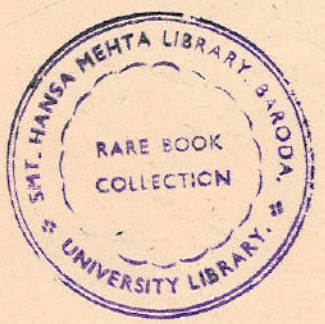
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HISTORY OF PHILOSOPHY



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A HISTORY OF PHILOSOPHY

WITH ESPECIAL REFERENCE TO

THE FORMATION AND DEVELOPMENT OF ITS PROBLEMS AND CONCEPTIONS

BY

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TRANSLATOR'S PREFACE.

REGARDED simply as a historical discipline, the history of thought might fairly claim a prominent place in education, and an equal share of the attention now given to comparative and historical studies. The evolution of an idea is in itself as interesting and valuable an object of study as the evolution of a word, of an institution, of a state, or of a vegetable or animal form.

But aside from this interest which it has in common with other historical sciences, the history of philosophy has a peculiar value of its own. For the moment we attempt any serious thinking in any field, — natural science, history, literature, ethics, theology, or any other, — we find ourselves at the outset quite at the mercy of the words and ideas which form at once our intellectual atmosphere and the instruments with which we must work. We cannot speak, for example, of mind or matter, of cause or force, of species or individual, of universe or God, of freedom or necessity, of substance or evolution, of science or law, of good or true or real, without involving a host of assumptions. And the assumptions are there, even though we may be unconscious of them, or ignore them in an effort to dispense with metaphysics. To dispense with these conceptions is impossible. Our only recourse, if we would not beg our questions in advance, or remain in unconscious bondage to the instruments of our thought, or be slaves to the thinking of the past generations that have forged out our ideas for us, is to "criticise our categories." And one of the most important, if not the only successful, means to this end is a study of the origin and development of these categories. We can free ourselves from the past only by mastering it. We may not hope to see beyond Aristotle or Kant until we have stood

on their shoulders. We study the history of philosophy, not so much to learn what other men have thought, as to learn to think.

For an adequate study of the history of thought, the main requisites are a careful study of the works of the great thinkers — a requisite that need not be enlarged on here, although such study is a comparatively recent matter in both Britain and America, with a few notable exceptions — and a text-book to aid us in singling out the important problems, tracing their development, disentangling their complications, and sifting out what is of permanent value. To meet this second need is the especial aim of the present work, and, with all the excellencies of the three chief manuals already in use, it can scarcely be questioned that the need is a real one. Those acquainted with the work here translated (W. Windelband's *Geschichte der Philosophie*, Freiburg i. B., 1892) have no hesitation in thinking that it is an extremely valuable contribution toward just this end. The originality of its conception and treatment awaken an interest that is greater in proportion to the reader's acquaintance with other works on the subject. The author shows not only historical learning and vision, but philosophical insight; and in his hands the comparative treatment of the history of thought proves as suggestive and fruitful as the same method applied to other subjects in recent times. A work like the present could only have been written with some such preparation as has come in this case from the previous treatment of Greek and Modern Philosophy at greater length, and in presenting it to English readers I am confident that it will meet the wants, not only of special students of philosophy, but also of all who wish to understand the development of thought. Teachers will, I think, find it very valuable in connection with lecture courses.

As regards the work of the Translator, little need be said. He has tried — like many others — to make a faithful translation into intelligible English, and is fully conscious that it has been with varying success. Of course translation in the strict sense is often impossible, and I cannot hope to have adopted the happiest compromise or found the most felicitous rendering in all cases. "Being" (spelled with a capital) is used for "*Sein*." Where the German "*Form*" seemed to differ enough from the ordinary English

sense of the word to make "form" misleading, I have spelled it "Form," and the same course has been taken with "*Real*," "*Realität*," where the German seemed to desire to distinguish them from "*wirklich*," which has been translated sometimes by "real," sometimes by "actual." "*Vorstellung*" is usually rendered by "idea," following Locke's usage, except in connection with the system of Leibniz, where "representation" is necessary to bring out his thought. "*Idee*," in the Platonic and Kantian use, is rendered "Idea" (spelled with a capital). The convenient word "*Geschehen*" has no exact counterpart, and has been variously rendered, most frequently perhaps by "cosmic processes." In the additions made to the bibliography, no attempt has been made to be exhaustive; I have simply tried to indicate some works that might aid the student. It is scarcely necessary to say that any corrections or suggestions will be gratefully received and utilised if possible. Material in square brackets is added by the translator.

In conclusion, I desire to express my indebtedness to my colleagues, Professors Shorey, Strong, and Cutting, and Dr. Schwill for helpful suggestions. My chief indebtedness, however, is to the critical taste and unwearied assistance of my wife. If I have in any degree succeeded in avoiding German idioms, it is largely due to her.

JAMES H. TUFTS.

University of Chicago,
July, 1893.

AUTHOR'S PREFACE.

After many painful delays and interruptions I now present at last the conclusion of the work whose first sheets appeared two years ago.

The reader will not confuse this with the compendiums which have very likely sometimes been prepared by dressing out lecture notes on the general history of philosophy. What I offer is a serious *text-book*, which is intended to portray in comprehensive and compressed exposition the evolution of the ideas of European philosophy, with the aim of showing through what motives the principles, by which we to-day scientifically conceive and judge the universe and human life, have been brought to consciousness and developed in the course of the movements of history.

This end has determined the whole form of the book. The literary-historical basis of research, the biographical and bibliographical material, were on this account necessarily restricted to the smallest space and limited to a selection that should open the way to the best sources for the reader desiring to work farther. The philosophers' own expositions, too, have been referred to in the main, only where they afford a permanently valuable formulation or rationale of thoughts. Aside from this there is only an occasional citation of passages on which the author supports an interpretation differing from that ordinarily adopted. The choice of material has fallen everywhere on what individual thinkers have produced that was new and fruitful, while purely individual turns of thought, which may indeed be a welcome object for learned research, but afford no philosophical interest, have found at most a brief mention.

As is shown even by the external form of the exposition, chief emphasis has been laid upon the development of what is weightiest from a philosophical standpoint: *the history of problems and conceptions*. To understand this as a connected and interrelated whole has been my chief purpose. The historical interweaving of the various lines of thought, out of which our theory of the world and life has grown, forms the especial object of my work, and I am convinced that this problem is to be solved, not by any *a priori* logical construction, but only by an all-sided, unprejudiced investigation of the facts. If in this exposition a relatively large part of the whole seems to be devoted to antiquity, this rests upon the conviction that for a historical understanding of our intellectual existence, the forging out of the conceptions which the Greek mind wrested from the concrete reality found in Nature and human life, is more important than all that has since been thought — the Kantian philosophy excepted.

The task thus set required, however, a renunciation which no one can regret more than myself. The purely topical treatment of the historical movement of philosophy did not permit of giving to the personality of the philosophers an impressiveness corresponding to their true worth. This could only be touched upon where it becomes efficient as a causal factor in the combination and transformation of ideas. The æsthetic fascination which dwells in the individual nature of the great agents of the movement, and which lends its especial charm to the academic lecture, as well as to the more extended exposition of the history of philosophy, had to be given up here in favour of a better insight into the pragmatic necessity of the mental process.

Finally, I desire to express at this place also my lively gratitude to my colleague, Dr. Hensel, who has not only aided me with a part of the proofs, but has also essentially increased the usefulness of the book by a subject index.

WILHELM WINDELBAND.

STRASSBURG, November, 1891.

CONTENTS.

INTRODUCTION.

		PAGE
§ 1.	Name and Conception of Philosophy	1
§ 2.	The History of Philosophy	8
§ 3.	Division of Philosophy and of its History	18

PART I.

THE PHILOSOPHY OF THE GREEKS.

INTRODUCTION		23
CHAPTER I.	THE COSMOLOGICAL PERIOD	27
§ 4.	Conceptions of Being	31
§ 5.	Conceptions of the Cosmic Processes or Becoming	47
§ 6.	Conceptions of Cognition	57
CHAPTER II.	THE ANTHROPOLOGICAL PERIOD	66
§ 7.	The Problem of Morality	72
§ 8.	The Problem of Science	87
CHAPTER III.	THE SYSTEMATIC PERIOD	99
§ 9.	Metaphysics grounded anew by Epistemology and Ethics	104
§ 10.	The System of Materialism	109
§ 11.	The System of Idealism	116
§ 12.	The Aristotelian Logic	132
§ 13.	The System of Development	139

PART II.

THE HELLENISTIC-ROMAN PHILOSOPHY.

INTRODUCTION		155
CHAPTER I.	THE ETHICAL PERIOD	159
§ 14.	The Ideal of the Wise Man	163
§ 15.	Mechanism and Teleology	178
§ 16.	The Freedom of the Will and the Perfection of the Universe	190
§ 17.	The Criteria of Truth	197

PAGE

CHAPTER II. THE RELIGIOUS PERIOD 210

§ 18. Authority and Revelation 219
§ 19. Spirit and Matter 229
§ 20. God and the World 235
§ 21. The Problem of the World's History 255

PART III.

THE PHILOSOPHY OF THE MIDDLE AGES.

INTRODUCTION 263

CHAPTER I. FIRST PERIOD 270

§ 22. The Metaphysics of Inner Experience 276
§ 23. The Controversy over Universals 287
§ 24. The Dualism of Body and Soul 301

CHAPTER II. SECOND PERIOD 310

§ 25. The Realm of Nature and the Realm of Grace 318
§ 26. The Primacy of the Will or of the Intellect 328
§ 27. The Problem of Individuality 337

PART IV.

THE PHILOSOPHY OF THE RENAISSANCE.

INTRODUCTION 348

CHAPTER I. THE HUMANISTIC PERIOD 352

§ 28. The Struggle between the Traditions 357
§ 29. Macrocosm and Microcosm 366

CHAPTER II. THE NATURAL SCIENCE PERIOD 378

§ 30. The Problem of Method 383
§ 31. Substance and Causality 399
§ 32. Natural Right 425

PART V.

THE PHILOSOPHY OF THE ENLIGHTENMENT.

INTRODUCTION 437

CHAPTER I. THEORETICAL QUESTIONS 447

§ 33. Innate Ideas 449
§ 34. Knowledge of the External World 466
§ 35. Natural Religion 486

PAGE

CHAPTER II. PRACTICAL QUESTIONS 500

§ 36. The Principles of Morals 502
§ 37. The Problem of Civilisation 518

PART VI.

THE GERMAN PHILOSOPHY.

INTRODUCTION 529

CHAPTER I. KANT'S CRITIQUE OF THE REASON 532

§ 38. The Object of Knowledge 537
§ 39. The Categorical Imperative 551
§ 40. Natural Purposiveness 559

CHAPTER II. THE DEVELOPMENT OF IDEALISM 568

§ 41. The Thing-in-itself 573
§ 42. The System of Reason 590
§ 43. The Metaphysics of the Irrational 615

PART VII.

THE PHILOSOPHY OF THE NINETEENTH CENTURY.

INTRODUCTION 623

§ 44. The Controversy about the Soul 630
§ 45. Nature and History 636

HISTORY OF PHILOSOPHY.

INTRODUCTION.

§ 1. The Name and Conception of Philosophy.

R. Haym, Art. *Philosophie* in Ersch und Grüber's *Encyclopädie*, III. Abth., Bd. 24.
W. Windelband, *Praeludien* (Freiburg i. B., 1884), 1 ff.
[A. Seth, Art. *Philosophy* in *Enc. Brit.*]
[G. T. Ladd, *Introduction to Philosophy*. N.Y. 1891.]

By philosophy present usage understands the scientific treatment of the general questions relating to the universe and human life. Individual philosophers, according to the presuppositions with which they have entered upon their work, and the results which they have reached in it, have sought to change this indefinite idea common to all, into more precise definitions,[1] which in part diverge so widely that the common element in the conception of the science may seem lost. But even the more general meaning given above is itself a limitation and transformation of the original significance which the Greeks connected with the name philosophy, — a limitation and transformation brought about by the whole course of the intellectual and spiritual life of the West, and following along with the same.

1. While in the first appearance in literature[2] of the words φιλοσοφεῖν and φιλοσοφία the simple and at the same time indefinite meaning, "striving after wisdom," may still be recognised, the word "philosophy" in the literature after Socrates, particularly in the school of Plato and Aristotle, acquired the fixed significance accord-

[1] Cited in detail in Ueberweg-Heinze, *Grundriss der Geschichte der Philosophie*, I. § 1. [Eng. trans. Ueberweg's *History of Philosophy*, trans. by G. S. Morris. N.Y. 1871.]
[2] Herodotus, I. 30 and 50; Thucydides, II. 40; and frequently also even in Plato, *e.g. Apol.* 29; *Lysis*, 218 A; *Symp.* 202 E ff.

ing to which it denotes exactly the same as the German word "*Wissenschaft.*"[1] According to this meaning philosophy in general[2] is the methodical work of thought, through which we are to know that which "is"; individual "philosophies" are the particular sciences in which individual realms of the existent are to be investigated and known.[3]

With this first *theoretical meaning* of the word "philosophy" a second was very early associated. The development of Greek philosophy came at the time when the naïve religious and ethical consciousness was in process of disintegration. This not only made the questions as to man's vocation and tasks more and more important for scientific investigation (cf. below, Part I. ch. 2), but also made instruction in the right conduct of life appear as an essential aim, and finally as the main content of philosophy or science. Thus philosophy in the Hellenistic period received the *practical meaning* of an *art of life, based upon scientific principles,*[4] — a meaning for which the way had already been prepared by the Sophists and Socrates.

In consequence of this change, purely theoretical interest passed over to the particular "philosophies," which now in part assumed the names of their special subjects of research, historical or belonging to natural science, while mathematics and medicine kept all the more rigorously that independence which they had possessed from the beginning with relation to science in general.[5] The name of philosophy, however, remained attached to those scientific efforts which hoped to win from the most general results of human knowledge a conviction for the direction of life, and which finally culminated in the attempt (made by Neo-Platonism) to create from such a philosophy a new religion to replace the old that had been lost.[6]

[1] A conception which it is well known is of much greater compass than the English and French "science." [In this translation the words "science" and "scientific" are used in this larger sense. The term "natural science" will be used for the narrower meaning which "science" alone often has. If it should serve to remind the beginner that philosophy and scientific thought should be one, and that natural science is not all of science, it may be of value.]

[2] Plato, *Rep.* 480 B; Aristotle, *Met.* VI. 1, 1026 a 18.

[3] Plato, *Theæt.* 143 D. Aristotle sets the doctrine "of Being as such" (the later so-called Metaphysics) as "First Philosophy" over against the other "philosophies," and distinguishes further theoretical and practical "philosophy." In one passage (*Met.* I. 6, 987 a 29) he applies the plural φιλοσοφίαι also to the different systems of science which have followed in historical succession, as we should speak of the philosophies of Kant, Fichte, Hegel, etc.

[4] Cf. the definition of Epicurus in Sext. Emp. *Adv. Math.* XI. 169, and on the other hand that of Seneca, *Epist.* 89.

[5] Cf. below, Part I.

[6] Hence Proclus, for example, would prefer to have philosophy called theology.

There was at first little change in these relations, when the remains of ancient science passed over into the culture of the present peoples of Europe as the determining forces of their intellectual life. Content and task of that which the Middle Ages called philosophy coincided with the conception held by later antiquity.[1] And yet the meaning of philosophy underwent an essential change by finding philosophy's task already performed, in a certain sense, by religion. For religion, too, afforded not only a sure conviction as a rule for the guidance of personal life, but also in connection with this, a general theoretical view of all reality, which was the more philosophical in its character, as the dogmas of Christianity had been formulated entirely under the influence of ancient philosophy. Under these circumstances, during the unbroken dominance of Church doctrine, there remained for philosophy, for the most part, only the position of a handmaid *to ground, develop, and defend dogma scientifically.* But just by this means philosophy came into a certain opposition to theology as regards method; for what the latter taught on the ground of divine revelation, the former was to win and set forth by means of human knowledge.[2]

But the infallible consequence of this relation was, that the freer individual thinking became in its relation to the Church, the more independently philosophy began the solution of the problem which she had in common with religion; from presentation and defence of doctrine she passed to its criticism, and finally, in complete independence of religious interests, sought to derive her teaching from the sources which she thought she possessed in the "natural light" of human reason and experience.[3] The opposition to theology, as regards methods, grew in this way to an opposition in the subject matter, and modern philosophy as "world-wisdom" set itself over against Church dogma.[4] However manifold the aspects which this relation took on, shading from a clinging attachment to a passionate conflict, the office of "philosophy" remained always that which

[1] Cf., for example, Augustine, *Solil.* I. 7; *Conf.* V. 7; Scotus Erigena, *De Div. Prædest.* I. 1 (Migne, 358); Anselm *Proslog.*, ch. 1. (Migne, I. 227); Abelard, *Introd. in Theol.* II. 3; Raymundus Lullus, *De Quinque Sap.* 8.

[2] Thomas Aquinas, *Summa Theol.* I. 32, 1; *Contr. Gent.* I. 8 f., II. 1 ff.; Duns Scotus, *Op. Ox.* I. 3, qu. 4; Durand de Pourçain, *In Sent. Prol.*, qu. 8; Raymundus of Sabunde, *Theol. Natur. Prooem.*

[3] Laur. Valla, *Dialect. Disp.* III. 9; B. Telesio, *De Nat. Rer. Prooem.*; Fr. Bacon, *De Augm*, III. 1 (Works, Spedding, I. 539 = III. 336); Taurellus, *Philos. Triumph.* I. 1; Paracelsus, *Paragr.* (ed. Huser) II. 23 f.; G. Bruno, *Della Causa*, etc., IV. 107 (Lagarde, I. 272); Hobbes, *De Corpor.* I. (Works, Molesworth, I. 2 and 6 f.).

[4] Characteristic definitions, on the one hand, in Gottsched, *Erste Gründe der gesammten Weltweisheit* (Leips. 1756), pp. 97 ff.; on the other hand, in the article *Philosophie*, in the *Encyclopédie* (Vol. XXV. pp. 632 ff.).

antiquity had assigned to it, to supply from scientific insight a foundation for a theory of the world and of human life, where religion was no longer able to meet this need, or at least to meet it alone. In the conviction that it was equal to this task, the philosophy of the eighteenth century, like that of the Greeks, considered it its right and duty to enlighten men with regard to the nature of things, and from this position of insight to rule the life of the individual and of society.

In this position of self-security philosophy was shaken by *Kant*, who demonstrated the impossibility of a philosophical (*i.e.* metaphysical) knowledge of the world beside of or above the individual sciences, and thereby restricted once more the conception and the task of philosophy; for after this quitclaim the realm of *philosophy, as a particular science*, was narrowed to just that *critical consideration by Reason of itself*, from which *Kant* had won his decisive insight, and which needed only to be extended systematically to activities other than that of knowing. With this function could be united what *Kant*[1] called the universal or cosmical conception of philosophy, — its vocation in the practical direction of life.

It is, to be sure, far from true that this new and apparently final conception of philosophy gained universal acceptance at once. It is rather the case that the great variety of philosophical movements of the nineteenth century has left no earlier form of philosophy unrepeated, and that a luxuriant development of the "metaphysical need"[2] even brought back, for a time, the inclination to swallow up all human knowledge in philosophy, and complete this again as an all-embracing science.

2. In view of these mutations through which the meaning of the word "philosophy" has passed in the course of time, it seems impracticable *to pretend to gain a general conception of philosophy from historical comparison.* None of those brought forward for this purpose[3] apply to all those structures of mental activity which lay claim to the name. Even the subordination of philosophy under the more general conception "science" is questionable in the case of those types of teaching which place a one-sided emphasis on the

[1] *Critique of Pure Reason*, A. 839; B. 866.
[2] Schopenhauer, *World as Will and Idea*, Vol. II. ch. 17.
[3] Instead of criticising particular conceptions it is sufficient here to point to the widely diverging formulas in which the attempt has been made to perform this impossible task: cf., for example, only the introductions to works such as those of Erdmann, Ueberweg, Kuno Fischer, Zeller, etc. All these conceptions thus determined apply only in so far as the history of philosophy has yielded the *result* which they express, but they do not apply with reference to the *intentions* expressed by the philosophers themselves.

practical significance of their doctrine:[1] still less can we define the subject-matter and form of philosophy considered as a special science, in a way that shall hold good for all cases. For even aside from the primitive or the revived standpoint for which philosophy is a universal science,[2] the attempts to limit it are extremely various. The problems of natural science form at first almost the sole objects of interest for philosophy, then for a long period are included in its scope, and do not separate from it until modern times. History, on the other hand, has remained an object of indifference to most philosophical systems, and has emerged as an object of philosophical investigation relatively late and in isolated cases. Metaphysical doctrines, again, in which the centre of philosophy is usually sought, we see either pushed one side at important turning-points in history or declared to be entirely impossible[3]; and if at times the ability of philosophy to determine the life of the individual or of society is emphasised, a proud standpoint of pure theory has renounced such a menial occupation.[4]

From still another side it has been claimed that philosophy treats the same subjects as the other sciences, but in another sense and by another method; but neither has this specific characteristic of form historical universality. That there is no such acknowledged historical method would of course be no objection if only the endeavour after such a method were a constant characteristic of all philosophies. This is, however, so far from being the case that in fact many philosophers imprint on their science the method of other disciplines, *e.g.* of mathematics or of investigation of nature,[5] while others will have nothing at all to do with a methodical treatment of their problems, and regard the philosophic activity as analogous to the creations of genius in art.

3. From these circumstances is explained also the fact that there is no fixed *relation of philosophy to the other sciences*, which is capable of a definition valid for all history. Where philosophy presents itself as the universal science, the other sciences appear only as its more or less distinctly separated parts.[6] Where, on the contrary, philosophy is assigned the task of grasping the results of the par-

[1] So in the case of the majority of the philosophers of later antiquity.
[2] As for Chr. Wolf; cf. his *Logica*, §§ 29 ff.
[3] This is especially the case where philosophy is regarded solely as "science of cognition." Cf., *e.g.*, W. Hamilton in his notes to Reid's works, II. 808. Among the French at the close of the eighteenth and the beginning of this century, philosophy = *analyse de l'entendement humain.*
[4] *E.g.* with Plotinus.
[5] So Descartes and Bacon.
[6] So, for example, in the Hegelian system.

ticular sciences in their general significance, and harmonising them into a comprehensive knowledge of the world, we have as the result peculiarly complex relations: in the first place, a dependence of philosophy upon the existing condition of insight reached in the particular disciplines — a dependence which expresses itself principally in the furtherance of philosophy by the prominent advances made by individual sciences;[1] in the next place, an influence in the opposite direction, when philosophy takes part in the work of the particular sciences. This action is felt as help or as hindrance, according as the philosophical treatment of the questions embraced under the particular disciplines sometimes contributes valuable factors for their solution, by means of its wider range of vision and its tendency toward unity,[2] but at other times presents itself only as a duplication which, if it leads to like results, appears useless, or if it wishes to furnish other results, dangerous.[3]

From what has been said it is evident farther, that the *relations of philosophy to the other activities of civilisation* are no less close than its relation to the individual sciences. For the conceptions arising from the religious and ethical and artistic life, from the life of the state and of society, force their way everywhere, side by side with the results won from scientific investigation, into the idea of the universe which the philosophy of metaphysical tendencies aims to frame; and the reason's valuations (*Werthbestimmungen*) and standards of judgment demand their place in that idea the more vigorously, just in proportion as it is to become the basis for the practical significance of philosophy. In this way humanity's convictions and ideals find their expression in philosophy side by side with its intellectual insights; and if these convictions and ideals are regarded, erroneously often, as gaining thereby the form of scientific intelligence, they may receive under certain circumstances valuable clarification and modification by this means. Thus this relation also of philosophy to general culture is not only that of receiving, but also that of giving.

It is not without interest to consider also the mutations in *external position* and *social relations* which philosophy has experienced. It may be assumed that science was from the first, with perhaps a few exceptions (Socrates), pursued in Greece in closed schools.[4] The fact that these, even at a later time, had the form

[1] As the influence of astronomy upon the beginnings of Greek, or that of mechanics upon those of modern, philosophy.

[2] The Protestant theology of the nineteenth century stands in this relation to German philosophy.

[3] Cf. the opposition of natural science to Schelling's philosophy of nature.

[4] H. Diels, *Ueber die ältesten Philosophenschulen der Griechen* in Philos. Aufsätze zum Jubiläum E. Zeller's, Leips. 1887, pp. 241 ff.

of societies with religious laws[1] would not in itself alone, in view of the religious character of all Greek judicial institutions, prove a religious origin of these schools, but the circumstance that Greek science worked out its contents directly from religious ideas, and that certain connections with religious cults present themselves unmistakably in a number of directions,[2] makes it not improbable that the scientific societies sprang originally from religious unions (the Mysteries) and continued in a certain connection with them. But when the scientific life had developed to complete independence, these connections fell away and purely scientific schools were founded as free unions of men who, under the guidance of persons of importance, shared with each other the work of research, exposition, defence, and polemic,[3] and at the same time had an ethical bond in a common ideal of the conduct of life.

With the advent of the larger relations of life in the Hellenistic and Roman period, these unions naturally became loosened, and we frequently meet writers, especially among the Romans, who are active in the field of philosophy in a purely individual way, neither members of a school nor professional teachers. Such were Cicero, Seneca, and Marcus Aurelius. Not until the latest period of antiquity were the ties of the schools drawn more closely again, as in Neo-Pythagoreanism and Neo-Platonism.

Among the Romanic and Germanic peoples the course of events has been not unlike that in the ancient world. The science of the Middle Ages also appears in the train of the Church civilisation; it has its seats in the cloister-schools, and is stimulated toward independent development primarily by questions of religious interest. In it, too, the oppositions of various religious orders, such as the Dominicans and Franciscans, assert themselves for a time, and even the freer scientific associations out of which the universities gradually developed, had originally a religious background and an ecclesiastical stamp.[4] Hence there was always but a slight degree of independence with reference to Church doctrine in this corporate philosophy of the universities, and this held true on into the eighteenth century for the Protestant universities also, in the foundation and development of which ecclesiastical and religious interests had a foremost place.

On the other hand, it is characteristic of the "world-wisdom" or secular philosophy which was gaining its independence at the beginning of the modern period, that those who bring and support it are not at all men of the schools, but men of the world and of life. An escaped monk, a state-chancellor, a cobbler, a nobleman, a proscribed Jew, a learned diplomat, independent men of letters and journalists, — these are the founders of modern philosophy, and in accord with this, their work takes for its outer form not the text-book or the deposit of academical disputations, but the free literary production, the essay.

Not until the second half of the eighteenth century did philosophy again become corporate, and domesticated in the universities. This took place first in Germany, where the most favourable conditions were afforded by the rising independence of the universities, and where a fruitful interchange between teachers and students of the university was beneficial to philosophy also.[5]

[1] v. Wilamowitz-Möllendorf, *Antigonos von Karystos* (Philol. Stud. IV. Berlin, 1881, pp. 263 ff.).

[2] The Pythagoreans, as is well known, offer a pre-eminent example of this; but sympathies with the Apollo cultus are plain enough in the Platonic Academy also. Pfleiderer has lately sought to bring the apparently isolated Heraclitus into connection with the Mysteries (E. Pfleiderer, *Heraklit von Ephesus.* Berlin, 1886).

[3] Cf. H. Usener, *Ueber die Organisation der wissenschaftlichen Arbeit im Alterthum* (Preuss. Jahrb., Jahrg. LIII., 1884, pp. 1 ff.), and E. Heitz, *Die Philosophenschulen Athens* (Deutsche Revue, 1884, pp. 326 ff.).

[4] Cf. G. Kaufmann, *Geschichte der deutschen Universitäten* I. pp. 98 ff. (Stuttg. 1888).

[5] *Schelling* has erected the finest monument to the ideal conception of science in the activity of German universities, in his *Vorlesungen über die Methode des akademischen Studiums* (2. and 3. Vorlesung. Ges. Werke, I. Abth., Vol. 5, pp. 223 ff.).

From Germany this spread to Scotland, England, France, and Italy, and in general it may be said that in the nineteenth century the seat of philosophy is essentially to be sought in the universities.[1]

In conclusion, the *share of the various peoples* in the development of philosophy deserves a brief mention. As with all developments of European culture, so with philosophy, — the Greeks created it, and the primitive structure of philosophy due to their creative activity is still to-day an essential basis of the science. What was added in antiquity by the mixed peoples of Hellenism and by the Romans does not, in general, amount to more than a special form and practical adaptation of the Greek philosophy. Only in the religious turn which this last movement took (cf. below, Part II. ch. 2) do we find something essentially new which sprang from the harmonising of national differences in the Roman Empire. The scientific culture of the Middle Ages was also international, as is implied in the universal employment of the Latin language. It is with modern philosophy that the special characters of particular nations first present themselves as of decisive influence. While the traditions of mediæval scholasticism maintain themselves most vigorously and independently in Spain and Portugal, the Italians, Germans, English, and French supply the first-movements of the new science which reached its highest point in the classical period of German philosophy. Compared with these four nations, the rest stand almost entirely in a receptive attitude; a certain independence is noticeable, if anywhere, in more recent time among the Swedes.

§ 2. The History of Philosophy.

The more varied the character assumed by the problems and content of philosophy in the course of time, the more the question rises, what meaning there can be in uniting in historical investigation and exposition products of thought which are not only so manifold, but also so different in kind, and between which there seems to be ultimately nothing in common but the name.

For the anecdotal interest in this checkered diversity of various opinions on various things, which was perhaps formerly the chief motive of a "History of Philosophy," stimulated too by the remarkable and strange nature of many of these views, cannot possibly serve as the permanent centre of a genuine scientific discipline.

1. At all events, however, it is clear that the case stands otherwise with the history of philosophy than with that of any other science. For with all these the field of research remains fixed, on the whole at least, however many the variations to which its extent, its separation from a still more general field, and its limitation with reference to neighbouring fields, may be subject in the course of history. In such a case there is no difficulty in tracing the development of knowledge over a field which can be determined in this way, and in eventually making just those variations intelligible as the natural consequences of this development of insight.

[1] This relation is so influential, that the poisonous attacks which Schopenhauer made upon it proved to be ultimately only the attacks of a Privatdocent irritated by lack of success.

Quite otherwise, however, in the case of philosophy, which has no such subject-matter common to all its periods, and whose "history," therefore, sets forth no constant advance or gradual approximation to a knowledge of the subject in question. Rather, it has always been emphasised that while in other sciences, a quiet building up of knowledge is the rule, as soon as they have once gained a sure methodical footing after their rhapsodical beginnings, — a rule which is interrupted only from time to time by a sudden new beginning, — in philosophy the reverse is true. There it is the exception that successors gratefully develop what has been already achieved, and each of the great systems of philosophy begins to solve its newly formulated problem *ab ovo*, as if the other systems had scarcely existed.

2. If in spite of all of this we are still to be able to speak of a "history of philosophy," the unity of connection, which we find neither in the objects with which philosophers busy themselves, nor in the problems they have set themselves, can be found only in the *common work which they have accomplished* in spite of all the variety in their subject-matter and in the purposes with which they have worked.

But this common product, which constitutes the meaning of the history of philosophy, rests on just the changing relations which the work of philosophers has sustained in the course of history, not only to the maturest results of science in general and of the special sciences in particular, but also to the other activities of European civilisation. For was it that philosophy had in view the project of a general scientific knowledge of the universe, which she would win either in the role of universal science, or as a generalising comprehension of the results of the special sciences, or was it that she sought a view of life which should give a complete expression to the highest values of will and feeling, or was it finally that with a clearly defined limitation of her field she made reason's self-knowledge her goal, — the result always was that she was labouring to bring to conscious expression the necessary forms and principles in which the human reason manifests its activity, and to transfer these from their original form of perceptions, feelings, and impulses, into that of *conceptions*. In some direction and in some fashion every philosophy has striven to reach, over a more or less extensive field, a formulation in conception of the material immediately given in the world and in life; and so, as these efforts have passed into history, the constitution of the mental and spiritual life have been step by step disclosed. *The History of Philosophy is the process in which European humanity has embodied in scientific conceptions its views of the world and its judgments of life.*

It is this common fruit of all the intellectual creations which present themselves as "philosophies," which alone gives to the history of philosophy as a genuine science its content, its problem, and its justification. This, too, is the reason why a knowledge of the history of philosophy is a necessary requirement, not only for all scholarly education, but for all culture whatever; for it teaches how the conceptions and forms have been coined, in which we all, in every-day life as well as in the particular sciences, think and judge the world of our experience.

The beginnings of the history of philosophy are to be sought in the historical compositions (for the most part lost) of the great schools of antiquity, especially the Peripatetic School. As we may see in the examples given by Aristotle,[1] these works had the critical purpose of preparing for the development of their own views by a dialectical examination of views previously brought forward. Such collections of historical material were planned for the various fields of science, and doxographies[2] in philosophy arose in this way side by side with histories of particular disciplines, such as mathematics, astronomy, physics, etc. As inclination and power for independent philosophic thought later declined, this literature degenerated into a learned scrap-book work, in which were mingled anecdotes from the lives of the philosophers, individual epigrammatic sayings, and sketches of their doctrines.

Those expositions belonging to the modern period which were based upon the remains of ancient tradition had this same character of collections of curiosities. Such were *Stanley's*[3] reproduction of Diogenes Laertius, and *Brucker's* works.[4] Only with time do we find critical discernment in use of the sources (*Buhle*,[5] *Fülleborn*[6]), a more unprejudiced apprehension of the historical significance of individual doctrines (*Tiedemann*,[7] *Degérando*[8]), and systematic criticism of these upon the basis of the new standpoint (*Tennemann*,[9] *Fries*,[10] and *Schleiermacher*[11]).

It was, however, through *Hegel*[12] that the history of philosophy was first made an independent science, for he discovered the essential point that the

[1] *E.g.* in the beginning of the *Metaphysics*.
[2] More in detail on these below.
[3] Th. Stanley, *The History of Philosophy*. Lond. 1685.
[4] J. J. Brucker, *Historia Critica Philosophiæ*. 5 vols. Leips. 1742 ff. *Institutiones Historiæ Philosophiæ*. Leips. 1747.
[5] J. G. Buhle, *Lehrbuch der Geschichte der Philosophie*. 8 vols. Göttingen, 1796 ff.
[6] G. G. Fülleborn, *Beiträge zur Geschichte der Philosophie*. 12 Studien. Züllichau, 1791 ff.
[7] D. Tiedemann, *Geist der Speculativen Philosophie*. 7 vols. Marburg, 1791 ff.
[8] De Gérando, *Histoire Comparée des Systèmes de Philosophie*. 2d ed. in 4 vols. Paris, 1822 f.
[9] W. G. Tennemann, *Geschichte der Philosophie*. 11 vols. Leips. 1798 ff. *Grundriss der Geschichte der Philosophie für den akademischen Unterricht*. Leips. 1812. [Eng. trans. 1833 and 1852.]
[10] J. Fr. Fries, *Geschichte der Philosophie*. 2 vols. Halle, 1837 ff.
[11] Fr. Schleiermacher, *Geschichte der Philosophie*, from his literary remains in the Coll. Works. III. Abth., 4 Bd., 1 Th. Berlin, 1839.
[12] Cf. the introductions of the *Phänomenologie des Geistes*, of the lectures on the *Philosophy of History*, and those on the *History of Philosophy*. Ges. Werke, Bd. II. pp. 62 ff.; IX. pp. 11 ff.; XIII. pp. 11–134. In Hegel's works the *Geschichte der Philosophie*, edited from his lectures by Michelet, occupies Vols. XIII.–XV. Berlin, 1833–36. [*Lectures on the History of Philosophy*, by G. W. Hegel. Trans. by E. S. Haldane in 3 vols. Vol. I. Lond. 1892.] On his standpoint

history of philosophy can set forth neither a motley collection of opinions of various learned gentleman "*de omnibus rebus et de quibusdam aliis*," nor a constantly widening and perfecting elaboration of the same subject-matter, but rather only the limited process in which the "categories" of reason have successively attained distinct consciousness and reached the form of conceptions.

This valuable insight was, however, obscured and injured in the case of Hegel by an additional asumption, since he was convinced that the chronological order in which the above "categories" have presented themselves in the historical systems of philosophy must necessarily correspond with the logical and systematic order in which these same categories should appear as "elements of truth" in the logical construction of the final system of philosophy (*i.e.* in Hegel's view, his own). The fundamental thought, right in itself, thus led to the mistake of a construction of the history of philosophy under the control of a philosophical system, and so to a frequent violation of historical fact. This error, which the development of a scientific history of philosophy in the nineteenth century has set aside in favour of historical accuracy and exactness, arose from the wrong idea (though an idea in logical consistence with the principles of Hegel's philosophy) that the historical progress of philosophical thought is due solely, or at least essentially, to an ideal necessity with which one "category" pushes forward another in the dialectical movement. In truth, the picture of the historical movement of philosophy is quite a different one. It depends not solely upon the thinking of "humanity" or even of the "*Weltgeist*," but just as truly upon the reflections, the needs of mind and heart, the presaging thought and sudden flashes of insight, of philosophising individuals.

3. The history of philosophy, considered as such a sum-total, in which the fundamental conceptions of man's views of the world and judgments of life have been embodied, is the product of a great variety of single movements of thought. And as the actual motives of these movements, various factors are to be distinguished, both in the setting of the problems and in the attempts at their logical solution.

The logical, *pragmatic factor* is no doubt sufficiently important. For the problems of philosophy are in the main given, and this is shown by the fact that they are constantly recurring in the historical movement of thought as the "primeval enigma of existence," and are ever anew demanding imperiously the solution which has never completely succeeded. They are given, however, by the inadequacy and internal contradictions of the material which consciousness presents for philosophical consideration.[1] But just for

stand G. O. Marbach, *Lehrbuch der Geschichte Philosophie* (2. Abth. Leips. 1838 ff.), C. Hermann, *Geschichte der Philosophie in pragmatischer Behandlung* (Leips. 1867), and in part also the survey of the entire history of philosophy which J. Braniss has published as the first (only) volume of a *Geschichte der Philosophie seit Kant* (Breslau, 1842). In France this line is represented by V. Cousin, *Introduction à l'Histoire de la Philosophie* (Paris, 1828; 7th ed. 1872); *Histoire Générale de la Philosophie* (12th ed., Paris, 1884).

[1] More precisely, this inadequacy, which cannot here be more exactly developed, and which can be fully brought out only in a system of epistemology, consists in the circumstance that that which is given in experience never meets completely the conceptional demands which, in elaborating the same according to the inner nature of the reason, we set up, at first naïvely and immediately, and later with reflective consciousness. This *antinomism* (or failure to meet the laws of thought) can be escaped by ordinary life, or even by experiential

this reason this material contains the real presuppositions and the logical constraining forces for all rational reflection upon it, and because from the nature of the case these are always asserting themselves anew in the same way, it follows that not only the chief problems in the history of philosophy, but also the chief lines along which a solution is attempted, are repeated. Just this constancy in all change, which, regarded from without, makes the impression that philosophy is striving fruitlessly in ever-repeated circles for a goal that is never attained, proves only this, — that the problems of philosophy are tasks which the human mind cannot escape.[1] And so we understand how the same logical necessity in repeated instances causes one doctrine to give birth to another. Hence progress in the history of philosophy is, during certain periods, to be understood entirely pragmatically, *i.e.* through the internal necessity of the thoughts and through the "logic of things."

The mistake of Hegel's mentioned above, consists, then, only in his wishing to make of a factor which is effective within certain limits, the only, or at least the principal, factor. It would be the opposite error to deny absolutely the "reason in history," and to see in the successive doctrines of philosophy only confused chance-thoughts of individuals. It is rather true that the total content of the history of philosophy can be explained only through the fact that the necessities existing in the nature of things assert themselves over and over in the thinking of individuals, however accidental the special conditions of this latter may be. On these relations rest the attempts made to classify all philosophical doctrines under certain types, and to establish a sort of rhythmical repetition in their historical development. On this basis V. Cousin[2] brought forward his theory of the four systems, Idealism, Sensualism, Scepticism, Mysticism; so too August Comte[3] his of the three stages, the theological, the metaphysical, and the positive. An interesting and in many ways instructive grouping of philosophical doctrines about the particular main problems is afforded by A. Renouvier in his *Esquisse d'une Classification Systématique des Doctrines Philosophiques* (2 vols., Paris, 1885 f.). A school-book which arranges the philosophical doctrines according to problems and schools has been issued by Paul Janet and Séailles; *Histoire de la Philosophie; les problèmes et les écoles* (Paris, 1887).

4. But the pragmatic thread very often breaks off in the history of philosophy. The historical order in particular, in which problems have presented themselves, shows almost a complete absence

science, by working with auxiliary conceptions, which indeed remain problematical in themselves, but which, within certain bounds, suffice for an elaboration of the material of experience that meets our practical needs. But it is just in these auxiliary conceptions that the problems of philosophy inhere.

[1] In this way the results of Kant's investigations on "The Antinomy of Pure Reason" (*Critique of Pure Reason*, Transcendental Dialectic, second sec.) might be historically and systematically extended; cf. W. Windelband, *Geschichte der neueren Philosophie*, II. 95 f.

[2] Cf. Note 12, p. 10.

[3] A. Comte, *Cours de Philosophie Positive* I. 9, with which Vols. V. and VI. are to be compared as the carrying out of the scheme. Similar thoughts are also found in D'Alembert's *Discours Préliminaire* in the *Encyclopédie*.

of such an immanent logical necessity. Here, on the contrary, another factor asserts itself which may best be designated as the *factor contributed by the history of civilisation.* For philosophy receives both its problems and the materials for their solution from the ideas of the general consciousness of the time, and from the needs of society. The great conquests and the newly emerging questions of the special sciences, the movements of the religious consciousness, the intuitions of art, the revolutions in social and political life, — all these give philosophy new impulses at irregular intervals, and condition the directions of the interest which forces, now these, now those, problems into the foreground, and crowds others for the time being aside; and no less do they condition also the changes which questions and answers experience in course of time. Where this dependence shows itself with especial clearness, we have under certain circumstances a philosophical system appearing, that represents exactly the knowledge which a definite age has of itself; or we may have the oppositions in the general culture of the age finding their expression in the strife of philosophical systems. And so besides the constant dependence upon the essential character of the subject-matter — the pragmatic factor — there prevails also a necessity growing out of the history of civilisation, or current state of culture, which warrants a historical right of existence to structures of thought in themselves untenable.

This relation also was first brought to notice in a greater degree than before by *Hegel*, although the "relative truth" which he ascribes to the particular systems has with him at the same time a systematic meaning, owing to his dialectical fundamental thought. On the other hand, the element due to the history of civilisation has been best formulated among his successors by *Kuno Fischer*,[1] who has also availed himself of it in most brilliant manner in his exposition of the subject. He regards philosophy in its historical unfolding as the progressive self-knowledge of the human mind, and makes its development appear as constantly conditioned by the development of the object which in it is attaining self-knowledge. Although this applies to a number of the most important systems, it is yet but one of the factors involved.

The influences from the history of civilisation which condition the statement and solution of philosophic problems, afford an explanation in most cases of an extremely interesting phenomenon which is of great importance for understanding the historical development; viz. *the complication or interweaving of problems.* For when interest is directed chiefly on certain lines of thought, it is inevitable, according to psychological laws, that associations will be formed between different bodies of thought, — associations which are not based on the subject-matter, — and so, that questions which in themselves have nothing to do with each other become blended and made to depend upon each other in their solution. An extremely important and very often recurring example of this is the intermingling of ethical and æsthetic interests in the treatment of theoretical problems. The well-known fact of daily life that men's views are determined by their wishes, hopes, fears, and inclinations, that their theoretical are condi-

[1] Kuno Fischer, *Geschichte der neueren Philosophie*, I. 1, Einleitung I.–V. [trans. by J. P. Gordy, *Descartes and his School*, N.Y. 1887].

tioned by their ethical and æsthetic judgments (*Urtheile durch ihre Beurtheilungen*), — this fact is repeated on a larger scale in their views of the universe, and has even been able to rise so high in philosophy that what had been previously involuntarily practised, was proclaimed (by Kant) an epistemological postulate.

5. Meanwhile the historical process we are tracing owes all its variety and multiplicity of forms to the circumstance that the development of ideas and the formulation of general beliefs into abstract conceptions are accomplished only through the thinking of individual *personalities*, who, though rooted ever so deeply with their thought in the logical connection and prevalent ideas of a historical period, always add a particular element by their own individuality and conduct of life. This *individual factor* in the development of the history of philosophy deserves so great attention for the reason that those who have borne the leading part in the movement have shown themselves to be marked, independent personalities, whose peculiar nature has been a determining influence, not merely for the selection and combination of problems, but also for working out the conceptions to furnish solutions, both in their own doctrines and in those of their successors. That history is the kingdom of individualities, of details which are not to be repeated and which have value in themselves, is shown also in the history of philosophy: here, too, great personalities have exercised far-reaching and not exclusively beneficial influences.

It is clear that the above-mentioned complication of problems is brought about by the subjective relations in which individual philosophers stand, in a much greater degree than by the occasions presented in the general consciousness of a time, of a people, etc. There is no philosophical system that is free from this influence of the personality of its founder. Hence all philosophical systems are creations of individuality, presenting in this respect a certain resemblance with works of art, and as such are to be understood from the point of view of the personality of their founder. The elements of every philosopher's *Weltanschauung* grow out of the problems of reality which are ever the same, and out of the reason as it is directed to their solution, but besides this out of the views and ideals of his people and his time; the form and arrangement, however, the connection and valuation which they find in the system, are conditioned by his birth and education, his activity and lot in life, his character and his experience. Here, accordingly, the universality which belongs to the other two factors is often wanting. In the case of these purely individual creations, æsthetic charm must take the place of the worth of abiding knowledge, and the impressiveness of many phenomena of the history of philosophy rests, in fact, only upon the magic of their "poetry of ideas" (*Begriffsdichtung*).

In addition, then, to the complication of problems and to the ideas determined by fancy and feeling, which are already enough to lead the general consciousness astray, there are in the case of individuals similar, but purely personal, processes to lend to the formation and solution of problems still more the character of artificiality. We cannot fail to recognise that philosophers have often gone about struggling with questions which have no basis in reality, so that all thought expended upon them was in vain, and that, on the other hand, even in connection with the solution of real problems, unfortunate attempts in the *a priori* construction of conceptions have slipped in, which have been hindrances rather than helps toward the issue of the matter.

The wonderful feature in the history of philosophy remains just this, that out of such a multitude of individual and general complications there has yet been on the whole laid down that outline of universally valid conceptions for viewing the world and judging life, which presents the scientific significance of this development.

6. *Investigation in the history of philosophy has accordingly the following tasks to accomplish:* (1) To *establish with precision* what may be derived from the available sources as to the circumstances in life, the mental development, and the doctrines of individual philosophers; (2) from these facts to reconstruct the *genetic* process in such a way that in the case of every philosopher we may understand how his doctrines depend in part upon those of his predecessors, in part upon the general ideas of his time, and in part upon his own nature and the course of his education; (3) from the consideration of the whole to *estimate* what value for the total result of the history of philosophy belongs to the theories thus established and explained as regards their origin.

With reference to the first two points, the history of philosophy is a *philologico-historical*, with reference to the third element it is a *critico-philosophical science.*

(*a*) To establish its facts the history of philosophy must proceed to a careful and comprehensive examination of the *sources*. These sources, however, vary greatly at different times in their transparency and fulness.

The main sources for investigation in the history of philosophy are of course the *works of the philosophers* themselves. For the *modern period* we stand here upon a relatively safe footing. Since the discovery of the art of printing, literary tradition has become so well established and clear that it offers in general no difficulties of any kind. The writings which philosophers have published since the Renaissance are throughout accessible for the research of to-day. The cases in which questions of genuineness, of the time of origination, etc., give rise to controversies are extremely seldom; a philological criticism has here but a narrow field for activity, and where it can enter (as is the case in part in reference to the different editions of Kant's works), it concerns solely subordinate, and in the last instance indifferent, points. Here, too, we are tolerably sure of the completeness of the material; that anything of weight is lost, or still to be expected from later publication, is scarcely to be assumed; if the sharpened philological attentiveness of the last decades has brought us new material for Spinoza, Leibniz, Kant, Maine de Biran, the philosophical outcome has been only vanishing in comparison with the value of what was already known. At most it has concerned the question of supplementing our knowledge, and this must continue to be its province. The importance of occasional expressions in letters has been specially felt here, for these are adapted to shed more light on the individual factor in the historical development of philosophy.

With the sources of the *Mediæval Philosophy* the case stands less favourably. These have in part (a small part, to be sure) still only a manuscript existence. *V. Cousin* and his school have rendered valuable service in publishing the texts, and in general we may be convinced that for this period also we possess material, which has indeed gaps, but is on the whole adequate for our purpose. On the other hand, our knowledge of the Arabian and Jewish philosophy of the Middle Ages, and so of the influence of those systems on the course of Western Thought, is still very problematical in details; and this is perhaps the gap most sorely felt in our investigation of the sources for the history of philosophy.

Much worse still is the situation as regards the direct sources for *Ancient Philosophy*. Of the original works, we have preserved, to be sure, the most

important: the fundamental portion of the works of Plato and Aristotle, though even these are often doubtful in form. Besides these we have only the writings of later time, such as those of Cicero, Seneca, Plutarch, the Church Fathers, and the Neo-Platonists. By far the greater part of the philosophical writings of antiquity is lost. In their stead we must content ourselves with the fragments which the accident of an incidental mention in the writings of extant authors has kept for us, here too often in a questionable form.[1]

If, nevertheless, success has been attained in gaining a view of the development of the ancient philosophy, clearer than that of the mediæval, presenting a picture whose accuracy extends even to details and is scientifically assured, this is due not only to the unremitting pains of philologists and philosophers in working through their material, but also to the circumstance that beside the remains of the original works of the philosophers there are preserved also, as *secondary sources*, remains of historical records made in antiquity. The best, indeed, of these also is lost: namely, the historical works which arose from the learned collection made by the Peripatetic and Stoic schools at the end of the fourth and in the third century B.C. These works passed later through many hands before they were preserved for us in the extant compilations prepared in the Roman period, as in the *Placita Philosophorum*,[2] going by the name of Plutarch, in the writings of Sextus Empiricus,[3] in the *Deipnosophistæ* of Athenæus,[4] in the treatise of Diogenes Laertius, *περὶ βίων δογμάτων καὶ ἀποθεγμάτων τῶν ἐν φιλοσοφίᾳ εὐδοκιμησάντων*,[5] in the collections of the Church Fathers, and in the notes of the Commentators of the latest period, such as Alexander Aphrodisias, Themistius, and Simplicius. H. Diels has given an excellent and thorough treatment of these secondary sources of ancient philosophy, *Doxographi Græci* (Berlin, 1879).

Where the condition of the sources is so doubtful as is the case over the entire field of ancient philosophy, critical ascertainment of the facts must go hand in hand with examination of the pragmatic and genetic connection. For where the transmission of the material is itself doubtful we can reach a decision only by taking a view of the connection that shall accord with reason and psychological experience. In these cases it becomes the task of the history of philosophy as of all history, after establishing a base of operations in that which is assured by the sources, to proceed to ascertain its position in those regions with which tradition finds itself no longer directly and surely in touch. The historical study of philosophy in the nineteenth century may boast that it has fulfilled this task, to which it was stimulated by Schleiermacher, by the labours of H. Ritter, — whose *Geschichte der Philosophie* (12 vols., Hamburg, 1829–53) is now, to be sure, antiquated, — Brandis and Zeller for the ancient philosophy; and of J. E. Erdmann and Kuno Fischer for the modern. Among the many complete expositions of the history of philosophy by far the most trustworthy in these respects is J. E. Erdmann's *Grundriss der Geschichte der Philosophie*, 2 vols. (3d ed.), Berlin, 1878; [Erdmann's *History of Philosophy*, trans. ed. by W. S. Hough, Lond. and N.Y., 1890].

An excellent bibliography of the entire history of philosophy, assembling the literature in exhaustive completeness and good arrangement, is to be found in Ueberweg's *Grundriss der Geschichte der Philosophie*, 3 vols., 7th ed., edited by M. Heinze (Berlin, 1886–88). [Ueberweg's *History of Philosophy*, trans. from the 4th ed. by G. S. Morris (N.Y., 1871), contains additions, but of course does not

[1] The collections of fragments of particular authors are mentioned under the notices of the individual philosophers. It would be desirable if they were all as excellent as Usener's *Epicurea*. Of the fragments of the Pre-Socratics W. F. A. Mullach has published a careful collection, which, however, is no longer adequate in the present condition of research (*Fragmenta Philosophorum Græcorum*).

[2] Plut. *Moralia*, ed. Dübner, Paris, 1841; Diels, *Dox.*, pp. 272 ff.; [Plutarch's *Morals, Miscellanies, and Essays*, ed. by Goodwin, Boston, 1870; trans. also in the Bohn Lib.].

[3] Ed. Bekker, Berlin, 1847.

[4] Ed. Meineke, Leips. 1857–1869.

[5] Ed. Cobet, Paris, 1850.

give the bibliography of recent works.] Under the general literature may also be mentioned, R. Eucken, *Die Lebensanschauungen der grossen Denker* (Leips. 1890).

(*b*) Explanation of facts in the history of philosophy is either pragmatic (logical), or based on the history of civilisation, or psychological, corresponding to the three factors which we have set forth above as determining the movement of thought. Which of these three modes of explanation is to be applied in individual cases depends solely upon the state of the facts with regard to the transmission of material. It is then incorrect to make either one the sole principle of treatment. The pragmatic method of explanation is dominant with those who see in the entire history of philosophy the preparation for a definite system of philosophy; so with Hegel and his disciples (see above, p. 10 f.); so from a Herbartian standpoint with Chr. A. Thilo, *Kurze pragmatische Geschichte der Philosophie* (2 pts.; Coethen, 1876–80). Kuno Fischer and W. Windelband have emphasised in their interpretation of modern philosophy, the importance of considering the history of civilisation and the problems of the individual sciences.

The purely *biographical* treatment which deals only with successive personalities is quite inadequate as a scientific exposition of the history of philosophy. This mode of treatment is represented in recent time by the treatise of G. H. Lewes, *The History of Philosophy from Thales to the Present Day* (2 vols., Lond. 1871), a book destitute of all historical apprehension, and at the same time a party composition in the spirit of the Positivism of Comte. The works of the French historians (Damiron, Ferraz) are inclined to take this form of a separate essay-like treatment of individual philosophers, not losing from sight, however, the course of development of the whole.[1]

(*c*) The most difficult task is to establish the principles according to which the critical philosophical estimate of the individual doctrines must be made up. The history of philosophy, like all history, is a critical science; its duty is not only to record and explain, but also to estimate what is to count as progress and fruit in the historical movement, when we have succeeded in knowing and understanding this. There is no history without this critical point of view, and the evidence of a historian's maturity is that he is clearly conscious of this point of view of criticism; for where this is not the case he proceeds in the selection of his material and in his characterisation of details only instinctively and without a clear standard.[2]

It is understood, of course, that the standard of critical judgment must not be a private theory of the historian, nor even his philosophic conviction; at least the employment of such a standard deprives the criticism exercised in accordance with it of the value of scientific universality. He who is given to the belief that he possesses the sole philosophical truth, or who comes to this field imbued with the customs of the special sciences in which, no doubt, a sure result makes it a very simple[3] matter to estimate the attempts which have led to it, — such a one may well be tempted to stretch all forms that pass before him upon the Procrustes-bed of his system; but he who contemplates the work of thought in history, with an open historical vision, will be restrained by a respectful reverence from reprimanding the heroes of philosophy for their ignorance of the wisdom of an epigone.[4]

[1] A. Weber, *Histoire de la Philosophie Européenne*, is to be recommended as a good text-book (3d ed., Paris, 1883).

[2] This applies in every domain of history, in the history of politics and of literature, as well as in that of philosophy.

[3] As an example of this it may be noticed that the deserving author of an excellent *History of the Principles of Mechanics*, Ed. Dühring, has developed in his *Kritische Geschichte der Philosophie* (3d ed., Berlin, 1878) all the caprice of a one-sided judgment. The like is true of the confessional criticism passed by A. Stöckl, *Lehrbuch der Geschichte der Philosophie* (2 vols., 3d ed., Mainz, 1889).

[4] It is impossible to protest enough against the youthful conceit with which it was for a time the fashion in Germany to look down with ridicule or insult from the "achievements of the present" upon the great men of Greek and Ger-

In contrast with this external method of pronouncing sentence, the scientific history of philosophy must place itself upon the standpoint of *immanent criticism*, the principles of which are two: *formal logical consistency* and *intellectual fruitfulness*.

Every philosopher grows into a certain set of ideas, and to these his thinking remains bound, and is subjected in its development to psychological necessity. Critical investigation has to settle how far it has been possible for him to bring the different elements of his thinking into agreement with each other. The contradiction is almost never actually present in so direct a form that the same thing is expressly maintained and also denied, but always in such a way that various positions are put forward which, only by virtue of their logical consequences, lead to direct contradiction and really irreconcilable results. The discovery of these discrepancies is formal criticism; it frequently coincides with pragmatic explanation, for this formal criticism has been performed in history itself by the successors of the philosopher in question, and has thus determined for them their problems.

Yet this point of view alone is not sufficient. As purely formal it applies without exception to all attested views of a philosopher, but it gives no criterion for decision on the question, in what the philosophical significance of a doctrine really consists. For it is often the case that philosophy has done its work just in conceptions which must by no means be regarded as in themselves perfect or free from contradiction; while a multitude of individual convictions, which there is no occasion to oppose, must remain unnoticed in a corner, so far as our historical survey is concerned. In the history of philosophy great errors are weightier than small truths.

For before all else the decisive question is: what has yielded a contribution to the development of man's conception of the universe and estimate of life? In the history of philosophy those structures of thought are the objects of study which have maintained themselves permanent and living as forms of apprehension and norms of judgment, and in which the abiding inner structure of the human mind has thus come to clear recognition.

This is then the standard, according to which alone we can decide also which among the doctrines of the philosophers — concerning, as they often do, so many various things — are to be regarded as properly philosophical, and which, on the other hand, are to be excluded from the history of philosophy. Investigation of the sources has of course the duty of gathering carefully and completely all the doctrines of philosophers, and so of affording all the material for explaining their genesis, whether from their logical content, or from the history of civilisation, or from psychological grounds; but the purpose of this laborious work is yet only this, that the philosophically indifferent may be ultimately recognised as such, and the ballast then thrown overboard.

It is especially true that this point of view must essentially determine selection and presentation of material in a *text-book*, which is not to give the investigation itself, but to gather up its results.

§ 3. Division of Philosophy and of its History.

It cannot be our purpose here to propose a systematic division of philosophy, for this could in no case possess universal validity historically. The differences which prevail in the course of the historical development, in determining the conception, the task, and the subject-matter of philosophy, involve so necessarily and obviously a change also in the divisions, that this needs no especial illustration. The oldest philosophy knew no division at all. In later antiquity

man philosophy; this was mainly the haughtiness of an ignorance which had no suspicion that it was ultimately living only by the thoughts of those whom it was abusing and despising.

a division of philosophy into logic, physics, and ethics was current. In the Middle Ages, and still more in modern times, the first two of these subjects were often comprised under the title, theoretical philosophy, and set over against practical philosophy. Since Kant a new threefold division into logical, ethical, and æsthetical philosophy is beginning to make its way, yet these various divisions are too much dependent upon the actual course of philosophy itself to make it worth our while to recount them here in detail.

On the other hand, it does commend itself to preface the historical exposition with at least a brief survey of the entire circuit of those problems which have always formed the subject of philosophy, however varied the extent to which they have been studied or the value that has been attached to them, — a survey, therefore, for which no claim is made to validity from a systematic point of view, but which is determined only by the purpose of preliminary orientation.

1. *Theoretical problems.* Such we call those which refer, in part to our knowledge of the actual world, in part to an investigation of the knowing process itself. In dealing with the former class, however, the general questions which concern the actual taken as a whole are distinguished from those which deal with single provinces of the actual. The former, viz. the highest principles for explaining the universe, and the general view of the universe based on these principles, form the problem of *metaphysics*, called by Aristotle first, *i.e.* fundamental, science, and designated by the name now usual, only on account of the position which it had in the ancient collection of the Aristotelian works — "after physics." On account of his monotheistic view of the world, Aristotle also called this branch of knowledge theology. Later writers have also treated *rational* or *natural theology* as a branch of metaphysics.

The special provinces of the actual are Nature and History. In the former, external and internal nature are to be distinguished. The problems presented to knowledge by external nature are called *cosmological*, or, specially, problems of *natural philosophy*, or perhaps *physical*. The investigation of internal nature, *i.e.* of consciousness and its states and activities, is the business of *psychology*. The philosophical consideration of history remains within the borders of theoretical philosophy only if it be limited to the investigation of the laws that prevail in the historical life of peoples; since, however, history is the realm of man's purposeful actions, the questions of the *philosophy of history*, so far as this deals with the end of the movement of history viewed as a whole, and with the fulfilment of this end, fall under the head of practical problems.

Investigation directed upon knowledge itself is called logic (in the general sense of the word), and also sometimes *noëtic*. If we are occupied with the question how knowledge actually arises, this *psycho-genetic* consideration falls in the province of *psychology*. If, on the other hand, we set up norms or standards according to which our ideas are estimated as regards their worth for truth, we call these *logical* laws, and designate investigation directed upon them as *logic* in the narrower sense. The application of these laws gives rise to *methodology*, which develops the prescriptions for a systematic ordering of scientific activity with reference to the various ends of knowledge. The problems, finally, which arise from the questions concerning the range and limit of man's knowing faculty and its relation to the reality to be known, form the subject-matter of *epistemology* or *theory of knowledge*.

H. Siebeck, *Geschichte der Psychologie*, Vol. I., in two parts (Gotha, 1880–84), incomplete, extending into the scholastic period.
K. Prantl, *Geschichte der Logik im Abendlande*, 4 vols. (Leips. 1855–70), brought down only to the Renaissance.
Fr. Harms, *Die Philosophie in ihrer Geschichte*. I. "Psychologie"; II. "Logik" (Berlin, 1877 and 1881).
[R. Adamson, *The History of Psychology* (in prep.).]

2. *Practical* problems are, in general, those which grow out of the investigation of man's activity, so far as it is determined by ends. Here, too, a psycho-genetic treatment is possible, which falls under psychology. That discipline, on the other hand, which considers man's action from the point of view of the ethical norm or standard, is *ethics* or *moral philosophy*. By *morals* (*Moral*) in the narrower sense is usually understood the proposal and grounding of ethical precepts. Since, however, all ethical action has reference to the community, there are attached to morals or ethics, in the narrower sense, the *philosophy of society* (for which the unfortunate name *sociology* seems likely to become permanent), and the *philosophy of law or right*. Further, in so far as the ideal of human society constitutes the ultimate meaning of history, the *philosophy of history* appears also in this connection, as already mentioned.

To practical problems, in the broadest sense of the word, belong also those which relate to art and religion. To designate philosophical investigation of the nature of the beautiful and of art, the name *æsthetics* has been introduced since the end of last century. If philosophy takes the religious life for its object, not in the sense of itself intending to give a science of the nature of the deity, but in the sense of an investigation with regard to man's religious behaviour, we call this discipline *philosophy of religion*.

Fr. Schleiermacher, *Grundlinien einer Kritik der bisherigen Sittenlehre* (collected works, III., Vol. I., Berlin, 1834). L. v. Henning, *Die Principien der Ethik in historischer Entwicklung* (Berlin, 1825). Fr. v. Raumer, *Die geschichtliche Entwicklung der Begriffe von Staat, Recht, und Politik* (Leips., 3d ed., 1861). E. Feuerlein, *Die philos. Sittenlehre in ihren geschichtlichen Hauptformen* (2 vols., Tübingen, 1857–59). P. Janet, *Histoire de la philosophie morale et politique* (Paris, 1858). W. Whewell, *History of Moral Science* (Edinburg, 1863). H. Sidgwick, *The Methods of Ethics*, 4th ed. (Lond. and N.Y. 1890). [*Outlines of the History of Ethics*, by same author (Lond. and N.Y., 3d ed., 1892). J. Martineau, *Types of Ethical Theory* (2d ed., Oxford and N.Y. 1886).] Th. Ziegler, *Geschichte der Ethik*, 2 vols. (the third not yet appeared; Strassburg, 1881–86). K. Köstlin, *Geschichte der Ethik* (only the beginning, 1 vol., Tübingen, 1887). [J. Bonar, *Philosophy and Economics in their Historical Relations* (Lond. and N.Y. 1893). D. G. Ritchie, *The History of Political Philosophy* (in prep.).]
R. Zimmermann, *Geschichte der Aesthetik* (Vienna, 1858). M. Schasler, *Kritische Geschichte der Aesthetik* (Berlin, 1871). [B. Bosanquet, *The History of Æsthetics* (Lond. and N.Y. 1892). W. Knight, *The Philosophy of the Beautiful* (an outline of the history, Edin. and N.Y. 1891). Gayley and Scott, *A Guide to the Literature of Æsthetics*, Univ. of California, is a valuable bibliography.]
J. Berger, *Geschichte der Religionsphilosophie* (Berlin, 1800). [Pünjer, *History of the Christian Philosophy of Religion* (Vol. I., Edin. and N.Y. 1887). O. Pfleiderer, *The Philosophy of Religion*, trans. by Menzies (Lond. 1887). Martineau, *A Study of Religion* (2 vols., 1888), and *Seat of Authority in Religion* (1890). J. Caird, *Introd. to the Philos. of Religion* (1880). E. Caird, *Evolution of Religion* (2 vols., Lond. and N.Y. 1893).]

The division of the history of philosophy is usually connected with that current for political history, so as to distinguish three great periods, — Ancient, Mediæval, and Modern Philosophy. Yet the sections made in this way are not so favourable for the history of philosophy as they perhaps are for political history. Other points of division must be made, equally important as regards the nature of the development; and, on the other hand, the transition between the Middle Ages and modern times demands a shifting of the point of division on either side.

In consequence of this, the entire history of philosophy will here be treated according to the following plan of division, in a manner to be more exactly illustrated and justified in detail by the exposition itself: —

(1) *The Philosophy of the Greeks:* from the beginnings of scientific thought to the death of Aristotle, — from about 600 to 322 B.C.

(2) *Hellenistic-Roman Philosophy:* from the death of Aristotle to the passing away of Neo-Platonism, — from 322 B.C. to about 500 A.D.

(3) *Mediæval Philosophy:* from Augustine to Nicolaus Cusanus, — from the fifth to the fifteenth century.

(4) *The Philosophy of the Renaissance:* from the fifteenth to the seventeenth century.

(5) *The Philosophy of the Enlightenment:* from Locke to the death of Lessing, — 1689–1781.

(6) *The German Philosophy:* from Kant to Hegel and Herbart, — 1781–1820.

(7) *The Philosophy of the Nineteenth Century.*

PART I.

THE PHILOSOPHY OF THE GREEKS.

Chr. A. Brandis, *Handbuch der Geschichte der griechisch-römischen Philosophie.* 3 pts. in 6 vols. Berlin, 1835–66.

Same author, *Geschichte der Entwickelungen der griechischen Philosophie und ihrer Nachwirkungen im römischen Reiche.* 2 pts. Berlin, 1862–66.

Ed. Zeller, *Die Philosophie der Griechen.* 3 pts. in 5 vols. 1 and 2 vols. in the 4th, 3–5 vols. in 3d ed. Leips. 1879–89. [Trans., with the exception of the portion on Aristotle and the Elder Peripatetics and that on the concluding religious period, as five works: *The Pre-Socratic Schools* (2 vols.), *Socrates and the Socratic Schools, Plato and the Older Academy, Stoics, Epicureans, and Sceptics, History of Eclecticism*, chiefly by S. F. Alleyne and O. J. Reichel. Lond. and N.Y., Longmans.]

A. Schwegler, *Geschichte der griechischen Philosophie.* Ed. by K. Köstlin. 3d ed. Freiburg, 1882.

L. Strümpell, *Die Geschichte der griechischen Philosophie.* 2 pts. Leips. 1854–61.

W. Windelband, *Geschichte der alten Philosophie.* Nördlingen, 1888.

Ritter et Preller, *Historia philosophiæ græco-romanæ (Græcæ).* In 7th ed. Edited by Schultess and Wellman. Gotha, 1886–88. An excellent collection of the most important sources.

[A. W. Benn, *The Greek Philosophers.* 2 vols. Lond. 1883.]

[J. F. Ferrier, *Lectures on Greek Philosophy.* Lond. 1888.]

[J. B. Mayor, *A Sketch of Ancient Philosophy, from Thales to Cicero.* Camb. 1881.]

If by science we understand that independent and self-conscious work of intelligence which seeks knowledge methodically for its own sake, then it is among the Greeks, and the Greeks of the sixth century B.C., that we first find such a science, — aside from some tendencies among the peoples of the Orient, those of China and India[1] particularly, only recently disclosed. The great civilised

[1] Even if it be conceded that the beginnings of moral philosophy among the Chinese rise above moralising, and especially those of logic in India above incidental reflections on the scientific formation of conceptions, — on which we shall not here pronounce, — these remain so remote from the course of European philosophy, which forms a complete unity in itself, that a text-book has no occasion to enter upon them. The literature is brought together in Ueberweg, I. § 6.

peoples of earlier antiquity were not, indeed, wanting either in an abundance of information on single subjects, or in general views of the universe; but as the former was gained in connection with practical needs, and the latter grew out of mythical fancy, so they remained under the control, partly of daily need, partly of religious poetry; and, as was natural in consequence of the peculiar restraint of the Oriental mind, they lacked, for their fruitful and independent development, the initiative activity of individuals.

Among the Greeks, also, similar relations existed until, at the time mentioned, the mighty upward movement of the national life unfettered the mental powers of this most gifted of all peoples. For this result the democratic development of constitutions which in passionate party struggle tended to bring out independence of individual opinions and judgments, and to develop the significance of personality, proved even more favourable than the refinement and spiritualisation of life which increasing wealth of trade brought with it. The more the luxuriant development of individualism loosened the old bonds of the common consciousness, of faith, and of morals, and threatened the youthful civilisation of Greece with the danger of anarchy, the more pressing did individual men, prominent by their position in life, their insight, and their character, find the duty of recovering in their own reflection the measure that was becoming lost. This ethical reflection found its representatives in the lyric and gnomic poets, especially, however, in the so-called *seven wise men*.[1] It could not fail to occur, also, that a similar movement, in which individual opinions asserted their independence, should trench upon the religious life already so varied, in which the opposition between the old mystery-cults and the æsthetic national mythology stimulated the formation of so many special types. Already in the cosmogonic poetry [2] the poet had dared to portray the heaven of the myths according to his own individual fancy; the age of the seven sages began to read its ethical ideals into the gods of the Homeric poetry, and in the ethico-religious reformation attempted by Pythagoras,[3] coming as it did in the outer form of a return to the old strictness of life, the new content which life had gained came all the more clearly to view.

[1] The "seven sages," among whom Thales, Bias, Pittacus, and Solon are usually named, while with regard to the rest tradition is not agreed, must not, with the exception of Thales, be regarded as representatives of science. Diog. Laert. I. 40; Plato, *Protag.* 343.

[2] *Pherecydes* of Syrus is to be regarded as the most important of these cosmogonic poets; he wrote in prose at the time of the first philosophies, but his mode of thought is still mythical throughout, not scientific. Fragments of his writings collected by Sturz (Leips. 1834).

[3] Cf. below at the opening of the first chapter of this part.

From such conditions of fermentation the science of the Greeks to which they gave the name philosophy was born. The independent reflection of individuals, aided by the fluctuations of religious fancy, extended itself from the questions of practical life to the knowledge of Nature, and there first won that freedom from external ends, that limitation of knowledge to itself, which constitutes the essence of science.

All these processes, however, took place principally in the outlying parts of Greek civilisation, in the colonies, which were in advance of the so-called Mother-country in mental as in material development. In Ionia, in Magna Græcia, in Thrace, stood the cradles of science. It was only after Athens in the Persian wars had assumed together with the political hegemony the mental as well, which she was to keep so much longer than the former, that Attic soil, consecrated to all the muses, attracted science also. Its advent was at the time of the Sophists; it found its completion in the doctrine and school of Aristotle.

It was in connection with the disinterested consideration of Nature that reflection first rose to the scientific construction of conceptions. The result of this was that Greek science devoted all the freshness of youthful joy and knowledge primarily to the problems of Nature, and in this work stamped out fundamental conceptions, or Forms of thought, for apprehending the external world. In order to turn the look of philosophy inward and make human action the object of its study, there was first need, for one thing, of subsequent reflection upon what had, and what had not, been accomplished by this study of Nature, and, for another thing, of the imperious demands made by public life on science now so far matured as to be a social factor. The effect of this change might for a time seem to be to check the pure zeal for research which had marked the beginnings, but after positive results had been reached in the field of the knowledge of man's inner nature this same zeal developed all the more vigorously, and led to the construction of those great systems with which purely Greek philosophy reached its consummation.

The philosophy of the Greeks divides, therefore, into *three periods*: a *cosmological*, which extends from about 600 to about 450 B.C.; an *anthropological*, which fills out about the second half of the fifth century B.C. (450–400); and a *systematic*, which contains the development of the three great systems of Greek science, those of Democritus, Plato, and Aristotle (400–322).

The philosophy of the Greeks forms the most instructive part of the whole history of philosophy from a theoretical point of view, not only because the fundamental conceptions created in it have become the permanent foundations

for all further development of thought, and promise to remain such, but also because in it the formal presuppositions contained in the postulates of the thinking Reason itself, attained sharp formulation as set over against the material of knowledge, which, especially at the beginning, was still relatively small in amount. In this the Greek philosophy has its typical value and its didactic importance.

These advantages appear already in the transparency and simplicity of the entire development, which enable us to see the inquiring mind at first turned outward, then thrown back upon itself, and from this point of view returning to a deeper apprehension of reality as a whole.

There is, therefore, scarcely any controversy with regard to this course of the general development of Greek philosophy, though different expositions have located the divisions between the periods at different points. Whether Socrates is made to begin a new period, or is placed together with the Sophists in the period of Greek Enlightenment, depends ultimately only on whether the result (negative or positive), or the object-matter of the philosophising, is regarded as of decisive importance. That, however, Democritus must in any case be separated from the "Pre-Socratics" and assigned to the great systematic period of Greek Philosophy, has been proved by the Author in his survey of the *Geschichte der alten Philosophie*, ch. 5.

CHAPTER I.

THE COSMOLOGICAL PERIOD.

S. A. Byk, *Die vorsokratische Philosophie der Griechen in ihrer organischen Gliederung.* 2 Parts. Leips. 1875–77.
[E. Burnet, *Early Greek Philosophy.* Lond. 1892.]

THE immediate background for the beginnings of Greek philosophy was formed by the cosmogonic poetry, which aimed to present in mythical garb the story of the prehistoric ages of the given world, and so, in the form of narratives of the origination of the universe, made use of prevailing ideas as to the constant mutations of things. The more freely individual views developed in this process, the more the time factor in the myth retreated in favour of the emphasising of these abiding relations; and the question finally emerged: "What is then the original ground of things, which outlasts all temporal change, and how does it change itself into these particular things, or change these things back into itself?"

The solution of this question was first attempted in the sixth century by the *Milesian School of natural philosophy,* of which Thales, Anaximander, and Anaximenes are known to us as the three chief representatives. Information of many kinds, which had long been publicly accumulating in the practical experience of the sea-faring Ionians, stood at their disposal, as well as many true observations, often of an acute sort. They kept in touch, also, no doubt, with the experience of the Oriental peoples, especially the Egyptians, with whom they stood in so close relation.[1] Knowledge from these various sources was brought together with youthful zeal. The chief interest fell upon physical questions, particularly upon

[1] The influence of the Orient upon the beginnings of Greek philosophy has been overestimated by Glabisch (*Die Religion und die Philosophie in ihrer weltgeschichtlichen Entwicklung*, Breslau, 1852) and Roth (*Geschichte unserer abendländischen Philosophie*, 2 Vols., Mannheim, 1858 ff.). In the case of information upon particular fields such influence is certainly to be recognised; on the other hand, the scientific conceptions are throughout independent works of Greek thought.

the great elementary phenomena, to explain which many hypotheses were thought out. Besides this, interest turned chiefly to geographical and astronomical problems, such as the form of the earth, its relation to the sidereal heavens, the nature of the sun, moon, and planets, and the manner and cause of their motion. On the other hand, there are but feeble indications of a zeal for knowledge applied to the organic world and man.

Such were the objects of experience studied by the first "philosophy." It stood quite far removed from medical science, which, to be sure, was limited to technical information and proficiency in the art, and was handed down as a secret doctrine, guarded in priest-like fashion in orders and schools, such as those of Rhodes, Cyrene, Crotona, Cos, and Cnidus. Ancient *medicine*, which aimed expressly to be an art and not a science (so Hippocrates), came into contact with philosophy when this was an all-embracing science, only at a late period and quite transiently. Cf. Häser, *Lehrbuch der Geschichte der Medicin*, I. (2d ed., Jena, 1875).

So also the beginnings of *mathematics* go along independently beside those of ancient philosophy. The propositions ascribed to the Milesians make the impression of individual pieces of information picked up and put together, rather than of results of genuine research, and are quite out of relation with their doctrines in natural science and philosophy. In the circles of the Pythagoreans, also, mathematical studies were at first evidently pursued for their own sake, to be drawn all the more vigorously into the treatment of general problems. Cf. G. Cantor, *Geschichte der Mathematik*, I. (Leips. 1880).

The efforts of the Milesians to determine the nature of the one world-ground had already in the case of *Anaximander* led beyond experience to the construction of a metaphysical conception to be used for explanation, viz. the ἄπειρον, and thereby drew science away from the investigation of facts to the consideration of conceptions. While *Xenophanes*, the *founder of the Eleatic School*, drew the consequences which result for the religious consciousness from the philosophical conception of the unity of the world, *Heraclitus*, in hard struggle with ideas that were obscure and religiously coloured, analysed destructively the presupposition of an abiding substance, and allowed only a law of change to stand as ultimate content of knowledge. All the more sharply, on the other hand, did the Eleatic School, in its great representative, *Parmenides*, shape out the conception of Being until it reached that regardless boldness of formulation which, in the following generation of the School, was defended by Zeno, and softened down in some measure only by Melissus.

Very soon, however, a series of efforts appeared, which brought anew into the foreground the interest in explanatory natural science that had been thrust aside by this development of the first metaphysical antitheses. In behalf of this interest more comprehensive efforts were made toward an enrichment of knowledge; this time, more than in the case of previous observations, questions and hypotheses from the organic and physiological realms were kept in

mind; and the attempt was made to mediate with explanatory theories between the opposing conceptions of Heraclitus and Parmenides.

Out of these needs arose, about the middle of the fifth century, side by side, and with many reciprocal relations, positive and polemical, the theories of *Empedocles*, *Anaxagoras*, and *Leucippus*, founder of the *Atomistic* School of Abdera. The number of these theories and their well-known dependence upon one another prove that in spite of the distance by which individual men and schools found themselves separated, there was already a great vigour in exchange of thought and in literary activity. The picture of this life takes on a much fuller form as we reflect that tradition, in sifting its material, has obviously preserved only the memory of what was most important, and that each of the names remaining known to us indicates, in truth, an entire circle of scientific activity.

The *Pythagoreans*, during this same period, occupied a peculiar position at one side. They also took up the metaphysical problem given by the opposition between Heraclitus and the Eleatics, but hoped to find its solution by the aid of mathematics, and, by their *theory of numbers*, as whose first literary representative *Philolaus* is known, added a number of most important factors to the further movement of thought. The original purpose or tendency of their league made itself felt in their doctrines, in that, in fixing these, they conceded a considerable influence to considerations of (ethical or æsthetic) worth. They indeed attempted a scientific treatment of ethical questions as little as did the entire philosophy of this period, but the cosmology which they based upon their astronomical ideas, already widely developed with the help of mathematics, is yet at the same time permeated by æsthetic and ethical motives.

Of the **Milesian School** only three names — Thales, Anaximander, and Anaximenes — have been handed down to us. From this it appears that the school flourished in what was then the Ionic capital during the entire sixth century, and perished with the city itself, which was laid waste by the Persians in 494, after the battle of Lade.

Thales, sprung from an old merchant family, is said to have predicted the solar eclipse in 585, and survived the invasion of the Persians in the middle of the sixth century. He had perhaps seen Egypt, and was not deficient in mathematical and physical knowledge. So early an author as Aristotle did not know writings from him.

Anaximander seems to have been little younger. Of his treatise περὶ φύσεως a curious fragment only is preserved. Cf. Neuhäuser (Bonn, 1883). — Büsgen, *Ueber das ἄπειρον des A.* (Wiesbaden, 1867).

It is difficult to determine the period of **Anaximenes**. It falls probably about 560–500. Almost nothing of his work περὶ φύσεως remains.

Aside from that given by Aristotle (in the beginning of the *Metaphysics*) we owe our meagre information concerning the theories of the Milesians chiefly to the *Commentary* of Simplicius. Cf. H. Ritter, *Geschichte der jonischen Philosophie* (Berlin, 1821); R. Seydel, *Der Fortschritt der Metaphysik unter den ältesten jonischen Philosophen* (Leips. 1861).

At the head of the **Eleatic School**, **Xenophanes**, who at all events was concerned in its establishment, is generally placed. Born about 570 in Colophon, he fled in 546, in consequence of the Persian conquest of Ionia, and gained a living as wandering poet. At last, in Elea, founded by the Ionians who fled into Magna Græcia, he found a permanent dwelling. He died after 480. The fragments of his partly gnomic, partly philosophical, sayings have been collected by Karsten (Amsterdam, 1835). Concerning him see Fr. Kern (Naumburg, 1864, Oldenburg, 1867, Danzig, 1871, Stettin, 1874 and 1877) and J. Freudenthal (Breslau, 1886).

Parmenides, an Eleatic of renowned family, who was not a stranger to the Pythagorean society, wrote about 470. The fragments of his didactic poem have been collected by Peyron (Leips. 1810) and H. Stein (Leips. 1864). [Met. tr. in *Jour. Spec. Phil.*, IV.] The lost treatise of **Zeno** (about 490–430) was probably the first which was separated into chapters and arranged dialectically. He, too, came from Elea.

Melissos, on the contrary, was the Samian general who conquered the Athenians in 442. Concerning his personal connection with the Eleatic school nothing is known.

The unimportant fragments of the Eleatics are in a measure supplemented by the accounts of Aristotle, Simplicius, and others. The pseudo-Aristotelian work, *De Xenephone, Zenone, Gorgia* (Arist., Berl. ed., 974 ff.), which must be used with great discretion, gives an account in the first chapter probably of Melissos; in the second, from confusedly intermingling sources, of Zeno; in the third, of Gorgias.

Heraclitus of Ephesus ("the Obscure"), about 536–470, disgusted with the ever-growing power of the democracy, gave up the high position which was his by birth, and in the moody leisure of the last decade of his life, wrote a treatise which was pronounced difficult of comprehension even by the ancients, while the fragments of it which we possess are often very ambiguous. Collected and edited by P. Schuster (Leips. 1873) and J. Bywater (Oxford, 1877). Cf. Fr. Schleiermacher (*Ges. W.*, III. Abth., Bd. 2, pp. 1–146); J. Bernays (*Ges. Abhandlungen*, Bd. I., 1885); F. Lasalle (2 Bde., Berlin, 1858); E. Pfleiderer (Berlin, 1886). [G. T. W. Patrick, *Heraclitus* in Am. Jour. Psy., I., 1888, contains trans. of the *Fr.*]

The first Dorian in the history of philosophy is **Empedocles** of Agrigentum, about 490–430, a priestly and prophetic personality, much regarded in his character as statesman, physician, and worker of miracles. He had, too, relations with the Sicilian school of orators, of which the names of Korax and Tisias are familiar; and besides his *καθαρμοί* (Songs of Purification) has left a didactic poem, the fragments of which have been published by Sturz (Leips. 1805), Karsten (Amsterdam, 1838), and Stein (Bonn, 1852).

Anaxagoras of Klazomene (500 till after 430) settled, toward the middle of the fifth century, in Athens, where he made friends with Pericles. In 434 he was accused of impiety and obliged to leave the city, and founded a school in Lampsacus. Schaubach (Leips. 1827) and Schorn (Bonn, 1829) have collected the fragments of his treatise, *περὶ φύσεως*. Cf. Breier (Berlin, 1840), Zévort (Paris, 1843).

So little is known of the personality of **Leucippus**, that even in ancient times his very existence was doubted. The great development of the atomistic theory by Democritus (see ch. 3) had completely overshadowed its founder. But traces of Atomism are to be recognised with certainty in the entire structure of thought after Parmenides. Leucippus, if not born in Abdera, yet active there as head of the school out of which Protagoras and Democritus went later, must have been contemporary with Empedocles and Anaxagoras, even though somewhat older. Whether he wrote anything is uncertain. Cf. Diels, *Verh. der Stett. Philol. Vers.* (1886). — A Brieger, *Die Urbewegung der Atome* (Halle, 1884); H. Liepmann, *Die Mechanik der leucipp-demokritischen Atome* (Leips. 1885).

The **Pythagorean Society** first appeared in the cities of Magna Græcia as a religious-political association toward the end of the sixth century. Its founder was **Pythagoras**, of Samos, who, born about 580, after long journeys, which probably led him toward Egypt also, made the aristocratic city of Crotona the starting-point of a reform movement which had for its aim a moral and religious purification. We are first apprised of the internal relations of the society through subsequent narratives (Jamblichus, *De Vita Pythagorica*, and Porphyrius, *De Vita Pythagoræ* published by Kiesling (Leips. 1815–16), whose trustworthiness is doubtful. It seems, however, to be certain that already the old society imposed definite duties upon its members, even for private life, and introduced the practice of working in common at intellectual pursuits, especially at music and mathematics. In consequence of its political position (in regard to which B. Krische, Göttingen, 1830) the external conditions of the society assumed at first a very favourable form, inasmuch as, after the plunder of the democratic Sybaris, 509, Crotona won a kind of hegemonic influence in Magna Græcia. In time, however, the Pythagoreans became the losers in the bitter party struggles of the cities, and often suffered bitter persecution, by which the society was finally destroyed in the fourth century.

To Pythagoras himself, who died about 500, we can trace back no philosophical writings, although the subsequent myth-making process sought so strenuously to make him the idol of all Hellenic wisdom. (E. Zeller in *Vortr. u. Abhandl.*, I., Leips. 1865.) Plato and Aristotle knew only of a philosophy of the *Pythagoreans*. **Philolaus**, who seems to have been somewhat younger than Empedocles and Anaxagoras, appears as the most prominent representative of this philosophy. Almost nothing is known of the circumstances of his life, and the fragments of his treatise (ed. by Boeckh, Berlin, 1819; cf. C. Schaarschmidt, Bonn, 1864) lie under considerable suspicion.

Of the remaining adherents of the society, only the names are known. The latest representatives came into so close relations with the Platonic Academy that, as regards their philosophy, they may almost be said to have belonged to it. Among them **Archytas** of Tarentum, the well-known *savant* and statesman, should be mentioned. Concerning the very doubtful fragments attributed to him, cf. G. Hartenstein (Leips. 1833), Fr. Petersen (Zeitschr. f. Alterthumsk; 1836), O. Gruppe (Berlin, 1840), Fr. Beckman (Berlin, 1844).

The reports concerning the teaching of the Pythagoreans, especially in the later accounts, are clouded by so many additions from foreign sources, that perhaps at no point in ancient philosophy is it so difficult to determine the actual facts in the case as here, even if we sift out the most trustworthy, namely Aristotle and his best taught commentators, notably Simplicius, many dark points and contradictory statements remain, particularly in details. The reason for this lies probably in the fact that in the school, which for a time was widely extended, various trends of thought ran side by side, and that among these the general fundamental thought first brought forward perhaps by Philolaus, was worked out in different ways. It would be of great service to attempt such a separation.

H. Ritter, *Geschichte der pythagoreischen Philosophie* (Hamburg, 1826); Rothenbücher, *Das System der Pythagoreer nach Aristoteles* (Berlin, 1867); E. Chaignet, *Pythagore et la philosophie pythagoricienne* (2 vols., Paris, 1873).

§ 4. The Conceptions of Being.

The fact that things of experience change into one another was the stimulus to the first philosophical reflections, and wonder[1] at this must indeed have arisen early among a people so mobile and with so varied an experience of Nature as the Ionians. To this fact, which furnished the fundamental motive of its reflection, the Ionic philosophy gave liveliest expression in Heraclitus, who seems to have been unwearied[2] in seeking the most pointed formulations for this universal mutability of all things, and especially for the sudden changes of opposites into each other. But while myth gave

[1] Cf. upon the philosophical value of the *θαυμάζειν*, Arist. *Met.* I. 2, 982 b 12.
[2] *Fragm.* (Schust.) 41–44, 60, 63, 67.

to this view the garb of a fabled account of the formation of the world, science asked for the abiding ground of all these changes, and fixed this question in the conception of the *cosmic matter*, or "*world-stuff*" (*Weltstoff*), which experiences all these transformations, from which all individual things arise, and into which they become again transformed (ἀρχή). In this conception[1] was tacitly contained the *presupposition of the unity of the world;* whether the Milesians[2] already sought to justify this we do not know. It was a later eclectic straggler[3] who first attempted to justify this *Monism* by the transformation of all things into one another, and by the inter-connection of all things without exception.

1. That, however, a single cosmic matter, or world-stuff, lies at the basis of the entire process of nature, appears in ancient tradition as a self-evident presupposition of the Ionic School. The only question was to determine what this elementary matter was. The nearest course was then to seek for it in what was given in experience, and so *Thales* declared it to be *water; Anaximenes, air.* To this choice they were probably determined only by the mobility, changeability, and apparent inner vitality[4] of water and air. It is evident, too, that the Milesians thought little in this connection of the chemical peculiarities of water and air, but only of the states of aggregation[5] concerned. While the solid appears in itself dead, moved only from without, the liquid and volatile make the impression of independent mobility and vitality; and the monistic prepossession of this first philosophising was so great that the Milesians never once thought of asking for a reason or ground of this ceaseless change of the cosmic matter, but instead assumed this as a self-intelligible fact — a matter of course — as they did all change or occurrence; at most they described its individual forms. The cosmic matter passed with them for something in itself living: they thought of it as animated, just as are particular organisms,[6] and for this reason their doctrine is usually characterised from the standpoint of the later separation in conceptions as *Hylozoism.*

[1] Which Aristotle in the *Met.* I. 3, 983 b 8, has defined, not without the admixture of his own categories.

[2] The expression ἀρχή, which, moreover, bears in itself the memory of the chronological fancies of the Cosmologists, is said by Simplicius to have been used first by Anaximander.

[3] Diogenes of Apollonia. Cf. Simpl. *Phys.* (D.) 32r 151, 30, and Arist. *Gen. et Corr.* I. 6, 322 b 13.

[4] *Schol.* in Arist. 514 a 33.

[5] For ὕδωρ, ὑγρόν is frequently substituted. With regard to the ἀήρ of Anaximenes the accounts are such that the attempt has been made to distinguish his metaphysical "air" from the empirical: Ritter, I. 217; Brandis, I. 144.

[6] Plut. *Plac.* I. 3 (*Doxogr.* D. 278). Perhaps this is intended in the conjecture of Aristotle, *Met.* I. 3, 983 b 22.

2. If we ask, however, why Anaximenes, whose doctrine, like that of Thales, seems to have kept within the bounds of experience, substituted air for water, we learn[1] that he believed air to have a characteristic which water lacked, — a characteristic, too, which his predecessor Anaximander had postulated as indispensable for the conception of primitive matter, viz. that of *infinity.* As motive for this postulate of *Anaximander* there is related the argument that a finite cosmic matter would exhaust itself in the ceaseless succession of productions.[2] But Anaximander had also seen that this demand made by the conception of the ἀρχή could not be satisfied by any matter or substance which we can perceive, and had on this account transferred the cosmic matter beyond experience. He maintained boldly the reality of an original ground of things, possessing all the properties that are necessary, if we are to derive the changes in the world of experience from something itself abiding and raised above change, — even though such a ground might not be found in experience. He drew from the conception of the ἀρχή the consequence, that though no object of experience corresponds to this conception, we must yet, to explain experience, assume such a conception behind it as real and conditioning it. He therefore called the cosmic matter "*the Infinite*" (τὸ ἄπειρον), and ascribed to it all the qualities postulated in the conception of the ἀρχή: that is, that it had never begun to be, and was imperishable, inexhaustible, and indestructible.

The conception of *matter*, thus constructed by Anaximander is, nevertheless, clear only in the respect that it is to unite within it spatial infinity and the quality of being without beginning or end in time, and thus the mark of the all-embracing and all-determining;[3] on the other hand, with reference to its qualitative determination, it cannot be made clear what the philosopher intended. Later accounts give us to understand that he expressly maintained that the original matter was qualitatively undetermined or indefinite (ἀόριστος),[4] while the statements of Aristotle[5] speak more for the assumption of a mixture of all kinds of matter known in experience, — a mixture completely adjusted or equalised, and therefore as a whole indifferent or neutral. The most probable view here is, that Anaximander reproduced in the form of an abstract conception the

[1] Simpl. *Phys.* (D.) 6r 24, 26.

[2] Plut. *Plac.* I. 3 (*Doxogr.* D. 277); Arist. *Phys.* III. 8, 208 a 8.

[3] Arist. *Phys.* III. 4, 203 b 7.

[4] Schol. in Arist. 514 a 33; Herbart, *Einleitung in die Philosophie* (Ges. W., I. 196).

[5] *Met.* XII. 2, 1069 b 18, and especially *Phys.* I. 4, 187 a 20. Cf. also Simpl. *Phys.* (D.) 33r 154, 14 (according to Theophrastus). This much-treated controversy will be spoken of more in detail below (§ 6).

unclear idea of the mythical chaos which was "one" and yet also "all." This he did by assuming as the cosmic matter an infinite, corporeal mass, in which the various empirical substances were so mixed that no definite quality could be ascribed to it as a whole. For this reason, however, the separation of the individual qualities out of this self-moved matter could no longer be regarded as properly a qualitative change in it. With this view the conception of the unity of the world as regards quality would be given up, to be sure, and an essential preparation made for the later development.

3. Still another predicate was given by Anaximander to the Infinite, — τὸ θεῖον, the divine. As a last remembrance of the religious home in which scientific reflection arose, it shows for the first time the inclination of philosophers, constantly recurring in history, to view as "Deity" the highest conception which theory has led them to use for explaining the world, and so to give it at the same time a sanction for the religious consciousness. Anaximander's matter is the first philosophic conception of God, the first attempt, and one which remains still entirely within the physical, to strip the idea of God of all mythical form.

But while the *religious need* thus maintained itself in the determination of metaphysical conception, the possibility of an influence of the results of science upon the religious life was brought nearer, the more these results met and responded to an impulse which hitherto had been dominant only in an obscure and uncertain manner within that life. The transformation which the Greek myths had undergone, as well in the import given them in cosmogonic fancy as in that given to their ethical interpretation, tended everywhere toward a monotheistic culmination (Pherecydes, Solon); and to this movement its final result, a clearly outspoken monism, was now proffered by science.

This relation was brought to expression by *Xenophanes*, not a thinker and investigator, but an imaginative disciple of science, strong in his convictions, who brought the new teaching from East to West and gave it a thoroughly religious colouring. His maintenance of *monotheism*, which he expressed as enthusiastic intuition in the saying,[1] that whithersoever he looked all was constantly flowing together for him into one Nature (μίαν εἰς φύσιν), took on at once, however, that sharp polemic turn against the popular faith, by which he is principally characterised in literature. The scorn, which he poured out with abundant wit over the anthropomorphism of mythology,[2] the anger with which he pursued the poets as the portrayers

[1] Timon in Sext. Emp. *Pyrrh. Hyp.* I. 224. [2] Clem. Alex. *Strom.* V. 601.

of these divine figures provided with all the weaknesses and vices of human nature,[1] — these rest upon an ideal of God which will have the Supreme Being regarded as incomparable with man in both bodily and mental characteristics. When he passes to positive attributes, Xenophanes becomes more obscure. On the one hand, the deity as ἓν καὶ πᾶν is identified with the universe, and to this "*World-God*" are then ascribed all the predicates of the Milesian ἀρχή (eternity, existence that has not become what it is, imperishability); on the other hand, qualities are ascribed to the deity, some of which are spatial, as the spherical form, while others are psychical functions. Among these latter the omnipresence of the knowing activity and of the rational guidance of things is expressly mentioned. In this respect the World-God of Xenophanes appears only as the highest among the rest of "gods and men."

While here a predominantly theological turn of philosophy is already manifested, the exchange of the point of view of metaphysics and natural science taken by Anaximander, for the religious point of view of Xenophanes shows itself in two essential deviations. The conception of the World-God is for the latter an object of religious reverence, and scarcely a means for understanding Nature. The Colophonian's sense for knowledge of Nature is slight, his ideas are in part very childlike, and, as compared with those of the Milesians, undeveloped. And so for his views, the characteristic of infinity, which Milesian science regarded as necessary in the cosmic matter, could be dispensed with; on the contrary, it seemed to him more in accordance with the dignity of the divine Nature,[2] to think of this as limited within itself, as entirely shut up or complete, consequently as regards its spatial aspect, spherical. And while the Milesians thought of the original ground of things as ever in motion spontaneously, and as characterised by living variety in its internal structure, Xenophanes struck out this postulate hitherto in use for the explanation of Nature, and declared the World-God to be immovable and perfectly homogeneous in all its parts. How, indeed, he thought that the variety of individual things whose reality he did not doubt, could be reconciled with this view, must remain uncertain.

4. As was required by the conception of change, the Milesian conception of the World-substance had united without clear discrimination two essential elements: the one that of a substance remaining like itself, the other that of independent or self-subsistent

[1] Sext. Emp. *Adv. Math.* IX. 193.
[2] Hippol. *Ref.* I. 14 (*Doxogr.* D. 565). In other passages, again, it is said that he would have the deity thought neither limited nor unlimited (?).

changeability. In the thought of Xenophanes the first element was isolated; the same process took place for the second through *Heraclitus*. His doctrine presupposes the work of the Milesians, from the conclusion of which it is separated by a generation, in this way: their effort to determine or define in conceptions an abiding world-ground has been recognised as hopeless. There is nothing abiding, either in the world or in its constitution taken as a whole. Not only individual things, but also the universe as a whole, are involved in perpetual, ceaseless revolution: *all flows*, and nothing abides. We cannot say of things that they are; they become only, and pass away in the ever-changing play of the movement of the universe. That, then, which abides and deserves the name of deity, is not a thing, and not substance or matter, but motion, the cosmic process, *Becoming* itself.

To meet a strong demand that seems made by this turn to abstraction, Heraclitus found help in the sensuous perception in which this motion presented itself to him: that of *fire*. The co-operation of this in the conversion of things of Nature into each other had been already noticed by the Milesians; to this may have been added ancient Oriental mystical ideas, which contact with the Persians made especially accessible to the Ionians of that day. But when Heraclitus declared the world to be an ever-living fire, and Fire, therefore, to be the essence of all things, he understood by this ἀρχή not a material or substance which survived all its transformations, but just the transforming process itself in its ever-darting, vibrating activity (*züngelnde*), the soaring up and vanishing which correspond to the Becoming and passing away.[1]

At the same time, however, this idea takes on a still firmer form, in that Heraclitus emphasised much more strongly than the Milesians the fact that this change is accomplished in accordance with definite relations, and in a succession that remains always the same.[2] This rhythm of events (which later times have called the uniformity of Nature under law) is therefore the only permanent; it is termed by Heraclitus the destiny (εἱμαρμένη), the order (δίκη), the reason (λόγος) of the world. These predicates, in which physical, ethical,

[1] The difficulty of ascribing to such a motion without any substrate, to a mere Becoming, the highest reality and the capacity to produce things, was evidently very much less for undeveloped thought not yet conscious of its categories than for later apprehension. The conception of Becoming as fire, hovering between the symbolic and the real meaning of the term, was supported by the use of language which treats of functions and relations as also substantives. But Heraclitus does not disdain to let the dim idea of a World-substance stand in the background in his metaphors (of the clay kneaded ever anew, of the drink continually stirred).

[2] Further in detail on this point in the following paragraph.

and logical order in the world appear as still identified, prove only the undeveloped state of thought which does not yet know how to separate the different motives. The conception, however, which Heraclitus has grasped with complete clearness, and carried though with all the strength of his austere personality, is that of *order*, a conception, nevertheless, whose validity was for him as much a matter of conviction as of knowledge.

5. In evident opposition to this theory of the Ephesian, the conception of *Being* was worked out by *Parmenides*, the head of the Eleatic School, and the most important thinker of this period. Yet it is not easy to reconstruct his formulation of this conception from the few fragments of his didactic poem, the quite unique character of which consists in the union of dryest abstraction with grand and rich imagery. That there is a Being (ἔστι γὰρ εἶναι), is for the Eleatic a postulate of such cogent evidence that he only states this position without proving it, and that he explains it only by a negative turn of thought which first discloses to us completely the sense in which we are to understand his main thought. "Non-being" (μὴ εἶναι), he adds, or that which "is" not (τὸ μὴ ἐόν), cannot be and cannot be thought. For all thought is in relation to a something that *is*, which forms its content.[1] This view of the correlative nature of Being and consciousness leads so far with Parmenides that the two, thought and Being, are declared to be fully identical. No thought to whose content Being does not belong,—no Being that is not thought: thought and Being are the same.

These propositions, which look so abstractly ontological if we consider only the words, take on quite another meaning when we consider that the fragments of the great Elean leave no doubt as to what he desired to have regarded as "Being" or that which "is." This was *corporeality*, materiality (τὸ πλέον). For him, "being" and "filling space" are the same. This "Being," this function of filling space, is precisely the same in the case of all that "is"; there is, therefore, only the one, single Being which has no internal distinctions. "Non-being," or what *is* not [has not the attribute of Being], means, accordingly, incorporeality, *empty space* (τὸ κενόν). This double meaning of the εἶναι (Being) employed by Parmenides, according to which the word means at one time "the full" and at another time "Reality," leads then to the proposition *that empty space cannot be*.

Now for the naïve, sensuous way of looking at things which lurks even in these principles of Parmenides, the separateness of

[1] *Fr.*, ed. Karsten, vv. 94 ff.

things, by virtue of which they present themselves in their plurality and multiplicity, consists in their separation by empty space; and, on the other hand, all that takes place in the corporeal world, *i.e.* all motion, consists in the change of place which the "full" experiences in the "empty" (or the "Void"). If, therefore, the Void is not real or actual, then *the plurality and motion of individual things cannot be real.*

The number and variety of things presented in co-existence and succession by experience had given the Milesians occasion to ask for the common abiding ground of which all these things were metamorphoses. When, however, the conception of cosmic substance or world-stuff has culminated with Parmenides in the conception of Being, there seems so little possibility of uniting these individual things with it, that reality is denied them, and the one unitary Being remains also the *only* being.[1] The conception formed for the purpose of explanation has so developed internally that to maintain it involves the denial of that which was to be explained by it. In this sense the Eleatic doctrine is *acosmism:* the manifoldness of things has sunk in the All-one: the latter alone "is," the former are deception and seeming.

According to Parmenides, however, we are to predicate of the One that it is eternal, has never come into being, is imperishable, and especially (as Xenophanes had maintained) that it is through and through one in kind, one with itself, without any distinctions or differences, *i.e.* completely homogeneous and absolutely unchangeable. He follows Xenophanes also in regarding the One as limited, complete, and definitive. Being is then a well-rounded sphere, perfectly homogeneous within itself, and this only and unitary *world-body* is at the same time the *world-thought*,[2] simple, excluding all particulars from itself: τὸ γὰρ πλέον ἐστὶ νόημα.

6. All these attempts, in part fantastic, in part regardlessly abstract, were needed in order to gain the presuppositions for the development of the first usable conceptions for apprehending Nature. For important as were the motives of thought that had come to recognition therein, neither the world-stuff or cosmic matter of the Milesians, nor the "Fire-Becoming" of Heraclitus, nor the Being of Parmenides were available for explaining Nature. Now the imperfection of the first had become clear through the contrast which

[1] A great rôle in these considerations of the Eleatics is obviously played by the ambiguities in language, by which, on the one hand, the ἕν means both numerical unity and also qualitative unity or simplicity, while the verb εἶναι has not only the function of the copula, but also the meaning of "Reality."

[2] Hence, terms like "materialism" and "idealism" do not apply to this naïve identification of consciousness and its object, the corporeal world.

separated the two latter as by a gulf, and with the recognition of this, occasion was given for the more independent investigators of the next period to separate in their conceptions the two *motifs* (being and becoming), and by setting them over against one another to think out new forms of relation, out of which permanently valuable categories for the knowledge of Nature resulted.

These *mediating attempts* have in common, on the one hand, the recognition of the Eleatic postulate that that which "is" must be thought throughout not only as eternal, without a beginning and imperishable, but also as homogeneous, and as regards its qualities unchangeable; on the other hand, however, they assent also to the thought of Heraclitus that an undeniable reality belongs to Becoming and change (*Geschehen*), and so to the manifoldness of things. Common to them, also, in their adjustment of these two needs of thought is the attempt to assume a *plurality of beings*, each of which should satisfy for itself the postulate of Parmenides; while, on the other hand, by changing their spatial relations, they were to bring about the changeful variety of individual things which experience shows. If the Milesians had spoken of qualitative changes of the cosmic substance or matter, the Eleatic principle had excluded the possibility of it; if, nevertheless, change ought to receive recognition, as with Heraclitus, and be attributed to Being itself, it must be reduced to a kind of change which leaves untouched the qualities of the existent. Such a change, however, was thinkable only as a change of place, *i.e.* as *motion.* The investigators of Nature in the fifth century maintained, therefore, with the Eleatics, the (qualitative) unchangeableness of the existent, but against the Eleatics, its plurality and motion;[1] with Heraclitus, they insisted upon the reality of occurrence and change, and against Heraclitus, upon the Being of permanent and unchangeable substances as underlying and producing the same. Their common view is this: there is a plurality of existing beings which, unchangeable in themselves, make the change and variety of individual things comprehensible.

7. This principle seems to have been asserted first and in its most imperfect form by *Empedocles*, — in a form, however, that was widely influential historically. He put forward as "*elements*"[2] the four which are still current in the popular modes of thought, — earth,

[1] In the later literature (Aristotle) ἀλλοίωσις (qualitative alteration) and κίνησις (change of place) are contrasted. In reality this is done here, though the terms are as yet lacking.

[2] Instead of the later expression στοιχεῖα, we find in Empedocles the more poetic term "roots of all things," ῥιζώματα.

water, air, and fire.[1] Each of these is according to this system, without beginning and imperishable, homogeneous and unchangeable, but at the same time divisible into parts, and in these parts capable of change of place. Out of the mixture of the elements arise individual things, which in turn cease to exist when the mixture is separated into the elements; to the kind of mixture made are due the various qualities of individual things, which are often different from the properties of the elements themselves.

At the same time the note of unchangeableness and a deviation from the Milesian Hylozoism assert themselves in the system of Empedocles to the extent that he could not assign independent capacity of motion to these material elements which experience only changing states of motion and mechanical mixings. On this account he was obliged to seek a *cause of motion* independent of the four elements. As such a cause he designated *love* and *hate*. The outcome, however, of this first attempt to set over against a dead matter, deprived by abstraction of all motion of its own, the force which moves it, as a metaphysically independent something, was very obscure. Love and hate are, with Empedocles, not mere properties, functions, or relations of the elements, but rather independent powers set over against them; but how we are to think the reality of these *moving forces* is not disclosed in any satisfactory way in the fragments.[2] Only this seems certain, that in fixing the dual nature of the principle of motion the thought was also operative that two distinct causes, love and hate, were requisite to account for the good and the evil in the change of things of our experience,[3] — a first indication that determinations of "worth" or value are beginning to be introduced into the theory of Nature.

8. Empedocles thought it possible to derive the special qualities of individual things from the proper mixture of the four elements: whether he attempted so to derive them, and if so, how, we do not indeed know. This difficulty was avoided by *Anaxagoras*, who, from the Eleatic principle that nothing that is can arise or pass away, drew the conclusion that as many elements must be assumed[4]

[1] Aside from dependence upon his predecessors, his selection was evidently due to the inclination to regard the different states of aggregation as the original essence of things. No importance seems to have attached to the number four, in this. The dialectical construction which Plato and Aristotle gave for this is quite remote from the thought of the Agrigentine.

[2] If φιλία and νεῖκος are occasionally counted by the later recorders as fifth and sixth ἀρχή of Empedocles, we must not infer from this that he regarded them as substances. His obscure and almost mythical terminology rests, for the most part, upon the fact that conceptions standing for functions are substantives in language.

[3] Arist. *Met.* I. 4, 984 b 32.

[4] He called them σπέρματα (seeds of things), or also simply χρήματα (substances).

as there are simple substances in the things of experience, meaning by simple substances those which on repeated division always separate into parts qualitatively the same with their wholes. Such elementary substances were later, in accordance with his definition, called *homoiomeriai*. At that time, however, when only mechanical division or change of temperature were known as means of investigation, this conception of element (in principle entirely corresponding to the conceptions of the chemistry of to-day) applied to the greater part of the substances given in experience,[1] and on that account Anaxagoras maintained that there were *countless elements* differing in form, colour, and taste. He held that they were present throughout the entire universe in a very finely divided state. Their coming together or compounding (σύγκρισις) constitutes the arising, their separation (διάκρισις) the passing away, of individual things. There is, accordingly, something of every substance present in everything: it is only for our sensuous apprehension that the individual thing takes on the properties of that substance or of those substances which may be present in a preponderating degree.

The elements, as the true being, are regarded now by Anaxagoras also as eternal, without beginning or end, unchangeable, and though movable in space, yet not in motion of themselves. Here, too, then, we must ask for a force which is the cause of motion. Since, however, this force must be regarded as existent, a something that is, Anaxagoras hit upon the expedient of assigning it to a special, single sort of matter or elementary substance. This *force-element* or *motive-matter* (*Bewegungsstoff*) is conceived to be the lightest and most mobile of all elements. In distinction from all the others it is that one of the *homoiomeriai* which alone is in motion of itself, and communicates this its own motion to the rest; it moves itself and the rest. To determine the inner nature of this "force-substance," however, two lines of thought unite: the property of originating motion is, for the naive mode of looking at things, the surest sign of the *animate;* this exceptional kind of matter, then, which is self-moved, must be animate matter or "soul-stuff" (*Seelenstoff*), its quality must be animate or psychical.[2] And, secondly, a power is known through its effect: if, now, this motive-matter is the cause of the formation of the world, to bring about which it has separated out the remaining idle elements, then we must be able to know its nature from this which it has accomplished. But the universe, in particular the regular revolution of the stars, makes the impression

[1] According to the fragments of Anaxagoras, bones, flesh, and marrow also; on the other hand, the metals.

[2] [The Greek ψυχή and German *Seele* include both these meanings.]

of *beautiful* and *purposive order* (κόσμος). Such a mastering of gigantic masses in a harmonious system, — this undisturbed circling of countless worlds, on which Anaxagoras turned his wondering contemplation, it seemed to him could be the result only of a *mind* arranging the movements according to ends, and ruling them. For this reason he characterised the force-substance as *Reason* (νοῦς) or as "*Thought-stuff.*"

The νοῦς of Anaxagoras is then a stuff or substance, a corporeal element, homogeneous, unproduced, and imperishable, diffused in a finely divided state throughout the universe; different from the other substances, however, not only in degree, as being the finest, lightest, and most mobile, but also in essence, since it alone is self-moved, and by virtue of its own motion moves the other elements in the purposive way which we recognise in the order of the world. This emphasising of the order in the universe is a Heraclitic element in the teaching of Anaxagoras, and the conclusion drawn from the ordered movements to a rational cause of them, acting according to ends, is the first instance of the *teleogical explanation of nature.*[1] With this procedure a conception of worth (*Werthbegriff*) — namely, beauty and perfection — is made a principle of explanation in the theoretical field also.

9. The *Atomism* of *Leucippus* developed from the Eleatic conception of Being in a direction opposite to that just traced. While Empedocles maintained that some, and Anaxagoras that all, qualities were metaphysically primitive, the founder of the school of Abdera remained in accord with the position of Parmenides, that no "Being" belongs to any of all the various qualitative determinations exhibited by experience, and that the sole property of Being is the property of filling space, *corporeality*, τὸ πλέον. If now, however, the plurality of things, and the mutations taking place among them as they come and go, were to be made intelligible, then instead of the single world-body, with no internal distinctions which Parmenides had taught, a plurality of such must be assumed, separated from one another, not by other Being, but by that which is not Being, Non-being: *i.e.* by the incorporeal, by *empty space*. This entity, then, which is Non-being [*i.e.* not Being in the true sense], must have in its turn a kind of Being, or of metaphysical reality ascribed to it,[2] and Leucippus regarded it

[1] As such he was praised by Plato (*Phæd.* 97 B), and overestimated by Aristotle (*Met.* I. 3, 984 b). Cf., however, § 5. The moderns (Hegel) have added the further over-estimate of seeking to interpret the νοῦς as an immaterial principle. But the fragments (Simpl. *Phys.* (D.) 33ᵛ 156, 13) leave no doubt that this lightest, purest element, which does not mingle with the rest, but only plays about them and moves them as living force, was also a space-filling matter or stuff.

[2] Plut. *Adv. Col.* 4, 2, 1109.

as the unlimited, the ἄπειρον, in contrast with the limitation which Being proper possesses, according to Parmenides. Leucippus, therefore, shatters in pieces the world-body of Parmenides, and scatters its parts through infinite space. Each of these parts, however, is, like the absolute Being of Parmenides, eternal and unchangeable, without beginning, indestructible, homogeneous, limited, and indivisible. Hence these portions of Being are called *atoms*, ἄτομοι; and for the reasons which had led Anaximander to his concept of the ἄπειρον Leucippus maintained that there were countless numbers of such atoms, infinitely varied in form. Their size must be taken as imperceptibly small, since all things in our experience are divisible. Since, however, they all possess only the one like quality of filling space, differences between them can be only quantitative; differences in size, form, and situation.

Out of such metaphysical considerations grew the concept of the atom, which has proved so fruitful for the theoretical science of Nature just because, as was evident already in the system of Leucippus, it contains the postulate that all qualitative differences exhibited by Nature are to be reduced to quantitative. The things which we perceive, Leucippus taught, are combinations of atoms; they arise when atoms unite, and pass away when they part. The properties which we perceive in these complexes are only seeming or appearance; there exist in truth only the determinations of size, form, arrangement, and situation of the individual atoms which constitute Being.

Empty space is, accordingly, the presupposition as well for the uniting and separating of atoms as for their separateness and shape. All "becoming," or change, is in its essence *motion of atoms in space.* If we ask for the ground of this motion of the atoms,[1] since space as properly not a true Being cannot be allowed as cause, and Atomism recognises nothing as actual except space and the atoms, this ground can be sought only in the atoms themselves; *i.e.* the atoms are of themselves in motion, and this, their independent motion, is as truly without beginning and end as is their being. And as the atoms are indefinitely varied in size and form, and completely independent of one another, so their original motions are infinite in variety. They fly confusedly about in infinite space, which knows no above and below, no within and without, each for itself, until their accidental meeting leads to the formation of things and worlds. The separation between the conceptions of matter and moving force

[1] Arist. *Phys.* VIII. 1, 252 a 32, says of the Atomists that they did not ask as to the origin of motion — as a matter of course, for they declared motion itself to be causeless.

which Empedocles and Anaxagoras, each in his way had attempted, was thus in turn abolished by the Atomists. They ascribed to the particles of matter the capacity, not indeed of qualitative change (ἀλλοίωσις), but of *independent motion* (κίνησις), and took up again the principle of the Milesian Hylozoism, in this restricted sense, as it had been limited by the Eleatic teaching.

10. In opposition to these pluralistic systems, *Zeno*, the friend and disciple of Parmenides, sought to defend the Eleatic doctrine by setting forth the contradictions in which the assumption of a plurality of Beings is involved. As regards size, he pointed out, it follows that the totality of Being must be on the one hand infinitely small, on the other hand infinitely great: infinitely small, because the combination of any number whatever of parts, each of which is to be infinitely small, never yields anything more than an infinitely small sum;[1] infinitely great, on the contrary, because the boundary which is to separate two parts must itself be an existent something, *i.e.* spatial magnitude, which again is itself separated from the two parts by a boundary of which the same holds true, and so on *in infinitum*. From the latter argument, which was called that from dichotomy (the ἐκ διχοτομίας), Zeno reasoned also that as regards number, what *is* must be unlimited, while, on the other hand, this complete Being, not in process of becoming, is to be regarded also as numerically limited [*i.e.* as complete]. And just as with the assumption of the "many," so the position that empty space is real is held to refute itself by a regress *ad infinitum*: if all that is is in space, and thus space is itself an existing entity, then it must itself be in a space, and this last likewise, etc. When the concept of the infinite, to which the Atomists had given a new turn, became thus prominent, all the enigmas involved in it for the contrasting points of view of intellect and sense-perception became prominent also, and Zeno used them to involve in a *reductio ad absurdum* the opponents of the doctrine of the one, self-limited Being.

This dialectic, however, cut both ways, as was shown in the Eleatic School itself, by the fact that a cotemporary of Zeno, *Melissus*, who shared his opinions, saw himself forced to declare that the Being of Parmenides was as unlimited in space as in time. For as Being can arise neither from other Being nor from Non-being, so it can be limited neither by existing Being (for then there must be a second Being), nor by a non-existent (for then this non-existent must be): a line of argument more consistent from a purely theo-

[1] The argument can be directed only against Atomism, and applies to this weakly.

retical point of view than the position of the master, which had been influenced by determinations of worth.

11. The *Pythagoreans* took a mediating position in these questions: for this, as for their other doctrines, they were happily fitted by their employment with mathematics, and by the manner in which they prosecuted this study. Its chief direction seems to have been arithmetical; even the geometrical knowledge ascribed to them (as the well-known proposition named after Pythagoras) amounts to a linear representation of simple relations between numbers ($3^2+4^2=5^2$, etc.). It was not, however, in the general relations of constructions in space only that the Pythagoreans found numbers to be the determining principles; the same was found to be true also in such phenomena of the corporeal world as they were chiefly engaged with. Their theoretical investigations concerning music taught them that harmony was based upon simple numerical relations of the length of the strings (octave, third, fourth), and their knowledge of astronomy, which was far advanced, led them to the view that the harmony prevailing in the motions in the heavenly bodies had, like the harmony in music,[1] its ground in an order, in accordance with which the various spheres of the universe moved about a common centre at intervals fixed by numbers. Suggestions so various as these mentioned seem to have united to evoke in a man like *Philolaus* the thought, that the permanent Being which philosophy was seeking was to be found in *numbers*. In contrast with the changing things of experience mathematical conceptions possess as regards their content the marks of a validity not subject to time —they are eternal, without beginning, imperishable, unchangeable, and even immovable; and while they thus satisfy the Eleatic postulate for Being, they present, on the other hand, fixed relations, — that rhythmical order which Heraclitus had demanded. Thus, then, the Pythagoreans found the abiding essense of the world in the mathematical relations, and in particular in numbers, — a solution of the problem more abstract than the Milesian, more capable of being represented to perception or imagination than the Eleatic, clearer than the Heraclitic, more difficult than those offered by cotemporary mediating attempts.

The Pythagorean *doctrine of numbers*, as carried out by them, was attached partly to the numerous observations they had made on the arithmetical relations, partly to analogies which they discovered or sometimes artificially introduced, between numerical and philosophical problems. The definite nature of each individual number and

[1] Out of this analogy arose the fantastic idea of the harmony of the spheres.

the endlessness of the number series must indeed have at first suggested that reality belongs as well to the limited as to the unlimited, and by transferring this thought into the geometrical sphere the Pythagoreans came to recognise, in addition to the elements as the limited, a Reality as belonging also to space as the unlimited void. They thought of the elements, however, as determined by the forms of the simple solids: fire by the tetrahedron, earth by the cube, air by the octahedron, water by the icosahedron, and a fifth material, æther, which they added as the celestial element to the four terrestrial elements assumed by Empedocles, by the dodecahedron.[1] In these conceptions the prevailing idea was this: *corporeality*, or the essential quality of bodies, consists in the mathematical limitation of the unlimited, in the *shaping out of space into forms*. Mathematical forms are made the essence of physical reality.

The Pythagoreans further believed that in the antithesis between the limited and the unlimited they recognised the antithesis found in numbers between the odd and the even;[2] and this antithesis was again identified with that between the perfect and the imperfect, the good and the bad,[3] in this last case not without the influence of old ideas connected with the religious faith of the oracles. Their *Weltanschauung* becomes thus *dualistic:* over against the limited, odd, perfect, and good stands the limitless, even, imperfect, and bad. As, however, both principles are united in the number one,[4] which has the value of an even as well as of an odd number, so in the world as a whole these antitheses are adjusted to form a harmony. The world is harmony of numbers.

Some of the Pythagoreans,[5] moreover, sought to trace out through the various realms of experience that fundamental antithesis, in the assumption of which all the school were agreed, and so a table of ten *pairs of opposites* came into existence: viz. limited and unlimited — odd and even — one and many — right and left — male and female — at rest and in motion — straight and crooked — light and dark —

[1] While the main line of the Pythagoreans thus followed Empedocles, a later, Ecphantus, conceived of this limitation of space in the sense of Atomism.

[2] The reason presented for this, viz. that even numbers permit of bisection to infinity (?), is indeed very questionable and artificial (Simpl. *Phys.* D. 105r 455, 20).

[3] Nor must we here overlook the factor which had already asserted itself with Xenophanes and Parmenides, viz. that to the Greek the conception of measure was one that had a high ethical worth; so that the infinite, which derides all measure, must to him appear imperfect, while the definite or limited (*πεπερασμένον*) was necessarily regarded as more valuable.

[4] Arist. *Met.* I. 5, 986 a 19.

[5] Or men standing in close relations with Pythagoreanism, such as the physician Alcmæon, a perhaps somewhat older contemporary of Philolaus. Cf. Arist. *Met.* I. 5, 986 a 22.

good and bad — square and oblong or with unequal sides. This is evidently a collection put together without system, to fill out the sacred number ten, but an attempt at an articulation may at least be recognised.

In accordance, then, with this or a similar scheme the Pythagoreans exerted themselves to make an order of things corresponding to the system of numbers, by assigning the fundamental conceptions in every department of knowledge to various numbers, and on the other hand by adjudging to every individual number, but especially to those from one to ten, determining significance in the various spheres of reality. The fantastic nature of the symbolic interpretation into which they fell in doing this must yet not cause us to overlook the fact that the attempt was therewith made to recognise an *abiding order of things* which could be grasped and expressed in *conceptions*, and to find the ultimate ground of this order in *mathematical relations*.

Nor did it escape the notice of the Pythagoreans themselves, notably of the later members of the school, that numbers could not be called the principles (*ἀρχαί*) of things in the same way in which the term is applied to the various "stuffs," or kinds of matter, to the elements, etc., that things have not arisen out of them, but are *formed according to them;* and perhaps they best and most effectively express their thoughts when they say that all things are *copies or imitations of numbers*. With this conception the world of mathematical forms was thought as a higher, more original reality, of which the empirical reality was held to be only a copy: to the former belonged abiding Being; the latter was the contrasted world of Becoming and change.

§ 5. Conceptions of Cosmic Processes.[1]

E. Hardy, *Der Begriff der Physis in griechischen Philosophie*, I. Berlin, 1884.

As the fact of change — that is, the cosmic processes — furnished the most immediate occasion for reflection upon the abiding Being, so, on the other hand, the various conceptions of Being had as their ultimate aim only to make the processes of Nature intelligible. This task was indeed occasionally forgotten, or set aside, in the development of the conceptions of Being, as by the Eleatics; but immediately afterward the further progress of thought proved to be determined all the more by the renewed attention given to

[1] [*Geschehen*. I have translated this word variously by "change," "occurrence," "event," "taking place," "coming to pass," "becoming," etc. The last, which is ordinarily used for the Greek *γίγνομαι* seems hardly broad enough. The German means any natural process or event.]

Becoming and change, and by the need of so thinking Being that Becoming and change could not only be reconciled with it, but also be made intelligible by it. Hand in hand, then, with ideas of Being, go those of Becoming, the two in constant relation to one another.

1. To the Ionians the living activity of the world was something so much a matter of course that they never thought of asking for a cause of it. *Naïve Hylozoism* could have in view only the explanation of a *particular* occurrence or cosmic process. *Explanation*, however, consists in reducing what is striking — not a matter of course or intelligible in itself — to such simpler forms of occurrence as seem to need no explanation, inasmuch as they are most familiar to our perception. That things change their form, their qualities, their working upon one another, seemed to the *Milesians* to require explanation. They contented themselves in this with conceiving these changes as condensation or rarefaction of the cosmic matter. This latter process did not seem to them to need a farther explanation, though Anaximenes at least did add, that these changes in the state of aggregation were connected with changes in temperature — condensation with cooling, rarefaction with growing warm. This contrast gave rise to the arrangement of the states of aggregation in a series corresponding to the degree of rarefaction or condensation of the primitive matter:[1] viz. fire, air, water, earth (or stone).

The Milesians used these ideas not only to explain individual phenomena of Nature, particularly the meteorological processes so important for a sea-faring people, but also to explain the development of the present state of the world out of the prime matter. Thus Thales conceived water as in part rarefying to form air and fire, and in part condensing to form earth and stone; Anaximenes, starting from air, taught an analogous process of world-formation. As a result of these views it was assumed that the earth — resting on water, according to the first, on air, according to the second — occupied the centre of the sphere of air revolving about it, and this sphere of air was yet again surrounded by a sphere of fire, which either broke through or shone through in the stars.

In setting forth this process of *world-origination*, which was perhaps still regarded by Thales and Anaximander as a process occurring once for all, the Milesians attached themselves closely to the cosmogonic poetry.[2] Not until later does the consideration seem to

[1] Hence it is intelligible that there were also physicists (not known to us by name) who would regard the world-stuff as an intermediate stage between air and water, or between air and fire.

[2] Hence, also, the designation of the world-stuff as ἀρχή (beginning).

have gained prevalence, that if to change of form a change back to the original form corresponds, and if, at the same time, matter is to be regarded as not only eternal but eternally living, it is necessary to assume a ceaseless process of world-formation and world-destruction, a *countless number of successive worlds*.[1]

2. Although these essential constituents characterise also the physical theories of *Anaximander*, he was led beyond them by his metaphysical conception of the ἄπειρον. The infinite, self-moved matter which was intended by this obscure conception was indeed, as a whole, to have no definite properties. It was held, however, to *contain qualitative opposites within itself*, and in its process of evolution to *exclude* them from itself, so that they became separate.[2] Anaximander remained then a Hylozoist in so far as he regarded matter as self-moved; he had seen, however, that the differences must be put into it if they were to come forth out of it on occasion of its self-motion. If, then, as regards his doctrine of Being, he approached the later theory of a plurality of primitive substances, and abandoned the doctrine that the primitive matter was changeable in quality, he was yet entirely at one with the other Milesians as regards his conception of the causelessness of the cosmic process, and thought that by the union of the two opposites, the warm and the cold, which he conceived as the first to come out from the ἄπειρον, he could explain water. This done, he could proceed with his cosmogony along the oceanic path taken by Thales.

But besides these physical and metaphysical determinations, the only fragment[3] preserved from him, giving his own words, represents the perishing of things as an expiation for injustice, and so presents the first dim attempt to present the world-process as *ethical necessity*, and to conceive of the shadows of transitoriness, which rest even on the bright picture of Hellenic life, as retribution for sin. However doubtful the particular interpretation of this utterance, there is yet without doubt voiced in it the need of giving to physical necessity the worth of an ethical order. Here Anaximander appears as a predecessor of *Heraclitus*.

3. The order of events which Heraclitus thought he could establish as the only constant amid the mutation of things, had two essential marks, the *harmony of opposites* and the *circuit completed by*

[1] This doctrine was supported, probably by Anaximander, certainly by Anaximenes. It is repeated in Heraclitus, Empedocles, and Leucippus.

[2] The decisive passages for this very controverted question (Ritter, Seydel, Zeller) are Arist. *Phys.* I. 4, 187 a 20, and Simpl. *Phys.* (D.) 33r 154, 14 (after Theophrastus); also the continuation of the passage in the following note.

[3] Simpl. *Phys.* (D.) 6r 24, 18. Cf. Th. Ziegler, *Arch. f. Gesch. d. Philos.*, I. 16 ff.

matter in its successive changes in the universe. The observation that everything in the world is in process of constant change was exaggerated by Heraclitus to the claim that everything is continually changing into its opposite. The "other" was for him *eo ipso* the opposed. The "flux of things" became transformed in his poetic rhetoric into a ceaseless strife of opposites, and this strife (πόλεμος) he declared to be the father of things. All that seems to be for a shorter or longer time is the product of opposed motions and forces which in their operation maintain themselves in equilibrium. The universe is thus at every moment a unity divided in itself and again re-united, a strife which finds its reconciliation, a want that finds its satisfaction. The essence of the world is the invisible harmony in which all differences and oppositions are solved. The world is Becoming, and Becoming is unity of opposites.

These antitheses, according to the view of Heraclitus, present themselves particularly in the two processes taking place in contrary directions, through which, on the one hand, fire becomes changed into all things, and, on the other hand, all things change back into fire. The same stages are passed through in both processes: on the "*way downward*" fire passes over, by condensation, into water and earth, on the "*way upward*" earth and water, by rarefaction, pass over into fire; and these two ways are alike. Change and counter-change run on side by side, and the semblance of a permanent thing makes its appearance where for a time there is as much counter-change upon the one way as there is change upon the other. The fantastic forms in which Heraclitus put these views envelop the essential thought of a sequence of changes taking place in conformity to law, and of a continual compensation of these changes. The world is produced from the fire in ever-repeated rhythm and at fixed intervals of time, and then again flashes up in fire, to arise from it anew, a Phœnix.[1]

In this ceaseless transformation of all things nothing individual persists, but only the order, in which the exchange between the contrary movements is effected, — the *law of change*, which constitutes the meaning and worth of the whole. If in the struggle between opposites it seems as though something new were constantly arising, this new is at the same time always a perishing product. The Becoming of Heraclitus produces no Being, as the Being of Parmenides produces no Becoming.

[1] In details his physical, and especially his astronomical, ideas are weak. Metaphysical inquiry is more important with him than explanatory investigation. He shares this with his opponent, Parmenides.

4. In fact, the doctrine of *Being* held by the *Eleatics* excluded with plurality and change, events or cosmic processes, also. According to their metaphysics an event or occurrence is incomprehensible, it is impossible. This metaphysics tolerates no physics. Parmenides denies to time, as to space, independent reality (ἄλλο πάρεξ τοῦ ἐοντος): for him there is only timeless Being with no distinctions. Although Parmenides added to the first part of his didactic poem, which presents the doctrine of Being, a second part which treats physical problems, this is yet done with the protest in advance that he is here presenting not truth, but the "opinions of mortals."[1] At the basis of all these ordinary opinions lies the false presupposition, previously rejected, that in addition to Being there is still another, Non-being. All becoming, all plurality and motion, rest on the interaction of these opposites, which are then further designated as light and darkness, warmth and cold. A *Weltanschauung* is then portrayed in poetic imagery, in which fire shapes the dark empty space into corporeal structures, a mode of representation which in part reminds us of Heraclitus, and in part accords with the astronomical teaching of the Pythagoreans. The all-ruling Fire-power (δαίμων), as inexorable necessity (δίκη), with the help of love (ἔρως) forces together what is akin, working from the centre of the world outward. Appropriation of the doctrines of others and polemic against them appear in motley mixture, agreeably to the purpose of the whole. Over this tissue thus interwoven hovers a poetic breath of plastic formative power, but original research and clear conceptions are lacking.

5. Ideas more definite, and more usable for explaining the particular, are found among the successors, who transformed the Eleatic conception of Being into the conceptions of element, homoiomeriæ, and atom, expressly for this purpose. They all declare that by occurrence or coming to be nothing else is to be understood than the motion of unchangeable corporeal particles. *Empedocles* and *Anaxagoras* seem still to have sought to connect with this the denial of empty space, — a principle which they received from Parmenides. They ascribed to their substances universal divisibility, and regarded parts as capable of displacement in such a way that as these parts mixed and reciprocally interpenetrated, all space should be always filled out. The motion in the world consists, then, in this

[1] The hypothetical exposition of how the world would have to be thought if, in addition to Being, Non-being, plurality, and becoming were also regarded as real, had, on the one hand, a polemic purpose; and on the other, it met the want of his disciples, who probably demanded of the master an explanation of his own of the empirical world.

displacement of the parts of matter, each of which is always crowding and displacing the other. Things at a distance from one another cannot act upon one another, except as parts of the one flow out and penetrate into the other. This action is the more possible in proportion as the effluxes of the one body resemble in their spatial form the pores of the other. So at least Empedocles taught, and the assumption of an *infinite divisibility of substances* is attested in the case of Anaxagoras also. Another picture of occurrence more akin to the present way of thinking is that presented by *Leucippus*. The atoms which impinge upon each other in empty space act upon each other by pressure and impact, group themselves together, and so form greater or smaller things or masses which are not separated and destroyed until some impact or pressure of other masses comes from without. All occurrence and coming to be consists in this process in which atom-complexes are successively formed and shattered.

The fundamental form of world-motion in all three systems, however, is that of the vortex, of circular rotation (δίνη). According to Empedocles it is brought about by the forces of love and hate acting among the elements; according to Anaxagoras it is begun by the Reason-stuff acting according to ends, and then continues with mechanical consistency; according to Leucippus it is the result always occurring from the collision of several atoms. The principle of *mechanism* was with Empedocles still enveloped in myth, with Anaxagoras it first made a half-successful attempt to break through the covering, and was completely carried through only by Leucippus. What hindered the first two from reaching this position was the introduction of considerations of worth into their explanatory theory. The one was for tracing the good and the evil back to corresponding powers of mind, which were, to be sure, not ascribed to any being, but mythically hypostatised; the other believed that he could explain the order of the whole only from the assumption that purposive, rationally considered impulse had originated the motions. Yet both came so near the position of Leucippus as to demand a *teleological explanation* for the *beginning* only of the vortex-motion; the farther course of the motions, and thus *every individual occurrence*, they explained, as did Leucippus, *purely mechanically*, by the pushing and crowding of the particles of matter after these are once in motion in the manner determined. They proceeded so consistently in this that they did not exclude from this mechanical explanation even the origination and functions of organisms, among which, moreover, plants are regarded as being as truly animate as are animals. Anaxagoras is reproached for this by Plato and Aristotle,

and an expression of Empedocles has been handed down,[1] according to which he taught that the animals had arisen here and there, without any rule, in odd and grotesque forms, and that in the course of time only those fitted for life maintained themselves. The principle of the survival of the fittest, which plays so great a part in the biology of to-day, *i.e.* in Darwinism, is here already clearly formulated.

On the ground of these ideas, an interesting contrast discloses itself in the case of the three investigators, as regards their attitude toward cosmogonic theories. For Empedocles and for Leucippus, namely, the process of world-formation and world-dissolution is a perpetual one; for Anaxagoras, on the contrary, it is one that takes place once for all. Between the first two there is again the difference that Empedocles, like Heraclitus, teaches that the world arises and perishes in periodic alternation; while Atomism, on the contrary, holds that a countless number of worlds come into being and pass away. According to the principles of Empedocles, to be more explicit, there are four different states of the elements; their complete intermixture, in which love alone rules, and hate is excluded, he calls σφαῖρος[2] (sphere); when hate penetrates, this homogeneous world-sphere becomes separated into the individual things, until the elements are completely parted from one another; and out of this separate condition love brings them again together, until full union is again attained. Neither in the case of complete mixture, nor in that of complete separation, are there individual things; in both cases the Eleatic acosmism makes its appearance. A world of individual things in motion exists only where love and hate struggle with one another in mingling and separating the elements.

It is otherwise with Leucippus. Some of the atoms that dart about irregularly in the universe strike together here and there. From the various impulses to motion which the individual particles bring with them, where such aggregations occur, there results, according to *mathematical necessity* (ἀνάγκη), a whirling movement of the whole, which draws into itself neighbouring atoms and atom-complexes, and sometimes even whole "worlds," and so gradually

[1] Arist. *Phys.* II. 8, 198 b 29. Moreover, we find an expression already attributed to Anaximander, which teaches a transformation of organisms by adaptation to changed conditions of life: Plut. *Plac.* V. 19, 1 (*Dox.* D. 430, 15). For man, also, the oldest thinkers claimed no other origin than that of growth out of the animal world: so Empedocles in Plut. *Strom.* fr. 2. (*Dox.* D. 579, 17).

[2] Evidently not without suggestion from the Eleatic world-sphere, which this absolute, fully adjusted mingling of all elements, taught by Empedocles, much resembles.

extends. Meanwhile such a system in process of revolution is differentiating itself, since, by the rotation, the finer, more movable atoms are driven to the periphery, the more inert and massy are gathered in the centre; and so like finds its way to like, not by inclination or love, but through their like conformity to the law of pressure and impact. So there arise at various times and in different places in the boundless universe, various worlds, each of which continues in motion within itself, according to mechanical law, until it perhaps is shattered in pieces by collision with another world, or is drawn into the revolution of a greater. So, the Atomists maintained, the sun and moon were at one time worlds by themselves, which subsequently fell into the greater vortex of which our earth is the centre. How near in principle this whole conception is to the natural science of to-day is obvious.

The *teleological point of view* taken by Anaxagoras excludes, on the contrary, a plurality of worlds in time as well as a plurality of worlds in space. The ordering mind, which introduces the purposive motion of the elements, forms just this *one world* only, which is the most perfect.[1] Anaxagoras, therefore, quite in the manner of the cosmogonic poetry, describes how the beginning of the world was preceded by a chaotic primitive condition, in which the elements were intermingled without order and without motion. Then came the νοῦς, the "Reason-stuff" (*Vernunftstoff*), and set it into ordered motion. This vortex-motion began at one point, the pole of the celestial vault, and extended gradually throughout the entire mass of matter, separating and dividing the elements, so that they now perform their mighty revolution in a uniformly harmonious manner. The teleological motive of the doctrine of Anaxagoras is due essentially to his admiration of the order in the *stellar world*, which, after it has performed the rotations started by the νοῦς, moves on without disturbance always in the same track. There is no ground for assuming that this teleological cosmology directed attention to the adaptation to ends in living beings, or even to the connected system of Nature as beneficent to man; its gaze was fixed on the beauty of the starry heavens; and what is related of the views of Anaxagoras on terrestrial things, on organisms, and on man, keeps quite within the setting of the mechanical mode of explanation in vogue among his contemporaries. What he said, too, with regard to the presence of life on other heavenly bodies, might just as well have come from the Atomists.

[1] This motive, fully carried out, is found in Plato, *Tim.* 31, with unmistakable reference to the opposition between Anaxagoras and the Atomists.

Accordingly, although Anaxagoras conceived of the νοῦς as also the principle of animation, and thought of the particles of this substance as mingled in greater or lesser number with organic bodies, yet the central point in this conception is that of the authorship of the astronomical world-order. The other side, the moment or factor of the cause of animate life, is much more energetically emphasised in the transformation which a younger eclectic natural philosopher, *Diogenes of Apollonia*, undertook to effect in the conception of Anaxagoras by connecting it with the hylozoistic principle of Anaximenes. He designated air as ἀρχή [first principle, primitive element], fitted it out, however, with the characteristics of the νοῦς, — omniscience and force acting according to ends, — named this "rational air" also πνεῦμα [spirit], and found this formative principle in man and other organisms as well as in the universe. A rich physiological knowledge enabled him to carry through in detail this thought as applied to the structure and functions of the human body. With him teleology became the dominant mode of apprehending also the *organic world*.

His fragments have been collected by Schorn (Bonn, 1829) and Panzerbieter (Leips. 1830). Cf. K. Steinhart in Ersch und Grüber's *Encyclopädie*.

6. All these doctrines, however, presuppose the conception of *motion* as one that is intelligible of itself and in need of no further explanation. They thought they had explained qualitative change when they had pointed out as its true essence motion, whether between the parts of a continuously connected matter, or in empty space. The opposition, therefore, which the Eleatic School brought to bear upon all these doctrines was directed first of all against this conception of motion, and *Zeno* showed that this could by no means be taken so simply, but was rather full of contradictions which incapacitated it for serving as principle of explanation.

Among Zeno's famous proofs of the impossibility of motion,[1] the weakest is that which proceeds from the *relativity of the amount of motion*, by showing that the movement of a wagon is variously estimated if it is observed either from wagons also in motion but in different directions and at varying rates of speed, or again from two wagons one of which is moving and one standing still. The three other proofs, on the contrary, which made use of the analysis into discrete parts, infinitely many and infinitely small, of the space passed through by motion, and the time occupied by it, were stronger, and for a long time were not overcome. The first proof was with reference to the *impossibility of passing through a fixed space*. This was regarded as proved by the infinite divisibility of the line, since the infinite number of points which must be attained before reaching the goal permitted no beginning of motion. The same thought appears, somewhat varied, in the second argument, which seeks to prove the *impossibility of passing through a space which has movable boundaries*. The argument (known as that of

[1] Arist. *Phys.* VI. 9, 239 b. 9. Cf. Ed. Wellmann, *Zenon's Beweise gegen die Bewegung und ihre Widerlegungen* (Frankfurt a. O. 1870).

Achilles and the tortoise) is, that since the pursuer in every interval or subdivision of time must first reach the point from which the pursued simultaneously starts, it follows that the latter will always be in advance, though by an interval which becomes constantly smaller and approaches a minimum. The third argument has reference to *the infinitely small extent of the motion performed in any instant.* According to this argument, called "*the resting arrow*," the moved body *is* in every instant in some one point of its track; its movement in this instant is then equal to zero; but from ever so many zeros no real magnitude arises.

Together with the above-mentioned difficulties (ἀπορίαι) with regard to space and plurality, these argumentations of Zeno set forth an extremely skilfully projected system of refuting the mechanical theories, especially Atomism, — a refutation which was intended to serve at the same time as indirect proof of the correctness of the Eleatic conception of Being.

7. The number-theory of the *Pythagoreans*, too, was determined by Eleatic conceptions in so far as its procedure was, in the main, to demonstrate mathematical forms to be the fundamental relations of reality. When, however, they termed the actual world of reality an imitation of the mathematical forms, they thereby ascribed a sort of reality, even though of a derivative and secondary character, to individual things, and to what takes place among them. They were also the less inclined to withdraw from answering cosmological and physical questions as they were able to bring to philosophy the brilliant results of their astronomical investigation. They had come to a knowledge of the spherical form of the earth and of the heavenly bodies; they were aware also that the change of day and night depends upon a movement of the earth itself. At first, indeed, they thought of this movement as a circuit performed about a central fire to which the earth presented always the same side, a side unknown to us.[1] On the other hand, they assumed that about this same central fire there moved in concentric circles, outside the earth's track, successively the moon, the sun, the planets, and finally the heaven containing the fixed stars. They brought into this system, however, in a way, the metaphysical dualism which they had maintained between the perfect and the imperfect, inasmuch as they regarded the

[1] Already in Plato's time the hypothesis of the central fire was given up by the younger Pythagoreans, Ecphantus, Hicetus of Syracuse (and with it that of the "counter-earth," which had hitherto been assumed as placed between the central fire and the earth, invented merely to fill out the number ten), and instead the earth was located in the centre of the universe and provided with a rotation on its axis. With this latter assumption that of a resting position of the heaven of the fixed stars was connected.

heaven of the stars, on account of the sublime uniformity of its motions, as the realm of perfection; the world "beneath the moon," on the contrary, on account of the unrest of its changing formations and motions, they regarded as that of imperfection.

This way of looking at things runs parallel to that of Anaxagoras, and leads, though in another way, to the interweaving and complication of theory with considerations of worth [ethical or æsthetic values]. *It was in connection with astronomical insight that the thought of an order of Nature in conformity to law dawned as clear knowledge upon the Grecian mind.* Anaxagoras reasons from this to an ordering principle. Pythagoreanism finds in the heavens the divine rest of unchangeableness (*Sichgleichbleibens*) which it misses upon the earth. Here we have a meeting of the ancient religious ideas and the very different result yielded thus far by the scientific work of the Greeks. This latter, seeking a Permanent in the mutation of occurrence, found such a permanence only in the great, simple relations, in the revolution of the stars, which abides ever the same. In the terrestrial world, with its whole change of manifold, constantly intersecting motions, this uniformity remained still hidden from Greek science: she regarded this terrestrial world rather as a domain of the imperfect, the lower, which wants the sure order of that other world. In a certain sense this may be looked upon as the ultimate result of the first period, a result which had a determining influence for after time.

What the attitude of the Pythagoreans was to the question concerning a periodic change of origination and annihilation of the world is uncertain. A plurality of co-existing worlds is excluded in their system. In their theory of world-formation and in their particular physical doctrines they concede so prominent a place to fire that they come very near to Heraclitus. Aristotle even places one of the contemporaries of Philolaus, *Hippasus* of Metapontum, in immediate connection with Heraclitus (*Met.* I. 3).

Their assumption of æther as a fifth element out of which the spherical shells of the heavens were formed, in addition to the four elements of Empedocles, is doubtless connected with the separation which they made between heaven and earth. It is not less difficult to decide whether they derived the elements from a common ground, and if so, how: according to many passages it would seem as if they had spoken of a progressive "attraction," *i.e.* in this case (cf. above, p. 46), mathematical shaping out or forming of empty space by the ἕν (one), the original number, which is exalted above limitation and the unlimited. Yet it seems, too, that in regard to these questions various views were held within the school side by side.

§ 6. The Conceptions of Cognition.

M. Schneidewin, *Ueber die Keime erkenntnisstheoretischer und ethischer Philosopheme bei den vorsokratischen Denkern*, Philos. Monatshefte, II. (1869), pp. 257, 345, 429.

B. Münz, *Die Keime der Erkenntnisstheorie in der vorsophistischen Periode der griechischen Philosophie.* Vienna, 1880.

The question, what things *really* are, or what is the intrinsic nature of things, which is already contained in the Milesian conception of the ἀρχή, presupposes that the current, original and naïve mode of thinking of the world has been shaken, although this presupposition has not come to clear recognition in consciousness. The question proves that reflective thought is no longer satisfied with the ideas which it finds current, and that it seeks truth behind or above them. Those ideas are given, however, through sense-perception and through the involuntary elaboration of this in thought, — an elaboration that has been transmitted from generation to generation, until it has became consolidated and fixed and embodied in language, and so forms a part of the thinker's data. When the individual with his reflection transcends these ideas so given — and it is in this that philosophical activity ultimately consists — he does it on the ground of logical needs which assert themselves as he reflects on the given. His philosophising, then, even though he takes no account of this fact, grows out of discrepancies between his experience and his thought — out of the inadequacy exhibited by what is presented to his perception or imagination, when set over against the demands and presuppositions of his understanding. However unconscious of this its inner ground naïve philosophising may be at the outset, attention cannot fail to be turned in time to the diversity in the sources of the conflicting ideas within.

1. The first observations, therefore, which the Grecian philosophers made on human knowledge concern this *contrast between experience and reflection.* The farther the explanatory theories of science became separated from the way of looking at things which belongs to daily life, the clearer it became to their authors that those theories sprang from another source than that of the customary opinions. To be sure they have not as yet much to say on this point. They set opinion (δόξα) over against truth, and this often means only that their own doctrines are true and the opinions of others false. So much only is certain to them, that they owe their own views to reflection, while the mass of mankind — concerning whose intellectual activity it is just the older philosophers, Heraclitus, Parmenides, Empedocles, who express themselves in an extremely depreciatory manner — persist in the illusion of the senses. Only through thinking (φρονεῖν, νοεῖν, λόγος), then, is the truth found; the senses, if alone, give fraud and a lie.[1] So strong has reflection become in itself that it not only proceeds to consequences which to the common thinking have become absolutely

[1] Heracl. *Frag.* (Schust.) 11, 123; Parmen. *Frag.* (Karsten) 54 ff.

paradoxical, but also maintains expressly that it is itself the sole source of truth as opposed to opinions.

This, to be sure, works oddly when we notice that completely opposite illustrations of this same assertion are given by *Heraclitus* and *Parmenides* in close succession. The former finds the deceit caused by the senses, and the error of the multitude, to consist in the illusory appearance of the Being of permanent things, which is presented to men by sense-perception; the Eleatic, on the contrary, is zealous against the senses, because they would fain persuade us that there are in truth motion and change, becoming and arising, plurality and variety. Precisely this double form in which this same claim is put forward shows that it is not the result of an investigation, but the expression of a demand made on other grounds.

Moreover, this proposition fits very differently into the general theories of the two great metaphysicians. The flux of all things, with its restless change of individual phenomena, as taught by Heraclitus, makes it easy to comprehend also the possibility of the emergence of false ideas, and the seeming of permanence and Being had besides a special explanation in the counter-course or opposition (ἐναντιοτροπία) of the two "ways," for this causes the illusion of permanence or Being to arise where there is just as much change in one direction as in the other [*i.e.* from primitive fire into things and *vice versa*]. On the contrary, it is quite impossible to see where the seat of illusion and error was to be sought in the one world-sphere of Parmenides, everywhere the same, which was held to be at the same time the one, true world-thought. The search could be only among individual things and their changing activities, which were themselves declared to be illusion, non-existent. Nevertheless there is no support to be found in the literature preserved, for supposing that this so simple a thought[1] which would have overthrown the entire Eleatic system, ever occurred to the investigators of that time. In any case, the Eleatics contented themselves with the assertion that all particular existence and all change were deception and illusion.

The same *naïve denial of that which they could not explain* seems to have been employed also by the successors of the Eleatics in the matter of the qualitative attributes of individual things. *Empedocles* at least maintained that all things were mixtures of the elements. The task that logically grew out of this was to show how the other qualities arise from the mixture of the properties of the

[1] First carried out in Plato, *Sophist*, 237 A.

elements. But this he did not perform; so far as our knowledge extends, he did not at all set himself this task; he probably regarded these particular qualities as not being (objectively), and as a deception of the senses, just as all qualities whatever were such in the view of Parmenides. And so the oldest view of the Atomists, as supported by *Leucippus*, may well have gone just to this point, maintaining that in individual things only the form, arrangement, situation, and motion of the constituent atoms were real, and that the other properties were a deceitful product of the senses, which here, too, found no further explanation.[1]

These difficulties were perhaps jointly influential in the mind of *Anaxagoras* when he regarded all qualities as original, and not as having *become* what they are, and accordingly postulated countless elements. But for him arose the opposite difficulty of showing how it could come about, if all was regarded as contained in all, every quality in every thing, that only some of these qualities seemed to be present in individual things. He explained this in part from the consideration that many of the constituent parts are imperceptible because of their minuteness; hence it is only by thought that we can learn the true qualities of things.[2] Besides this, however, he seems to have followed up the thought, found already in Anaximander's idea of the ἄπειρον, that a complete mingling of definite qualities yields something indefinite. So, at least, he described the primitive mixture of all substances which preceded the formation of the world as completely devoid of quality,[3] and a similar thought seems to have permitted him to regard the four elements of Empedocles not as primitive substances, but rather as already mixtures.[4]

The *rationalism* common to the pre-Sophistic thinkers assumes, among the *Pythagoreans*, the particular form of affirming that knowledge consists in *mathematical* thought. This, though in itself a narrowing, is yet, on the other hand, a great step in advance, inasmuch as there is here given for the first time a positive definition of "thought" as contrasted with "perception." Only through number, taught *Philolaus*,[5] is the essential nature of things to be known; that is, it is when the definite mathematical relations lying at their basis are recognised that things are properly conceived or

[1] It is extremely improbable that the solution of the problem through the subjectivity of the sense-qualities, which is found in Democritus, was presented already by Leucippus, and therefore before Protagoras, who is universally regarded as the founder of this theory.

[2] Sext. Emp. *Adv. Math.* VII. 90 f.

[3] *Frag.* (Schorn) 4. From this passage the true light may, perhaps, be thrown upon the sense in which Anaximander designates the ἄπειρον as ἀόριστον.

[4] Arist. *De Gen. et Corr.* I. 1, 314 a 24.

[5] *Frag.* (Mull.) 13.

understood. This had been the experience of the Pythagoreans in music and in astronomy, and this was the object of their desire and effort in all other fields. When, however, they ultimately came to the result that this requirement could be completely met only in the knowledge of the perfect world of the stars, they concluded from this that science (σοφία) relates only to the realm of order and perfection, that is, to heaven, and that in the realm of the imperfect, of change not subject to order, *i.e.* on earth, only practical ability (ἀρετή) is of avail.[1]

Another positive characteristic of the "thinking" which the earlier investigators had set over against "perceiving," without closer specification, appears obscurely in the reasonings of *Zeno*, viz. conformity to *logical* laws. At the basis of all his attacks against plurality and motion lie the *principle of contradiction* and the presupposition that that can not be actual of which the same thing must be affirmed and also denied. This principle and presupposition were applied with clearness and certainty, though not abstractly expressed. The Eleatic theory of the world, so highly paradoxical, forced its supporters to enter into polemic more than did others, and the accounts as to Zeno's treatise, which, as it seems, was also logically well arranged and divided, offer a notable evidence of the developed technique of refutation to which the school attained in consequence. To be sure, this formal training which prevailed in Eleatic circles does not seem to have led as yet to the abstract statement of logical laws.

2. The setting over against each other of "thinking" and "perceiving" arose, then, from an estimation of their relative epistemological value (*erkenntnisstheoretischen Werthbestimmung*) [*i.e.* from the postulate that one of these two forms of mental activity is worth more epistemologically for attaining truth]. In decided contradiction with this, however, stand the *psychological* principles with which these same investigators sought to apprehend the origin and process of knowing. For although their thinking was directed first and chiefly toward the outer world, man's mental activity came under their attention in so far as they were obliged to see in this activity one of the formations, or transformations, or products of motion, of the universe. The mind or soul and its action are then at this time considered scientifically only in *connection with the entire course of the universe*, whose product they are as truly as are all other things; and since among the men of this period the general principles of explanation are everywhere as yet conceived corpore-

[1] Stob. *Ecl.* I. 488.

ally it follows that we meet also a thorough-going *materialistic psychology.*[1]

Now mind or soul is in the first place *moving force.* Thales ascribed such a soul to magnets, and declared that the whole world was full of souls. The essential nature of individual souls was therefore sought at first in that which had been recognised as the moving principle in the whole. Anaximenes found it in air, Heraclitus and likewise Parmenides (in his hypothetical physics) in fire, Leucippus in the fiery atoms,[2] and Anaxagoras in the world-moving, rational substance, the νοῦς. Where, as in the system of Empedocles, a corporeal moving principle was lacking, the mixed substance which streams through the living body, the blood, was regarded as soul. Diogenes of Apollonia found the essence of the soul in the air mixed with the blood.[3] With the Pythagoreans, too, the individual soul could not be considered as the same with the ἕν (One) which they conceived as moving principle of the world, nor regarded as a part of it; instead, they taught that the soul was a number, and made this very vague statement more definite by saying that it was a harmony, — an expression which we can only interpret[4] as meaning a harmony of the body; that is, the living, harmonious activity of its parts.

If now to this moving force, which leaves the body in death, were ascribed at the same time those properties which we to-day designate as "psychical," we find a clear characterisation of the specifically theoretical interest by which this oldest science was filled, in the fact that among these attributes it is that of ideation, of "knowing," which is almost exclusively the object of attention.[5] Of feelings and volitions there is scarcely incidental mention.[6] But as the

[1] Besides those characterisations of the soul, which resulted from their general scientific theory, we find in the tradition in case of several of these men (Heraclitus, Parmenides, Empedocles, and the Pythagoreans) still other doctrines which are not only not connected with the former, but are even in contradiction to them. A conception of the body as prison of the soul (σῶμα = σῆμα), personal immortality, recompense after death, transmigration of souls, — all these are ideas which the philosophers took from their relations to the mysteries and retained in their priestly teaching, however little they accorded with their scientific teachings. Such expressions are not treated above.

[2] In like manner, some of the Pythagoreans declared the motes which the sunlight discloses in the air to be souls.

[3] Since, with reference to this, he recognised the distinction between venous and arterial blood, he meant by his πνεῦμα what the chemistry of to-day calls oxygen.

[4] According to Plato, *Phædo*, 85 ff.

[5] The νοῦς of Anaxagoras is only knowing; air with Diogenes of Apollonia is a great, powerful, eternal, intelligent body. Being with Parmenides is at the same time νοεῖν, etc. Only φιλότης and νεῖκος with Empedocles are mythically hypostasised impulses, and these, too, have nothing to do with his psychological views.

[6] With this is connected the fact that in general we cannot once speak of attempts at ethical investigation in this period. For single moralising reflections or admonitions cannot be regarded as beginnings of ethics. On the only exception cf. below, note 5.

individual soul in so far as it is moving force was held to be a part of the force which moves the entire universe, so also the "*knowing*" of the individual could be conceived only as a part of the knowing activity of the world.[1] This is clearest in the systems of Heraclitus and Anaxagoras; each individual has so much knowledge as there is contained in him of the general World-reason, — fire with Heraclitus,[2] the νοῦς with Anaxagoras. In the case of Leucippus and of Diogenes of Apollonia the ideas are similar.

This physical conception, which with Anaxagoras especially is purely quantitative, was given a turn by Heraclitus, in which the epistemological postulate again forces its way to the front, and asserts itself in the interest of a deeper insight and a profounder view. The World-reason in which the individual participates in his knowledge is everywhere the same; the λόγος of Heraclitus[3] and the νοῦς of Anaxagoras, as homogenous Reason, are distributed through the whole universe as moving force. Knowing, then, is that which is *common* to all. It is therefore the law and order to which every one has to unite himself. In dreams, in personal opinion, each one has his own world; knowing is common (ξυνόν) to all. By means of this characteristic, viz. that of universally valid law, the conception of knowing acquires a *normative significance,*[4] and subjection to the common, to the law, appears as a duty in the intellectual realm as well as in the political, ethical, and religious.[5]

[1] The expression "World-soul" was first used by Plato, or at the earliest by Philolaus (in the fragment which has certainly been much questioned just for this reason, Mull. 21). The idea is certainly present in Anaximenes, Heraclitus, Anaxagoras, and perhaps also among the Pythagoreans.

[2] Hence the paradoxical expression, the dryest soul is the wisest, and the warning to guard the soul from the wet (intoxication).

[3] Cf., for this and the following, M. Heinze, *Die Lehre vom Logos in der griechischen Philosophie* (Oldenburg, 1872).

[4] *Frag.* (Schust.) 123.

[5] This is the only conception in the development of pre-Sophistic thought, in the case of which we can speak of an attempt to propound a scientific principle of *ethics.* If Heraclitus had in mind a universal expression for all moral duties in speaking of this subordination to law, or at least hit upon such, he attached it at once to the fundamental thoughts of his metaphysics, which declared this law to be the abiding essence of the world. Yet attention has above (§ 4) been called to the fact that in the conception of the world-order which hovered before him, he did not as yet separate consciously the different motives (especially the physical from the ethical), and so ethical investigation does not as yet work itself clear from the physical to an independent position. The same is true of the Pythagoreans, who expressed the conception of order by the term "harmony" (which also might be adopted from Heraclitus), and therefore designated virtue as "harmony." To be sure, they used the term "harmony" for the soul, for health, and for many other things.

3. If now we ask how under these assumptions the fact was explained that "knowledge" comes into the individual man, *i.e.* into his body, we find that the only answer offered by Heraclitus and the whole company of his successors is, "through the door of the *senses*." When a man is awake, the World-reason streams into his body through the opened senses (sight and hearing are of course chiefly noticed[1]), and, therefore, he knows. This comes about, to be sure, only if there is besides, in the man himself, so much reason or soul that the motion coming from without is met by an inner motion;[2] but upon this interaction, effected through the senses, between the outer and the inner reason knowledge rests.

A *psychological* distinction, then, between perceiving and thinking, which, as regards their respective epistemological values, are so abruptly opposed, Heraclitus does not know how to state. Parmenides,[3] however, was just as little in a position to make such a distinction.[4] Rather, he expressed more sharply still the *dependence upon bodily relations* in which the thinking of the individual man is involved, when he said that every one so thought as the conditions constituted by the mixture of substances in the members of the body permitted, and when he found in this a confirmation of his general thought of the identity of corporeality and thinking in general.[5] Still more express is the testimony[6] that Empedocles declared thinking and perceiving to be the same, that he thought change in thinking as dependent upon change of the body, and that he regarded the constitution of the blood as of decisive importance for the intellectual capacity of the man.

These two last-named thinkers did not hesitate, moreover, to make their conception more plain to the imagination by means of physiological hypotheses. Parmenides taught in his hypothetical physics

[1] Also smell (Empedocles) and taste (Anaxagoras). Only the Atomists, and in particular Democritus, seem to have given value to the sense of touch.

[2] Arist. *De An.* I. 2, 405 a 27.

[3] Theophr. *De Sens.* 3 f.

[4] So, too, it is reported (Theophr. *De Sens.* 25) of Alcmæon, the Pythagoreanising physician, that he declared thought or consciousness (*ὅτι μόνος ξυνίησι*) to be the characteristic which distinguishes man from the other animals. But a more precise determination is lacking here also unless, in accordance with the expression, we think of something similar to the Aristotelian *κοινὸν αἰσθητήριον*. With this would agree the circumstance that the first attempts to localise the particular psychical activities in particular parts of the body seem to have been made in the circles of the Pythagoreans and of the physicians who stood in near relations to them; localising, *e.g.*, thought in the brain, perception in the individual organs and in the heart, and the emotions also in the latter organ. From them Diogenes of Apollonia, and after him Democritus, seem to have taken these beginnings of a physiological psychology.

[5] *Frag.* (Karst.) vv. 146–149.

[6] Arist. *De An.* I. 2, 404 b 7; III. 3, 427 a 21; *Met.* III. 5, 1009 b 17; Theophr. *De Sens.* 10 f.

that like is always perceived by like, warmth without by the warmth in man, the cold without by the cold even in the dead body. Empedocles, with the aid of his theory of effluxes and pores, carried out the thought that every element in our body perceives the same element in the outer world, so as to teach that each organ is accessible to the impress of those substances only whose effluxes fit into its pores; *i.e.* he derived the specific energy of the sense organs from relations of similarity between their outer form and their objects, and carried this out for sight, hearing, and smell, with observations which in part are very acute.[1]

This view, that like is apprehended by like, was opposed by Anaxagoras,—on what ground it is not certain.[2] He taught that perception is only of opposite by opposite, warmth without by the cold in man, etc.[3] At all events, his doctrine also is a proof that these *metaphysical rationalists* maintained all of them in their *psychology* a *crass sensationalism*.

[1] Theophr. *De Sens.* 7.

[2] Perhaps we have here a remembrance of Heraclitus, who also explained perception from the *ἐναντιοτροπία*, — motion against motion, — and with whom opposition was the principle of all motion.

[3] Theophr. *De Sens.* 27 ff. It is interesting that Anaxagoras inferred from this that every perception is joined with pain (*λύπη*).

CHAPTER II.

THE ANTHROPOLOGICAL PERIOD.

G. Grote, *History of Greece*, VIII. (London, 1850), pp. 474–544.
C. F. Hermann, *Geschichte und System der platonischen Philosophie*, I. (Heidelberg, 1839), pp. 179–231.
Blass, *Die attische Beredsamkeit von Gorgias bis zu Lysias*. Leips. 1868.
H. Köchly, *Sokrates und sein Volk*, 1855, in "Akad. Vorträgen und Reden," I (Zürich, 1859), pp. 219 ff.
H. Siebeck, *Ueber Sokrates' Verhältniss zur Sophistik*, in "Untersuchungen zur Philosophie der Griechen," 1873, 2 Aufl. (Freiburg i. B. 1888).
W. Windelband, *Sokrates* in "Præludien" (Freiburg i. B. 1884), pp. 54 ff.
[H. Jackson, Art. *Sophists*, in *Enc. Brit.*]

THE farther development of Greek science was determined by the circumstance that in the powerful, universal upward movement of the mental and spiritual life which the nation achieved after the victorious result of the Persian wars, science was torn away from the restraints of close schools in which it had been quietly pursued, and brought out upon the stage of *publicity*, where all was in vehement agitation.

The circles in which scientific research was fostered had widened from generation to generation, and the doctrines which at first had been presented in smaller societies and spread abroad in writings that were hard to understand, had begun to filter through into the general consciousness. The *poets*, as Euripides and Epicharmus, began already to translate into their language scientific conceptions and views; the knowledge gained by investigation of Nature had already been made *practically effective*, as by Hippodamus in his architecture. Even *medicine*, which had formerly been only an art practised according to traditions, became so permeated with the general conceptions of natural philosophy, and with the special doctrines, information, and hypotheses of physiological research which in the course of time had occupied an ever-broader space in the systems of science, that it became encumbered with an excessive

growth of etiological theories,[1] and first found in Hippocrates the reformer who reduced this tendency to its proper measure and gave back to the physician's art its old character in contrast to scientific doctrine.[2]

Moreover, the Greek nation, matured by the stern experience which had been its lot within and without, had entered upon the age of manhood. It had lost its naïve faith in old tradition, and had learned the value of knowledge and ability for practical life. Of science, which up to this time had followed in quiet the pure impulse of investigation — the noble curiosity which seeks knowledge for its own sake — the state now demanded light on the questions which disturbed it, counsel and help in the doubt into which the luxuriance of its own development in culture had plunged it. In the feverish emulation of intellectual forces which this greatest period in the world's history brought with it, the thought everywhere gained recognition that in every walk in life the man of knowledge is the most capable, the most useful, and the most successful. In every department of practical activity, the fruitful innovation of independent reflection, of individual judgment, took the place of the old life controlled by custom. *The mass of the people was seized with the burning desire to make the results of science its own.* It was especially true, however, that at this time family tradition, habituation, personal excellence of character and address were no longer sufficient, as formerly, for the man who wished to play a political part. The variety of transactions and the attendant difficulties, as well as the intellectual status of those with whom and upon whom he would work, made a *theoretical schooling for the political career* indispensable. Nowhere was this movement so powerful as in *Athens*, then the capital of Greece, and here also these desires found their fullest satisfaction.

For the supply followed the demand. The men of science, *the Sophists* (σοφισταί), stepped forth out of the schools into public life, and taught the people what they themselves had learned or discovered. They did this, indeed, partly out of the noble impulse to teach their fellow-citizens,[3] but it was none the less true that this teaching became their *business*. From all parts of Greece men of the different schools flocked toward Athens to expound their doc-

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[1] This innovation in medicine began among the physicians who stood in near relation to Pythagoreanism, especially with Alcmæon. As a literary instance of it, the writing which goes falsely under the name of Hippocrates, περὶ διαίτης, serves. Cf. H. Siebeck, *Gesch. d. Psych.* I. 1, 94 ff.

[2] Cf. principally his writings περὶ ἀρχαίης ἰητρικῆς and περὶ διαίτης ὀξέων.

[3] Cf. Protagoras in Plato, *Prot.* 316 d.

trines, and from so expounding them in the capital as well as in the smaller cities, to gain honour and wealth.

In this way it happened that in a short time not only the *social position of science*, but its own inner nature, its tendency and the questions for its solution, were fundamentally changed. It became a social power, a determining factor in political life, as in the case of Pericles; but just by this means it came into a state of *dependence upon the demands of practical, and in particular, of political life.*

These demands showed themselves principally in the facts that the democratic polity demanded of politicians first of all the capacity for public speaking, and that in consequence the instruction of the Sophists was especially sought as a preparation for public life, and converged more and more upon this object. Men of science became *teachers of eloquence.*

As such, however, they lost sight of the goal of nature-knowledge, the vision of which had formerly hovered before the eyes of science. At the most they presented transmitted doctrines in the most graceful and pleasing form possible. But their own investigations, if they were not confined to a formal routine, were necessarily directed toward *man's thinking and willing,* — the activities which public speaking was designed to determine and control, — toward the manner in which ideas and volitions arise, and the way in which they contend with one another and maintain their mutual rights. In this way Greek science took an essentially *anthropological* or *subjective* direction, studying the inner activities of man, his ideation and volition, and at the same time lost its purely theoretical character and acquired a preponderantly *practical significance.*[1]

But while the activity of the Sophists found itself brought face to face with the manifold character of human thought and will, while the teachers of eloquence were presenting the art of persuasion and pursuing the path upon which every opinion could be helped to victory, every purpose to its achievement, the question rose before them whether above and beyond these individual opinions and purposes which each one feels within himself as a necessity and can defend against others, there is anything whatever that is right and true in itself. The question *whether there is anything universally valid,* is the problem of the anthropological period of Greek philosophy, or of the Greek Enlightenment.

For it is likewise the problem of the time, — of a time in which religious faith and the old morality were wavering, a time when the

[1] Cicero's well-known expression (*Tusc.* V. 4, 10) with regard to Socrates holds good for the entire philosophy of this period.

respect which authority had commanded sank more and more, and all tended towards an anarchy of individuals who had become self-governing. Very soon this internal disintegration of the Greek spirit became clearly evident in the disorders of the Peloponnesian war, and with the fall of Athenian supremacy the flower of Grecian culture withered.

The dangers of this condition were at first decidedly increased by philosophy. For while the Sophists were perfecting the scientific development of the formal art of presentation, verification, and refutation which they had to teach, they indeed created with this rhetoric, on the one hand, the beginnings of an independent *psychology,* and raised this branch of investigation from the inferior position which it had taken in the cosmological systems to the importance of a fundamental science, and developed, on the other hand, the preliminaries for a systematic consideration of the *logical* and *ethical norms.* But as they considered what they practised and taught, — viz. the skill to carry through any proposition whatever,[1] — the *relativity* of human ideas and purposes presented itself to their consciousness so clearly and with such overwhelming force that they disowned inquiry as to the existence of a universally valid truth in the theoretical, as well as in the practical sphere, and so supported a *scepticism* which at first was a genuine scientific theory, but soon became a frivolous play. With their self-complacent, pettifogging advocacy, the Sophists made themselves the mouth-piece of all the unbridled tendencies which were undermining the order of public life.

The intellectual head of the Sophists was *Protagoras;* at least, he was the only one who was the author of any conceptions philosophically fruitful and significant. Contrasted with him, *Gorgias,* who is usually placed at his side, appears only as a rhetorician who occasionally attempted the domain of philosophy and surpassed the artifices of the Eleatic dialectic. *Hippias* and *Prodicus* are only to be mentioned, the one as the type of a popularising polyhistor, and the other as an example of superficial moralising.

To the disordered activity and lack of conviction of the younger Sophists, Socrates opposed faith in reason and a conviction of the existence of a universally valid truth. This conviction was with him of an essentially practical sort; it was his *moral disposition,* but it led him to an investigation of *knowledge,* which he anew set over against opinions, and whose essence he found in *conceptional thought.*

Socrates and the Sophists stand, accordingly, on the ground of

[1] Cf. the well-known τὸν ἥττω λόγον κρείττω ποιεῖν, Aristoph. *Nub.* 112 ff., 893 ff.; Arist. *Rhet.* II. 24, 1402 a 23.

the same common consciousness of the time, and discuss the same problems; but where the Sophists with their skill and learning remain caught in the confusion of the opinions of the day and end with a negative result, there the plain, sound sense, and the pure and noble personality of Socrates find again the ideals of morality and science.

The strong impression which the teaching of Socrates made forced the Sophistic activity into new lines. It followed him in the attempt to gain, through scientific insight, sure principles for the ethical conduct of life. While the old schools had for the most part become disintegrated, and had diverted their activity to the teaching of rhetoric, men who had enjoyed intercourse with the Athenian sage now founded new schools, in whose scientific work Socratic and Sophistic principles were often strangely intermingled, while the exclusively anthropological direction of their investigation remained the same.

Among these schools, called for the most part "Socratic," though not quite accurately, the *Megarian*, founded by *Euclid*, fell most deeply into the unfruitful subtleties of the later Sophists. Connected with this is the *Elean-Eretrian* School, the most unimportant. The fundamental contrast, however, in the conception of life which prevailed in the Greek life of that day, found its scientific expression in the teachings of those two schools whose opposition permeates all ancient literature from that time on: namely, the *Cynic* and the *Cyrenaic*, the precursors of the Stoic and Epicurean. The first of these schools numbers among its adherents, besides its founder *Antisthenes*, the popular figure of *Diogenes*. In the latter, which is also called the Hedonistic School, the founder, *Aristippus*, was succeeded by a grandson of the same name, and later by *Theodorus*, *Anniceris*, *Hegesias*, and *Euemerus*.

The wandering teachers known as the Sophists came in part from the earlier scholastic societies. In the second half of the fifth century these had for the most part disappeared, and had given place to a freer announcement of opinions attained, which was not unfavourable to special research, particularly physiological research, as in the case of **Hippo**, **Cleidemus**, and **Diogenes** of Apollonia, but which was attended by a crippling of general speculation. Only the school of Abdera and the Pythagorean School survived this time of dissolution. A society of Heracliteans which maintained itself in Ephesus appears soon to have fallen away into the pursuits of the Sophists, as in the case of **Cratylus**.[1]

From the Atomistic School came **Protagoras** of Abdera (about 480–410). He was one of the first, and rightly the most renowned, of these wandering teachers. Active at various times in Athens, he is said to have been convicted of impiety in that city, to have fled because of this, and to have met his death in flight. Of his numerous treatises, grammatical, logical, ethical, political, and religious in their character, very little has been preserved.

[1] In Plato (*Theæt.* 181 A) they are called *οἱ ῥέοντες*: cf. Arist. *Met.* IV. 5, 1010 a 13.

Gorgias of Leontini (483–375) was in Athens in 427 as an envoy from his native city, and there gained great literary influence. In old age he lived in Larissa in Thessaly. He came from the Sicilian school of orators, with which Empedocles also had been connected.[1]

Concerning **Hippias** of Elis, with the exception of some opinions (among which are those criticised in the Platonic dialogue *Hippias Major*), it is known only that he made great parade of his "much knowledge." Of **Prodicus** of Iulis, a town on the island of Ceos, the familiar allegory "Hercules at the Cross-roads" is preserved by Xenophon, *Memor.* II. 1, 21. The remaining Sophists, known for the most part through Plato, are without intrinsic importance. We know only that this or that characteristic affirmation is put in the mouth of one or another.

In forming a conception of the Sophistic doctrine we have to contend with the difficulty that we are made acquainted with them almost exclusively through their victorious opponents, Plato and Aristotle. The first has given in the *Protagoras* a graceful, lively delineation of a Sophist congress, redolent with fine irony, in the *Gorgias* a more earnest, in the *Theætetus* a sharper criticism, and in the *Cratylus* and *Euthydemus* supercilious satire of the Sophists' methods of teaching. In the dialogue the *Sophist*, to which Plato's name is attached, an extremely malicious definition of the theories of the Sophists is attempted, and Aristotle reaches the same result in the book on the fallacies of the Sophists (Ch. I. 165 a 21).

The history of philosophy for a long time repeated the depreciatory judgment of opponents of the Sophists, and allowed the word *σοφιστής* (which meant only a "learned man," or, if you will, a "professor") to bear the disparaging meaning which they had given it. Hegel rehabilitated the Sophists, and thereupon it followed, as often happens, that they were for a time overestimated, as by Grote.

M. Schanz, *Die Sophisten* (Göttingen, 1867).

Socrates of Athens (469–399) makes an epoch in the history of philosophy, even by his external characteristics, by his original personality, and his new style of philosophising. He was neither *savant* nor wandering teacher, belonged to no school and adhered to none. He was a simple man of the people, the son of a sculptor, and at first busied himself with the chisel. In his ardent desire for knowledge he absorbed the new doctrines with which the streets of his native city re-echoed, but did not allow himself to be dazzled by these brilliant rhetorical efforts, nor did he find himself much advanced by them. His keen thought took note of their contradictions, and his moral earnestness was offended by the superficiality and frivolity of this constant effort after culture. He held it to be his duty to enlighten himself and his fellow-citizens concerning the emptiness of this pretended knowledge, and, through earnest investigation, to follow after truth. So, a philosopher of this opportunity and of daily life, he worked unremittingly among his fellow-citizens, until misunderstanding and personal intrigue brought him before the court which condemned him to the death that was to become his greatest glory.

The accounts concerning him give a clear and trustworthy picture of his personality. In these accounts Plato's finer and Xenophon's coarser portrayal supplement each other most happily. The first in almost all his writings brings out the honoured teacher with dramatic vividness. Of the second we have to consider the *Memorabilia* (*Ἀπομνημονεύματα Σωκράτους*) and the *Symposium*. As regards his teaching, the case is more difficult, for here the presentations of both Xenophon and Plato are partisan writings, each laying claim to the famous name for his own doctrine (in the case of Xenophon a mild Cynicism). The statements of Aristotle are authoritative on all essential points, because of the greater historical separation and the freer point of view.

E. Alberti, *Sokrates* (Göttingen, 1869); A. Labriola, *La Dottrina di Socrate* (Naples, 1871); A. Fouillée, *La Philosophie de Socrate* (Paris, 1873).

Euclid of Megara founded his school soon after the death of Socrates. The two Eristics (see below), **Eubulides** of Miletus, **Alexinus** of Elis, **Diodorus Cronus** of Caria (died 307), and **Stilpo** (380–300), are to be mentioned as

[1] In regard to these relationships cf. H. Diels, *Berichte der Berl. Akademie*, 1884, pp. 343 ff.

belonging to this school, which had only a brief existence, and later became incorporated with the Cynics and Stoics. The same is true of the society which **Phædo**, the favourite pupil of Socrates, founded in his home at Elis, and which **Menedemus** soon after transplanted to Eretria. Cf. E. Mallet, *Histoire de l'école de Megare et des écoles d'Elis et d'Erétrie* (Paris, 1845).

The founder of the Cynic School (named after the gymnasium Cynosarges) was **Antisthenes** of Athens, who, like Euclid, was an older friend of Socrates. The singular **Diogenes** of Sinope is rather a characteristic by-figure in the history of civilisation than a man of science. In this connection **Crates** of Thebes may also be mentioned. Later this school was blended with that of the Stoics.

F. Dümmler, *Antisthenica* (Halle, 1882); K. W. Göttling, *Diogenes der Kyniker, oder die Philosophie des griechischen Proletariats* (Ges. Abhandl. I. 251 ff.).

Aristippus of Cyrene, a Sophist and wandering teacher, somewhat younger than Euclid and Antisthenes, and united only for a little time with the Socratic circle, founded his school in old age, and seems to have left to his grandson the systematic development of thoughts, which, for himself, were rather a practical principle of life. The above-named successors (Theodorus, etc.) extend into the third century, and form the transition to the Epicurean School, which took up the remnants of the Hedonistic into itself.

A. Wendt, *De Philosophia Cyrenaica* (Göttingen, 1841).

§ 7. The Problem of Morality.

The reflections of the Gnomic poets and the sentences of the so-called seven wise men had already, as their central point, the admonition to observe moderation. In like manner the pessimistic complaints which we meet among poets, philosophers, and moralists of the fifth century are directed for the most part against the unbridled license of men, their lack of discipline and of obedience to law. The more serious minds discerned the danger which the passionate seething and foaming of public life brought with it, and the political experience that party strife was ethically endurable only where it left the order of the laws untouched, made subjection to law appear as the supreme duty. Heraclitus and the Pythagoreans expressed this with complete clearness, and knew how to attach it to the fundamental conceptions of their metaphysical theories.[1]

We meet here with two assumptions which even among these thinkers appear as self-evident presuppositions. The first is the *validity of laws*. The naïve consciousness obeys the command without asking whence it comes or by what it is justified. Laws have actual existence, those of morals as well as those of the courts; they are here once for all, and the individual has to follow them. No one in the pre-Sophistic period thought of examining the law and asking in what its claim to valid authority consists. The second assumption is a conviction which is fundamental in the moralising of all peoples and all times: viz. that obedience to the law brings *advantage*, disregard of it, *disadvantage*. As the result of

[1] Cf. above, p. 63, note 5.

this thought admonition takes on the character of persuasive counsel,[1] which is directed to the shrewdness of the one admonished as well as to the desires slumbering within him.

With the Greek Enlightenment confidence in both of these presuppositions began to waver, and accordingly morality became for it a problem.

1. The impulse to this came from the *experiences of public life*. The frequent and sudden change of constitutions was indeed adapted to undermine the authority of law. It not only took away the halo of unconditional, unquestioned validity from the individual law, but it accustomed the citizen of the democratic republic especially to reflect and decide upon the ground and validity of laws as he consulted and voted. Political law became a subject for discussion, and the individual set himself with his judgment above it. If, now, besides noting this mutation in time, attention is also given to the variety exhibited not only in the political laws, but also in the usages prescribed by customary morality in the different states and among different peoples, the consequence is that the worth of universal validity for all men can no longer be attributed to laws.[2] At least this holds good in the first place for all *laws made by man;* in any case, therefore, for political laws.

In the face of these experiences the question arose whether there is anything whatever that is valid everywhere and always, any law that is independent of the difference between peoples, states, and times, and therefore authoritative for all. *Greek ethics began thus with a problem which was completely parallel to the initial problem of physics.* The essence of things which remains ever the same and survives all changes the philosophers of the first period had called Nature (φύσις):[3] it is now asked whether there is also determined by this unchanging *Nature* (φύσει) a law that is exalted above all change and all differences, and in contrast with this it is pointed out that all existing prescriptions valid only for a time, and within a limited territory, are given and established by *human institution* or *statute* (θέσει or νόμῳ).

This contrast between Nature and institution or statute is the most characteristic work of the Greek Enlightenment in the forma-

[1] A typical example of this is the allegory of Prodicus, in which the choosing Hercules is promised golden mountains by Virtue as well as by Vice, in case he will intrust himself to her guidance.

[2] Hippias in Xen. *Mem.* IV. 4, 14 ff.

[3] Περὶ φύσεως is the title borne by the writings of all the older philosophers. It is to be emphasised that the constitutive mark of the concept φύσις was originally that of remaining ever like itself. The contrary of this is then the transient, that which occurs a single time.

tion of conceptions. It dominates the entire philosophy of the period, and has from the beginning not only the meaning of a principle of genetic explanation, but the significance of a *norm* or standard *for the estimation of worth.* If there is anything universally valid, it is that which is valid "by Nature" for all men without distinction of people and time; what has been established by man in the course of history has only historical worth, worth for a single occasion. That only is justly authorised which Nature determines, but human institution goes beyond this. The "law" (νόμος) tyrannises over man and forces him to much that is contrary to Nature.[1] Philosophy formulated in its conceptions that opposition between a natural, "divine" law and the written law, which formed the theme of the *Antigone* of Sophocles.

Out of this antithesis came the problems, on the one hand, to establish in what this law of Nature, everywhere the same, consists; on the other, to understand how, in addition to this, the institutions of historical law arise.

The first problem Protagoras did not avoid. In the mythical presentation of his thought which Plato has preserved,[2] he taught that the gods gave to all men in equal measure a *sense of justice,* and *of ethical respect* or *reverence* (δίκη and αἰδώς), in order that in the struggle of life they might be able to form permanent unions for mutual preservation. He found, therefore, the φύσις of practical life in *primary ethical feelings* which impel man to *union in society and in the state.* The carrying out of this thought in its details and the definition of the boundary between this which is valid by Nature (φύσει) and the positive determinations of historical institution are unfortunately not preserved to us.

There are, however, many indications that the theory of the Sophists proceeded from such fundamental conceptions to a wide-reaching *criticism of existing conditions,* and to the *demand* for profound *revolutions* in social and political life. The thought was already at that time forcing its way forward, that all distinctions between men before the law rest only upon institution, and that Nature demands *equal right for all.* Lycophron desired to do away with the nobility. Alcidamas[3] and others[4] combated slavery from this point of view. Phaleas demanded equality of property as well as of education for all citizens, and Hippodamus was the first to

[1] Hippias in Plat. *Prot.* 337 C.
[2] Plat. *Prot.* 320 ff. Cf. A. Harpff, *Die Ethik des Protagoras* (Heidelberg, 1884).
[3] Arist. *Rhet.* I. 13, 1373 b 18. Cf. also *Orat. Attic.* (ed. Bekker) II. 154.
[4] Arist. *Pol.* I. 3, 1253 b 20.

project the outlines of an ideal state, constituted according to reason. Even the thought of a political equality of women with men came to the surface in this connection.[1]

If now positive legislation deviates from these demands of Nature, its rationale is to be sought only in the *interests* of those who make the laws. Whether this takes the form assumed in the opinion of Thrasymachus[2] of Chalcedon, who held that it is those in power who by means of the law force the subjects to do what is for their (the masters') advantage, or whether it wears the contrary form as developed by Callicles,[3] that laws have been erected by the great mass of the weak as a bulwark against the power of strong personalities which would be superior to the individual, and that according to the view of Lycophron[4] all those who do no harm to others thus mutually assure for themselves life and property,—in all these cases the ground of the laws lies in the interests of those who make them.

2. If personal interest is therefore the ground for setting up laws, it is also the sole *motive for obeying them.* Even the moralist wishes to convince man that it is for his interest to accommodate himself to the law. From this it follows, however, that obedience to the law is under obligation to extend only so far as it is the *individual's interest.* And there are cases where the two do not coincide. It is not true that only subordination to law makes a man happy; there are great criminals, so Polus works out the thought,[5] who have attained the happiest results by the most frightful misdeeds. Experience contradicts the claim that only right doing leads to happiness; it shows rather that a shrewd conduct of life, restrained by no regard for right and law, is the best guaranty of good fortune.[6]

Through such considerations the scepticism which had originally, as it seems,[7] been directed only toward the validity of political law, gradually attacked that of the moral laws as well. What Polus, Callicles, and Thrasymachus propound in the Platonic dialogues, the *Gorgias* and the *Republic,* with regard to the conceptions of the *just* and *unjust* (δίκαιον and ἄδικον) has reference in equal measure to the moral and to the political law. This double reference is effected through the middle ground of the characteristics

[1] The persiflage in the *Ecclesiazusæ* of Aristophanes can refer only to this.
[2] Plat. *Rep.* 338 C.
[3] Plat. *Gorg.* 483 B.
[4] Arist. *Pol.* III. 9, 1280 b 11.
[5] In Plat. *Gorg.* 471.
[6] Cf. the praise of ἀδικία by Thrasymachus in Plat. *Rep.* 344 A.
[7] This is especially true of Protagoras, perhaps also of Hippias.

of penal justice, and proves that the law of Nature is set over against, not only the civil law, but also the requirements of morals.

In both respects the naturalism and radicalism of the younger Sophists pushed on to the extreme consequences. The weak may subject himself to the law; he is, though, but the stupid man, serving the uses of others by so doing;[1] the strong, however, who is at the same time the wise, does not allow himself to be led astray by the law; he follows solely the *impulse of his own nature*. And this is the right, if not according to human law, yet according to the higher law of Nature. She shows in all living beings that the stronger should rule the weaker; only for the slave is it becoming to recognise a command above himself. The free man should not bridle his desires, but let them have full development; according to human law it may be a disgrace to do injustice, according to the dictates of Nature it is a disgrace to suffer injustice.[2]

In such forms the *individual's natural disposition, the constitution of his impulses, was proclaimed as law of Nature*, and exalted to be the *supreme law of action*; and *Archelaus*, a disciple of Anaxagoras, belonging to the Sophistic period, proclaimed that the predicates good and bad, "just" and "shameful" (δίκαιον — αἰσχρόν), spring not from Nature, but from Institution. *All ethical judging is conventional*.[3]

3. *Religious* ideas were also involved in this overthrow as a matter of course, and all the more since after their theoretical value had been taken away, at least in educated circles, by the cosmological philosophy typified by Xenophanes, they had retained recognition only as allegorical methods of presenting ethical conceptions. In this latter line of thought the school of Anaxagoras had been active for a time, especially a certain Metrodorus of Lampsacus. It was only a consequence of the ethical *relativism* of the Sophists when *Prodicus* taught that men had made to themselves gods out of all that brought them blessing, and when *Critias* declared belief in the gods to be an invention of shrewd statecraft.[4] If such claims still excited indignation among the masses and the powers of the official priesthood,[5] it was easy for Protagoras in the presence of these questions to wrap himself in the mantle of his scepticism.[6]

4. The position of *Socrates* with reference to this whole movement presents two sides: on the one hand, he brought the principle

[1] Thrasymachus in Plat. *Rep.* 343 C.
[2] Callicles in Plat. *Gorg.* 483 A and 491 E.
[3] Diog. Laert. II. 16.
[4] Sext. Emp. *Adv. Math.* IX. 51–54.
[5] As is shown by the condemnation of Diagoras of Melos (Aristoph. *Av.* 1073).
[6] Diog. Laert. IX. 51.

underlying the movement to its clearest and most comprehensive expression; on the other hand, he set himself in the most vigorous manner against its outcome, and both these sides of his activity, contrary as they seem to be and much as this external opposition had to do with the tragic fate of the man, stand, nevertheless, in the most exact and rigidly consistent connection; for just by grasping the principle of the Enlightenment in all its depth, and formulating it in its full force, did Socrates succeed in developing from it a positive result of wide-reaching power.

For him, also, the time for following traditional customs without question is past. Independent judgment of individuals has taken the place of authority. But while the *Sophists* gave their attention to the *analysis of the feelings and impulses* which lie at the basis of the actual decisions of individuals, and ultimately saw themselves forced to adjudge to all these motives the equal right of an unfolding in accordance with the necessity of Nature, Socrates, on the contrary, reflected upon precisely that element which was the decisive factor in the culture of his time: namely, the practical, political, and social significance which knowledge and science had achieved. Just through the process in which individuals had achieved independence, through the unfettering of personal passions, it had become evident that in all fields *man's ability rests upon his insight*. In this Socrates found that *objective standard for the estimation* of men and their actions which the Sophists had sought in vain in the machinery of feelings and desires.

Ability, then, or excellence (*Tüchtigkeit*, ἀρετή) is insight. He who acts according to feelings, according to presuppositions that are not clear, according to customs that have been handed down, may indeed occasionally hit the right thing, but he does not know it, he is not sure of the issue; he who is entirely involved in delusion and error as to the matter in hand is certain to make mistakes; he only will be able to act right who has the right knowledge of things and of himself.[1] Scientific knowledge (ἐπιστήμη) is therefore the basis of all qualities which make man able and useful, of all single ἀρεταί.

This insight consists, on the one hand, in an *exact knowledge of the things* to which the action is to relate. Man should understand his business; as we find the able man in every business to be the one who has learned it thoroughly and knows the objects with which he has to work, so should it be also in civil and political life; here, too,

[1] These fundamental thoughts of Socrates are reproduced by Xenophon and Plato in countless turns and variations. In Xenophon the passage, *Mem.* III. ch. 9, is most important for comparison; in Plato, the dialogue *Protagoras*.

only insight should be trusted.[1] The individual excellences differentiate themselves accordingly with reference to the objects which the knowledge concerns in the individual case;[2] common to all, however, is not only knowledge in general, but also *self-knowledge*. Hence Socrates declared it to be his principal vocation to educate himself and his fellow-citizens to earnest self-examination; the γνῶθι σεαυτόν was the watch-word of his teaching.[3]

5. These considerations, which Socrates developed out of the principles by which practical ability or excellence is determined, became transferred by the aid of the *ambiguity in the word* ἀρετή,[4] to ethical excellence also, or *virtue*, and so led to the fundamental doctrine that *virtue consists in knowledge of the good*.[4] So far the course of thought followed by Socrates is clear and free from doubt. The sources become less clear when we ask what the man who was so strenuous to reach clearly defined conceptions intended by the *good*. According to Xenophon's exposition, the good (ἀγαθόν) must have coincided everywhere, for his master, with the profitable or useful (ὠφέλιμον). Virtue would then be the knowledge of what was suited to the end in view, or useful, in each particular instance. This interpretation is the easiest to attach to that analogy between moral virtue and the various kinds of excellence shown in daily life, which Socrates really taught, and the presentation given in the earliest Platonic dialogues, in particular the *Protagoras* attributes to Socrates this standpoint of *individual advantage*. Insight or discernment (here called prudence, φρόνησις) is a measuring art, which weighs exactly the benefit and the harm that will result from the action, and so chooses what is most to the purpose. In further agreement with this view is the fact that in exact contrast with the Sophists, who demanded a free and uncramped development of the passions, Socrates emphasised no virtue so much, and exhibited none so fully in his own life, as that of self-control (σωφροσύνη).

But according to this interpretation the Socratic conception of the good would be indefinite in its content; decision must be made from case to case as to what suits the end in view, or is useful, and

[1] Hence, too, the anti-democratic position, so fatal for his personal destiny, taken by Socrates, who demanded expressly that the most difficult and most responsible art, that of governing, should be practised only by those of the most complete discernment, and who on this account absolutely rejected the appointment of state officials by lot or popular choice.

[2] Socrates did not attempt a system of the individual excellences; on the other hand, he did give by way of example definitions of courage (cf. the Platonic *Laches*), piety (Plat. *Euthyphro*, Xen. *Mem.* IV. 6, 3), justice (*Mem.* IV. 6, 6), etc.

[3] As defined by his theoretical philosophy; see § 8.

[4] The same ambiguity which has given occasion to countless difficulties lies in the Latin *virtus*; so, too, in ἀγαθόν, *bonum*, good.

instead of the good we should again always have what is *good for something*.[1] It may be regarded as certain that Socrates strove to transcend this relativism, and also that by reason of the anthropological basis of his thinking he did not get beyond this position in the formulation of his conceptions. His doctrine that it is better to suffer wrong than to do wrong, his strict conformity to law, in accordance with which he scorned to avoid the execution of an unjust sentence and preserve himself by flight for further life and activity, his admonition that the true meaning of life consists in εὐπραξία, in continual right-doing, in man's ceaseless labour for ethical improvement, in the participation in all that is good and beautiful (καλοκἀγαθία), especially, however, his *erotic*, *i.e.* his doctrine that friendship and the relation of attachment between teacher and taught should consist only in a mutual striving to become good or constantly better through their life in common and their mutual furtherance of each other's aims,—all this goes far beyond the conception presented by Xenophon. It can be united with the standpoint of utility only if we attribute to Socrates the distinction between the true welfare of the soul, on the one hand, and earthly gain, on the other, which Plato makes him set forth in the *Phædo*, but of which we elsewhere find but slight traces, since the historic Socrates, even according to Plato's *Apology*, maintained a completely sceptical position with regard to personal immortality, and did not know the sharp Platonic separation between immateriality and corporeality. Socrates teaches, indeed, even according to Xenophon, that man's true fortune is to be sought, not in outward goods nor in luxurious life, but in virtue alone: if, however, this virtue is to consist only in the capacity to recognise the truly useful and act accordingly, the doctrine moves in a circle as soon as it maintains that this truly useful is just virtue itself. In this circle Socrates remained fast; the objective determination of the conception of the good which he sought he did not find.

6. However indefinite the answer to the question as to what should properly form the content of that knowledge of the good which constitutes virtue, Socrates was at all events convinced — and this proved much more important — that *this knowledge is in itself sufficient to cause one to do the good, and so bring happiness*. This proposition, which may serve as a type of a rationalistic conception of life, contains two pregnant presuppositions, one *psychological*, viz. pronounced *intellectualism*, the other ethical, viz. pronounced *eudæmonism*.

[1] Xen. *Mem.* III. 8, 5.

The fundamental assumption which Socrates thus makes is indeed the expression of his own reflective, judicious nature. Every man, he says, acts in the manner that he considers best suited for his end, most beneficial and most useful; no one does that which he knows to be unfit for the end in view, or even fit in a lesser degree. If, then, virtue is knowledge of what is to the purpose, it follows immediately that the virtuous man acts in accordance with his knowledge, therefore to the purpose, rightly, in the way that is beneficial to him. No one does wrong knowingly and purposely: he only does not act rightly who has not right insight. If it sometimes seems as if some one acted wrongly in the face of better insight — "against his better judgment" — it must be that he was not clearly and surely in possession of this better knowledge, for otherwise he would have purposely injured himself, which is absurd.

In this a fundamental difference between Socrates and the Sophists becomes evident: the latter maintained the originality of the will, and on that account its warrant from Nature; for Socrates, to will a thing and to regard a thing as good, profitable, and useful are the same thing. Knowledge determines the will without opposition; man does what he holds to be best. True as it may be that Socrates was in error in this opinion, and that the truth lies in the mean between him and the Sophists, this his intellectualistic conception of the will came to exercise a decisive influence over all ancient ethics.

Sin is, then, error. He who does a bad act does it from a mistaken judgment, regarding the bad, *i.e.* the injurious, as the good; for every one believes that he is doing the good, *i.e.* the advantageous. Only because the case stands thus is there any meaning in instructing men ethically; only for this reason is virtue capable of being taught. For all teaching addresses itself to man's knowledge. Because man can be taught what the good is, therefore — and by this means alone — he can be brought to the stage of right action. Were virtue not knowledge, it would not be capable of being taught.

From this standpoint Socrates raised the customary morality taught by the popular moralising to a scientific plane. All his keenness, his subtlety, and dialectical dexterity were employed[1] to prove against the Sophists that not only the surest, but even the only sure way of attaining to permanent happiness, lies in obeying ethical prescriptions under all circumstances, *in subordination to law and morals.* So he gives back to Authority her right. The principle of the Enlightenment tolerates no unquestioning subjection to the existing state of things and requires examination of the laws; but *these laws sustain the examination*, they evince themselves to be requirements made by insight into what is for the best; and because it has now been recognised that it is the right course to obey them, unconditional obedience must be rendered.[1] Far from being in conflict with the institutions of law and morals, Socrates is rather the one who undertook to prove their *reasonableness and thereby their claim to universal validity.*[2]

[1] Compare in Plato the refutation of Thrasymachus in the first book of the *Republic*, which may be regarded as Socratic in its principles, but which in part is very weakly supported, both in form and in matter.

F. Wildauer, *Socrates' Lehre vom Willen.* Innsbruck, 1877.
M. Heinze, *Der Eudämonismus in der griechischen Philosophie.* Leips. 1883.

7. In addition to the psychologico-ethical presuppositions that the will is always directed toward what is recognised as good, and that therefore virtue, as knowledge of the good, draws after it of itself the appropriate action, we find in the argumentations of Socrates the further opinion that this appropriate action of the virtuous man actually attains its end and makes him happy. *Happiness or well-being* (εὐδαιμονία) *is the necessary result of virtue.* The intelligent man knows, and hence does, what is good for him; he must then, through his doing, become happy also. This assumption applies, however, only to a perfect intelligence which would be absolutely certain of the effects that an intended action would have in the connected series of the world's events.

[1] In details, as might be expected from the nature of the case, this rehabilitation of the popular morals falls into trivial moralising, especially as Xenophon portrays it. But while Socrates hoped precisely by this means to render the right service to his people, it proved to be just the point where he came to the ground between two stools: with the Sophists and their adherents, he passed for a reactionary; on the other hand, the men who, like Aristophanes, saw precisely in the questioning of the authority of law and morals in general, the dangerous cancer of the time, without investigation classed him who wished to place this authority on a basis of reason, among those who were undermining it. So it was that it could come about that Socrates appeared in the *Clouds* of Aristophanes as the type of Sophistic teaching which he combated. That this relation led ultimately to his condemnation is obvious.

[2] It is hence quite alien to the principles of Socrates to demand or *even to allow* for every *individual act* a special examination of the grounds of the political or ethical command. If, for example, it has once been recognised as right to obey the ordinances of the government under all circumstances, this obedience must then be rendered, even if the ordinance evidently commands the unreasonable and the unjust; cf. Plato's *Crito*. If, as was true of Socrates himself, a man is convinced that his life is under divine guidance, and that where his insight does not suffice, a higher voice warns him through his feeling, — at least, warns him away from what is wrong, — then he must obey this voice. Cf. on the δαιμόνιον, § 8. The essential thing always is that a man give an account to himself of his doing, but the grounds on which he acts in so doing may even consist in such maxims as *exclude an examination in individual cases.*

The transmitted expressions of Socrates, in fact, make the impression that he was convinced that man could possess that insight which by its operation upon his action and its consequences is adapted to bring about happiness, and that he might gain this insight through philosophy: that is, through unremitting earnest examination of himself, of others, and of the relations of human life. Investigations as to how far the world's course, which man cannot foresee, may cross and destroy the operation even of the best planned and most intelligent conduct of life, are not to be pointed out in the teaching of Socrates. When we consider the slight degree of confidence which he otherwise had in human knowledge, as soon as this attempted to venture beyond establishing ethical conceptions and practical requirements, we can explain the above conviction only on the following basis — he did not fear that the *providential guidance*, which was for him indeed an object not of knowledge, but of faith, would frustrate the beneficial consequences of right action.

8. Socrates had defined virtue, the fundamental ethical conception, as insight, and this in turn as knowledge of the good, but had given to the concept of the good no universal content, and in a certain respect had left it open. This made it possible for the most diverse conceptions of life to introduce their views of the ultimate end (τέλος) of human existence into this open place in the Socratic concept; and so this first incomplete work in the formation of ethical conceptions at once afforded the material for a number of particular structures.[1] The most important of these are the *Cynic* and the *Cyrenaic*. Both present the attempt to define the true intrinsic worth of the life of the individual in a universal manner. Both wish to show in what man's *true happiness* consists, how man must be constituted and how he must act in order to attain this with certainty; both call this constitution or disposition through which participation in happiness is gained, *virtue*. The eudæmonistic side of the Socratic ethics is here developed in an entirely one-sided manner, and though universal validity is vindicated for the conception proposed, the point of view of the *individual's happiness* forms so exclusively the standard that the worth of all relations of public life even is estimated by it. In Cynicism, as in Hedonism, the Greek spirit is proceeding to appropriate the fruit which the conditions

[1] So indeed in the case of Xenophon and Æschines; the philosophising cobbler Simon, too, seems to have have been thus dependent on Socrates. What the Megarian and the Elean-Eretrian schools accomplished in this respect is too indefinitely transmitted to us, and is too closely in contact with Cynicism, to deserve separate mention.

of life brought about by civilisation yield for the fortune of the individual. The criticism of the social conditions and authorities, begun by the Sophists, has won a fixed standard through the mediating aid of the Socratic conception of virtue.

The doctrine of virtue taught by *Antisthenes*[1] takes at the beginning a high and specious turn at the point where the doctrine finds itself hopelessly entangled in the Socratic circle. He declines to define more closely the contents of the concept of the good, and declares virtue itself to be not only the highest, but the only good, understanding, however, by virtue essentially only the *intelligent conduct of life*. This alone makes happy, not indeed through the consequences which it brings about, but *through itself*. The contentment that dwells within the right life itself is accordingly completely independent of the world's course: virtue is itself sufficient for happiness; the wise man stands free in the presence of fate and fortune.

But this Cynic conception of virtue as sufficient in itself is, as is shown by its further development, in nowise to be interpreted as meaning that the virtuous man should find his fortune in doing good for its own sake amid all the whims of fate. Cynicism did not rise to this height, however much it may sound like it when virtue is celebrated as the only sure possession in the vicissitudes of life, when it is designated as the only thing to be striven for, and baseness, on the contrary, as the only thing to be avoided. This doctrine is a postulate derived with great logical consistency from the Socratic principle that virtue necessarily makes happy (cf. above, 7), and from this postulate Antisthenes sought in turn to define the real contents of the concept of virtue.

If, namely, virtue is to make happy with certainty and under all circumstances, it must be that conduct of life which makes man *as independent as possible of the course of events*. Now every want and every desire is a bond which makes man dependent upon fortune, in so far as his happiness or unhappiness is made to consist in whether a given wish is fulfilled or not by the course of life. We have no power over the outer world, but we have power over our desires. We expose ourselves the more to alien powers, the more we desire, hope, or fear from them; every desire makes us slaves of the outer world. Virtue, then, which makes man independent, can consist only in suppression of desires, and restriction of wants to the smallest conceivable measure. *Virtue is freedom from wants*,[2] — from the standpoint of eudæmonism certainly the most

[1] Principally preserved in Diog. Laert. VI.

[2] Xen. *Symp.* 4, 34 ff.

consistent conclusion, and one that must have appealed especially to men of a humble position in life such as we find the Cynics to be in part.

By carrying out this thought in a radical manner the Cynics came to occupy a purely negative attitude toward civilisation. By aiming to reduce the measure of the virtuous wise man's wants to what was absolutely inevitable, and to regard all other strivings as pernicious or indifferent, they rejected all the goods of civilisation and attained the *ideal of a state of Nature*, — an ideal stripped of all higher worth. Taking up earlier Sophistic theories and developing them farther, they taught that the wise man accommodates himself only to what Nature peremptorily demands, but despises all that appears desirable or worthy of obedience merely as the result of human opinion or institution. Wealth and refinement, fame and honour, seemed to them just as superfluous as those enjoyments of the senses which went beyond the satisfaction of the most elementary wants of hunger and love. Art and science, family and native land, were to them indifferent, and Diogenes owed his paradoxical popularity to the ostentatious jest of attempting to live in civilised Greece as if in a state of Nature, solely φύσει.

In this way the philosophising proletarian forced himself to despise all the good things of civilisation, from the enjoyment of which he found himself more or less excluded. On the other hand, he recognised none of the laws to which civilised society subjected itself, as binding in themselves, and if there is any truth at all in the coarse anecdotes which antiquity relates on the subject, this class took pleasure in scoffing openly at the most elementary demands of morals and decency. This forced and, in part, openly affected naturalism knows nothing any longer of δίκη and αἰδώς (justice and reverence), which the older Sophistic teaching had allowed to remain as natural impulses, and elicits a conception of virtue which supposes that greed and lust complete the essential qualities of the natural man.

Yet the Cynics were not so bad as they made themselves. Diogenes even preserved a remnant of respect for mental training, as the only thing which could free man from the prejudices of conventional institutions and lead to freedom from wants by insight into the nothingness of the pretended goods of civilisation. He also conducted the education of the sons of Xeniades, a Corinthian Sophist, according to the principles of the Cynic naturalism, and not without success.

On the whole, this philosophy is a characteristic sign of the time, the mark of a disposition which, if not hostile, was yet indifferent

to society and had lost all comprehension of its ideal goods; it enables us to see from within how at that time Greek society was disintegrating into individuals. When Diogenes called himself a cosmopolitan, there was in this no trace of the ideal thought of a community of all men, but only the denial of his adherence to any civilised community; and if Crates taught that the plurality of gods exists only in the opinion of men, and that, "according to Nature," there is but one God, there is in the Cynic doctrine no trace to warrant the conclusion that this monotheism was for them an especially clear idea or even an especially deep feeling.

9. In complete contrast with this system stands *Hedonism*, the philosophy of *regardless enjoyment*. Starting as did the Cynics from the incompleteness of the Socratic doctrine, Aristippus struck out in the opposite direction. He was quick to give to the concept of the good, a clear and simple content, — that of *pleasure* (ἡδονή). This latter conception at first does duty under the general psychological meaning of the feeling of contentment which grows out of the fulfilment of every striving and wish.[1] Happiness is then the state of pleasure which springs from the satisfied will. If this is the only thing to be considered, it is a matter of indifference what the object of will and of gratification is; all depends on the degree of pleasure, on the strength of the feeling of satisfaction.[2] This, however, in the opinion of Aristippus, is present in the highest degree in the case of sensuous, bodily enjoyment which relates to the immediate present, to the satisfaction of the moment. If, then, virtue is knowledge directed toward happiness, it must enable man to enjoy as much and as vigorously as possible. *Virtue is ability for enjoyment.*

Every one, to be sure, may and can enjoy; but only the man of education, of intelligence, of insight — the wise man — understands how to enjoy *rightly*. In this we must consider not only the intelligent appraisal (φρόνησις), which knows how to select, among the various enjoyments that present themselves in the course of life, those which will afford the pleasure that is highest, purest, least mixed with pain; we must consider also the inner self-possession of the man who is not blindly to follow every rising appetite, and who, when he enjoys, is never to give himself entirely up to the enjoyment, but is to stand above it and control it. The enjoyment which makes man the slave of things is, indeed, as the Cynics

[1] Besides this, also, Xenophon not infrequently puts the ἡδύ into the mouth of Socrates.

[2] This, too, is a completely correct consequence from the eudæmonistic principle.

say, to be rejected; but to delight in pleasure and yet not give one's self up to it is harder than to renounce it, as they do. Of this, however, man becomes capable through right insight only.[1]

On this ground the Cyrenaics, in particular the younger Aristippus (called μητροδίδακτος, "mother-taught," because his grandfather's wisdom was transmitted to him through his mother Arete), set on foot systematic investigations as to the origin of the πάθη, the feelings and impulses. In a physiological psychology which was connected with that of Protagoras (cf. below, § 8), they traced the varieties in feeling back to states of motion in the body: to rest corresponded indifference, to violent motion pain, to gentle motion pleasure. Besides such explanatory theories, however, this philosophy of *bonvivants* extended to an unprejudiced general theory of things. For them, too, as *Theodorus* taught, all ethical and legal prescriptions were ultimately merely institutions that were valid for the mass of men; the educated man of enjoyment gives himself no trouble about them, and enjoys things when they come into his possession. Theodorus, who bears the surname "the Atheist," put aside also all religious scruples which are opposed to devotion to sensuous enjoyment, and the school also exerted itself in this interest to strip the halo from religious faith, so far as possible, as is proved by the well-known theory of *Euemerus*, who in his ἱερὰ ἀναγραφή undertook to trace belief in the gods back to the worship of ancestors and veneration of heroes.

Thus the Cyrenaics ultimately agreed with the Cynics in this, that they, too, regarded all that is fixed νόμῳ, *i.e.* by the social convention of morals and law, as a limitation of that right to enjoyment which man has by nature (φύσει), and which the wise man exercises without troubling himself about historical institutions. The Hedonists gladly shared the refinement of enjoyment which civilisation brought with it; they found it convenient and permissible that the intelligent man should enjoy the honey which others prepared; but no feeling of duty or thankfulness bound them to the civilisation whose fruits they enjoyed. This same condition of recognising no native land, this same turning aside from the feeling of political responsibility, which among the Cynics grew out of despising the enjoyments of civilisation, resulted for the Cyrenaics from the egoism of their enjoyment. Sacrifice for others, patriotism, and devotion to a general object, Theodorus declared to be a form of foolishness which it did not become the wise man to share, and even Aristippus rejoiced in the freedom from

[1] Cf. Diog. Laert. II. 65 ff.

connection with any state, which his wandering life afforded him.[1] The philosophy of the parasites, who feasted at the full table of Grecian beauty, was as far removed from the ideal meaning of that beauty as was the philosophy of the beggars who lay at the threshold.

In the meantime, the principle of the expert weighing of enjoyments contains an element which necessarily leads beyond that doctrine of enjoyment for the moment which Aristippus preached, and this advance was made in two directions. Aristippus himself had already admitted that in the act of weighing, the pleasure and pain which would in future result from the enjoyment must be taken into account; *Theodorus* found that the highest good was to be sought rather in the cheerful frame of mind (χαρά) than in the enjoyment of the moment, and *Anniceris* came to see that this could be attained in a higher degree through the spiritual joys of human intercourse, of friendship, of the family, and of civil society than through bodily enjoyments. This knowledge that the enjoyments afforded by the intellectual and spiritual aspects of civilisation are ultimately finer, richer, and more gratifying than those of bodily existence, leads directly over into the doctrine of the Epicureans. But, on the other hand, the Hedonistic school could not fail ultimately to see that the painless enjoyment to which it aimed to educate the man of culture is but a rare lot. In general, found *Hegesias*, he is to be accounted as already happy who attains the painless state, is free from actual discomfort. With the great mass of men discomfort, the pain of unsatisfied desires, preponderates: for them it would be better, therefore, not to live. The impressiveness with which he presented this brought him the surname πεισιθάνατος, — he persuaded to death. He is the first representative of *eudæmonistic pessimism;* with this doctrine, however, eudæmonism refutes itself. He shows that if happiness, satisfaction of wishes, and enjoyment are to be the meaning and end of human life, it misses this end, and is to be rejected as worthless. Pessimism is the last but also the annihilating consequence of eudæmonism, — its immanent criticism.

§ 8. The Problem of Science.[2]

P. Natorp, *Forschungen zur Geschichte des Erkenntnissproblems bei den Alten.* Berlin, 1884.

The Sophists were teachers of political eloquence. They were obliged in the first instance to give instruction on the nature and

[1] Xen. *Mem.* II. 1, 8 ff.

[2] [*Wissenschaft.* Science, as used in this section, is nearly equivalent to "scientific knowledge." Sometimes the subjective aspect of the term is prominent, and sometimes the objective.]

right use of language. And while they were transforming rhetoric from a traditional art to a science, they applied themselves in the first place to linguistic researches, and became creators of grammar and syntax. They instituted investigations as to the parts of the sentence, the use of words, synonyms, and etymology. Prodicus, Hippias, and Protagoras distinguished themselves in this respect; as to the fruit of their investigations, we are only imperfectly informed.

1. Our knowledge of their *logical* acquisitions, which with the exception of a few allusions are lost, is in a still more unfortunate condition. For, as a matter of course, the teachers of rhetoric treated also the train of thought in discourse. This train of thought, however, consists in proof and refutation. It was then inevitable that the Sophists should project a theory of proof and refutation, and there is explicit testimony to this in the case of Protagoras.[1] Unfortunately, there is no more precise information as to how far the Sophists proceeded with this, and as to whether they attempted to separate out the logical Forms from those elements which belong to the content of thought. It is characteristic that the little information which we have concerning the logic of the Sophists relates almost without exception to their emphasising of the *principle of contradiction*. To the essential nature of the advocate's task, refutation was more closely related than proof. *Protagoras* left a special treatise[2] concerning *Grounds of Refutation*, perhaps his most important writing, and formulated the law of the contradictory opposite, so far, at least, as to say that there are with reference to every object two mutually opposing propositions, and to draw consequences from this. He thus formulated, in fact, the procedure which Zeno had practically employed, and which also played a great part in the disciplinary exercises of the Sophists, indeed the greatest part.

For it was one of the main arts of these "Enlighteners" to perplex men as to the ideas previously regarded as valid, to involve them in contradictions, and when the victims were thus confused, to force them if possible, by logical consequences, real or manufactured, to such absurd answers as to make them become ridiculous to themselves and others. From the examples which Plato[3] and Aristotle[3] have preserved, it is evident that this procedure was not

[1] Diog. Laert. IX. 51 ff.
[2] It is probable that Καταβάλλοντες (*sc.* λόγοι) and Ἀντιλογίαι are only two different titles of this work, the first chapter of which treated truth.
[3] Plato in the *Euthydemus* and in the *Cratylus*, Aristotle in the book "*On the Sophistic Fallacies.*"

always any too purely logical, but was thoroughly sophistical in the present sense of the word. The examples show that these people let slip no ambiguity in speech, no awkwardness in popular expression, if out of it they might weave a snare of absurdity. The witticisms which result are often based merely upon language, grammar, and etymology; more rarely they are properly logical; quite often, however, coarse and dull. Characteristic here, too, are the *catch-questions*, where either an affirmative or negative answer, according to the customs and presuppositions of the ordinary meanings of the words, gives rise to nonsensical consequences, unforeseen by the one answering.[1]

Plato has portrayed two brothers, *Euthydemus* and *Dionysidorus*, who practised this art of logomachy or *eristic*, which had great success among the Athenians who were great talkers and accustomed to word-quibbling. Aside from them, it was prosecuted principally by the *Megarians*, among whom the head of the school, *Euclid*, busied himself with the theory of refutation.[2] His adherents, *Eubulides* and *Alexinus*, were famous for a series of such catches, which made a great sensation and called forth a whole literature.[3] Among these there are two, the "Heap" and the "Bald-head,"[4] the fundamental thought in which is to be traced back to Zeno, and was introduced by him into the arguments by which he wished to show that the composition of magnitudes out of small parts is impossible. In like manner, Zeno's arguments against motion were amplified, even if not deepened or strengthened,[5] by another Megarian, *Diodorus Cronos*. Unwearied in finding out such *aporiæ*, difficulties, and contradictions, this same Diodorus invented also the famous argument (κυριεύων) which was designed to destroy the conception of possibility: only the actual is possible; for a possible which does not become actual evinces itself thereby to be impossible.[6]

In another manner, also, the Sophists who were affiliated with the *Eleatics*, show an extreme application of the principle of contradiction, and a corresponding *exaggeration of the principle of identity*. Even Gorgias seems to have supported his opinion that all statements are false, upon the assumption that it is incorrect to predicate

[1] As a typical example, "Have you left off beating your father?" or "Have you shed your horns?"
[2] Diog. Laert. II. 107.
[3] Cf. Prantl, *Gesch. der Log*, I. 33 ff.
[4] Which kernel of grain by being added makes the heap? Which hair falling out makes the bald head?
[5] Sext. Emp. *Adv. Math.* X. 85 ff.
[6] Cic. *De Fato*, 7, 13.

of any subject anything else than just this subject itself; and the Cynics, as well as Stilpo the Megarian, made this thought their own. There remain, accordingly, only such purely identical judgments as, good is good, man is man, etc.[1] As a logical consequence of this, judging and talking are made as impossible as were plurality and motion according to the Eleatic principle. As in the metaphysics of Parmenides, the ghost of which appears occasionally both among the Megarians and the Cynics (cf. below, No. 5), the lack of conceptions of relation permitted no combination of unity with plurality and led to a denial of plurality, so here the lack of conceptions of logical relation made it appear impossible to assert of the subject a variety of predicates.

2. In all these devious windings taken by the researches of the Sophists concerning the knowing activity, the *sceptical direction* is manifesting itself. If on such grounds the logical impossibility of all formation of synthetic propositions was maintained, this showed that knowledge itself was irreconcilable with the abstract principle of identity, as it had been formulated in the Eleatics' doctrine of Being. The doctrine of Parmenides had itself become ensnared past help in the dichotomies of Zeno. This came to most open expression in the *treatise* of *Gorgias*,[2] which declared Being, Knowledge, and Communication of Knowledge to be impossible. There is nothing; for both Being, which can be thought neither as eternal nor as transitory, neither as one nor as manifold, and Non-being are conceptions that are in themselves contradictory. If, however, there were anything, it would not be knowable; for that which is *thought* is always something else than that which actually *is*, otherwise they could not be distinguished. Finally, if there were knowledge, it could not be taught; for every one has only his own ideas, and in view of the difference between the thoughts and the signs which must be employed in their communication, there is no guaranty of mutual understanding.

This *nihilism*, to be sure, scarcely claimed to be taken in earnest; even the title of the book, *περὶ φύσεως οὐ περὶ τοῦ μὴ ὄντος* (*Concerning Nature, or concerning that which is not*), appears like a grotesque farce. The Rhetorician, trained to formal dexterity, who despised all earnest science and pursued only his art of speaking,[3] indulged in the jest of satirising as empty the entire labour of philosophy, and doing this ironically in the style of Zeno's pinching-mill of contradictions. But just the facts that he did this, and that his work found applause, show how among the men who occupied themselves in instructing the people, and in the circles of scientific culture itself, faith in science was becoming lost at just the time when the mass of the people was seeking its welfare in it. This despair of truth is the more comprehensible, as we see how the serious scientific investigation of Protagoras attained the same result.

[1] Plat. *Theæt.* 201 E. Cf. *Soph.* 251 B.

[2] Extracts are found partly in the third chapter of the pseudo-Aristotelian treatise *De Xenophane, Zenone, Gorgia* (cf. p. 30), in part in Sext. Emp. VII. 65–86.

[3] Plat. *Meno.* 95 C.

E. Laas, *Idealismus und Positivismus.* I. Berlin, 1880.
W. Halbfass. *Die Berichte des Platon und Aristoteles über Protagoras.* Strassb. 1882.
Sattig, *Der Protagoreische Sensualismus.* (Zeitschrift für Philosophie, vols. 86–89).

3. The germ of the doctrine of *Protagoras* is found in his effort to explain the ideas of the human mind *psycho-genetically*. Insight into the origin and development of ideas was absolutely necessary for the practical aspect of a system of ethics, and particularly for the cultivation of rhetoric. The statements, however, which the metaphysicians had occasionally uttered, were in nowise sufficient for the purpose, constructed as they were from general presuppositions and permeated by them; on the contrary, the observations in physiological psychology which had been made in the more recent circles of investigators who were more given to natural science, offered themselves as fit for the purpose. Thinking and perceiving had been set over against each other from the point of view of their relative worth; this determining element now disappeared for Protagoras, and so there remained for him only the view of the psychological identity of thinking and perceiving, — a view to which even those metaphysicians had committed themselves as soon as they attempted to explain ideation from the world-process (cf. § 8). In consequence of this he declared that *the entire psychical life consists only in perceptions.*[1] This *sensualism* was then illustrated by the great mass of facts which physiological psychology had assembled in connection with the teaching of the physicians that were scientific investigators, and by the numerous theories which had been brought forward with special reference to the process of the action of the senses.

All these, however, had in common the idea that *perception* rests in the last instance upon *motion*, as does every process by which things come to be or occur in the world. In this even Anaxagoras

[1] Diog. Laert. IX. 51.

and Empedocles were at one with the Atomists, from whose school Protagoras, as a native of Abdera, had probably gone out. This agreement extended still farther to the assumption, made on all sides, that in perception there was not only a condition of motion in the thing to be perceived, but also a like condition in the percipient organ. Whatever view might be taken as to the metaphysical essence of that which was there in motion, it seemed to be acknowledged as undoubted that every perception presupposed this double motion. Empedocles had already anticipated the doctrine that the inner organic motion advances to meet the outer.[1]

On this foundation[2] the Protagorean *theory of knowledge* is built up. If, that is to say, perception is the product of these two motions directed toward one another, it is obviously *something else than the perceiving subject*, but just as obviously it is *something else than the object which calls forth the perception.* Conditioned by both, it is yet different from both. This pregnant discovery is designated as the doctrine of the *subjectivity of sense-perception.*

Nevertheless, in the case of Protagoras this appears with a peculiar restriction. Since, like all earlier thinkers, he evidently could not assume a consciousness without a corresponding existent content of consciousness, he taught that from this double motion there was a twofold result: viz. *perception* (αἴσθησις) in the man, and *content of perception* (τὸ αἰσθητόν) in the thing. Perception is therefore indeed the *completely adequate knowledge of what is perceived*, but no knowledge of the thing. Every perception is then in so far true as, at the instant when it arises, there arises also in connection with the thing the represented content, as αἰσθητόν, but no perception knows the thing itself. Consequently every one knows things not as they are, but as they are in the moment of perception for him, and for him only; and they are in this moment with reference to him such as he represents them to himself. This is the meaning of the Protagorean *relativism*, according to which things are for every individual such as they *appear* to him; and this he expressed in the famous proposition that *man is the measure of all things.*

According to this, therefore, every opinion which grows out of perception is true, and yet in a certain sense, just for this reason, it is

[1] Whether these two motions were already designated by Protagoras as active and passive (ποιοῦν and πάσχον), as is the case in Plato's presentation (*Theæt.* 156 A), may remain undecided. At all events, such anthropological categories in the mouth of the Sophist are not surprising.

[2] With regard to such preparatory ideas, there is no ground to trace this theory of the motions which advance to meet one another, to direct connection with *Heraclitus.* Its Heraclitean element, which Plato very correctly saw, was sufficiently maintained by those direct predecessors who reduced all Becoming and change to relations of motion.

also false. It is valid only for the one perceiving, and for him even only at the moment when it arises. All *universal validity* forsakes it. And since, according to the view of Protagoras, there is no other kind of ideas, and therefore no other knowledge than perception, there is for human knowledge nothing whatever that is universally valid. This view is *phenomenalism* in so far as it teaches in this entirely definite sense a knowledge of the phenomenon, limited to the individual and to the moment; it is, however, *scepticism* in so far as it rejects all knowledge which transcends that.

How far Protagoras himself drew practical consequences from this principle that every one's opinion is true for himself, we do not know. Later Sophists concluded that, according to this, error would not be possible; everything, and again nothing, belongs to everything as attribute. In particular they concluded that no actual contradiction is possible; for since every one talks about the content of his perception, different assertions can never have the same object. At all events, Protagoras refused to make any positive statement concerning what *is;* he spoke not of the actual reality that moves, but only of motion, and of the phenomena which it produces for perception.

Moreover, the attempt was now made, whether by Protagoras himself, or by the Sophistic activity dependent upon him, to trace differences in perception, and so also in the phenomenon, back to differences in this motion. It was principally the velocity of the motion which was considered in this connection, though the form also was probably regarded.[1] It is interesting to note further that under the concept of perception not only sensations and perceptions, but also the sensuous feelings and desires, were subsumed; it is noteworthy especially because to these states also an αἰσθητόν, a momentary qualification of the thing which produced the perception, was held to correspond. The predicates of agreeableness and desirability receive in this way the same valuation epistemologically as do the predicates of sensuous qualification. What appears agreeable, useful, and desirable to any one is agreeable, useful, and desirable for him. The individual state of consciousness is here, too, the measure of things, and no other universally valid determination of the worth of things exists. In this direction the Hedonism of Aristippus was developed out of the Protagorean doctrine; we know, teaches Aristippus, not things, but only their

[1] Doubtless we have here asserting itself the development of the Pythagorean theory of knowledge out of the Atomistic school, to which this reduction of the qualitative to the quantitative was essential (cf. above, § 5), even though the Sophist declined from principle to enter into such metaphysical theories as Atomism.

worth for us, and the states (πάθη) into which they put us. These, however, are rest and indifference, violent motion and pain, or gentle motion and pleasure. Of these only the last is worth striving for (cf. above, § 7, 9).

4. Thus all courses of Sophistic thought issued in giving up truth as unattainable. *Socrates, however, needed truth,* and on this account he believed that it was to be attained if it were honestly sought for. Virtue is knowledge; and since there must be virtue, there must be knowledge also. Here for the first time in history the *moral consciousness* appears with complete clearness as an *epistemological postulate.* Because morality is not possible without knowledge, there must be knowledge; and if knowledge is not here and now existent, it must be striven for as the lover seeks for the possession of the loved object. Science is the yearning, struggling love for knowledge, — φιλοσοφία, *philosophy* (cf. Plat. *Symp.* 203 E).

Out of this conviction grow all the peculiarities of the Socratic[1] doctrine of science,[2] and in the first place the bounds within which he held knowledge to be necessary and therefore possible. It is only a knowledge of the relations of human life that is necessary for the ethical life; only for these is a knowing necessary, and only for these is man's knowing faculty adequate. Hypotheses as to metaphysics and the philosophy of Nature have nothing to do with man's ethical task, and they are left unconsidered by Socrates, so much the rather as he shared the view of the Sophists that it was impossible to gain a sure knowledge concerning them. Science is possible only as practical insight, as knowledge of the ethical life.

This view was formulated still more sharply by the Sophistic successors of Socrates under the influence of his eudæmonistic principle. For both Cynics and Cyrenaics science had worth only so far as it affords to man the right insight which serves to make him happy. With Antisthenes and Diogenes science was prized not in itself, but as a means for controlling the desires and for knowing man's natural needs; the Cyrenaics said the causes of perception (τὰ πεποιηκότα τὰ πάθη) are for us as much matters of indifference as they are unknowable; knowledge which leads to happiness has to do only with our states, which we know with certainty. Indifference toward metaphysics and natural science

[1] Cf. Fr. Schleiermacher, *Ueber den Werth des Sokrates als Philosophen* (Ges. W. III., Bd. 2, pp. 287 ff.).

[2] [*Wissenschaftslehre. Wissenschaft,* "scientia," "science," has here both its subjective and objective sense; knowledge as mental act, and knowledge as a body of truth. Hence *Wissenschaftslehre* means both "doctrine of science," *i.e.* science of knowledge, and "scientific doctrine" *i.e.* philosophy. — Tr.]

is with Socrates, as with the Sophists, the result of employment with the inner nature of man.

5. It will remain a noteworthy fact for all time that a man who so narrowed for himself the intellectual horizon of scientific research as did Socrates, should yet determine within this the *essential nature of science* itself, in a manner so clear and so authoritative for all the future. This achievement was due essentially to his *opposition to the relativism of the Sophists,* — an opposition that was a matter both of instinct and of positive conviction. They taught that there are only *opinions* (δόξαι) which hold good for individuals with *psycho-genetic necessity*; he, however, sought a *knowledge* that should be *authoritative for all* in like manner. In contrast with the change and multiplicity of individual ideas he demanded the one and abiding which all should acknowledge. He sought the *logical "Nature"* (φύσις) as others had sought the cosmological or ethical "Nature" (cf. § 7, 1), and found it in the *concept* or general notion. Here, too, the view propounded was rooted in the demand, the theory in the postulate.

The ancient thinkers, also, had had a feeling that the rational thinking to which they owed their knowledge was something essentially other than the sensuous mode of apprehending the world in vogue in everyday life, or than traditional opinion; but they had not been able to carry out this distinction in relative worth either psychologically or logically. Socrates succeeded in this because here, too, he defined the thing in question by the work which he expected it to perform. The idea that is to be more than opinion, that is to serve as knowledge for all, must be what is common in all the particular ideas which have forced themselves upon individuals in individual relations: subjective universal validity is to be expected only for the objectively universal. Hence, if there is to be knowledge, it is to be found only in that in which all particular ideas agree. This universal in the object-matter which makes possible the subjective community of ideas is the concept (λόγος), and *science* [scientific knowledge] is accordingly *conceptional thinking,* — abstract thought. The universal validity which is claimed for knowledge is only possible on condition that the scientific concept brings out into relief the common element which is contained in all individual perceptions and opinions.

Hence the goal of all scientific work is the *determination of the essential nature of conceptions, — definition.* The aim of investigation is to establish τί ἕκαστον εἴη, what each thing is, and to come to ideas of an abiding nature as over against changing opinions.

This doctrine was in some measure prepared for by the investigations of the Sophists concerning the meaning of words, synonyms, and etymological relations. In the latter respect, the hypotheses of the Sophists in the beginnings of the philosophy of language (cf. Plato's *Cratylus*) extended to the question whether a natural or only a conventional relation obtains between words and their meanings (φύσει ἢ θέσει). Prodicus, whom Socrates mentions with commendation, seems to have been specially successful in fixing the meanings of words.

Among the later Sophists the Socratic demand for fixed conceptions became forthwith fused with the Eleatic metaphysics, and with its postulate of the identity of Being with itself. Euclid called virtue, or the good, the only Being: it remains the same, changeless in itself, and only the names by which men call it differ. Antisthenes, indeed, explained the concept by the definition that it is this which determines the timeless Being of the thing;[1] but he conceived this identity of the existent with itself, raised above all relations, in so bold a manner that he thought of every truly existing entity as capable of being defined only through itself. Predication is impossible. There are none but analytic judgments (cf. above, No. 1). Accordingly only the composite can have its essential elements determined in conceptions; the simple is not to be defined.[2] There is, then, no possibility of understanding the simple by conceptions; it can only be exhibited in a sensuous presentation. The Cynics came thus from the Socratic doctrine of the conception to a sensualism which recognised as simple and original only that which can be grasped with the hands and seen with the eyes, and this is the ground of their opposition to Plato.

6. *The searching out of conceptions* (for his purpose, indeed, only ethical conceptions) was accordingly for Socrates the essence of science, and this determined in the first place the outer form of his philosophising. The conception was to be that which is valid for all: it must then be found in *common thinking.* Socrates is neither a solitary hypercritic nor an instructor who teaches *ex cathedra*, but a man thirsting for the truth, as anxious to instruct himself as to teach others. His philosophy is a philosophy of the *dialogue;* it develops itself in conversation which he was ready to begin with every one who would talk with him.[3] To the ethical conceptions which he alone was seeking for, it was indeed easy to find access from any object whatever of everyday business. The common element must be found in the mutual exchange of thoughts; the διαλογισμός was the way to the λόγος. But this "conversation" encountered many difficulties: the inertia of the customary mode of thinking, the idle desire for innovation, and the paradoxical statements which were characteristic of the Sophists, the pride belonging to seeming knowledge and thoughtless imitation. Into such a condition of things Socrates made his entrance by introducing himself as one eager to learn. By skilful questions he drew out the views of others, disclosed the defects in these views with remorseless consistency, and finally led the Athenian, proud of his culture, into the state of mind where he recognised that *insight into one's*

[1] λόγος ἐστὶν ὁ τὸ τί ἦν ἢ ἔστι δηλῶν: Diog. Laert. VI. 3.
[2] Plat. *Theæt.* 202 B.
[3] This factor united with the influence of Zeno's dialectic to stamp upon the succeeding philosophical literature the form of the dialogue.

own ignorance, is the beginning of all knowledge. Whoever stood this test and still remained with him was taken into partnership in a serious effort to determine, in common thinking, the essential meaning of conceptions. Undertaking the direction of the conversation, Socrates brought his companion step by step to unfold his own thoughts in clearer, less contradictory statements, and so caused him to bring to definite expression what was slumbering in him as an imperfect presentiment. He called this his *art of mental midwifery*, and that preparation for it his *irony.*

7. The *maieutic method* has, however, still another essential meaning. In the process of conversation the common rational quality comes to light, to which all parts are subject in spite of their diverging opinions. The conception is not to be made, it is to be found; it is already there, it requires only to be *delivered* from the envelopes of individual experiences and opinions in which it lies hidden. The procedure of the Socratic formation of conceptions is, therefore, *epagogic* or *inductive:* it leads to the generic conception by the comparison of particular views and individual sensuous presentations; it decides every individual question by seeking to press forward to determine a general conception. This is accomplished by bringing together analogous cases, and by searching out allied relations. The general conception thus gained is then employed to decide the special problem proposed, and this *subordination of the particular under the general* is thus worked out as the *fundamental relation of scientific knowledge.*

The inductive method of procedure as employed by Socrates, according to Xenophon and Plato, is, to be sure, still marked by a childlike simplicity and imperfection. It lacks as yet caution in generalisation and methodical circumspection in the formation of conceptions. The need for the general is so lively that it satisfies itself at once with hastily gathered material, and the conviction of the determining validity of the conception is so strong that the individual questions proposed are decided forthwith in accordance with it. But however great the gaps may be in the arguments of Socrates, the significance of these arguments is by no means lessened. His doctrine of induction has its value not for *methodology*, but for *logic*, and for the *theory of knowledge.* It fixes in a way that is decisive for all the future that it is the *task of science* to strive *to establish general conceptions from comparison of facts.*

8. While Socrates thus defined the essential nature of science as conceptional thought, — thinking in conceptions, — he also fixed *the bounds within which science can be employed:* this task is, in his opinion, to be fulfilled only within the domain of practical life.

Science is, as regards its form, the formation of conceptions, and *as regards its content ethics.*

Meanwhile the whole mass of ideas concerning Nature and all the connected questions and problems still persist, and though for the most part they are a matter of indifference for the moral life, nevertheless they cannot be entirely put aside. But after Socrates renounced the task of attaining insight into such questions through conceptions, it was all the more possible for him to form an idea of the universe that should satisfy his scientifically grounded ethical needs.

So it comes that Socrates puts aside, indeed, all natural science, but at the same time professes a *teleological view of Nature*, which admires the wisdom in the arrangement of the world, the adaptation in things,[1] and which, where understanding ceases, trusts Providence in faith. With this faith Socrates kept himself as near as possible to the religious ideas of his people, and even spoke of a plurality of gods, although he indeed inclined to the ethical monotheism which was preparing in his time. But he did not come forward in such matters as a reformer: he taught morality, and if he expounded his own faith, he left that of others untouched.

Out of this faith, however, grew the conviction with which he limited the rationalism of his ethics, — his confidence in the δαιμόντον. The more he pressed toward clearness of conceptions and complete knowledge of ethical relations, and the more true to himself he was in this, the less could he hide from himself that man in his limitation does not completely succeed in this task, that there are conditions in which knowledge is not sufficient for certain decision, and where feeling enters upon its rights. Under such conditions Socrates believed that he heard within himself the *daimonion*, a counselling and for the most part warning voice. He thought that in this way the gods warned from evil in difficult cases, where his knowledge ceased, the man who otherwise served them.

So the wise man of Athens set faith and feeling beside ethical science.

[1] It is not probable that Socrates experienced any strong influence from Anaxagoras in this respect, for the latter's teleology relates to the harmony of the stellar universe, not to human life, while the considerations which are ascribed to Socrates, especially by Xenophon, make utility for man the standard for admiration of the world. Much more closely related to Socratic faith are the religious views of the great poets of Athens, especially the tragedians.

CHAPTER III.

THE SYSTEMATIC PERIOD.

THE third, completing period of Greek science harvested the fruit of the two preceding developments. It appears essentially as a *reciprocal inter-penetration of cosmological and anthropological bodies of thought.* This union appears in but a very slight degree as a necessity found in the nature of the case, still less as a demand of the time; rather, it is in its essentials the work of great personalities and of the peculiar direction taken by their knowledge.

The tendency of the time was rather toward a practical utilisation of science: it was in accord with this tendency when research separated into special investigations on mechanical, physiological, rhetorical, and political problems, and when scientific instruction accommodated itself to the ideas of the ordinary man. Not only for the mass of the people, but for scholars as well, general questions of cosmology had lost the interest which in the beginning was directed toward them, and the fact that they were sceptically abandoned because of the Sophistic theory of knowledge is nowhere presented in the form of renunciation or lamentation.

If, therefore, Greek philosophy turned with renewed force from the investigation of human thinking and willing — researches with which it had busied itself during the time of the Enlightenment — back to the great problems of metaphysics, and reached its greatest height along this path, it owes this achievement to the personal thirst for knowledge on the part of the three great men who brought in this most valuable development of ancient thought, and stand as its representatives, — *Democritus*, *Plato*, and *Aristotle.*

The creations of these three heroes of Greek thought differ from the doctrines of all their predecessors by reason of their *systematic* character. Each of the three gave to the world an all-embracing system of science complete in itself. Their teachings gained this character, on the one hand, through the all-sidedness of their problems, and on the other, through the conscious unity in their treatment of them.

While each of the earlier thinkers had seized upon but a limited

circle of questions, and in like manner had shown himself informed only in certain departments of actual reality, while especially no one had as yet shown interest in both physical and psychological investigation, these three men directed their work *in like measure to the entire compass of scientific problems.* They brought together what experience and observation had won; they examined and compared the conceptions which had been formed from these, and they brought that which up to this time had been isolated, into fruitful union and relation. This all-sidedness of their scientific interest appears in the compass and varied character of their literary activity, and the great amount of material elaborated is in part explained only through the vigorous *co-operation of their extended schools,* in which a division of labour in accordance with inclination and endowment was allowed.

But this work thus shared in common did not result in a mass of unrelated material. This was guarded against by the fact that each of these three men undertook and conducted the *working over* of the entire material of knowledge with a *unity of purpose and method* derived from the principle which formed his fundamental thought. This, indeed, led at more than one point to a one-sided conception, and to a kind of violation of individual domains, and thereby to the inter-weaving of problems in ways which do not stand criticism. But on the other hand, just by means of the adjustment which must take place in this process between the forms of cognition in different departments of knowledge, the formation of metaphysical conceptions was so furthered, abstract thought was so refined and deepened, that in the short time of scarcely two generations the *typical outlines of three different conceptions of the world* were worked out. Thus the advantages and the disadvantages of philosophical system-building appear in like measure in the case of these men of genius who were the first founders of systems.

The *systematising of knowledge so that it should become an all-inclusive philosophical doctrine* was achieved with increasing success by Democritus, Plato, and Aristotle, and with the last first found the form of an *organic articulation of science* into the individual disciplines. With this Aristotle concluded the development of Greek philosophy and inaugurated the age of the special sciences.

The course of this development was more particularly this: the two opposing systems of Democritus and Plato arose from the application to cosmological and metaphysical problems, of the principles gained through the doctrines of the Sophists and of Socrates; from the attempt to reconcile these opposites proceeded the concluding doctrine of Aristotle.

The essential feature in the work of Democritus and Plato was that they used the insight into the theory of knowledge, gained by the philosophy of the Enlightenment, to *ground metaphysics anew.* Their common dependence upon the doctrines of the cosmological period and upon the Sophistic teaching, in particular upon the theory of Protagoras, stamps upon the two doctrines a certain parallelism and a partial relationship, — a relationship the more interesting, the deeper the contrast between the two in other respects. This contrast, however, is due to the fact that the *Socratic teaching* had no effect upon Democritus, while its influence on Plato was decisive; hence the ethical factor is as preponderant in the system of the latter as it is unimportant in that of the former. Thus in parallel lines from the same source developed the *materialism of Democritus and the idealism of Plato.*

From this contrast is explained, too, the difference in their working. The purely theoretical conception of science which prevails with Democritus did not suit the age; his school soon disappeared. Plato, on the contrary, whose scientific teaching furnished at the same time the basis for a principle of life, had the pleasure of forming in the *Academy* an extensive and lasting school. But this school, the so-called *Older Academy,* following the general tendency of the time, soon ran out partly into special investigation, partly into popular moralising.

Out of it rose then the great form of *Aristotle,* the most influential thinker that history has seen. The powerful concentration with which he caused the entire content of thought in Greek science to crystallise about the *conception of development* (ἐντελέχεια) in order to adjust the opposition discovered between his two great predecessors, made him the philosophical teacher of the future, and his system the most perfect expression of Greek thought.

Democritus of Abdera (about 460–360) was educated in the scientific association of his home and by journeys lasting many years, led the life of a quiet, unassuming investigator in his native city during the turmoil of the Sophistic period, and remained far from the noisy activity of Athens. He did not impart any special ability, political or otherwise, by his teaching, but was essentially disposed to theoretical thought, and particularly inclined to the investigation of Nature. With gigantic learning and comprehensive information he united great clearness of abstract thought and apparently a strong inclination to simplify problems schematically. The number of his works proves that he stood at the head of an extended school, of which some unimportant names are preserved, yet nothing is more characteristic of the way in which his age turned aside from research that was not interesting to it than the indifference with which his system of the mechanical explanation of Nature was met. His doctrine was forced into the background for two thousand years by the teleological systems, and prolonged its existence only in the Epicurean school, while even there it was not understood.

Antiquity honoured Democritus as a great writer also, and for this reason the almost complete loss of his works is all the more to be lamented, as aside from

the numerous titles only very unimportant and in part doubtful fragments are extant. The most important writings seem to have been, theoretically, the *Μέγας* and *Μικρὸς διάκοσμος*, *περὶ νοῦ* and *περὶ ἰδεῶν*; practically, *περὶ εὐθυμίης* and *ὑποθῆκαι*. W. Kahl (Diedenhofen, 1889) has begun to work through the sources which had been collected by W. Burchard (Minden, 1830 and 1834) and Lortzing (Berlin, 1873).

Cf. P. Natorp, *Forschungen zur Geschichte des Erkenntnissproblems im Alterthum* (Berlin, 1884); G. Hart, *Zur Seelen- und Erkenntnisslehre des Demokrit* (Leips. 1886).

Plato of Athens (427–347), of distinguished family, had most successfully assimilated the artistic and scientific culture of his time when the personality of Socrates made so decisive an impression upon him that he abandoned his attempts at poetry and devoted himself entirely to the society of the master. He was his truest and most intelligent, and yet at the same time his most independent disciple. The execution of Socrates occasioned his acceptance of Euclid's invitation to Megara; then he journeyed to Cyrene and Egypt, returned for a time to Athens, and here began to teach through his writings, and perhaps also orally. About 390 we find him in Magna Græcia and Sicily, where he became connected with the Pythagoreans and took part also in political action. This brought him into serious danger at the court of the ruler of Syracuse, the elder Dionysius, whom he sought to influence with the help of his friend Dion; he was delivered as prisoner of war to the Spartans and ransomed only by the help of a friend. This attempt at practical politics in Sicily was twice repeated later (367 and 361), but always with unfortunate results.

After the first Sicilian journey, he founded his school in the grove *Akademos*, and soon united about him a great number of prominent men for the purpose of common scientific work. Yet the bond of this society was to be sought still more in a friendship based upon community of ethical ideals. His teaching activity at the beginning had, like that of Socrates, that character of a common search for truth which finds expression in the dialogue. It was not until his old age that it took on more the form of the didactic lecture.

This life finds its æsthetic and literary embodiment in Plato's *works*,[1] in which the process itself of philosophising is set forth with dramatic vividness and plastic portraiture of personalities and their views of life. As works of art, the *Symposium* and the *Phædo* are most successful; the grandest impression of the system, as a whole, is afforded by the *Republic*. With the exception of the *Apology* of Socrates, the form is everywhere that of the dialogue. Yet the artistic treatment suffers in Plato's old age, and the dialogue remains only as the schematic setting of a lecture, as in the *Timæus* and the *Laws*. For the most part, Socrates leads the conversation, and it is into his mouth that Plato puts his own decision when he comes to one. Exceptions to this are not found until in the latest writings.

The mode of presentation is also on the whole more artistic than scientific. It exhibits extreme vividness and plasticity of imagination in perfect language, but no strictness in separating problems or in methodical investigation. The contents of any individual dialogue is to be designated only by the prominent subject of inquiry. Where abstract presentation is not possible or not in place Plato takes to his aid the so-called myths, allegorical presentations which utilise motives from fables and tales of the gods in free, poetic form.

The transmission of his works is only in part certain, and it is just as doubtful in what order they originated and what relation they bear to one another.

The following are among the most important names of those who have worked over these questions since Schleiermacher in his translation (Berlin, 1804 ff.) gave an impulse in that direction: J. Socher (Munich, 1820), C. Fr. Hermann (Heidelberg, 1839), E. Zeller (Tübingen, 1839), Fr. Suckow (Berlin, 1855), Fr. Susemihl (Berlin, 1855–56), E. Munk (Berlin, 1886), Fr. Ueberweg (Vienna, 1861), K. Schaarschmidt (Bonn, 1866), H. Bonitz (Berlin, 1875), G. Teichmüller (Gotha, 1876; Leipsic, 1879; Breslau, 1881), A. Krohn (Halle, 1878), W. Dittenberger (in *Hermes*, 1881), H. Siebeck (Freiburg i. B. 1889). [H. Jackson in *Jour. Phil.*, X., XI., and XIII.; Archer-Hind's editions of *Phædo* and *Timæus*; reviewed critically by P. Shorey in *Am. Jour. Philol.*, IX. and X.]

[On Plato's philosophy, in addition to the above, W. Pater, *Plato and Platonism* (Lond. and N.Y. 1893); J. Martineau, in *Types of Ethical Theory* (Lond. and N.Y. 1886), also in *Essays*; Art. *Plato* in *Enc. Brit.*, by L. Campbell; R. L. Nettleship, *The Theory of Education in P.'s Rep.*, in *Hellenica*; J. S. Mill in *Essays and Discussions*.]

The writings which are considered genuinely Platonic are (*a*) youthful works, which scarcely go beyond the Socratic standpoint: *Apology*, *Crito*, *Euthyphro*, *Lysis*, *Laches* (perhaps also *Charmides*, *Hippias Minor*, and *Alcibiades*, I.); (*b*) writings to establish his position with regard to the Sophistic doctrines: *Protagoras*, *Gorgias*, *Euthydemus*, *Cratylus*, *Meno*, *Theætetus*; (*c*) main works intended to present his own doctrine: *Phædrus*, *Symposium*, *Phædo*, *Philebus*, and the *Republic*, whose working out, begun early and completed in successive strata, as it were, extended into the last years of the Philosopher's life; (*d*) the writings of his old age: *Timæus*, the *Laws*, and the fragment of *Critias*. Among the doubtful writings the most important are the *Sophist*, *Politicus*, and *Parmenides*. These probably did not originate with Plato, but with men of his school who were closely related with the Eleatic dialectic and eristic. The first two are by the same author.

Cf. H. v. Stein, *Sieben Bücher zur Geschichte des Platonismus* (Göttingen, 1861 ff.); G. Grote, *Plato and the Other Companions of Socrates* (Lond. 1865); A. E. Chaignet, *La vie et les écrits de Platon* (Paris, 1873); E. Heitz, (*O. Müller's Gesch. der griech. Lit.*, 2. Aufl., II. 2, 148–235).

Plato's school is called the **Academy**, and the time of its development, which reaches to the end of ancient thought, and which was aided by the continued possession of the academic grove and the gymnasium existing there, is usually divided into three or five periods: (1) the Older Academy, Plato's most immediate circle of scholars and the succeeding generations, extending to about 260 B.C.; (2) the Middle Academy, which took a sceptical direction, and in which an older school of Arcesilaus and a younger school of Carneades (about 160) are distinguished; (3) the New Academy, which with Philo of Larissa (about 100) turned back to the old dogmatism, and with Antiochus of Ascalon (about twenty-five years later) turned into the paths of Eclecticism. Concerning the two (or four) later forms cf. Part II. ch. 1. Later the Neo-Platonic school took possession of the Academy. Cf. Part II. ch. 2.

To the **Older Academy** belonged men of great erudition and honourable personality. The heads of the school were **Speusippus**, the nephew of Plato, **Xenocrates** of Chalcedon, **Polemo** and **Crates** of Athens; beside these, **Philip** of Opus and **Heracleides** from Pontic Heraclea are to be mentioned among the older, and **Crantor** among the younger members. Less closely related with the school were the astronomers **Eudoxus** of Cnidos and the Pythagorean **Archytas** of Tarentum.

Aristotle of Stagira towers far above all his associates in the Academy (384–322). As son of a Macedonian physician, he brought with him an inclination toward medical and natural science, when, at eighteen years of age, he entered the Academy, in which as literary supporter and also as teacher, at first of rhetoric, he early played a comparatively independent part, without acting contrary to a feeling of reverent subordination to the master, by so doing. It was not until after Plato's death that he separated himself externally from the Academy, visiting, with Xenocrates, his friend Hermias, the ruler of Atarneus and Assus in Mysia, whose relative Pythias he afterwards married. After an apparently transient stay at Athens and Mitylene, he undertook, at the wish of Philip of Macedon, the education of the latter's son Alexander, and conducted it for about three years with the greatest results. After this, he lived for some years in his native city, pursuing scientific studies with his friend Theophrastus, and together with him, in the year 335, founded in Athens his own school, which had its seat in the *Lyceum*, and (probably on account of its shady walks) was called the **Peripatetic** School.

[1] Translated into German by Hier. Müller, with introductions by K. Steinhart. 8 vols. Leips. 1850–1866. As ninth volume of the series *Platon's Leben*, by K. Steinhart. Leips. 1873. [English by Jowett, third ed. 5 vols. Oxford, 1893.] Among more recent editions, in which the paging of that of Stephanus (Paris, 1578), employed in citations, is always repeated, are to be noted those of J. Bekker (Berlin, 1816 f.), Stallbaum (Leips. 1850), Schneider and Hirschig (Paris: Didot, 1846 ff.), M. Schanz (Leips. 1875 ff.).

After twelve years of the greatest activity, he left Athens on account of political disturbances and went to Chalcis, where he died in the following year, of a disease of the stomach. Cf. A. Stahr, *Aristotelia*, I. (Halle, 1830).

Of the results of the extraordinarily comprehensive literary activity of Aristotle only the smallest part, but the most important part from the point of view of science, is extant. The dialogues published by himself, which in the eyes of the ancients placed him on a level with Plato as an author also, are lost with the exception of a few fragments, and so also are the great compilations which with the aid of his scholars he prepared for the different branches of scientific knowledge. Only his *scientific didactic writings*, which were designed as text-books to be made the foundation of lectures in the Lyceum, are extant. The plan of execution in his works varies greatly; in many places there are only sketchy notes, in others complete elaborations; there are also different revisions of the same sketch, and it is probable that supplementary matter by different scholars has been inserted in the gaps of the manuscripts. Since the first complete edition prepared in ancient times (as it appears, on the occasion of a new discovery of original manuscripts) by Andronicus of Rhodes (60–50 B.C.) did not separate these parts, many critical questions are still afloat concerning it.

Cf. A. Stahr, *Aristotelia*, II. (Leips. 1832); V. Rose (Berlin, 1854); H. Bonitz (Vienna, 1862 ff.); J. Bernays (Berlin, 1863); E. Heitz (Leips. 1865 and in the second ed. of O. Müller's *Gesch. der griech. Lit.*, II. 2, 236–321); E. Vahlen (Vienna, 1870 ff.).

This text-book collection,[1] as it were, is arranged in the following manner: (*a*) Logical treatises: the *Categories*, on the *Proposition*, on *Interpretation*, the *Analytics*, the *Topics* including the book on the Fallacies — brought together by the school as "*Organon*"; (*b*) Theoretical Philosophy: *Fundamental Science* (*Metaphysics*), the *Physics*, the *History of Animals*, and the *Psychology*; to the three last are attached a number of separate treatises; (*c*) Practical Philosophy: the *Ethics* in the Nicomachean and Eudemian editions and the *Politics* (which likewise is not complete); (*d*) Poietical or Poetical Philosophy: the *Rhetoric* and the *Poetic*.

Fr. Biese, *Die Philosophie des Aristoteles* (2 vols., Berlin, 1835–42); A. Rosmini-Serbati, *Aristotele Exposto ed Esaminato* (Torino, 1858); G. H. Lewes, *Aristotle, a Chapter from the History of Science* (Lond. 1864); G. Grote, *Aristotle* (published from his literary remains, Lond. 1872).

[Trans. of the *Psychology* by E. Wallace (Camb. 1882); of the *Ethics*, by Peters (Lond. 1881), Welldon (Lond. and N.Y.), Williams (Lond. 1876), Chase (Lond. 1877), Hatch (Lond. 1879); of the *Poetics*, by Wharton (Camb. 1883); of the *Politics*, by Welldon (Camb. 1888), Jowett (2 vols., Oxford, 1885–88); of the *Rhetoric*, by Welldon (Lond. and N.Y. 1886); also tr. of all of the above and of the *Metaphysics*, *Organon*, and *History of Animals* in the Bohn Library. Editions of the *Politics* with valuable introduction by Newman (Oxford, 1887, 2 vols.); of the *Ethics*, by A. Grant. Cf. also Art. in *Enc. Brit.*, *Aristotle* by A. Grant; T. H. Green in *Works*; A. C. Bradley, *A.'s Theory of the State*, in *Hellenica*. E. Wallace, *Outlines of A.'s Phil.* is convenient for the student.]

§ 9. Metaphysics grounded anew in Epistemology and Ethics.

The great systematisers of Greek science exercised a swift but just criticism upon the Sophistic doctrine. They saw at once that among the doctrines of the Sophists but a single one possessed the worth of lasting validity and scientific fruitfulness — *the perception theory of Protagoras.*

[1] Of the newer editions, that of the Berlin Academy (J. Bekker, Brandis, Rose, Usener, Bonitz), 5 vols., Berlin, 1831–70, is made the basis of citations. The Parisian edition (Didot) is also to be noticed (Dübner, Bussemaker, Heitz) 5 vols., Paris, 1848–74.

1. This, therefore, became the starting-point for Democritus and for Plato; and both adopted it in order to transcend it and attack the consequences which the Sophist had drawn from it. Both admit that perception, as being itself only a product of a natural process, can be the knowledge of something only which likewise arises and passes away as transitory product of the same natural process. Perception then gives only opinion (δόξα); it teaches what appears in and for human view (called *νόμῳ* in Democritus with a genuine Sophistic mode of expression), not what *truly* or really (*ἐτεῇ* with Democritus, *ὄντως* with Plato) is.

For Protagoras, who regarded perception as the only source of knowledge, there was consequently no knowledge of what is. That he took the farther step of denying Being altogether and declaring the objects of perception to be the sole reality, behind which there is no Being to be sought for, — this "positivist" conclusion is not to be demonstrated in his case: the doctrine of "nihilism" ("there is no Being") is expressly ascribed by tradition only to Gorgias.

If, nevertheless, from any grounds whatever, a universally valid knowledge (*γνησίη γνώμη* with Democritus, *ἐπιστήμη* with Plato) was to be again set over against opinions, the sensualism of Protagoras must be abandoned and the position of the old metaphysicians, who distinguished *thought* (διάνοια), as a higher and better knowledge, from perception, must be taken again (cf. § 6). Thus Democritus and Plato both in like manner transcend Protagoras by acknowledging the relativity of perception, and looking to "thought" again for knowledge of what truly is. Both are outspoken *rationalists.*[1]

2. This new metaphysical rationalism is yet distinguished from the older rationalism of the cosmological period, not only by its broader psychological basis, which it owed to the Protagorean analysis of perception, but also in consequence of this, by another, *valuation of perception itself from the standpoint of the theory of knowledge.* The earlier metaphysicians, where they could not fit the contents of perception into their conceptional idea of the world, had simply rejected them as deceit and illusion. Now this illusion had been explained (by Protagoras), but in such a way that while surrendering its universal validity the content of perception might yet claim at least the value of a *transient and relative reality.*

This, in connection with the fact that scientific knowledge was

[1] Cf. Sext. Emp. *Adv. Math.* VIII. 56. The doctrine of Democritus with regard to "genuine" knowledge is most sharply formulated in Sext. Emp. *Adv. Math.* VII. 139. Plato's attack upon the Protagorean sensualism is found principally in the *Theætetus*, his positive rationalistic attitude in the *Phædrus*, *Symposium*, *Republic*, and *Phædo.*

directed toward the abiding "true" Being, led to a *division in the conception of reality*, and with this the fundamental need of explanatory thought came to clear, explicit consciousness, — a need which unconsciously lay at the basis of the beginnings of science. To the two kinds of knowledge — so Democritus and Plato taught — correspond *two different kinds of reality:* to perception a changing, relative, transient reality or actuality; to thought a reality homogeneous, absolute and abiding. For the former Democritus seems to have introduced the expression phenomena; Plato designates it as the world of generation, γένεσις: the other kind of reality Democritus calls τὰ ἐτεῇ ὄντα; Plato, τὸ ὄντως ὄν or οὐσία [that which *really* is, or essence].

In this way perception and opinion gain a correctness which is analogous to that of scientific thought. Perception cognises changing reality as thought cognises abiding reality. To the two modes of cognition correspond two domains of reality.[1]

But between these two domains there exists for this reason the same *relation, as regards their respective values*, as obtains between the two kinds of cognition. By as much as thought, the universally valid act of consciousness, is above perception, the knowledge valid only for individuals and for the particular, by so much is the true Being higher, purer, more primitive, raised above the lower actuality of phenomena and the changing processes and events among them. This relation was especially emphasised and carried out by Plato for reasons hereafter to be unfolded. But it appears also with Democritus, not only in his theory of knowledge, but also in his ethics.

In this way the two metaphysicians agree with the result which the Pythagoreans (cf. § 5, 7, and § 6, 1) had likewise won from their premises, viz. the distinction of a higher and lower kind of reality. Nevertheless, in the presence of this similarity we are not to think of a dependence; in nowise in the case of Democritus, who was a complete stranger to the astronomical view of the Pythagoreans, and scarcely in the case of Plato, who indeed later adopted the astronomical theory, but whose idea of the higher reality (the doctrine of Ideas) has an entirely different content. The case rather is that the common, fundamental motive which came from the conception of Being propounded by Parmenides, led in these three quite different forms to the division of the world into a sphere of higher and one of lower reality.

3. The *pragmatic parallelism* in the motives of the two opposed systems of Democritus and Plato reaches a step farther, although

[1] Best formulated in Plat., *Tim.* 27 D ff., especially 29 C.

but a short step. To the world of perception belong, without doubt, the specific qualities of the senses, for these disclose their relativity in the fact that the same thing appears differently to different senses. But after we have abstracted these qualities, that which remains as an object for the knowledge of the truly actual, is primarily the *form* which things have, and both thinkers designated as the true essential nature of things the pure *forms* (ἰδέαι).

But it almost seems as though here they had nothing in common but the name, striking as this fact is; for if Democritus understood by the ἰδέαι, which he also called σχήματα, his atom-forms, while Plato understood by his ἰδέαι or εἴδη the conceptions corresponding to logical species (*Gattungsbegriffe*), then the apparently like statement that the truly existent consists in "forms" has a completely different meaning in the two authors. For this reason we must here, too, remain in doubt as to whether we should see a parallel dependence upon *Pythagoreanism*, which, to be sure, had previously found the essence of things in mathematical forms, and whose influence upon the two thinkers may be assumed without encountering any difficulties in the assumption itself. At all events, however, if a common suggestion was present, it led to quite different results in the two systems before us, and though in both of them knowledge of mathematical relations stands in very close relation to knowledge of true reality, these relations are yet completely different with the respective thinkers.

4. The relationship thus far unfolded between the two rationalistic systems changes now suddenly to a sharp opposition as soon as we consider the motives from which the two thinkers transcended the Protagorean sensualism and relativism, and observe also the consequences which result therefrom. Here the circumstance becomes of decisive importance, that *Plato was the disciple of Socrates*, while Democritus experienced not even the slightest influence from the great Athenian sage.

With Democritus the demand which drives him to transcend the position of Protagoras grows solely out of his theoretical need and develops according to his personal nature, — the demand, namely, that there is a knowledge, and that this, if it is not to be found in perception, must be sought for in thought; the investigator of Nature believes, as against all the Sophistic teaching, in the possibility of a theory that shall explain phenomena. Plato, on the contrary, sets out with his postulate of the Socratic conception of virtue. Virtue is to be gained only through right knowledge; knowledge, however, is cognition of the true Being: if, then, this is not to be found in perception, it must be sought for through thought. For

Plato philosophy grows, according to the Socratic principle,[1] out of the ethical need. But while the Sophistic friends of Socrates were endeavouring to give to the knowledge that constituted virtue some object in the form of a general life-purpose, the good, pleasure, etc., Plato wins his metaphysical position with one stroke, by drawing the inference that this knowledge in which virtue is to consist must be the cognition of what is truly real, the οὐσία, — as opposed to opinions which relate to the relative. In his case the knowledge in which virtue is to consist demands a metaphysics.

Here, then, the ways are already parting. Knowledge of the truly real was for Democritus, as for the old metaphysicians, essentially an idea of the unchangeably abiding Being, but an idea by means of which it should be possible to understand the derivative form of reality which is cognised in perception. His rationalism amounted to an *explanation of phenomena*, to be gained through thought; it was *essentially theoretical rationalism*. For Plato, on the contrary, knowledge of the truly real had its ethical purpose within itself; this knowledge was to constitute virtue, and hence it had no other relation to the world given through perception than that of sharply defining its limits. True Being has for Democritus the theoretical value of explaining phenomena; for Plato, the practical value of being the object of that knowledge which constitutes virtue. His doctrine is, as regards its original principle, *essentially ethical rationalism*.

Democritus, therefore, persevered in the work undertaken in the school of Abdera, — the construction of a metaphysics of Nature. With the help of the Sophistic psychology he developed *Atomism* to a comprehensive system. Like Leucippus, he regarded empty space and the atoms moving in it as the true reality. He then attempted not only to explain from the motion of these atoms all qualitative phenomena of the corporeal world as quantitative phenomena, but also to explain from these motions all mental activities, including that knowing activity which is directed toward true Being. Thus he created the *system of materialism*.

Plato, however, was led to the entirely opposite result by his attachment to the Socratic doctrine, which proved to be of decisive importance for his conception of the essential nature of science.

5. Socrates had taught that knowledge consists in *general conceptions*. If, however, this knowledge, in contrast with opinions, was to be knowledge of what truly, actually is, there must belong to the content of these conceptions that higher Being, that true essential

[1] Set forth most clearly in the *Meno*, 96 ff.

reality which, it was held, could be grasped only by thought, in contrast with perception. The "forms" of true reality, knowledge of which constitutes virtue, are the *species* or *class-concepts* (*Gattungsbegriffe*), εἴδη. With this consideration, the Platonic conception of the "Idea" first gains its complete determination.

So understood, Plato's *doctrine of Ideas* presents itself as the summit of Greek philosophy. In it are combined all the different lines of thought which had been directed toward the physical, the ethical, the logical first principle (ἀρχή or φύσις). The Platonic Idea, the species or class-concept, is firstly the abiding Being in the change of phenomena; secondly, the object of knowledge in the change of opinions; thirdly, the true end in the change of desires.

But this οὐσία, from the nature of its definition, is not to be found within the sphere of what may be perceived, and everything corporeal is capable of being perceived. The Ideas are then something essentially different from the corporeal world. True reality is incorporeal. The division in the conception of reality takes on accordingly a fixed form; the lower reality of natural processes or generation (γένεσις), which forms the object of perception, is the corporeal world; the higher reality of Being, which thought knows, is the incorporeal, the immaterial world, τόπος νοητός. Thus the Platonic system becomes *immaterialism*, or, as we call it after the meaning given by him to the word "Idea," *Idealism*.

6. In the Platonic system, accordingly, we find perhaps the most extensive interweaving and complication of problems which history has seen. The doctrine of Democritus, on the contrary, is ruled throughout by the one interest of explaining Nature. However rich the results which this latter doctrine might achieve for this its proper end, — results which could be taken up again in a later, similarly disposed condition of thought, and then first unfold their whole fruitfulness, — at first the other doctrine must surpass this, all the more in proportion as it satisfied all needs of the time and united within itself the entire product of earlier thought. More points of attack for immanent criticism are perhaps offered by the Platonic system than by that of Democritus; but for Greek thought the latter was a relapse into the cosmology of the first period, and it was Plato's doctrine that must become the system of the future.

§ 10. The System of Materialism.

The systematic character of the doctrine of Democritus consists in the way in which he carried through in all departments of his work the fundamental thought, that scientific theory must so far

gain knowledge of the true reality, *i.e.* of the atoms and their motions in space, as to be able to explain from them the reality which appears in phenomena, as this presents itself in perception. There is every indication (even the titles of his books would show this) that Democritus took up this task by means of investigations covering the entire compass of the objects of experience, and in this connection devoted himself with as great an interest to the psychological as to the physical problems. So much the more must we regret that the greater part of his teachings has been lost, and that what is preserved, in connection with accounts of others, permits only a hypothetical reconstruction of the main conceptions of his great work, a reconstruction which must always remain defective and uncertain.

1. It must be assumed in the first place that Democritus was fully conscious of this task of science, viz. that of explaining the world of experience through conceptions of the true reality. That which the Atomists regard as the Existent, viz. space and the particles whirring in it, has no value except for theoretical purposes. It is only thought in order to make intelligible what is perceived; but for this reason the problem is so to think the truly real that it may explain the real which appears in phenomena, that at the same time this latter reality may "remain preserved"[1] as something that "is" in a derived sense, and that the truth which inheres in it may remain recognised. Hence Democritus knew very well that thought also must seek the truth in perception, and win it out of perception.[2] His rationalism is far removed from being in contradiction with experience, or even from being strange to experience. Thought has to infer from perception that by means of which the latter is explained. The motive which lay at the foundation of the mediating attempts following the Eleatic paradox of acosmism became with Democritus the clearly recognised principle of metaphysics and natural science. Yet unfortunately nothing is now known as to how he carried out in detail the methodical relation between the two modes of cognition, and how the process by which knowledge grows out of perception in the particular instance was thought by him.

More particularly, the theoretical explanation which Democritus

[1] The very happy expression for this is *διασώζειν τὰ φαινόμενα*. Cf. also Arist. *Gen. et Corr.* I. 832, 5 a.

[2] Hence, the expressions in which he recognised the truth in the phenomenon; *e.g.* Arist. *De An.* I. 2, 404 a 27, and the like. To attempt, however, to construe out of this a "sensualism" of Democritus, as has been attempted by E. Johnson (Plauen, 1868), contradicts completely the accounts with regard to his attitude toward Protagoras.

gave for the contents of perception consists, as with Leucippus, in the *reduction of all phenomena to the mechanics of atoms*. What appears in perception as qualitatively determined, and also as involved in qualitative change (*ἀλλοιούμενον*), exists "in truth," only as a quantitative relation of the atoms, of their order, and their motion. The task of science is then to *reduce all qualitative to quantitative relations*, and to show in detail what quantitative relations of the absolute reality produce the qualitative characteristics of the reality which appears in phenomena. Thus, the *prejudice in favour of what may be perceived or imaged* (*anschaulich*), as if spatial form and motion were something simpler, more comprehensible in themselves, and less of a problem than qualitative character and alteration, is made the principle for the theoretical explanation of the world.

Since this principle is applied with complete systematic rigour to the whole of experience, Atomism regards the *psychical life* with all its essential elements and values as also a *phenomenon*, and the form and motion of the atoms which constitute the true Being of this phenomenon must be stated by the explanatory theory. Thus matter in its form and motion is regarded as that which alone is truly real, and the entire mental or spiritual life as the derived, phenomenal reality. With this the system of Democritus first assumes the character of conscious, outspoken *materialism*.

2. In the properly *physical* doctrines, the teaching of Democritus presents, therefore, no change in principle as compared with that of Leucippus, though there is a great enrichment by careful detailed investigation. He emphasised still more sharply than his predecessor, where possible, the thought of the mechanical necessity (*ἀνάγκη*, which he also occasionally called *λόγος*), in accordance with which all occurrence or change whatever takes place, and further defined this thought as involving that no operation of atoms upon one another is possible except through impact, through immediate contact, and further, that this operation consists only in the change of the state of motion of the atoms which are also unchangeable as regards their form.

The atom itself as that which "is," in the proper sense of the word, has accordingly only the characteristics of abstract corporeality, viz. the filling of a limited space, and the quality of being in motion in the void. Although all are imperceptibly small, they yet exhibit an endless variety of forms (*ἰδέαι* or *σχήματα*). To form, which constitutes the proper fundamental difference in the atoms, belongs in a certain sense also size; yet it is to be observed that the same geometrical form, *e.g.* the sphere, may appear in different

sizes. The larger the atom, the greater its mass; for the essential quality of what is, is indeed materiality, space-claiming. For this reason Democritus asserted weight or lightness to be a function of size,[1] evidently yielding to the mechanical analogies of daily life. In connection with these terms (*βαρύ* and *κοῦφον*), however, we are not to think of the falling motion, but solely of the *degree of mechanical movability* or of *inertia*.[2] Hence it was also his opinion that as the atom-complexes whirled about, the lighter parts were forced outward, while the more inert with their inferior mobility were gathered in the middle.

The same properties communicate themselves as metaphysical qualities to things which are composed of atoms. The form and size of things is produced by the simple summation of the form and size of the component atoms; though in this case, the inertia is not dependent solely upon the sum total of the magnitudes of the atoms, but upon the greater or less amount of empty space that remains between the individual particles when they are grouped together. The inertia depends therefore upon the less or greater degree of *density*. And since the ease with which particles may be displaced with reference to one another depends upon this interruption of the mass by empty space, the properties of *hardness* and softness belong also to the true reality that is known by thought.

All other properties, however, belong to things not in themselves, but only in so far as motions proceeding from things act upon the organs of perception; they are "states of perception as it is in process of qualitative change." But these states are also conditioned throughout by the things in which the perceived properties appear, and here the arrangement and the situation which the atoms have taken with reference to each other in the process of composition are of principal importance.[3]

While, then, form, size, inertia, density, and hardness are properties of things *ἐτεῇ*, *i.e.* in truth, all that is perceived in them by the individual senses as colour, sound, smell, taste, exists only *νόμῳ* or *θέσει*, *i.e.* in the phenomenon. This doctrine, when taken up anew in the philosophy of the Renaissance (cf. Part IV. ch. 2) and later, was

[1] As the most extensive exposition for this and for the following topic Theophr. *De Sens.* 61 ff. (*Dox.* D. 516) is to be compared.

[2] It is scarcely to be decided now whether the motion of their own, which Atomism ascribed to all the atoms as primitive and causeless, was thought of by Democritus as conditioned already by the size or mass, so that the greater had, even from the beginning, possessed less velocity. At all events, these determinations held good for him within the sphere of the mechanical operation of the atoms on one another. What is larger can be pushed with greater difficulty; what is smaller can be pushed more easily.

[3] Cf. Arist. *Gen. et Corr.* I. 2, 315 b 6.

designated as distinguishing between the *primary and secondary qualities of things*; and it is desirable to introduce this expression here, since it corresponds throughout to the metaphysical and epistemological sense in which Democritus made the Protagorean doctrine useful for his own purpose. While the Sophist would make all properties secondary and relative, Democritus admitted this only for the qualities perceived by special senses, and set over against these the quantitative determinations as primary and absolute. He therefore designated also as "genuine knowledge" the insight into the primary qualities to be won through thought, while, on the contrary, perception which is directed toward the secondary qualities he termed "obscure knowledge" (*γνησίη — σκοτίη γνώμη*).

3. The secondary qualities appear accordingly as dependent upon the primary; they are not, however, dependent upon these alone, but rather upon the action of these upon the percipient agent. But in the atomistic system that which perceives, the *mind or soul*, can consist only of atoms. To be more explicit, it consists, according to Democritus, of the same atoms which constitute also the essence of *fire:* namely, the finest, smoothest, and most mobile. These are indeed scattered also through the whole world, and in so far animals, plants, and other things may be regarded as animate, as having souls, but they are united in largest numbers in the human body, where in life a fire-atom is placed between every two atoms of other sorts, and where they are held together by breathing.

Upon this presupposition, then, analogous, as we see, to the older systems, Democritus built up his explanation of phenomena from the true essence of things. That is, perception, and with it the secondary qualities, arises from the action of things upon the fire-atoms of the soul. The reality which appears is a necessary result of the true reality.

In carrying out this doctrine Democritus took up and refined the theories of perception advanced by his predecessors. The effluxes (cf. above, § 6, 3) which proceed from things to set in motion the organs and through them the fire-atoms, he called *images* (*εἴδωλα*), and regarded them as infinitely small copies of the things. Their impression upon the fire-atoms is perception, and the similarity between the content of this perception and its object was held to be secured thereby. Since impact and pressure are the essence of all the mechanics of the atoms, *touch* is regarded as the most primitive sense. The special organs, on the contrary, were regarded as capable of receiving only such images as corresponded to their own formation and motion, and this theory of the *specific energy of the sense organs* was worked out very acutely by Democritus. From this it

followed also that in case there were things whose effluxes could not act upon any one of the organs, these would remain imperceptible for the ordinary man, and for these perhaps "other senses" might be accessible.

This *theory of images* appeared very plausible to ancient thought. It brought to definite expression, and indeed to a certain extent explained, the mode of representing things which is still common for the ordinary consciousness, as if our perceptions were "copies" of things existing outside of us. If one did not ask further how things should come to send out such miniature likenesses of themselves into the world, he might think that he understood, by means of this theory, how our "impressions" can resemble things without. For this reason this theory at once attained the predominance in physiological psychology, and retained its position until after the beginnings of modern philosophy, where it was defended by Locke.

Its significance, however, for the conceptions in the system of Democritus, lies in this, that it was regarded as describing that motion of the atoms in which perception consists. It remained hidden from this materialism, which was such from principle, as well as from all its later transformations, that perception as a psychical activity is something specifically different from any and every motion of atoms, however determined. But in seeking out the individual forms of motion from which the individual perceptions of the special senses arise, the philosopher of Abdera caused many a keen observation, many a fine suggestion, to become known.

4. It is interesting now that the same fate befell the materialistic psychology of Democritus as had befallen the pre-Sophistic metaphysicians (cf. § 6): it, too, was obliged in a certain respect to obliterate again the epistemological contrast between perception and thought. Since, that is, all psychical life is regarded as motion of the fire-atoms,[1] and since the motion of atoms in the connected system of the universe is conditioned by contact and impact, it follows that *thought*, which knows the truly real, can be explained only from an *impression* which this truly real makes upon the fiery atoms, — explained therefore itself only through the efflux of such *images*. As a psychological process, therefore, thought is the same as perception, viz. impression of images upon fire-atoms; the only difference is that in the case of perception the relatively coarse images of the atom-complexes are active, while thought, which apprehends true reality, rests upon a contact of the fire-atoms with the finest images, with those which represent the atomic structure of things.

[1] Arist. *De An.* I. 2, 405 a 8.

Odd and fantastic as this sounds, the indications are yet all in favour of the supposition that Democritus drew this conclusion from the presuppositions of his materialistic psychology. This psychology knew no independent, internal mechanism of ideas or conscious states, but only an arising of ideas through the motion of atoms. Hence it regarded ideas that were evidently deceptive as also "impressions," and sought for these the exciting images. Dreams, *e.g.* were traced back to εἴδωλα which had either penetrated into the body in the waking state and on account of their weak motion had previously produced no impression, or had first reached the fiery atoms in sleep, evading the senses. A mysterious ("magnetic," or "psychic," we should say to-day) action of men upon one another appeared comprehensible on this hypothesis, and an objective basis was given to faith in gods and demons by assuming giant forms in infinite space from which corresponding images proceeded.

In correspondence with this Democritus seems to have thought of "genuine knowledge" as that motion of the fire-atoms which is produced by the impression of the smallest and finest images, — those which represent the atomic composition of things. This motion is, however, the most delicate, the finest, the gentlest of all — that which comes nearest to rest. With this definition the *contrast between perception and thought was expressed in quantitative terms* — quite in the spirit of the system. The coarse images of things as wholes set the fiery atoms into relatively violent motion and produce by this means the "obscure insight" which presents itself as perception; the finest images, on the contrary, impress upon the fiery atoms a gentle, fine motion which evokes the "genuine insight" into the atomic structure of things, *i.e.* thought. In consideration of this, Democritus commends the thinker to turn away from the world of the senses, quite in contrast with the mode of thought which would develop truth out of perception. Those finest motions assert their influence only where the coarser are kept back; and where too violent motions of the fiery atoms take place, the result is false ideation, the ἀλλοφρονεῖν.[1]

5. This same quantitative contrast of strong and soft, violent and gentle motion, was laid by Democritus at the *basis of his ethical theory* also.[2] In so doing he stood with his psychology completely upon the *intellectualistic* standpoint of Socrates in so far as he transposed the epistemological values of ideas immediately into ethical values of states of will. As from perception only that

[1] Theophr. *De Sens.* 58 (*Dox.* D. 515).

[2] The resemblance with the theory of Aristippus (§ 7, 9) is so striking, that the assumption of a causal connection is scarcely to be avoided. Yet it may be that we should seek for this rather in a common dependence upon Protagoras, than in the interaction of Atomism and Hedonism upon each other.

obscure insight follows which has for its object the phenomenon and not the true essence, so also the pleasure which arises from the excitation of the senses is only relative (*νόμῳ*), obscure, uncertain of itself, and deceitful. The true happiness, on the contrary, for which the wise man lives "according to nature" (*φύσει*), the *εὐδαιμονία*, which is the end (*τέλος*) and measure (*οὖρος*) of human life, must not be sought in external goods, in sensuous satisfaction, but only in that gentle motion, that tranquil frame (*εὐεστώ*), which attends upon right insight, upon the gentle movement of the fiery atoms. This insight alone gives to the soul measure and harmony (*ξυμμετρία*), guards it from emotional astonishment (*ἀθαυμασία*), lends it security and imperturbability (*ἀταραξία, ἀθαμβία*), — the ocean-calm (*γαλήνη*) of the soul that has become master of its passions through knowledge. True happiness is rest (*ἡσυχία*), and rest is secured only by knowledge. Thus Democritus gains as the cap-stone of his system his personal ideal of life, — that of pure knowledge, free from all wishes; with this ideal, this systematic materialism culminates in a noble and lofty theory of life. And yet there is in it also a tendency which characterises the morals of the age of the Enlightenment: this peace of mind resting upon knowledge is the happiness of an individual life, and where the ethical teachings of Democritus extend beyond the individual, it is friendship, the relation of individual personalities to one another, that he praises, while he remains indifferent as regards connection with the state.

§ 11. The System of Idealism.

The origin and development of the Platonic *doctrine of Ideas* is one of the most difficult and involved, as well as one of the most effective and fruitful, processes in the entire history of European thought, and the task of apprehending it properly is made still more difficult by the literary form in which it has been transmitted. The Platonic dialogues show the philosophy of their author in process of constant re-shaping: their composition extended through half a century. Since, however, the order in which the individual dialogues arose has not been transmitted to us and cannot be established absolutely from external characteristics, pragmatic hypotheses based on the logical connections of thought must be called to our aid.

1. In the first place there is no question that the opposition between Socrates and the Sophists formed the starting-point for Platonic thought. Plato's first writings were dedicated to an affectionate and in the main, certainly, a faithful presentation of the Socratic doctrine of virtue. To this he attached a polemic

against the Sophistic doctrines of society and knowledge marked by increasing keenness, but also by an increasing tendency toward establishing his own view upon an independent basis. The Platonic criticism of the Sophistic theories, however, proceeded essentially from the Socratic postulate. It admitted fully, in the spirit of Protagoras, the relativity of all knowledge gained through perception, but it found just in this the inadequacy of the Sophistic theory for a true science of ethics.[1] The knowledge which is necessary for virtue cannot consist in opinions as they arise from the changing states of motion in subject and object, nor can it consist of a rational consideration and legitimation of such opinions gained by perception;[2] it must have a wholly different source and wholly different objects. Of the corporeal world and its changing states — Plato held to this view of Protagoras in its entirety — there is no science, but only perceptions and opinions; it is accordingly an *incorporeal world* that forms the object of science, and this world must exist side by side with the corporeal world as independently as does knowledge side by side with opinion.[3]

Here we have for the first time the claim of an *immaterial reality*, brought forward expressly and with full consciousness, and it is clear that this springs from the ethical need for a knowledge that is raised above all ideas gained by sense-perception. The assumption of immateriality did not at first have as its aim, for Plato, the explanation of phenomena: its end was rather to assure an object for ethical knowledge. The idealistic metaphysics, therefore, in its first draft[4] builds entirely upon a new foundation of its own, without any reference to the work of earlier science that had been directed toward investigating and understanding phenomena; it is an *immaterial Eleatism*, which seeks true Being in the Ideas, without troubling itself about the world of generation and occurrence, which it leaves to perception and opinion.[5]

To avoid numerous misunderstandings[6] we must, nevertheless, expressly point out that the Platonic conception of immateriality (*ἀσώματον*) is in nowise coincident with that of the spiritual or psychical, as might be easily assumed from the modern mode of thinking. For the Platonic conception the particular psychical

[1] On this point, the *Theætetus* brings together the whole criticism of the Sophistic doctrine.
[2] *δόξα ἀληθὴς μετὰ λόγου*, *Theæt.* 201 E. (Probably a theory of Antisthenes.)
[3] Arist. *Met.* I. 6, 987 a 32; XIII. 4, 1078 b 12.
[4] As set forth in the dialogues *Phædrus* and the *Symposium*.
[5] Investigations as to theoretical and natural science are first found in the latest dialogues.
[6] To which the Neo-Platonic transformation of the doctrine of Ideas gave occasion. Cf. Pt. II. ch. 2, § 18.

functions belong to the world of Becoming, precisely as do those of the body and of other corporeal things; and on the other hand, in the true reality the "forms" or "shapes" of corporeality, the Ideas of sensuous qualities and relations, find a place precisely as do those of the spiritual relations. The identification of spirit or mind and incorporeality, the division of the world into mind and matter, is un-Platonic. The incorporeal world which Plato teaches is not yet the spiritual.

Rather, the Ideas are, for Plato, *that incorporeal Being which is known through conceptions.* Since, that is, the conceptions in which Socrates found the essence of science are not given as such in the reality that can be perceived, they must form a "second," "other" reality, different from the former, existing by itself, and this immaterial reality is related to the material, as Being to Becoming, as the abiding to the changing, as the simple to the manifold — in short, as the world of Parmenides to that of Heraclitus. The object of ethical knowledge, cognised through general conceptions, is that which "is" in the true sense: the ethical, the logical, and the physical ἀρχή (ground or first principle) are the same. This is the point in which all lines of earlier philosophy converge.

2. If the Ideas are to be "something other" than the perceptible world, knowledge of them through conceptions cannot be found in the content of perception, for they cannot be contained in it. With this turn of thought, which corresponds to the sharper separation of the two worlds, the Platonic doctrine of knowledge becomes much more rationalistic than that of Democritus, and goes also decidedly beyond that of Socrates; for while the latter had developed the universal out of the opinions and perceptions of individuals inductively, and had found it as the common content in these opinions and perceptions, Plato does not conceive of the process of induction in this analytical manner, but sees in perceptions only the suggestions or promptings with the help of which the soul *bethinks itself* of the conceptions, of the knowledge of the Ideas.

Plato expressed this rationalistic principle in the form that *philosophical knowledge is recollection* (ἀνάμνησις). He showed in the example of the Pythagorean proposition[1] that mathematical knowledge is not extracted from sense-perception, but that sense-perception offers only the opportunity on occasion of which the soul recollects the knowledge already present within her, that is, knowledge that has purely rational validity. He points out that the pure mathematical relations are not present in corporeal reality; on the

[1] *Meno*, 80 ff.

contrary, the notion of these relations arises in us when similar figures of perception offer but the occasion therefor, and he extended this observation, which is completely applicable to mathematical knowledge, to the sum total of scientific knowledge.

That this reflection upon what is rationally necessary should be conceived of as recollection is connected with the fact that Plato, as little as any of his predecessors, recognises a creative activity of the consciousness, which produces its content. This is a general limit for all Greek psychology; the content for ideas must somehow be given to the "soul"; hence, if the Ideas are not given in perception, and the soul nevertheless finds them in herself on occasion of perception, she must have already *received* these Ideas in some way or other. For this act of reception, however, Plato finds only the mythical representation,[1] that before the earthly life the souls have *beheld* the pure forms of reality in the incorporeal world itself, that the perception of similar corporeal things calls the remembrance back to those forms forgotten in the corporeal earthly life, and that from this awakes the *philosophical impulse*, the *love of the Ideas* (ἔρως), by which the soul becomes raised again to the knowledge of that true reality. Here, too, as in the case of Democritus, it is shown that the entire ancient rationalism could form no idea of the process of thought except after the analogy of sensuous perception, particularly that of the sense of sight.

What Socrates in his doctrine of the formation of conceptions had designated as induction, became transformed, therefore, for Plato, into an intuition that proceeds by recollecting (συναγωγή), into reflection upon a higher and purer perception (*Anschauung*). This pure perception, however, yields a plurality of ideas corresponding to the multiplicity of objects which occasion such perceptions, and from this grows the further task for science to know also the *relations of the Ideas to each other*. This is a second step of Plato's beyond Socrates, and is specially important for the reason that it led shortly to the apprehension of the *logical relations between conceptions*. It was principally the relations of the subordination and co-ordination of concepts to which Plato became attentive. The division of the class-concepts or logical genera into their species played a great part in his teaching.[2] The possibility or impossibility of the union of particular conceptions is brought more exactly into

[1] *Phædr.* 246 ff.

[2] Cf. *Phileb.* 16 C. Yet this dividing process is not anywhere especially prominent in the writings that are certainly Platonic. It is handled with the pedantry of a school in the *Sophist* and *Politicus*. Antiquity preserved "definitions" and "divisions" from the Platonic school. In *Athenæus*, II. 59 C, is an instance of mockery, by a comic poet, at this academical concept-splitting.

consideration,[1] and as a methodical aid he recommended the hypothetical method of discussion, which aims to examine a tentatively proposed conception by developing all the possible consequences that would follow from the possibility of its union with conceptions already known.

These logical operations taken as a whole, by means of which the Ideas and their relations to one another (κοινωνία) were to be found, Plato denoted by the name *dialectic*. What is found in his writings concerning it has throughout a methodological character, but is not properly logical.

3. The doctrine of knowledge as recollection stood, however, in closest connection with Plato's conception of the *relation of Ideas to the world of phenomena*. Between the higher world of οὐσία and the lower world of γένεσις, between what *is* and what is in process of Becoming, he found that relation of similarity which exists between archetypes (παραδείγματα) and their copies or images (εἴδωλα). In this, too, a strong influence of mathematics upon the Platonic philosophy is disclosed: as the Pythagoreans had already designated things as imitations of numbers, so Plato found that individual things always correspond to their class-concepts only to a certain degree, and that the class-concept is a logical ideal which none of its empirical examples comes up to. He expressed this by the conception of *imitation* (μίμησις). It was thus at the same time established that that second world, that of the incorporeal Ideas, was to be regarded as the higher, the more valuable, the more primitive world.

Yet this mode of representing the matter gave rather a determination of their respective values than a view that was usable for metaphysical consideration: hence Plato sought for still other designations of the relation. The logical side of the matter, according to which the Idea as class-concept or species represents the total unitary extent or compass, of which the individual things denote but a part, appears in the expression *participation* (μέθεξις), which means that the individual thing but partakes in the universal essence of the Idea; and the changing process of this partaking is emphasised by the conception of *presence* (παρουσία). The class-concept or species is present in the thing so long as the latter possesses the qualities which dwell in the Idea. The Ideas come and go, and as these now communicate themselves to things and now again withdraw, the qualities in these things which are like the Ideas are successively changed to the eye of perception.

The precise designation of this relation was, for Plato, an object

[1] *Phædo*, 102 ff.

of only secondary interest, provided only the difference between the world of Ideas and the corporeal world, and the dependence of the latter upon the former, were recognised.[1] Most important and sufficient for him was the conviction that by means of conceptions that knowledge which virtue needs of what truly and really *is*, could be won.

A. Peipers, *Ontologia Platonica*. Leips. 1883.

4. But the logico-metaphysical interest which Plato grafted upon the Socratic doctrine of knowledge carried him far beyond the master as regards the contents of this doctrine. The general characteristics which he developed for the essence of the Ideas applied to *all class-concepts*, and the immaterial world was therefore peopled with the archetypes of the entire world of experience. So many class-concepts, so many Ideas; for Plato, too, there are countless "forms." In so far criticism[2] was right in saying that Plato's world of Ideas was the world of perception thought over again in conception.

In fact, according to the first draft of the Platonic philosophy, there are Ideas of everything possible, of things, qualities, and relations; of the good and the beautiful as well as of the bad and the ugly. Since the Idea is defined methodologically, in a purely formal way, as class-concept, every class-concept whatever belongs to the higher world of pure forms; and in the dialogue *Parmenides*,[3] not only was Plato's attention called by a man schooled in the Eleatic Sophistic doctrine to all kinds of dialectical difficulties which inhere in the logical relation of the one Idea to its many copies, but he was also rallied, spitefully enough, with the thought of all the foul companions that would be met in his world of pure conceptual forms.

Plato's philosophy had no principle that could serve as a weapon against such an objection, nor is there in the dialogues any intimation that he had attempted to announce a definite criterion for the *selection* of those class-concepts that were to be regarded as Ideas, as constituents of the higher incorporeal world. Nor do the examples which he adduces permit such a principle to be recognised; we can only say that it seems as if in course of time he continually emphasised more strongly the attributes expressing worth (as the good and the beautiful), the mathematical relations (greatness and smallness, numerical determinations, etc.), and the types of species in the organic world, while, on the contrary, he no longer reckoned

[1] *Phædo*, 100 D. [2] Arist. *Met.* I. 9, 990 b 1. [3] *Parm.* 130 C.

among the Ideas mere concepts of relation, especially negative notions and things made by human art.[1]

5. Our knowledge of the *systematic connection and order* which Plato intended to affirm in the realm of Ideas remains ultimately as obscure as that in regard to the preceding point. Urgent as he was to establish co-ordination and subordination among the conceptions, the thought of a logically arranged pyramid of conceptions which must culminate in the conception that was most general and poorest in content seems not to have been carried out. A very problematical attempt to set up a limited number (five) of most general conceptions[2] is presented in the *Sophist* (254 ff.). But these attempts, which tend toward the Aristotelian doctrine of the categories, are not to be traced back with certainty to Plato himself.

With him we find, rather, only the doctrine presented in the *Philebus*, as well as in the *Republic*, that the *Idea of the Good* is the highest, embracing, ruling, and realising all others. Plato defines this Idea as regards its content as little as did Socrates; he determined it only by means of the relation, that it should represent in its content the highest *absolute end of all reality*, of the incorporeal as of the corporeal. The subordination of the other Ideas to this highest Idea is accordingly not the *logical* subordination of a particular under the general, but the *teleological* of the means to the end.

In the latest period of his philosophising, concerning which we have only intimations in the *Laws* and in critical notices of Aristotle,[3] and in the teachings of his nearest successors, the imperfection of this solution of the logical problem seems to have led Plato to the unfortunate thought of developing the *system of Ideas* according to the method of the *Pythagorean number-theory*. The Pythagoreans also, to be sure, had the purpose of attaching the abiding arrangements of things symbolically to the development of the number series. But that was only a makeshift, because they had as yet no idea of the logical arrangement of conceptions: hence, when Plato, in connection with his other thoughts, fell back upon this makeshift, designated the Idea of the Good as the ἕν, the One, and attempted to derive from it the duality (δυάς) of the Infinite or Indefinite, and the Measure (ἄπειρον and πέρας, = even and odd; cf. § 4, 11), and from this, further, the other Ideas in such a way as to present a series of the conditioning and the conditioned, neither

[1] Cf. also Arist. *Met.* XII. 3, 1070 c 18.

[2] Being, rest, motion, sameness (ταὐτότης) and otherness (ἑτερότης), *i.e.* the division of Being into the resting (οὐσία), ever the same with itself, and the moved (γένεσις), in process of constant change.

[3] Cf. A Trendelenburg, *Platonis de Ideis et Numeris Doctrina* (Leips. 1826).

this deplorable construction nor the fact that men like Speusippus, Xenocrates, Philippus, and Archytas undertook to carry it out in detail, would be worth more particular mention, were not this just the point to which the speculation of the Neo-Pythagoreans and the Neo-Platonists became attached. For by this gradation which Plato thus began within the οὐσία the world of true reality, the *division in the conception of reality*, which had developed out of the opposition between perception and thought, became *multiplied*, and thus dualism was again abolished. For when to the One, or the Idea of the Good, was ascribed the highest absolute reality, and to the various strata of the world of Ideas, a reality of constantly decreasing worth in proportion as they were removed from the One in the system in numbers, there arose from this a *scale of realities* which extended from the One down to the lowest reality, — that of the corporeal world. Fantastic as this thought may be, it yet evinced its force and influence in the development of thought, even to the threshold of modern philosophy. Its power, however, lies doubtless in all cases in its amalgamation of attributes of worth with these various grades of reality.

6. While as metaphysics, the doctrine of Ideas fell into such serious difficulties, it was carried out in an extremely happy, simple, and transparent manner in that domain which formed its proper home, — that of ethics. For the systematic elaboration of this, however, Plato needed a *psychology*, and that, too, of another sort than the psychology which had arisen in previous science, out of the presuppositions of natural philosophy, and with the aid of individual perceptions or opinions. When, in contrast with this, he developed his psychology from the postulates of the doctrine of Ideas, the result was of course a purely metaphysical theory which stood and fell with its postulate, yet it was at the same time, by reason of the import of the doctrine of Ideas, a first attempt to understand the psychical life from within, and in accordance with its internal character and articulation.

The conception of the *soul* or mind was in itself a difficulty[1] in the dualism of the doctrine of Ideas. For Plato, also, "soul" was on the one hand the living element, that which is moved of itself and moves other things, and on the other hand, that which perceives, knows, and wills. As principle of life and of motion, the soul belongs, therefore, to the lower world of Becoming, and in this it remains when it perceives and directs its desires toward objects of the senses. But this same soul, nevertheless, by its true knowledge

[1] *Phædo*, 76 ff.

of the Ideas, becomes partaker in the higher reality of abiding Being. Hence it must be assigned a *position between the two worlds* — not the timeless, unchanged essence of the Ideas, but a vitality which survives change; *i.e. immortality.* Here, for the first time, personal immortality is brought forward by Plato as a part of philosophic teaching. Of the proofs which the *Phædo* adduces for this, those are most in accord with the spirit of the system which reason from the soul's knowledge of Ideas to its relationship with eternity; in correspondence with the form of the system is the dialectic false conclusion that the soul cannot be or become dead, because its essential characteristic is life; the most tenable of the arguments is the reference to the unity and substantiality which the soul evinces in ruling the body.

In consequence of this intermediate position the soul must bear in itself the traits of both worlds; there must be in its essence something which corresponds to the world of Ideas, and something which corresponds to the world of perception. The former is the *rational nature* (λογιστικόν or νοῦς), the seat of knowledge and of the virtue which corresponds to it; in the latter, the irrational nature, Plato made a further distinction of two elements, — the nobler, which inclines towards the Reason, and the lower, which resists it. The nobler he found in the ardent, spirited Will (*Spirit*, θύμος), the lower in the sensuous desire (*Appetite*, ἐπιθυμία). Thus Reason, Spirit, and Appetite are the three forms of activity of the soul, the classes or species (εἴδη) of its states.

These fundamental psychological conceptions which had thus grown out of considerations of ethical worth are employed by Plato to set forth the moral destiny of the individual. The fettering of the soul to the body is at once a consequence and a punishment of the sensuous appetite. Plato extends the immortal existence of the soul equally beyond the two boundaries of the earthly life. The sin for the sake of which the soul is ensnared in the world of sense is to be sought in a pre-existent state;[1] its destiny in the hereafter[1] will depend upon how far it has freed itself in the earthly life from the sensuous appetite, and turned to its higher vocation — knowledge of the Ideas. But inasmuch as the ultimate goal of the soul appears to be to strip off the sensuous nature, the three forms of activity are designated also as *parts of the soul.* In the *Timæus* Plato even portrays the process of the formation of the soul out of these parts, and retains immortality for the rational part only.

[1] These doctrines are depicted in the form of mythical allegories which make use of motives from the popular faith and from the Mystery-cults. V. *Phædr.* 246 ff.; *Gorgias*, 523 ff.; *Rep.* 614 ff.; *Phædo*, 107 ff.

It is already clear from these changing determinations that the relation of these three fundamental forms of the psychical life to the none too strongly emphasised unity of the soul's nature was not clearly thought out; nor is it possible to give to these conceptions formed from the ethical need the significance of purely psychological distinctions, such as have since been made.[1]

7. But at all events there followed in this way, from the doctrine of the two worlds, a negative *morals* that would fly from the world, and in which the withdrawal from the world of sense and the spiritualisation of life were praised as ideals of wisdom. It is not only the *Phædo* that breathes this earnest disposition in its portrayal of the death of Socrates; the same ethical theory prevails in such dialogues as the *Gorgias*, the *Theætetus*, and, in part, the *Republic.* But in Plato's own nature the heavy blood of the thinker was associated with the light heart-beat of the artist, and thus while his philosophy lured him into the realm of bodiless forms, the whole charm of Hellenic beauty was living and active within him. Strongly as he therefore combated root and branch the theory of Aristippus, which would fain regard man's strivings as satisfied with sensuous pleasure, it was nevertheless his opinion that the Idea of the Good becomes realised even in the world of sense. Joy in the beautiful, pleasure in the sensuous imitation of the Idea, painless because free from the element of wishing, the development of knowledge and practical artistic skill, the intelligent understanding of the mathematical relations which measure empirical reality, and the appropriate ordering of the individual life, — all these were valued by him as at least preparatory stages and participations in that highest good which consists in knowledge of the Ideas, and of the highest among them, the Idea of the Good. In the *Symposium* and in the *Philebus* he has given expression to this his estimate of the goods of life.

This same thought, that ethical values and standards must illumine the whole circuit of human life, was used in another form by Plato in that presentation of the system of the virtues which he developed in the *Republic.* Here he showed that each part of the soul has a definite task to fulfil, and so a perfection of its own to reach: the rational part, in *wisdom* (σοφία), the spirited (θυμοειδές) in *energy of will* (courage, ἀνδρία), the appetitive (ἐπιθυμητικόν) in

[1] That the question here for Plato was essentially that of the gradation of the psychical from the point of view of relative worth, is shown not only in the employment made of these distinctions in ethics and politics, but also in such remarks as those which designated this triple division as characteristic for the different organic beings (plant, animal, man), or for the different peoples, inhabitants of southern countries, of northern countries, and the Greeks.

self-control (moderation, σωφροσύνη); that, however, in addition to all these, as the virtue of the soul as a whole, there must be the right relation of these parts, complete *uprightness* (justice, δικαιοσύνη).

The true significance, however, of these *four cardinal virtues*, is first unfolded upon a higher domain, that of politics.

8. The tendency of the doctrine of Ideas, directed as it was toward the general and the universal, exhibited its most perfect operation in the aspect now to be noticed, viz. that the ethical ideal of the Platonic philosophy lay not in the ability and happiness of the individual, but in the ethical perfection of the *species*. True to the logical principle of the doctrine of Ideas, that which truly *is* in the ethical sense, is not the individual man, but mankind, and the form in which this truly existent humanity appears is the organic union of individuals in the *state*. The ethical ideal becomes for Plato the *political*, and in the midst of the time which saw the dissolution of Greek political life, and in opposition to those doctrines which proclaimed only the principle of individual happiness, he raised the conception of the state to an all-controlling height.

He considered the state, however, not from the side of its empirical origin, but in reference to its task, viz. that of presenting in large the ideal of humanity, and of educating the citizen to that particular virtue which makes him truly happy. Convinced that his project could be realised, with force if necessary, he wove into its fabric not only features which he approved of the then-existing Greek political life, in particular those of the aristocratic Doric constitutions, but also all the ideals for whose fulfilment he hoped from the right formation of public life.

K. F. Hermann, *Ges. Abhandlungen*, 122 ff.; E. Zeller, *Vorträge und Abhandlungen*, I. 62 ff.

If the *ideal state* is to present man in large, it must consist of the three parts which correspond to the three parts of the soul, — the *teaching class*, the *warrior class*, and the *working class*. It belongs to the first class alone, that of the cultured (φιλόσοφοι), to guide the state and to rule[1] (ἄρχοντες), to give laws and to watch over their observance. The virtue proper to this class is wisdom, insight into that which is for the advantage of the whole, and which is demanded by the ethical aim of the whole. To support this class there is the second class, that of the public officials (ἐπίκουροι; guardians, φύλακες), which has to evince the virtue of the fearless performance of duty (ἀνδρία) as it maintains the order of the state within and without.

[1] Hence the λογιστικόν is called also ἡγεμονικόν.

It is, however, obedience which holds the desires in check, self-control (σωφροσύνη), that becomes the great mass of the people, the artisans and farmers (γεωργοὶ καὶ δημιουργοί), who have to care for providing for the external means of the states by their labour and industry.[1] Only when each class thus does its duty and maintains its appropriate virtue does the nature of the state correspond to the ideal of justice (δικαιοσύνη).

The principle of *aristocracy in education*, which is of decisive importance in the Platonic ideal of the state, appears most clearly in the provision that for the great mass of the third class only the ordinary ability of practical life is claimed, and in that this is regarded as sufficient for their purpose, while the education, which the state has the right and duty to take in hand itself in order to train its citizens for its own ends, is given only to the two other classes. By means of a constantly repeated process of selection continued from birth to the late years, the government causes the two upper classes to be continually renewed, strata by strata; and in order that no individual interest may remain to hold back these classes, who are properly the organs of the whole body, in the fulfilment of their task, they are to renounce family life and private property. Their lot is that of education by the state, absence of family relations, community of life and of goods. He who is to live for the ends of the whole, for the ethical education of the people, must not be bound to the individual by any personal interest. To this thought, which found its historic realisation in the sacerdotal state of the mediæval hierarchy, is limited whatever of communism, community of wives, etc., men have professed to discover in the Platonic teaching. The great Idealist carries out to its extreme consequences the thought that the end of human life consists in moral education, and that the entire organisation of a community must be arranged for this sole end.

9. With this a new relation between the world of ideas and the world of phenomena was discovered, and one which corresponded most perfectly to the spirit of the Platonic system: the Idea of the Good disclosed itself as the task, as the *end* (τέλος), which the phenomenon of human life in society has to fulfil. This discovery became of decisive importance for the final form taken by Plato's metaphysical system.

For, as first projected, the doctrine of Ideas had been precisely as incompetent as the Eleatic doctrine of Being to explain empirical reality. The class-concepts were held to give knowledge of the

[1] Hence the third part of the soul is called also the φιλοχρήματον.

absolute reality,[1] which, purely for itself, simple and changeless, without origin and imperishable, forms a world by itself, and, as incorporeal, is separated from the world where things arise. Hence, as was demonstrated in the dialogue the *Sophist*,[2] in a keen polemic against the doctrine of Ideas, this doctrine formed no principle of motion, and therefore no explanation of facts, because it excluded from itself all motion and change.

But however little Plato's interests may have been directed toward this end, the conception of the Idea as true Being ultimately demanded, nevertheless, that the phenomenon should be regarded, not only as something other, something imitative, something that participated, but also as something dependent. It demanded that the *Idea be regarded as cause of occurrence and change* (αἰτία). But that which is itself absolutely unchangeable and immovable, and excludes every particular function from itself, cannot be a cause in the mechanical sense, but only in the sense that it presents the *end* for the sake of which the occurrence takes place. Here for the first time the relation between the two worlds of Being and Becoming (οὐσία and γένεσις) is fully defined; all change and occurrence exists for the sake of the Idea;[3] the Idea is the *final cause* of phenomena.

This foundation of *teleological metaphysics* Plato gives in the *Philebus* and in the middle books of the *Republic*, and adds at once a further culminating thought by introducing as the final cause of all occurrence, the world of Ideas as a whole, but in particular the highest Idea, to which all the rest are subordinate in the sense of means to end, — the *Idea of the Good*. This, referring to Anaxagoras, he designates as the *World-reason* (νοῦς), or as the *deity*.[4]

Side by side with this *motif* taken from Anaxagoras, another of a Pythagorean nature appears with increasing force in a later form of the doctrine of Ideas, a *motif* in accordance with which the imperfection of the phenomenon is pointed out as in contrast with the true Being. This inadequacy, however, could not be derived from Being itself, and just as Leucippus, in order to understand plurality and motion, had declared that in addition to the Being of

[1] *Symp.* 211 B, αὐτὸ καθ' αὐτὸ μεθ' αὑτοῦ μονοειδὲς ἀεὶ ὄν.

[2] Page 246 ff. The doctrine there criticised, that of the ἀσώματα εἴδη, can in accordance with the individual verbal coincidences be only the Platonic; just this is a factor in the decision against the genuineness of the dialogue. Schleiermacher's hypothesis of a Megarian doctrine of Ideas, thought out to rescue the genuineness, has not shown itself tenable.

[3] *Phileb.* 54 C.

[4] Yet we are not to think in this case of personality, or of a spiritual being, but of the absolute ethical end or purpose of the world, the conception of the ἀγαθόν finding an exact definition as little as with Socrates. It is rather presupposed as being the simplest, the most comprehensible in itself.

Parmenides the Not-being was also "real," or "actual," and existent, so Plato saw himself forced, with like logical consistency, for the purpose of explaining phenomena and the inadequacy which they show with reference to the Ideas, to assume beside the world of Being or of cause, *i.e.* the world of Ideas and the Idea of the Good, a *secondary or accessory cause* (ξυναίτιον) in that which has not the attribute of Being. Indeed, the parallelism in these two courses of thought that this secondary cause, which is not Being (τὸ μὴ ὄν), is for Plato precisely the same as for Leucippus and Philolaus, viz. *empty space*.[1]

Space was then for Plato the "nothing" out of which the world of phenomena is formed for the sake of the Idea of the Good, or of the deity. This process of formation, however, consists in *taking on mathematical form;* hence Plato taught in the *Philebus* that the world of perception was a "mixture" of the "unlimited" (ἄπειρον), *i.e.* space, and of "limitation" (πέρας), *i.e.* the mathematical forms;[2] and that the cause of this mixture, the highest, divine world-principle, was the Idea of the Good. Space assumes mathematical formation in order to become like the world of Ideas.

By virtue of this introduction of the number theory into the doctrine of Ideas, mathematics gains its peculiar position in the Platonic philosophy. The mathematical structures are the intermediate link, by means of which empty space, which *is* not, is able to imitate in phenomena the pure "forms" of the world of Ideas. Hence mathematical knowledge (διάνοια), as well as purely philosophical knowledge (ἐπιστήμη), has to do with an abiding essence (οὐσία), and is therefore comprised together with this, as rational knowledge (νόησις), and set over against knowledge of phenomena (δόξα). But occupying thus an intermediate place, it takes only the position of a last stage in the preparation for the wisdom of the "rulers," as set forth in the system of education in the *Republic*.

10. The metaphysical preliminaries were now given for what Plato ultimately projected in the *Timæus;* viz. *a sketch or rough draught of the philosophy of Nature*, for which, of course, true to his epistemological principle, he could not claim the worth of certainty, but only that of probability.[3] Since, that is, he was not in a position

[1] Under the influence of the Aristotelian terminology, this secondary cause has been designated as "matter" (ὕλη), and it is only recently that modern researches have made it clear that the Platonic "matter" is simply space. Cf. H. Siebeck, *Untersuchungen z. Philos. d. Gr.* (2 Aufl., Freiburg i. B. 1889).

[2] It is probable that in this case Plato transposed the *numbers* into the world of Ideas itself, but looked upon their representation in *geometrical* structures as the "limitation" added to space.

[3] The Platonic Physics is then hypothetical in like manner with that of Parmenides. Here, too, it would seem that regard for the demands of his dis-

to carry through dialectically, and establish in conceptions this project of explaining occurrence from the world's end or purpose, Plato gave an exposition of his *teleological view of Nature* in mythical form only, — a view intended only as an opinion, and not as science.

This view, nevertheless, takes a position sharply *opposed to the mechanical explanation of Nature*, and, as this latter is set forth, we can scarcely suppose that Plato had any other doctrine in mind than that of Democritus. In opposition to the theory which makes all kinds of worlds arise here and there from the "accidental" (meaning "purposeless" or "undesigned") meeting of "that which is in unordered, lawless motion," and perish again, he sets forth his own theory that there is only this one, most perfect and most beautiful cosmos, unitary in nature and unique as regards its kind, and that its origin can be traced only to a reason acting according to ends.

If, then, it is desired to form a theory concerning this origin, the ground of the world of phenomena must be sought in the telic relation of this world to the Ideas. This relation Plato expressed by the idea of a "*world-forming God*" (δημιουργός, demiurge) who formed or shaped out that which is not Being, *i.e.* space, "with regard to the Ideas." In this connection the Not-being is characterised as the indefinite plasticity which takes up all corporeal forms into itself (δεξαμένη), and yet at the same time forms the ground for the fact that the Ideas find no pure representation in it. This counter-working of the accessory cause, or of the individual accessory causes, Plato designates as *mechanical necessity* (ἀνάγκη). He takes up then the conception of Democritus as a particular *moment* into his physics, in order to explain by it what cannot be understood teleologically. Divine activity according to ends and natural necessity are set over against each other as explaining principles, on the one hand for the perfect, and on the other hand for the imperfect in the world of phenomena. Ethical dualism passes over from metaphysics into physical theory.

ciples was united with a polemical purpose. Hence there is found mingled in the *Timæus*, a dependence upon Democritus and a combating of his views, an attitude like that of Parmenides toward Heraclitus. Yet the distinction is not to be forgotten, that the Eleatic denied the reality of the world of phenomena, while Plato denied only that it could be known scientifically, *i.e.* through conceptions. In presenting his view, however, Plato goes into questions of astronomy, mechanics, chemistry, organic life, physiological psychology, finally even into those of medicine. He gives, therefore, a kind of compendious exposition of his opinions in matters of natural science, opinions which in detail are extraordinarily fantastic, and as compared with the exact ideas even of his time, inadequate; and yet taken in their whole connection, in their relation to their central principle, they have exercised an effect extending far beyond the design of their author.

The characteristic fundamental thought of the Platonic as contrasted with the Atomistic physics is, that while Democritus conceived of the movements of the whole as mechanical resultants of the original states of motion of the individual atoms, Plato, on the contrary, regarded the *ordered motion of the universe as a whole*, as the primitive unit, and derived every individual change or occurrence from this purposively determined whole. From this thought sprang the strange construction of the conception of the *world-soul*, which Plato characterised as the single principle of all motions, and thus also of all determinations of form, and likewise of all activities of perception and ideation in the world.[1] In fantastic, obscure exposition he brought forward as the mathematical "division" of this world-soul, his astronomical theory, which was in the main closely connected with that of the younger Pythagoreans, but which was less advanced than theirs in its assumption that the earth stood still. The main criterion in this process of division was the distinction between that which remains like itself (ταὐτόν) and that which changes (θάτερον), — a contrast in which we easily recognise the Pythagorean contrast between the perfect stellar world and the imperfect terrestrial world.

A similar continuation of Pythagorean doctrine is contained in the Platonic *Timæus*, with reference also to the purely mathematical construction of the corporeal world. Here, too, the four elements are characterised according to the simple, regular, geometrical solids (cf. p. 46). But it is expressly taught that these *consist of triangular surfaces*, and those, too, of a right-angled sort, which are in part equilateral, in part so formed that the shorter side is half the length of the hypothenuse. The *limiting surfaces* of these solids, — tetrahedron, cube, etc., — may be thought of as composed of such right-angled triangles, and Plato would have the essence of space-filling, *i.e.* density or solidity of bodies, regarded as consisting in this composition of these limiting surfaces. By thus conceiving of physical bodies as purely mathematical structures, the metaphysical thought of the *Philebus* found expression also in physics, — the thought, namely, that the phenomenal world is a limitation of space formed in imitation of the Ideas. These triangular surfaces, which were, moreover, conceived of as being indivisible, have a suspicious similarity with the atomic forms (σχήματα) of Democritus.

[1] In this respect the *Timæus*, quite as does Democritus, characterises psychical differences by differences of motion, tracing, for example, right ideation to the ταὐτόν, merely individual perception to the θάτερον, etc. "Soul" is for the Greeks at the same time principle of motion and of perception, and just that (κινητικόν and αἰσθητικόν, Arist. *De An.* I. 2, 403 b 25), and even Plato makes the second characteristic dependent upon the first.

§ 12. The Aristotelian Logic.

The breadth of plan which appeared in the systems of the two great antipodal thinkers, Democritus and Plato, and in accordance with which their doctrines were methodically developed, made it indispensable that there should be not only a division of labour, but a separation of problems. The titles of the writings of Democritus make it probable that he proceeded clearly and definitely in this respect also. Plato, to be sure, conceived his literary activity essentially from the artist's point of view, but it is evident that in his activity as a teacher he did not fail to make that arrangement of problems for separate treatment which we miss in his dialogues. In his school the division of philosophy into dialectic, physics, and ethics became dominant.

If by dialectic in this connection we are to understand essentially the doctrine of Ideas in its metaphysical development, *Aristotle* made the great step in advance of prefacing the investigation of the subject-matter in all three departments with a preliminary study of the *essential nature of science*, a doctrine of the forms and laws of scientific thought. Even with the Sophists and Socrates reflection had begun upon the question, in what scientific activity properly consists, and the sharpened attention given to the inner processes had made it possible for the abstracting thinker to separate the general forms of the thought-process itself from the particular contents to which this process relates at different times. All these beginnings and attempts — for even with Plato it did not go beyond this — were comprehended by Aristotle in his *Logic*, and developed into a complete system in which we have before us the ripe self-knowledge of Greek science.

1. The immediate aim of the Aristotelian logic is, according to the express declarations of the philosopher, entirely *methodological*. The way is to be shown by which the goal of scientific cognition can be reached in all departments of knowledge. As in rhetoric the art of persuasion is taught, so in logic we are to learn the art of scientific investigation, cognition, and proof. For this reason Aristotle did not reckon logic, which was his greatest creation, among the philosophical disciplines themselves, but treated it in his lectures as a propædeutic, and for this reason his school regarded this study as the general instrument (*ὄργανον*) for all scientific work.

But this preparatory study itself was made a science by Aristotle. Instead of bringing forward rules of practical value in individual cases, as may well have been the case with the Sophists, instead of the general fixing of a principle which had been the service of

Socrates, he offers an examination of the thinking activity on all sides, a comprehensive examination of its regular forms. He fulfils the methodological task by *formal logic*.

But in so doing it becomes evident that the knowledge of the forms of right thinking can be gained only from understanding the task of thought, and that in turn this task can be disclosed only from a definite idea of the general relation of knowledge to its object. Thus the Aristotelian logic is connected in the most intimate manner with the metaphysical presupposition which lie at the basis of his treatment of the other disciplines also. In its principle, it is thoroughly *epistemological*.

2. As such, however, it has its roots in the Socratic-Platonic doctrine of Ideas. That which truly *is*, is the *general* or *universal*, and knowledge of this is the *conception*. In this respect Aristotle always remained a Platonist. What he combated in the system of his great predecessor[1] was only the *Eleatic assumption of absence of relation*, — absence of relation between general and particular, between Ideas and phenomena, between conceptions and perceptions; an absence of relation which, in spite of all his efforts, Plato had not overcome, even in the later phase of his teaching. Even as the final cause of occurrence the Ideas remained a world by themselves beside (*παρά*) the phenomena. This tearing apart (*χωρίζειν*) of essence and phenomenon, of Being and Becoming, is, in addition to special dialectical objections,[2] the object of the chief reproach which Aristotle brings against the doctrine of ideas. While Plato had made two different worlds out of the general which is known by the conception, and the particular which is perceived, the entire effort of Aristotle is directed toward removing again this division in the conception of reality, and discovering that relation between Idea and phenomenon which shall make conceptional knowledge able to explain what is perceived.

Out of this grows as the primary task for logic, that of recognising the true *relation between the general and the particular*, and hence this fundamental form of abstract or conceptional thought, which had been already recognised as fundamental by Socrates, stands in the centre of the Aristotelian logic.

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[1] Principally in *Met.* I. 9, and XIII. 4.

[2] Of these, two are principally worthy of mention in passing. The one argues, from the logical subordination which obtains among the Ideas, that everything that we perceive must be subsumed under a number of Ideas; the other calls attention to the difficulty that the resemblance, which, according to this system exists between the Idea and the phenomenon, makes necessary still a higher general above both, etc., *in infinitum* (*ἄνθρωπος — αὐτάνθρωπος — τρίτος ἄνθρωπος*).

The importance of this same relation grows out of still another course of thought. If Aristotle found any previous works that were preparatory for his theory of science, they consisted in the considerations of the Sophists with regard to the art (principally rhetorical) of *proof* and refutation. If now Aristotle asked how one can prove anything scientifically, *i.e.* in a manner universally valid and relating to true knowledge, he found that this could consist only in the *deduction of the particular from the general.* To prove scientifically means to state the grounds for the validity of what is asserted, and these are to be found only in the more general under which the particular is subsumed.

From this resulted the peculiar complication which constitutes the Aristotelian conception of science. The general, the Idea, is, as the true Being, the *cause* of occurrence and change. It is that, therefore, out of which and through which the perceived particular is to be *comprehended, conceived,* or *explained.* Science has to set forth how the perceived particular follows from the general which is known in conceptions. On the other hand, the general is in thought the *ground* by means of which and from which the particular is *proved.* Accordingly, conceiving or comprehending and proving are the same thing, viz. *deduction of the particular from the general.*

The scientific theory of Aristotle is accordingly concentrated in the conception of *derivation* or *deduction* (ἀπόδειξις). Scientific explanation of phenomena from true Being is the same logical process as scientific proof: namely, the deduction or derivation of what is given in perception from its general ground. Explaining and proving are therefore denoted by the same word, "deduction," and the right proof is that which takes as its ground the actual or real general cause of that which is to be proved.[1] It is, therefore, the task of science to exhibit the *logical necessity* with which the particular insight (of perception) follows from the general insight (of conception), and the particular phenomenon from the general cause.

This characterisation of the task of science, thus developed from metaphysical presuppositions, experienced an essential change in the progress of its author's investigations.

3. The most immediate task of logic, according to this, is to establish more exactly what *deduction* — *i.e.* on the one hand, *proof;*

[1] This definition of the conception of *scientific proof* is obviously directed against the *rhetorical* proof of the Sophists. In the art of persuasion, all proofs are welcome, however external they may remain to the true nature of the case, provided only they are formally sufficient to bring the hearer to assent. Scientific proof, however, should proceed from the inner, logical necessity of the case, and should therefore give at the same time insight into the true cause of what is to be proved.

on the other hand, *explanation* — properly is, or to set forth those forms in which thought cognises the *dependence of the particular upon the general.* This theory was given by Aristotle in the *Analytics,* the logical groundwork, which treats synthetically, in the first part, of the syllogism, in the second of deduction, proof, and conception. For in the process of analysing those activities of thought in which all deduction consists, there results as simple fundamental form the deduction of one proposition, one statement from another: *i.e.* the *inference or syllogism* (συλλογισμός).

The *doctrine of the syllogism* became thus the central point of the Aristotelian logic. To this points all that he taught (apparently only in the most general outlines) concerning the forms of thought which lie at the basis of the syllogism: out of it come all the points of view in his methodology.

The outlines of this doctrine, which form the basis of traditional logic even to this day, are the following. The syllogism is the deduction of a judgment from two other judgments. Since in a judgment one concept (the predicate) is affirmed of another concept (the subject), this affirmation can be grounded only by establishing the desired connection between the two by means of a third concept, the middle term (μέσον). This third concept must then stand in some relations with the other two, and these relations must be expressed in two judgments, which are called the premises (προτάσεις) of the syllogism. Inference, or drawing the conclusion, consists in the process of thought which, from the relations that one and the same concept (the middle term) sustains to two other concepts, discovers the relation of these two concepts to each other.

Agreeably to its general presuppositions, the Aristotelian doctrine of the syllogism fixed its attention upon but one of the possible relations existing between concepts, — the relation of the *subordination* of the particular under the general. The only question for this theory is always whether the one *concept* (the subject) should be subordinated to the other (the predicate) or not. The doctrine of the syllogism has to do only with the knowledge of those forms of thought according to which it is to be decided, with the help of an intermediate concept, *whether a subordination of one concept under another occurs or not.* This question Aristotle answered in an absolutely exhaustive manner; in this consists both the abiding worth of his doctrine of the syllogism and also the limits of its significance.

In correspondence with the fact just noted, Aristotle treats in his *theory of the judgment* essentially only the two elements which come into consideration for this end: first, Quantity, which determines

the kind of subordination of the subject to the predicate as regards extent, and yields the distinctions of general, particular, and singular judgments; and second, Quality, according to which this subordination is either affirmed or denied, and, therefore, the relation either of connection or of separation is asserted as existing between the respective extents of the two concepts.

The kinds or figures (*σχήματα*) of the syllogism are, therefore, essentially fixed by the manner in which the relations of subordination between the concepts, which are given in the premises, determine the subordination sought in the conclusion, — a relation which finds its external expression in the position of the middle term in the two premises, since this is either the subject of one premise and predicate of the other, or predicate of both, or subject of both. As the most valuable and primitive of these three figures, however, Aristotle consistently designated the first, because in it the principle of subordination is purely and clearly expressed, since the subject of the conclusion is subordinated to the middle term, and together with this, as falling within its compass, is subordinated to the predicate of the major.[1]

4. But by defining inference, and so deduction, proof, and explanation in this way, it followed that only propositions of a lesser degree of generality could be deduced from those of higher generality by means of this activity so essential to science. That is, by means of inference, we can never prove anything equally general with the premises, to say nothing of proving anything more general. The peculiar restriction of the ancient idea of the nature of thought, according to which thought can only apprehend and take apart what is given but can never produce anything new, makes its appearance in this feature of the Aristotelian logic. From this, however, it follows immediately that the deducing, proving, and explaining science may, indeed, in the individual case, be able to take that which has served as premise in the syllogism, and deduce it again as the conclusion of a still more general syllogism, but must, nevertheless, ultimately proceed from premises which are themselves capable of no further deduction, proof, and comprehension, of no reduction to middle terms. The truth of these ultimate premises is, therefore, *immediate* (*ἄμεσα*), not to be deduced, proved or comprehended. All deduction needs something primitive; all proof, a ground that cannot be proved; all explaining, something given which cannot be explained.

[1] The details cannot be developed here. Cf. in general, F. Kampe, *Die Erkenntnisstheorie des Aristoteles* (Leips. 1870); R. Eucken, *Die Methode der aristotelischen Forschung* (Berlin, 1872).

The apodictic, proving, and explaining activity of science has, therefore, a limit; the ultimate grounds of proof are not to be proved; the ultimate causes used in explaining are not to be explained. Hence if science is to fulfil its task, which consists in explaining the particular by means of the general, it must first press forward from the particular on to the general, in the case of which proving and explaining are forbidden by the nature of the case, because as immediately certain it asserts itself as not to be deduced and not to be proved. Hence the processes of deducing, proving, and explaining, in which the ultimate task of science consists, must be preceded by the searching out of the starting-points for deduction, of the ultimate grounds of proof, and of the highest principles of explanation. The activity of thought involved in this last process Aristotle calls *dialectic*, and has laid down its principles in the *Topics*.

This procedure of *searching out the grounds* is not, in the nature of the case, attended by the same "apodictic certainty," as is that of deducing consequences from the grounds, when the latter are once established. Investigation proceeds from the particular given in perception, and from the ideas current in customary opinion (*ἔνδοξον*), to find the general, from which the particular can then be proved and explained. *Investigation*, therefore, follows a direction the reverse of that taken by deduction; the latter is deductive, the former inductive, *epagogic*. The latter proceeds, proving and explaining, from general to particular; the former, searching and testing, from particular to general.[1] Only the completed science is "apodictic"; science, in its process of coming into being, is epagogic.

In all these investigations and the contrasts that appear in them, the chief question for Aristotle is that with regard to judgments; but in connection with this he treats also *concepts*. As a judgment is proved or deduced, by being concluded from more general judgments, by means of the middle term, so a *concept is deduced or derived* by being formed from a more general concept (the next higher class or *genus*, *γένος*) by adding a particular characteristic mark or *difference* (*διαφορά*). This deduction of the concept is *definition* (*ὁρισμός*). As, however, the deduction of propositions ultimately presupposes most general premises, which cannot be further

[1] This relation of contrariety between deduction and inquiry Aristotle expressed in the statements that that which, as regards the nature of the thing, is the original (*πρότερον τῇ φύσει*), and therefore the general, is for human knowledge the later, that which must be acquired (*ὕστερον πρὸς ἡμᾶς*); and that, on the contrary, that which is for us the most immediate (*πρότερον πρὸς ἡμᾶς*), the particular, is, according to the true essence, the derivative, the later (*ὕστερον τῇ φύσει*).

proved, so, too, definition of lower concepts goes back ultimately to most general concepts which withdraw from all attempts at deduction and explanation. These concepts, also, as well as the highest premises of proof, must be sought inductively;[1] and it seems as though Aristotle looked upon the propositions of highest generality as the elucidations of these most general concepts.

5. Among the text-books which Aristotle left, the two main logical treatises, the *Analytics* and the *Topics*, are those which are most nearly complete by far.[2] This may explain the fact that the logical demands which the Philosopher makes of science are developed so clearly and surely, while, on the other hand, his system as carried out in the form known to us, fulfils in but a lesser measure the expectations thus raised.

For evidently we should expect that a sure statement could be made as to what the Philosopher declared to be those immediately certain, highest propositions or concepts which were to be the result of investigation, and the starting-point of proof and explanation. If, however, we ask for these, we find ourselves in great embarrassment as regards the teaching of Aristotle. Of general propositions there is but a single principle, the *principle of contradiction*,[3] which he set forth as an unprovable major premise, or highest principle for all proofs, partly in the purely logical setting that affirmation and denial of the same combination of concepts reciprocally exclude each other, partly in the metaphysical form that a thing cannot be the same and also not be the same. But aside from this he prefers to call attention to the fact that every department of knowledge has its own ultimate presuppositions, and does not state these more exactly.

If, however, we seek for the highest concepts, — aside from the reference made here also to the particular nature of individual disciplines, — we have the choice between the four "principles" (*ἀρχαί*), or "causes," of the *Metaphysics*, and the "categories," which are designated as the fundamental forms of predication concerning what is, — a choice not decided by Aristotle. In both cases we find ourselves already in the midst of the material as opposed to the formal elements of his teaching.

[1] Over against determination (*πρόσθεσις*), as the deduction of one concept from the higher by adding a new mark, stands therefore abstraction (*ἀφαίρεσις*) as process of formation of class-concepts, — a process which, by continually taking away individual characteristics, gains a concept poorer in contents, but wider in its extent. Formation of concepts is, accordingly, with Aristotle, again completely analytic, while with Plato it had been intuitive. Aristotle was the first to free himself from the optical analogy, in accordance with which the knowing process of thought had been conceived even by Democritus and Plato.

[2] In the case of the *Topics*, this completeness seems even to have been attained.

[3] *Met.* IV. 3 ff.

§ 13. The System of Development.

The impression of something completely new, which the logic of Aristotle makes, as contrasted with all that had previously appeared in Greek science, rests principally upon the capacity for *abstract thought*, presupposed in so high a degree by this separation of the general Forms of thought from every possible content — a separation that evinced his genius. This genius for the formation of conceptions by abstraction was evinced by Aristotle in all departments of his scientific work, and if the "Father of logic" became the philosophic teacher for two thousand years, he owes this success, first of all, to the sureness, clearness, and consistency with which he formed and defined his conceptions. He fulfilled the task set by Socrates, and in so doing created the language of science. The fundamental part of the scientific conceptions and expressions everywhere in use, even to the present time, goes back to his formulations.

With this inclination to abstraction is connected the further fact that Aristotle solved *the fundamental problem of Greek philosophy* — viz. how behind the changing multiplicity of phenomena a unitary and abiding Being is to be thought — by means of a *concept of relation*, that of *development*. His two great predecessors had still been seeking to assign a particular content to the conception of true Being. Democritus had regarded the atoms and their motion, Plato the Ideas and their final causation, as the causes of phenomena, — causes different from the phenomena themselves. Aristotle, however, determined the true reality — that which is — *as the essence which unfolds in the phenomena themselves*. He renounced the attempt to think out as the cause of phenomena something different from them (a second world), and taught that the Being of things which is known in conception possesses no other reality than the sum total of the phenomena in which it *realises* itself. So regarded, Being (*οὐσία*) takes on the character of the *essence* (*τὸ τί ἦν εἶναι*), which constitutes the one, only ground of its individual formations, but is real or actual only in these themselves, and *all phenomenal appearance* or coming into being becomes the *realisation of the essence*. This is the concept of relation by means of which Aristotle overcame the opposition of the Heraclitic and Eleatic metaphysics.

1. In particular, the process of development presents itself to Aristotle as the *relation of Form and Matter* (*εἶδος, μορφή* — *ὕλη*). Plato[1] had declared the world of phenomena to be a mixture of the

[1] The main outlines of the Aristotelian metaphysics develop in the simplest way from that phase of the Platonic metaphysics which is presented in the *Philebus* (cf. above, § 11, 9). Cf. J. C. Glaser, *Die Metaphysik des Aristoteles* (Berlin, 1841).

"unlimited" and of "limitation"; Aristotle holds to the observation that, in everything of the phenomenal world, formed matter lies before us. But for him this matter is, indeed, in itself indefinite, and yet not purely indifferent, empty space, but a corporeal substratum (ὑποκείμενον); for him, this form is not merely the mathematical limit, but the form determined as to its contents by the essence. The matter or material substratum is the possibility of that which, in the complete thing, has become actual or real by means of the form. In matter, therefore, the essential nature (οὐσία) is given only *potentially* (δυνάμει). First, and only by means of the form, does it exist in *reality* or *actuality* (ἐνεργείᾳ, *actu*). *Occurrence*, however, or the natural process, is that process in which the essence passes over from mere possibility, through form, into *actualisation*. The essence has not any second, higher reality beside and apart from the phenomena; it exists only in the succession of its phenomenal manifestations, by means of which it realises its own possibility. The universal is real or actual only in the particular; the particular *is* only because in it the universal realises itself.

With this transformation of the doctrine of Ideas, Aristotle solves the fundamental problem of the theoretical philosophy of the Greeks, viz. that of so thinking Being or what "*is*" that Becoming, or the process of Nature (*das Geschehen*), may be explained from it. From the Hylozoism of the Milesians on to the opposing theories of his two great predecessors, all standpoints of Greek metaphysics are contained as elements in this doctrine of Aristotle. The Being cognised in conception is the general essence, which realises itself in its particular phenomenal manifestations from potentiality on through form, and the process of this realisation is motion. Being is that which comes to existence in the processes of Nature. This self-realisation of the essence in the phenomena, Aristotle calls *entelechy* (ἐντελέχεια).

2. The central point of the Aristotelian philosophy lies, therefore, in this *new conception of the cosmic processes as the realisation of the essence in the phenomenon*, and the respect in which it is opposed to the earlier explanation of Nature consists therefore in *carrying through in conceptions the teleology* which Plato had only set up as postulate, and developed in mythical, figurative form. While the earlier metaphysics had looked upon the mechanical process of pressure and impact as the typical fundamental relation of the cosmic processes, Aristotle regarded as this typical relation the development of organisms and man's building or forming activity. From these two departments he took his examples when

he wished to elucidate the metaphysical character of the cosmic processes.[1]

Nevertheless, the relation of form and matter is not completely the same in these two kinds of purposive processes, and the difference between the two asserts itself everywhere in the carrying out of the Aristotelian fundamental thought. In the case of organic processes, matter and form are the two sides, separable only through abstraction, of one and the same reality identical from beginning to end; even in the germ which in the process of development brings the essence to its unfolding, the matter is already shaped internally by the form. In the case of artistic construction, on the contrary, the material which contains possibility exists at first by itself, and the work of the artist with its end in view is added later to produce the shape by means of motion.

In the latter case, therefore, the development is to be regarded under *four principles*. These are the *Matter*, the *Form*, the *End*, and the *Cause* of what comes to pass or comes to be.

In the former case, on the contrary, the three other principles, as set over against the Matter, are but different expressions for the same thing, since the Form constitutes the Cause and the Result of the process.

We find, accordingly, that when applied to the task of science, this fundamental relation of form and matter is carried out in a twofold way: on the one hand, *individual things* are regarded as self-realising forms; on the other hand, things in *relation to one another* are regarded, the one as matter, the other as form. These two applications of the fundamental principle go through the entire Aristotelian system side by side, and in the general principles of the system they sometimes so collide, that it is only by their separation that apparent contradiction can be cleared away.

3. The former point of view yields the result, that for the Aristotelian conception of the world, in contrast with both that of Democritus and that of Plato, the truly real is the *individual thing*, determined in itself by its form. To it, therefore, belongs primarily the name of *essence* or *substance* (οὐσία). But the essence develops and realises itself in individual determinations, which are partly its states (πάθη), partly its *relations* to other things[2] (τὰ πρός τι). Hence knowledge has these which belong to the thing (τὰ συμβεβηκότα) to predicate of it, while the individual thing itself cannot be predicated of anything else, *i.e.* in the proposition it can be only

[1] Aside from its discussion in the *Metaphysics*, this question is chiefly treated in the *Physics*.

[2] *Met.* XIV. 2, 1089 b 23.

subject and never predicate.[1] Of these modes in which substance manifests itself, or of the predicates that are possible with regard to it, Aristotle enumerates as *categories*, quantity (ποσόν), quality (ποιόν), relation (πρός τι), determination in space and time (ποῦ, ποτέ), action (ποιεῖν), and passion or passivity (πάσχειν); and in addition, also, position (κεῖσθαι) and condition (ἔχειν). This collection (making ten categories inclusive of substance), in which, perhaps, grammatical observations co-operated, is designed to present the *highest classes* or *genera* under which the contents of all possible ideas are to be subsumed. Yet Aristotle made no methodical use of this collection, and his doctrine of the categories acquired, therefore, no importance in his metaphysics, aside from the above-noted relation of substance to its determinations.

When we consider how sharply Aristotle shaped out the scientific conception of substance in its logical and metaphysical character, it may appear strange at the first glance that he has announced neither a methodical principle nor a real principle applying to the nature of the thing, according to which it would be possible to decide what these truly existing individual things, in his sense of the word, are. It is clear only that, on the one hand, he did not regard as essence everything whatever that occasionally appears in experience as a thing separate from others, and, on the other hand, that he ascribed this character to organic individuals, to individual men. It would be in the spirit of his teaching to suppose that he could have spoken of an "essence" only where an inner determination of form constitutes the ground of the coherence of individual characteristics, where, therefore, the knowledge of this essence solves the problem of science — viz. to determine existent reality by the general conception — in so far as the abiding individual thing forms the class-concept for all its particular modes of appearing which show themselves in perception.

But the Socratic-Platonic view of the problem of science brought with it the consequence that Aristotle defined yet again the essence of the individual thing as that through which the individual thing belongs to its *class* or *species*. If substance, as contrasted with its perceptible phenomena and attributes, presents the universal, on the other hand the species (γένος, or again Platonically, εἶδος) is the universal that realises itself in the individual substances. Here, too, the same relation is repeated; the species exists only in so far as it realises itself in individual things as their truly existing essence, and the individual thing exists only as the species comes to its phenomenal manifestation in it. Just for this reason the species also have the claim to the metaphysical significance of being essences (οὐσίαι). By this means the conception of substance with Aristotle contains a peculiarly changeable double meaning. The substances proper are individual things as determined in conception, but as a second kind of substances (δεύτεραι οὐσίαι)[1] we have the species which constitute the essence of individual things, just as these latter constitute the essence of perceptible phenomena.

[1] *Analyt. Post.* I. 22, 83 a 24.

Scientific knowledge is directed partly toward the conception of the individual thing, partly toward the conception of the species. Each of these realises itself in phenomena, and here there is found much which, as belonging directly to the conception (συμβεβηκότα in the narrower sense), can be deduced from it, but also much which, as foreign to the conception, appears in the particular only incidentally, as a consequence of the matter in which the conception realises itself; and of this which is conceptionally indifferent or "*accidental*" (συμβεβηκότα in the usual sense of the word) there is, in according to the presuppositions of the Aristotelian doctrine, no "theory," no scientific knowledge. Hence Aristotle also — and in this lies a characteristic limit of the ancient study of Nature — disclaimed on principle any scientific insight into the necessity of law, with which even the most individual and most particular follow from the general. This individual instance he declared rather to be something really accidental, not to be explained by conception, and limited scientific consideration to that which is valid universally (καθ' ὅλου), or at least *for the most part* (ἐπὶ τὸ πολύ).

4. In this we see decidedly a holding fast to the tradition of the doctrine of Ideas: the same attitude discloses itself also in another direction. If, that is, the relation of matter and form is affirmed between the different things or classes of things, each of which is in itself already actual as formed matter, this relation becomes *relative* in so far as the same thing which in contrast with a lower is to be regarded as form, appears as matter when contrasted with the higher. In this aspect the conception of development becomes the principle of an *ordering of things according to their metaphysical values*, considering these things as rising in uninterrupted succession from the lowest formations of matter to the highest forms. In this scale every class of things is assigned its metaphysical dignity by means of the test that it is regarded as form of the lower and as the material of the higher.

[1] So, at least, they are called in the treatise on categories, the genuineness of which is, to be sure, not entirely uncontested; yet the designation is quite in the line of Aristotle's teaching taken as a whole.

This system of individual things, and of their classes, has both a lower and an upper limit, the former in mere matter, the latter in pure form. Wholly unformed *matter* (πρώτη ὕλη) is, of course, in itself, as mere possibility, not actual; it never exists without being somehow actualised as form. Yet it is not merely that which is not Being (the Platonic μὴ ὄν, or empty space), but the accessory cause, which evinces itself as such through real effects (τὸ οὗ οὐκ ἄνευ, *sine qua non*). Its reality is shown in the fact that the forms do not completely realise themselves in individual things, and that from it side-workings (παραφυάς) proceed which are without connection with the purposefully active form, or even in contradiction with it. It is, therefore, from matter that the fact is explained that the forms realise themselves only potentially (κατὰ τὸ δυνατόν): from matter arises that which is conceptionally indeterminate (συμβεβηκός), or the accidental (αὐτόματον), — the lawless and purposeless in Nature. Hence the Aristotelian doctrine distinguishes, in its explanation of Nature, as did Plato in the *Philebus*, between *final causes* (τὸ οὗ ἕνεκα) and *mechanical causes* (τὸ ἐξ ἀνάγκης): the former are the forms which realise themselves in matter; the latter reside in matter, out of which proceed side-workings and counter-workings. Thus the cosmic processes are regarded by Aristotle ultimately under the *analogy of the plastic artist*, who finds in the hard material a limit to the realisation of his formative thought. This material is, indeed, so far related to the Idea, that the Idea can present itself in it, at least in general, and yet it is in so far a foreign, and thus an independent, element, that it in part opposes itself as a *retarding principle* to the realising of the forms. Ancient philosophy did not overstep this *dualism* between the purposive activity of the form and the resistance of matter; with the demand of the teleological view of the world it united the naive honesty of experience, recognising the necessity, purposeless and contrary to design, which asserts itself in the phenomena of the actual world.

5. It is, on the contrary, self-evident in the case of pure form, since its conception is immediately connected with that of true actuality, that it possesses in itself the highest actuality without needing any matter whatever. The assumption of such a *pure Form* is necessary according to the system of Aristotle, for the reason that matter, as the merely possible or potential, has in itself alone no principle of motion or of generation. We cannot, indeed, speak of a beginning of motion in time in this system of development, which centres about the conception of self-realising essence, since *motion* must be *as eternal as Being* itself, to the essential characteristics of which it belongs; but yet we must point out that property in Being

which is the *cause* of motion. This is, however, everywhere the notion of the form upon the matter, in which, with reference to individual things, Aristotle distinguishes two elements, viz. an impulse to be formed inherent in matter, and the purposive motion proceeding from the form itself. But in so far as the form is itself moved, it must be regarded in turn as matter for a higher form; and, since the same thing is true of the latter, and so on, motion would not be understood if the chain of its causes did not have a first link in the pure Form which is itself not moved. The *first mover* (πρῶτον κινοῦν) is itself unmoved. Hence, in the case of its action upon matter, only the first of the two elements above mentioned comes into consideration. It operates, not by means of its own activity, but only by means of the fact that its absolute actuality excites in matter the impulse to form itself according to it (the prime mover), not as a mechanical, but as a *pure, final cause* (κινεῖ ὡς ἐρώμενον, οὐ κινούμενον).

The prime mover, or the *pure Form*, means, then, in the Aristotelian metaphysics, quite the same thing as the Idea of the Good in the Platonic, and for it alone Aristotle employs all the predicates of the Platonic Idea. It is eternal, unchangeable, immovable, wholly independent, separated (χωριστόν) from all else, incorporeal, and yet at the same time the cause of all generation and change. It is the *perfect Being* (ἐνέργεια) in which all possibility is at the same time actuality; of all that exists it is the highest (τὸ τί ἦν εἶναι τὸ πρῶτον) and best — *the deity*.[1]

The highest Being or Essence, thus determined according to its relations, is also characterised by Aristotle as regards its content. Such an activity, related to no possibility, resting purely within itself (*actus purus*), is thought, and thought alone; not, of course, that mental process which applies itself to individual things and their changing phenomena, but *the pure thought*, which is employed with itself and its eternal nature; that thought which presupposes nothing else as an object, but has itself for its constant, unchanging content, the thought of thought (νόησις νοήσεως), — *self-consciousness*.

In these conceptions, so determined, dwells a significance of mighty import for the world's history. On the one hand, mono-

[1] The exposition of this course of thought from which the later, so-called *cosmological proof for the existence of God* essentially arose, is found principally in the twelfth book of the *Metaphysics*. In his popular dialogues Aristotle amalgamated it with determinations of worth, by giving it the following form: the distinction between the imperfect and the more perfect which things of experience show presupposes the reality of a most perfect. Cf. Schol. in Arist. 487 a 6.

theism was herewith conceptionally formulated and scientifically grounded; on the other hand, it passed over from the pantheistic form, which it had with Xenophanes, and even still with Plato, into the *theistic* form, since God is conceived of as a self-conscious being different from the world. But besides this *transcendence*, the doctrine that *God is the absolute mind or spirit* (*Geist*) involves at the same time the metaphysical advance that the *immaterial*, the incorporeal pure Being, is made equivalent to the spiritual. *Spiritual monotheism* is the ripe fruit of Grecian science.

This divine spirituality is conceived of in a purely intellectualistic manner; its essential nature is solely thought directed upon itself. All doing, all willing, is directed toward an object, distinct from the doer or the willer. The divine mind, as pure form, needs no object; he is sufficient for himself, and his knowledge of himself (θεωρία), which has no other goal than itself, is his eternal blessedness. He acts upon the world, not through his motion or activity, but through the longing for him which the world has. The world, and what takes place in it, arises from the *longing of matter after God.*

6. Matter (the merely potential) is that which is moved without itself moving anything; God (the solely actual) is that which moves without itself being moved; between the two is the entire series of things, which suffer motion as well as call it forth; and these, taken as a whole, are designated by Aristotle as *Nature* (φύσις; equivalent to "world" according to present usage). Nature is, accordingly, the *connected system of living beings viewed as a unity*, in which matter developing ever higher, from form to form, through all the multitude of its particular shapes, approaches the resting Being of the deity, and imitating this, potentially takes it up into itself.

But in this connection, the *graded scale of things*, in the exposition of which the Aristotelian *philosophy of Nature* consists, shows a twofold standard for estimating relative worth. The scale is therefore developed in two different series, which find their union only at the end in a manner which is, indeed, consistent with the fundamental conceptions of the system, but which is, nevertheless, in itself surprising.

In the conception of the deity, according to Aristotle, there meet, as chief characteristics, that of Being, resting within itself, and remaining like itself (ἀΐδιον), and that of spirituality or rationality (νοῦς). Hence the individual "forms" of Nature take a higher rank in proportion as they contain the one or the other of these elements which constitute the highest worth. In the one line, the series of phenomena ascends from the unordered change of the terrestrial world to the ever-uniform revolution of the stars; in the

other line, we are led from the merely mechanical change of place to the activities of the soul and its most valuable development, rational knowledge; and both series have the same terminus, inasmuch as the stars that are in most uniform motion are conceived of as the highest intelligences, the most rational spirits.

7. In relation to the first of these two aspects Aristotle, taking up the astronomical views of Plato, adopted the old Pythagorean antithesis between the earthly and the heavenly world, and it is to be ascribed to the victorious influence of his philosophy that the maturer ideas of the later Pythagoreans did not prevail in antiquity, in spite of their recognition by those learned in astronomy in the following period. As the whole universe has the most perfect form, everywhere the same, — that of the sphere, — so among all motions the most perfect is the *circular motion*, which returns into itself. This belongs to the *æther*, the celestial element, out of which the *stars* are formed, and the transparent hollow spheres, in which the stars move with ever-unchanged uniformity. Farthest out, and in an absolute changelessness that comes nearest the divine Being, is the heaven of the fixed stars, beneath that the planets, the sun, and the moon, whose apparent deviation from the circular movement was explained by a complicated theory of hollow spheres placed one within another, the theory which Eudoxus, an astronomer sustaining a close relation to the Academy, and his disciple Callippus had propounded.[1] The stars themselves were, however, for Aristotle beings of superhuman intelligence, incorporate deities. They appeared to him as the purer forms, those more like the deity, and from them a purposive, rational influence upon the lower life of earth seemed to proceed, — a thought which became the root of mediæval astrology.

The lower "forms" of terrestrial life, on the other hand, are the *four elements* (of Empedocles), which are characterised by the tendency to *rectilinear* motion. But rectilinear motion involves at once the opposition of two tendencies, — the centrifugal, which belongs to Fire; and the centripetal, which belongs to Earth. The first of the two tendencies is also attributed in a lesser degree to Air, and the latter in a lesser degree to Water, and so the central mass, our earth,

[1] Schiaparelli, *Le Sfere Omocentriche di Eudosso, Callippo, ed Aristotele* (Milan, 1876). Cf. also O. Gruppe, *Die kosmischen Systeme der Griechen* (Berlin, 1851). As a principle of method, the following prescription for the proposal of these questions has been preserved from the Old Academy, typical of the mathematico-metaphysical presupposition of the speculative explanation of Nature; viz. to discover the uniformly ordered motions of the stars by means of which their apparent motions may be explained (διασώζειν). Simpl. in Arist. *De Cœlo* (Karst.), 119.

in a state of rest as a whole, is composed in such a way that about the earthy material is disposed at first Water and then Air, while Fire strives toward the celestial outer world. The *changing combinations*, however, into which the four elements enter, constitute the imperfect, that which cannot be conceived, that which is *accidental* in the terrestrial world. Here the side-working and counter-working of matter are stronger than in the celestial region where the mathematical determinateness of undisturbed circular motion realises itself.

8. In the changes of the terrestrial world, *mechanical, chemical,* and *organic* processes are built up upon each other in such a way that the higher always presupposes the lower as its condition. Without change of place (φορά or κίνησις in the narrowest sense), change of qualities (ἀλλοίωσις) is not possible, and the organic transformation which consists in growth and decay (αὔξησις — φθίσις) is not possible without both the preceding. The higher form is, however, never merely a product of the lower, but is something self-subsistent, by means of which those lower forms can be employed only in a purposive manner.

From this develops an important principle in which Aristotle is opposed to Democritus, — a principle which the former esteemed very highly in regard to detailed research in natural science, and used a great deal, even with express mention. Aristotle[1] protests against the attempt to reduce all qualitative to quantitative determinations, — an attempt ultimately accepted even by Plato. He combats the contrasting from an epistemological and metaphysical point of view, of secondary and primary qualities; to the former he accords not a less but rather a higher reality than to the latter, and in the succession of "forms" the inner conceptional character or determination is evidently of more worth for him than the outer determination which is capable of mathematical expression.[2] The attempt of Democritus to raise to the rank of a principle for explaining the world the reduction of all qualitative to quantitative differences, found its victorious opponent in Aristotle and his doctrine of the "entelechies," the inner Forms of things. The keen logician saw that it is never possible to develop qualities analytically from quantitative relations, and that, on the contrary, the quality (by whichever sense it may be perceived) is something new, which presupposes the entire body of quantitative relations as its occasion only.

[1] Cf. especially the third book of the treatise *De Cœlo*.

[2] For this reason Aristotle also characterises the elements not only by the different tendencies of their motions, but also by primitive qualities; and he develops them out of a meeting of the contrasted pairs, warm and cold, dry and moist. *Meteor.* IV. 1, 378 b 11.

9. With logical consistency the same view is applied by Aristotle to the relation of the psychical and bodily activities; the latter are but the matter for which the former furnish the forms. There is, with Aristotle, no such dependence of psychical upon corporeal functions as Democritus, in accordance with the procedure of the older metaphysics, and even Plato, in part (in the *Timæus*), had taught. For Aristotle the *soul* is rather the *entelechy of the body, i.e.* the Form which realises itself in the motions and changes of the organic body. The soul is the cause of bodily formation and motion, a cause acting from ends; itself incorporeal, it is yet actual or real only as the power moving and controlling the body.

But the psychical life itself is also, according to Aristotle, built up as it were in successive grades or strata, each of which, in turn, presents matter for the higher. The first Form of organic life is the *vegetative soul* (θρεπτικόν), which "forms" the mechanical and chemical changes to the purposive functions of assimilation and propagation. The soul of *plants* is restricted to this purely physiological significance of a vital force; to this is added in the whole animal kingdom,[1] the *animal soul*, whose constitutive characteristics are spontaneous motion in space (κινητικὸν κατὰ τόπον) and sensation (αἰσθητικόν).

The purposive, spontaneous motion of the animal body proceeds from *desire* (ὄρεξις), which arises from the *feelings* of pleasure and pain, in the form of an effort to procure or shun. But these presuppose everywhere the *idea of their object*, and are at the same time bound together with the thought that this object is worthy to be striven for or to be shunned. The view of the dependence of all desire upon ideas, peculiar to all Greek psychology, is so strong with Aristotle, that he even sets forth these relations expressly, according to the logical function of judgment and inference. In the practical sphere, also, there is affirmation and denial,[2] there is the process of drawing a conclusion from a general aim to a particular mode of action.

The proper seat, or home, as it were, of the entire animal life of ideation is found in *sensation*. In the physiological psychology which treats this subject[3] Aristotle has used in comprehensive

[1] Aristotle's *History of Animals* (cf. J. B. Meyer, Berlin, 1855) treats in exemplary manner, and with admirable care of detailed investigation, anatomical, physiological, morphological, and biological problems, and also the questions of system. The parallel work on plants is indeed lost, but in compensation we have the work of his friend and disciple Theophrastus.

[2] *Eth. Nic.* VI. 2, 1139 a 21.

[3] Besides the sections which treat this subject, in the treatise on the Soul, the smaller treatises attached to this are also to be compared, viz: on *Perception*, on *Memory*, on *Dreams*, etc.

manner all the particular information and theories which his predecessors, especially Democritus, possessed on this point; but he overcame the common inadequacy of all earlier doctrines by conceding a much greater importance to the self-activity of the soul in the process in which perception arises. Not satisfied to adopt the old theory that perception consists in a co-operation of object and subject, he pointed to the *unity of consciousness* (*Einheitlichkeit*, μεσότης), with which the animal soul unites what is given in the individual perceptions of the individual senses to form collective perceptions, or perceptions that perceive the object as a whole, and in so doing grasps also the relations of number, situation, and motion. Thus above the individual senses we must assume the *common sense* (κοινὸν αἰσθητήριον),[1] which is also the seat of recollection, both of the involuntary or memory (μνήμη) and the voluntary (ἀναμνήσις), by virtue of the circumstance that in it the perceptions remain as imaginative representations (φαντασίαι); at the same time, however, it is also the seat of our knowledge of our own states.[2]

10. Vegetative and animal souls, however, form in *man* but the matter for the realisation of the Form peculiar to him, — the *reason* (νοῦς — διανοεῖσθαι). By its operation, impulse (ὄρεξις) becomes will (βούλησις); imaginative representation becomes knowledge (ἐπιστήμη). It comes as a something new and higher ("from without," θύραθεν) to all the psychical activities which develop from perception even among the beasts. Aristotle expressed this relation by designating the pure rational activity itself as the *active reason* (νοῦς ποιητικός), and, on the contrary, as *passive reason* (νοῦς παθητικός), the material of perceptions, which arises from the bodily existence, furnishes possibilities and occasions for reason, and is subsequently worked over and formed by it.

Accordingly the "passive" reason signifies the *individual phase* (*Erscheinungsweise*) given in the natural disposition of the individual man, and determined by the occasions of his personal experience, — the "active" reason, on the contrary, signifying the pure reason considered as a unity in its nature and principles (*principielle Einheitlichkeit*), common to all individuals. The latter is imperishable, as it is without beginning, while the former passes away with the

[1] With regard to physiological localisation Aristotle found the psychical activity to be attached to the vital warmth (ἔμφυτον θερμόν), which as animating breath (πνεῦμα) is mingled with the blood, and his school developed this doctrine still further. Cf. H. Siebeck, *Zeitschrift für Völkerpsychologie*, 1881, pp. 364 ff. In consequence of this he regarded the heart as the seat of the common sense and so supplanted the better insight with which Alcmæon, Diogenes of Apollonia, Democritus, and Plato had recognised the importance of the brain.

[2] This beginning for a doctrine of *inner perception* is found in Arist. *De. An.* III. 2, 425 b 12.

individuals in whom it appears. Personal immortality is put in question by this conclusion just as in the Platonic *Timæus*, where it was claimed only for the "rational" "part" of the soul, *i.e.* that part which is everywhere alike and impersonal. It is clear that we have here no longer to do with empirical psychology, but with such doctrines as have been taken from the systematic connection of the whole work, and grafted upon psychology in consequence of ethical and epistemological postulates.

11. In the conception of the reason as the Form peculiar to the human soul, Aristotle found the key to the solution of that feature of the *ethical* problem which even Plato had sought in vain, *i.e.* that of the content of the Good. Man's *happiness* or *well-being* (εὐδαιμονία), which in Aristotle's system also is regarded as the supreme end of all endeavour (τέλος), is, indeed, dependent in part upon external fortune; it is not complete until this has afforded its good things; but ethics has to do only with that which stands in our power (τὰ ἐφ' ἡμῖν), only with the happiness which man gains by his own activity (πρακτὸν ἀγαθόν). Every being, however, becomes happy by the unfolding of his own nature and of his own peculiar activity — *man*, therefore, through *reason*. The *virtue* of man is, accordingly, that habitude or permanent state of mind (ξις) through which he is made capable of the practice of rational activity; it develops out of the endowments of his natural disposition, and has for its fruit, satisfaction, pleasure.

As in the animal soul impulse and perception were to be distinguished as different expressions, so, too, the reason develops itself, partly as rational action, partly as rational thought; as perfection, on the one hand, of the character or disposition (ἦθος), on the other, of the faculty of intelligence (αἰσθάνεσθαι in the broadest sense of the word). Thus there result, as the excellence or ability of the rational man, the *ethical* and the *intellectual* or *dianoetic virtues*.

12. The ethical virtues grow out of that training of the will by which it becomes accustomed to act according to right insight (φρόνησις — ὀρθὸς λόγος). It enables man, in his decisions, to follow practical reason, *i.e.* insight into what is correct or proper. With this doctrine Aristotle transcends the principles of Socrates, — with evident regard to the facts of the ethical life: not that he assigned to the will a psychological independence as over against knowledge; the point, rather, is, that he gave up the opinion that the determination of the will arising from rational insight must of itself be stronger than the desire arising from defective knowledge. Since experience often shows the reverse of this, man must gain by

practice that self-control (ἐγκράτεια) by means of which he follows under all circumstances that which is rationally known, even against the strongest desires.[1]

While to ethical virtue in general belong natural disposition, insight, and habitude, the individual virtues are distinguished by the different relations of life to which they refer. A systematic development of these is not given by Aristotle, but we have, rather, a comprehensive and delicate treatment of the individual virtues. The general principle is that rational insight always finds the *right mean* between the unreasonable extremes to which the natural impulsive life leads. Thus courage is the right mean between cowardice and rashness. A particularly detailed exposition is given to friendship[2] as the common striving for all that is good and beautiful, and also to justice as the basis of the political community.

13. For Aristotle, like Plato, was convinced that the moral excellence of man, since it always relates to activities which prosper in the life of a community, can find its fulfilment only in the life of a community; for him, too, there is ultimately no perfect moral life outside the *state*, the essential end of which was considered by Aristotle, also, to be the ethical training of its citizens. As, nevertheless, in the case of the individual man, virtue ought to develop out of the natural disposition, so the political relations also are treated by Aristotle from the point of view, that the historically given relations are to be used for the highest possible fulfilment of that highest end.

Every constitution is right if the government has the ethical weal of the community as its highest goal; every constitution has failed if this is not the case. The good of the state, therefore, does not depend upon the external form, which is defined by the number of those who rule.[3] The rule of a single individual may be right as a kingdom (βασιλεία), bad if a despotism (τυραννίς); the rule of few may be good if an aristocracy of culture and disposition, if an oligarchy of birth or property, bad; the rule of all as a republic of law and order (πολιτεία) may be good, as mob-rule (δημοκρατία), bad. With profound political intelligence, Aristotle brings together in these expositions the experiences of Grecian history, and on the ground of these enters upon the *philosophy of*

[1] In the polemic against the Socratic doctrine which Aristotle brings forward in this line, *Eth. Nic.* III. 1–8, are developed the first beginnings of the problem of freedom.

[2] In the eighth book of the *Nicomachæan Ethics*.

[3] A point of view which the dialogue the *Statesman*, passing under Plato's name, had already emphasised, while Plato himself in the *Republic* constructed the "bad" constitutions from psychological analogies of a predominance of the lower parts of the soul.

history in giving intimations as to the necessity with which individual forms of constitutions pass over into one another and develop out of one another.

After these presuppositions we can understand that Aristotle could not think of projecting in detail the constitution of an ideal state in Plato's manner. He contented himself with a critical emphasising of those elements which had proved requisite in individual constitutions for fulfilling the general task of the state. In this connection he agrees with the Platonic demand for a public system of education; the ethical community must itself take the care of fitting for their place the elements of which it will in future consist, and it is the task of education (in the treatment of which the fragment of the *Politics* breaks off) to lead man out of his rude state of nature with the help of the noble arts, to ethical and intellectual culture.

14. To the practical activity of the reason (λογιστικόν), in the broader sense of the word, Aristotle reckoned also "making" (ποιεῖν) in addition to "acting" (πρᾶξις); yet, on the other hand, he made so great distinction between this creative activity, which presents itself in *art*, and the action directed toward the ends of daily life, that he occasionally set the science of art, poietic philosophy, as a third independent science, side by side with the theoretical and practical. Of this poietic philosophy, there is preserved besides the *Rhetoric* only the fragment of his theory of the art of poetry, under the name of the *Poetic*. This sets out, indeed, from principles relating to the nature of art in general, but in its particular subject offers only the outlines of a theory of tragedy. In this, such peculiar relations of this science of art to the two other principal parts of philosophy appear, that it becomes difficult to subordinate this branch under either of the other two.

Art is imitative production, and the arts are distinguished as well by the objects which they imitate as by the material with which they imitate. The objects of poetic art are men and their actions; its means are language, rhythm, and harmony. Tragedy, in particular, represents an important action as performed immediately by speaking and acting persons.[1]

But the purpose of this imitative representation is an *ethical* one: the passions of man, in particular in the case of tragedy, *fear* and *sympathy*, are to be so excited, that by their excitation and enhancement *purification* of the soul (κάθαρσις) from these passions is brought about.

[1] *Poet.* 6, 1449 b 24.

On the doctrine of the *Catharsis*, which became so important for the later theory of art, and on the literature concerning it, cf. A. Döring, *Die Kunstlehre des Aristoteles* (Jena, 1876).

The attainment of this end is, however, accomplished in such a way, that in artistic representation the particular is brought to our view, not as a particular, but in its universal nature or essence. Art, like science, has for its object the universal in its particular realisation; it offers a kind of knowledge, and with this the pleasure which attends upon knowledge.[1]

15. The highest perfection of its development finally is achieved by the rational nature of man in *knowledge*. The *dianoetic* virtues are the highest, and those which bring complete happiness. The activity of the *theoretical reason* (ἐπιστημονικόν) is directed to the immediate apprehension of the highest truths, *i.e.* of the conceptions and judgments which the inductive search of scientific investigation only leads up to without being able to prove, and from which all deduction must take its beginning (cf. § 12, 4).

But knowledge of these, the full unfolding of the "active reason" in man, is again designated by Aristotle as a "*beholding*" (θεωρία); and with this beholding of the highest truth man gains a participation in that *pure thought*, in which the essence of the deity consists, and thus, also, in the eternal *blessedness* of the divine self-consciousness. For this "beholding" which exists only for its own sake and has no ends of will or deed, this wishless absorption in the perception of the highest truth, is the blessedest and best of all.

[1] *Poet.* 9, 1451 b 5.

PART II.

THE HELLENISTIC-ROMAN PHILOSOPHY.

As regards the general literature, the same works serve for this part that were cited at the beginning of Part I.

WITH the age of Aristotle, Grecian civilisation stepped out from its national restrictions and into the great general movement in which the peoples of antiquity that dwelt about the Mediterranean, through interchange and adjustment of their ideas, became fused into one common civilisation. This process began through the union of Oriental with Greek thought, in the Hellenistic states of Alexander's successors. It found its external completion in the Roman Empire, its internal completion in Christianity. Hellenism, Romanism, and Christianity were the three stages in which the world's future civilisation developed from antiquity.

The intellectually determining element in this union was Greek science, and herein consists its significance for the world's history. It became, like Greek art, the common possession of ancient civilisation. To it were joined step by step the highest movements in the inner life of the peoples, and it became the forming power for all the longings and impulses that lived within their souls. It was with the fall of its political independence, with its absorption into the Empire, that the Greek nation bought the accomplishment of its task of civilisation; by their dispersal over the world the Greeks became the teachers of the world.

But in connection with this entrance into more extended relations, Greek science experienced a separation of the different elements which were united in it. Together with the purely theoretical interest in which it had originated, and which had found so clear an expression in the personality and teaching of Aristotle, a practical interest had in time developed, which sought in science the conviction that should govern life. In Plato's philosophy the two were inseparately fused together, but now these two tendencies of science became separated.

Scientific thought, which had come to a knowledge of its own processes in the Aristotelian logic, had arrived at the consciousness

of fundamental conceptions, with the aid of which it could use the abundance of phenomena. The principal opposing theories of the interpretation of the world had developed in the great systems, and in this way a fixed frame or setting was formed for the scientific treatment of detail. But beginning, as it did, with so slightly extended a knowledge of detail, the more successful Greek science was in the development of principles, the more it now experienced a crippling, at once of metaphysical interest and metaphysical force.

In consequence of this, however, the theoretical tendency of science was toward details, and the fundamental scientific character of the Hellenistic-Roman time is *erudition* and the *development of the special sciences.* The individual man of science, by entrance into one of the great schools, gained a firm support of collective opinion, and a ruling principle for the treatment of separate questions and subjects which interested him. And indifference toward general metaphysical theories was the greater, the more it appeared that fruitful investigation in special provinces, extension of knowledge of facts, and comprehension of special departments of science were possible, independently of the strife of metaphysical systems. The separation of problems, which had been completed typically in the Aristotelian teaching and school, led necessarily to specialisation, and the purely theoretical interest in knowledge for its own sake developed, during the Hellenistic-Roman period, essentially in the individual sciences. The great *savants* of later antiquity stand, it is true, in loose relations with one school or another, but they always show themselves indifferent to metaphysics. So it happens that during this time production, so far as the theoretical principles of philosophy were concerned, was extremely small, while investigation into mathematics, natural science, grammar, philology, literary and general history, had rich and comprehensive results to record. With the great mass of those names which are reckoned as "philosophers," whether heads of schools or associates in the schools, and which are continued in the schematic treatment of the "*History of Philosophy,*" only literary-historical notices are connected, as that they worked specially in this or that department; or it may be personal information, of no importance to philosophy, as that they attached themselves to this or that one among the earlier teachers, — almost never do we find any formation of new and original conceptions. So far as theoretical knowledge was concerned, this period turned the old problems of the Greeks hither and thither, and moved along the track which it found already laid down.

So much the more powerfully, during these centuries of appropriation and elaboration, did the *practical significance of philosophy* unfold itself. The need of a scientific doctrine of the ends of human life, of such a wisdom as should guarantee the happiness of the individual, could but become more urgent as the ideal structure of Greek life fell in pieces, as the religion of the people sank ever more and more to an external tradition, as the crumbling political life, robbed of its independence, no longer awakened devotion, and the individual in his inner life felt thrown back upon himself. Thus *wisdom for the conduct of life* became the fundamental problem of the philosophy which followed that of the Greeks, and the narrowing in the statement of the philosophical problem which Socrates, and after him the Cynic and Cyrenaic schools of Sophistic thought, had begun, is the general character of the succeeding period.

This did not exclude general theoretical doctrines and their sharply championed contests from assuming airs of great importance during this period; but, on the one hand, they met with no original interest for their own sake, and consequently developed only in the directions which were determined by the real end in view, *i.e.* that of wisdom for the conduct of life; on the other hand, they were lacking in originality, they were throughout only the old traditions shifted about, conditioned by the fundamental practical thoughts. Even such comprehensive systems as the Stoic and the Neo-Platonic work only with the conceptions of Greek philosophy, in order to gain a theoretical basis for their practical ideal. The key to their theoretical doctrines lies always in the fundamental practical conviction, and in so far they are all of them characteristic types of the mingling of problems.

With this predominance of practical importance is connected the fact that the dependence of philosophy upon the general movement of civilisation, which had already with the Sophists made its entrance into the quiet circle of disinterested investigation, became in the Hellenistic-Roman period a permanent phenomenon, and this appears most decisively in the changing attitude of this philosophy toward *religion.*

The development which Greek philosophy had taken, and the ever more sharply pronounced opposition to the religion of the people into which it had come, brought with it the result that the special task of that wisdom for the conduct of life which the post-Aristotelian philosophy sought, was to find a *compensation for religious faith.* The cultured world, which had lost the support afforded by religion, and was obliged to give up that of the state also, sought it in philosophy. As a result, the point of view of the Hellenistic-Roman wisdom for the conduct of life was primarily that of *individual morality,* and the philosophy which busied itself

with this had, consequently, a thoroughly *ethical* stamp. The sharpness of the opposition of this individualistic ethics to religion appears most clearly among the Epicureans. But in the other schools, also, the doctrines of the deity have a purely ethical, or perhaps a theoretical interest, but none that is specifically religious.

This essentially ethical development of philosophy reached its completion in Greece, especially, indeed, in Athens, which, amid all the spread of Greek culture eastward and westward, formed for centuries the centre of scientific life. But soon new centres particularly for erudite detailed investigation, arose in the great libraries and museums, in Rhodes, in Pergamum, in Alexandria, in Tarsus, in Rome, and later, in Antioch and Byzantium. Of these, *Alexandria* became especially important, where not only did elaborative erudition experience so typical a development, that the entire direction of this period is generally called "literary-historical" in accordance with it, but where, also, the philosophical direction of the time experienced its decided change.

For as time went on philosophy could not remain indifferent to that deep feeling of dissatisfaction which had seized the ancient world in the midst of all the glory of the Roman Empire. This huge empire offered to the peoples which it had welded together into a mighty unit, no compensation for the loss of their national independence; it granted them neither inner worth nor outer fortune. The draught from the life of earth had become insipid to ancient peoples, and they thirsted after religion. So they groped after the different cults and religious practices which individual peoples had brought with them, and the religions of the Orient became mixed with those of the Occident.

Into this movement philosophy was the more drawn, the more it became clear that it could not satisfy the cultured man by the presentation of its ethical ideal of life, — could not secure for him the promised happiness. It followed then — at first, in Alexandria — that the mingling, surging flood of religious ideas emptied itself into philosophy, which now sought to build up upon a scientific basis, not only an ethical conviction, but a religion as well. Philosophy employed the conceptions of Greek science to clarify and put in order religious ideas, to give to the importunate demand of religious feeling an idea of the world that should be satisfactory to it, and so created the *systems of religious metaphysics*, in more or less intimate connection with the contending religions.

Accordingly, in the Hellenistic-Roman philosophy there are two distinct periods to be distinguished, the *ethical* and the *religious*. The last century B.C. is to be designated as the time in which the one gradually passed over into the other.

CHAPTER I.

THE ETHICAL PERIOD.

THE two schools of the great masters of Attic philosophy, the *Academic* and the *Peripatetic*, followed the tendency of the time which separated science into the two branches, ethical philosophy and learned investigation. While in the first generation of the Academy — that contemporary with Aristotle — a Pythagoreanising metaphysics had predominated, this made room in the next period for popular moralising (cf. p. 101). In the Lyceum, indeed, *Theophrastus*, and after him, *Strato*, held fast to the development and re-shaping of the Aristotelian metaphysics, but the associates of Theoprastus, *Dicæarchus*, *Aristoxenus*, and others, as well as Theophrastus himself, turned to literary-historical studies and to natural science. Later, the Peripatetics had a great share in the Alexandrian erudition, and the history of philosophy especially found in them its most industrious workers. But in philosophy itself they played only the conservative rôle of defending the system of their school against the attacks of the others, especially upon the ethical domain, and the new edition of the Aristotelian works by *Andronicus* gave new stimulus for a zealous reproduction of his teaching. Paraphrases, commentaries, excerpts, and interpretations formed the chief occupation of the later Peripatetics.

The Academy and Lyceum were, however, injured in their working by the two schools which were founded toward the end of the fourth century, and which owed their great success to the fact that they formulated the tendency of the time toward the practical wisdom of life with the clearness and impressiveness of one-sidedness: namely, the *Stoic* and the *Epicurean*.

The first was founded in the Στοὰ ποικίλη by *Zeno*, a native of *Citium* in Cyprus, and had, both in his time and in that of his successor, *Cleanthes*, more likeness to Cynicism than in the time of its third head, *Chrysippus*, who succeeded in turning the school into a more scientific course. *Epicurus*, on the contrary, founded a society which made the Hedonistic principle, in a refined and intellect-

ualised form, its centre, but developed only a slight degree of scientific vitality. While numerous adherents were won to its social-ethical principle then established, and to the view of the world connected with it, as these were continued through antiquity and especially in the Roman world, the school remained decidedly more unfruitful scientifically than the others, as well in the special sciences as in philosophy. Its doctrines have been presented in an interesting manner by the Roman poet, *Lucretius*.

These four schools continued side by side in Athens for centuries, and in the time of the Empire they were still maintained in various chairs of instruction, and formed there a sort of university; but only in the Academy, and here only with great gaps, can a succession of heads of the school be traced; while the tradition in the case of the Stoa and the Epicureans breaks off with the first century B.C., and for the Lyceum soon after that time.

At first, however, these *four schools* contended with each other in the liveliest fashion during the third and second centuries B.C., and it was especially in ethical questions, and in metaphysical, physical, and logical questions only in so far as connected with the ethical, that they sought to bear away the palm from one another.[1]

But, moving along side by side with the dogmatic doctrines during the whole period was another tendency, which, like the Stoic and Epicurean philosophy, originated in the teaching of the Sophists: namely, *Scepticism*. It did not, indeed, take on the form of an association in a school, but it, too, was *brought together into a systematic form*, and found an *ethical culmination*. Such a concentration, in accord with the spirit of the times, of the negative results of the teaching of the Sophists, was achieved by *Pyrrho*, whose doctrines were set forth by *Timon*. This Sophistical scepticism had the triumph of obtaining possession of Plato's grove for a time; for, if the *Middle Academy* did not make this doctrine fully its own, it made it a weapon for combating Stoicism and grounding its own ethics. In this phase of the development of the Academy appear the two heads of the school, *Arcesilaus* and *Carneades*, who were separated by about a century. In after time, when the Academy again rejected Scepticism, this doctrine met with sympathy principally among the *empirical physicians*, among whom, even at the end of this period, *Ænesidemus* and *Agrippa* are to be mentioned. A complete collection of the doctrines of the Sceptics, made at a much later time, is preserved in the works of *Sextus Empiricus*.

[1] Cicero in his philosophical dialogues gives vivid pictures of these school controversies, with a dextrous use of the original sources.

But the deeper significance of this Scepticism was that it brought to expression the fundamental frame of mind which had seized the entire ancient civilisation as it had once seized that of Greece, — a frame of mind at variance with the true ideal import and content of that civilisation; and the same lack of the spirit of decided conviction found only another form in the *Eclecticism* which began to develop in the second half of the second century. With the extension of the schools in the great relations of the life of the Roman Empire, the school-spirit disappeared, polemic was crippled, and the need of adjustment and fusion made itself felt instead. The teleological view of the world, especially, formed the basis upon which Platonism, Aristotelianism, and Stoicism could agree in a common opposition against Epicureanism.

The tendency toward such a fusion, toward *syncretism*, first awoke in the Stoic school, and found its most efficient supporters in *Panætius* and *Posidonius*, who supplemented the doctrine of the Stoa on all sides by borrowing Platonic and Aristotelian elements. In opposition to them stood the *New Academy*, which, after *Philo of Larissa* had made an end of the sceptical episode in the development of the school, made the attempt, through *Antiochus*, to unite philosophy, then so disunited, upon those doctrines in which Plato and Aristotle agree.

Less important, because more devoid of principles, but not, therefore, the less significant historically, was that sort of eclecticism which the *Romans* employed in taking up Greek philosophy. This consisted in piecing together, from an essentially practical point of view, the different school systems which met their approval. This was the case with *Cicero*, *Varro*, and in part with the school of the *Sextians*.

Of the **Peripatetic** School (the Lyceum), the co-founder himself is primarily to be noticed, **Theophrastus** of Erebus in Lesbos (about 370–287), a somewhat younger friend of Aristotle, who through his teachings and writings won great regard for the school. Of his works, the botanical, also a fragment of the *Metaphysics*, extracts from his *Characters*, from the treatise concerning perception, from his history of physics, and some isolated fragments are preserved (edited by F. Wimmer, Breslau, 1842–62).

With him appear **Eudemus** of Rhodes, **Aristoxenus** of Tarentum, who studied music historically and theoretically (*Elemente der Musik*, German by R. Westphal, Leips. 1883), **Dicæarchus** of Messina, a learned polyhistor who wrote a history of Grecian civilisation (*βίος* Ἑλλάδος), and **Strato** of Lampsacus, who was head of the school (287–269).

Among the Peripatetic doxographers, Hermippus, Sotion, Satyrus, Heracleides Lembus (in the second century B.C.), and among the later commentators, Alexander of Aphrodisias (about 200 A.D. in Athens) are to be mentioned.

The **Middle Academy** begins with **Arcesilaus** of Pitane in Æolia (about 315–241), whose teachings were recorded by his pupil Lacydes, and ends with **Carneades** (in Rome, 155) and his successor Clitomachus, who died 110. Nothing remains of their writings. The sources are, beside Diogenes Laertius, principally Cicero and Sextus Empiricus.

Just as indirect and general in its character is our knowledge of the **New Academy**. **Philo** of Larissa was still in Rome in 87. His successor, **Antiochus** of Ascalon, was heard by Cicero in Athens in 78. To the supporters of eclectic Platonism in this first, essentially ethical form belong among others **Arius Didymus**, who inclined strongly to Stoicism (in the time of Augustus), and **Thrasyllus** (under Tiberius), who prepared an edition of the works of Democritus and Plato, arranged according to subjects. An extensive literature of paraphrase and commentary connected with Plato's works also developed in the Academy.

When we consider the personality of the **Stoic** School, we are struck by the frequency of the descent of its members from the Hellenistic mixed races of the Orient. Thus the founder, **Zeno** (about 340–265), came from his Cyprian home as a merchant to Athens, and there, taken captive by philosophy, is said to have absorbed the doctrines of the different schools, to found his own in the year 308. His principal pupil was **Cleanthes** of Assos in Troas, from whose writings a monotheistic hymn to Zeus is preserved, Stob. *Ecl.* I. 30 (Wachsmuth, p. 25). The scientific head of the school was **Chrysippus** (280–209) of Soli or Tarsus in Cilicia. He is said to have written an extraordinary amount, but, aside from the titles, only very unimportant fragments of his works are preserved. Cf. G. Bagnet (Loewen, 1822). Among the literary-historical *savants* of the Stoic School, **Diogenes** of Babylon and **Apollodorus** are to be mentioned; Aristarchus and Eratosthenes stood in close relation to the school.

Panætius (180–110), who was strongly influenced by the Academic scepticism and who maintained a close relation with the Roman statesmen, began the syncretistic development of the Stoa, which was completed by **Posidonius** of Syrian Apamea (about 135–50). The latter was one of the greatest polyhistors of antiquity, especially in the geographico-historical domain. He taught in Rhodes, and was heard by many young Romans, among whom was Cicero.

Concerning the Stoics of the time of the Empire, cf. the following chapter. Sources for the Stoic doctrines are Cicero and Diogenes Laertius, Book VII., in part also the extant writings of the Stoics of the time of the Empire, and the discoveries at Herculaneum.

D. Tiedmann, *System der stoischen Philosophie* (3 vols., Leips. 1776); P. Weygoldt, *Die Philosophie der Stoa* (Leips. 1883); P. Ogereau, *Essai sur le Système Philosophique des Stoiciens* (Paris, 1885); L. Stein, *Die Psychologie der Stoa* (2 vols., Berlin, 1886–88); [Capes, *Stoicism*, Lond. 1880].

Epicurus (341–270), born in Samos, the son of an Athenian schoolmaster, had already made attempts at teaching in Mitylene and in Lampsacus, before founding in Athens, in 306, the society which is named after his "gardens" (κῆποι, *horti*, as also the other schools were named after the places where they assembled). He was much loved as a teacher, on account of his companionable qualities. Of his numerous writings lightly thrown off, the proverbs (κύριαι δόξαι), three didactic letters, parts of his treatise περὶ φύσεως (in the discoveries at Herculaneum), and besides only scattered fragments are preserved; collected and arranged systematically by H. Usener, *Epicurea* (Leips. 1887).

Among the great mass of his followers, antiquity brings into prominence his closest friend Metrodorus of Lampsacus; also Zeno of Sidon (about 150) and Phædrus (about 100 B.C.). **Philodemus** of Gadara in Coele-Syria has become a somewhat more distinct figure to us since a part of his writings has been found at Herculaneum (*Herculanensium voluminum quæ supersunt*, first series, Naples, 1793 ff.; second, 1861 ff.); the most valuable, περὶ σημείων καὶ σημειώσεων (cf. Fr. Bahusch, Lyck, 1879).

The didactic poem of Tit. **Lucretius** Carus (98–54), *De Natura Rerum*, in six books, has been edited by Lachmann (Berlin, 1850) and Jac. Bernays (Leips. 1852); [Eng. ed. with tr. of the poem by Munro, Lond. 1886. Cf. *The Atomic Theory of Lucretius*, by J. Masson, Lond. 1884].

Further sources are Cicero and Diogenes Laertius, in the tenth book.

Cf. M. Guyau, *La Morale d'Epicure* (Paris, 1878); P. v. Gizycki, *Ueber das Leben und die Moralphilosophie des Epikur* (Berlin, 1879); W. Wallace, *Epicureanism* (Lond. 1880); [Wallace, Art. *Ep.* in *Enc. Brit.*; W. L. Courtney, *Ep.* in *Hellenica*].

Scepticism, as accords with the nature of the case, makes its appearance, not as a close school, but in looser form.[1] It remains doubtful whether the systematiser of Scepticism, **Pyrrho** of Elis (perhaps 365–275), had any intimate relations with the Socratic-Sophistic school of his native city. A certain Bryso, who passes for the son of Stilpo, is looked upon as an intermediate link. He accompanied Alexander on his journey to Asia, together with a follower of Democritus, Anaxarchus by name. The Sillograph, Timon of Phlius (320–230, the latter part of the time at Athens) from Pyrrho's standpoint derides philosophers. Fragments of his writings in C. Wachsmuth, *De Timone Phliasio* (Leips. 1859). Cf. Ch. Waddington, *Pyrrhon* (Paris, 1877).

The external relations of later Scepticism are very obscure and uncertain. **Ænesidemus** from Cnossus taught in Alexandria, and composed a treatise, Πυῤῥώνειοι λόγοι, of which nothing remains. His life falls probably in the first century B.C., yet it has also been set almost two centuries later. Of Agrippa, nothing in detail can be established. The literary representative of Scepticism is the physician **Sextus Empiricus**, who lived about 200 A.D., and of his writings there are extant his *Outline Sketches of Pyrrhonism* (Πυῤῥώνειοι ὑποτυπώσεις), and the investigations comprehended under the name *Adversus Mathematicos*, of which Books VII.–XI. contain the exposition of the sceptical doctrine, with many valuable historical notices (ed. by J. Bekker, Berlin, 1842).

Cf. K. Stäudlin, *Gesch. und Geist des Skepticismus* (Leips. 1794–95); N. Maccoll, *The Greek Sceptics* (London, 1869); L. Haas, *De Philosophorum Scepticorum Successionibus* (Würzburg, 1875); [Owen, *Evenings with the Sceptics* (Lond. 1881); A. Seth, Art. *Scepticism*, in *Enc. Brit.*].

Among the Romans, the admission of philosophy at first encountered violent resistance; but by the beginning of the first century B.C. it was the general custom for the young Romans of superior rank to study in Athens or Rhodes, and to hear the lectures of the heads of schools, for the same end as that for which the Athenians had formerly heard the Sophists. The literary activity of Marcus Tullius **Cicero** (106–43) must be judged from the point of view of his purpose, which was to awaken among his countrymen an inclination for general scientific culture and a comprehension of its meaning, and from this standpoint his work is to be highly prized. Skill in composition and grace of form excuse the lack of proper philosophising ability, which is shown in a selection of doctrines based on no philosophical principle. The main treatises are *De Finibus*, *De Officiis*, *Tusculanæ Disputationes*, *Academica*, *De Natura Deorum*, *De Fato*, *De Divinatione*. Cf. Herbart, *Ueber die Philosophie des Cicero;* in Works, XII. 167 ff. [Trans. of the above writings of Cicero in the Bohn. Lib.]

His friend, M. Terentius **Varro** (116–27), the well-known polyhistor and prolific writer, was more learned, but of his labours toward the history of philosophy only occasional notes are extant.

Quintus Sextus and a *son* of the same name and **Sotion** of Alexandria are named as Sextians. Sotion seems to have been the intermediate link in which the Stoic morals were brought into union with the Alexandrian Pythagoreanism, and given that religious turn which characterises them in the time of the Empire. Some of their *Sentences*, discovered in a Syrian translation, have been edited by Gildemeister (Bonn, 1873).

On the literary conditions of this whole period cf. R. Hirzel, *Untersuchungen zu Cicero's philosophischen Schriften* (3 vols., Leips. 1877–83).

§ 14. The Ideal of the Wise Man.

The fundamental ethical tendency of the philosophising of this entire period is still more precisely characterised by the fact that it is throughout *individual ethics* that forms the centre of investigation in this time of epigones. The elevation to the ideals of ethical

[1] Hence all reckonings by the successions of heads of the school, attempted in order to fix the chronology of the later Sceptics, are illusory.

community, in which morals culminated with both Plato and Aristotle, was a glorification that had become foreign to its time, of that through which Greece had become great, viz. the thought of an active, living state. This had lost power over the hearts of men, and even in the schools of Plato and Aristotle it found so little sympathy that the Academicians, as well as the Peripatetics, brought into the foreground the question of individual happiness and virtue. What is preserved from the treatise of the Academician Crantor, *On Grief*,[1] or from the works of Theophrastus under the title of *Ethical Characters*, stands wholly upon the footing of a philosophy that esteems the right appreciation of the good things of life to be its essential object.

In the endless discussions on these questions in which the schools engaged in the following centuries, the successors of the two great thinkers of Attic philosophy found themselves in an attitude of common opposition to the new schools. Both had pursued through the entire circuit of empirical reality the realisation of the Idea of the Good, and in spite of all the idealism with which Plato especially strove to transcend the world of the senses, they had not failed to appreciate the relative value of this world's goods. Highly as they prized virtue, they yet did not exclude the view that for the complete happiness of man[2] the favour of external fortune, health, prosperity, etc., are requisite also, and they denied especially the doctrine of the Cynics and Stoics that virtue is not only the highest (as they admitted), but also the sole good.

At all events, however, they too laboured to determine the right conduct of life which promised to make man happy, and while individual members of the schools pursued their special researches, the public activity, especially that of the heads of the schools in their polemic with their opponents, was directed to the end of drawing the *picture of the normal man*. This it was that the time desired of philosophy: "Show us how the man must be constituted who is sure of his happiness, whatever the fortune of the world may bring him!" That this normal man must be called the able, the virtuous, and that he can owe his virtue only to insight, to knowledge, that he therefore must be the "wise" man, — this is the presupposition arising from the Socratic doctrine, which is recognised as self-evident by all parties during this entire period; and therefore all strive to portray the *ideal of the wise man, i.e.* of the man whom his insight makes virtuous, and so, happy.

[1] Cf. F. Kayser (Heidelberg, 1841).

[2] This Aristotelian view was completely assented to by Speusippus and Xenocrates of the Older Academy.

1. The most prominent characteristic in the conception of the "wise man," as determined in this period, is, therefore, *imperturbability* (*ataraxy*, ἀταραξία). Stoics, Epicureans, and Sceptics are unwearied in praising this *independence of the world* as the desirable quality of the wise man: he is free, a king, a god; whatever happens to him, it cannot attack his knowledge, his virtue, his happiness; his wisdom rests in himself, and the world does not trouble him. This ideal, as thus portrayed, is characteristic of its time; the normal man, for this period, is not he who works and creates for the sake of great purposes, but he who knows how to free himself from the external world, and find his *happiness in himself alone*. The inner isolation of individuals, and indifference toward general ends, find here sharp expression: the *overcoming of the outer world* conditions the happiness of the wise man.

But since he has no power over the world without him, he must overcome it *within himself;* he must become master of the effects which it exercises upon him. These effects, however, consist in the feelings and desires which the world and life excite in man; they are disturbances of his own nature — emotions, or passions (*πάθη, affectus*). Wisdom is shown, therefore, in the relation which man maintains to his *passions*.[1] It is essentially freedom from passions or emotions, *emotionlessness* (apathy, ἀπάθεια, is the Stoic expression). To rest unmoved within one's self, this is the blessing of this "wisdom."

The terms with which this doctrine is introduced in the case of Epicurus and Pyrrho point immediately to a dependence upon Aristippus and Democritus. It corresponds to the gradual transformation which took place in the Hedonistic school (cf. § 7, 9) that *Epicurus*,[2] who made its principle his own, and likewise designated *pleasure* as the *highest good*, nevertheless preferred the permanent *frame of satisfaction* and *rest* to the enjoyment of the moment. The Cyrenaics also had found the essence of pleasure in gentle motion; but — Epicurus held — that is still a "pleasure in motion"; and the state of painless rest, free from all wishes (ἡδονὴ καταστηματική), is of higher value. Even the zest and spirit of enjoyment has become lost; the Epicurean would indeed gladly enjoy

[1] The ancient conception of the passions (*Affect*), extending into modern time (Spinoza), is accordingly wider than that of the present psychology. It is best defined by the Latin translation "*perturbationes animi*," "emotions," and includes all states of feeling and will in which man is dependent upon the outer world.

[2] As intermediate links, the younger followers of Democritus, strongly tinctured with Sophistic doctrine, are named; especially a certain *Nausiphanes*, whom Epicurus heard.

all pleasure, but it must not excite him or set him in motion. Peace of soul (γαληνισμός, cf. § 10, 5) is all that he wishes, and he anxiously avoids the storms which threaten it, *i.e.* the passions.

Epicurus therefore recognised the logical consistency with which the Cynics had characterised *absence of wants* as virtue and happiness; but he was far from seriously renouncing pleasure, as they did. The wise man must, to be sure, understand this also, and act accordingly, as soon as it becomes requisite in the course of things. But his satisfaction will be greater in proportion as the compass of the wishes which he finds satisfied is fuller. Just for this reason, he needs the *insight* (φρόνησις) which not only makes it possible to estimate the different degrees of pleasure and pain as determined through the feelings, which are to be expected in a particular case, but also decides whether and how far one should give place to individual wishes. In this aspect Epicureanism distinguished three kinds of wants: some are natural (φύσει) and unavoidable, so that, since it is not possible to exist at all without their satisfaction, even the wise man cannot free himself from them; others, again, are only conventional (νόμῳ), artificial, and imaginary, and the wise man has to see through their nothingness and put them from him; between the two, however (here Epicurus opposes the radically one-sided nature of Cynicism), lies the great mass of those wants which have their natural right, but are not indeed indispensable for existence. Hence the wise man can in case of necessity renounce them; but since the satisfaction of these gives happiness, he will seek to satisfy them as far as possible. Complete blessedness falls to his lot who rejoices in all these good things in quiet enjoyment, without stormy striving.

On the same ground, Epicurus prized mental joys higher than physical enjoyments which are connected with passionate agitation. But he seeks the joys of the mind, not in pure knowledge, but in the æsthetic refinement of life, in that intercourse with friends which is pervaded by wit and sentiment and touched with delicacy, in the comfortable arrangement of daily living. Thus the wise man, in quiet, creates for himself the blessedness of self-enjoyment, independence of the moment, of its demands and its results. He knows what he can secure for himself, and of this he denies himself nothing; but he is not so foolish as to be angry at fate or to lament that he cannot possess everything. This is his "ataraxy," or impassiveness: an enjoyment like that of the Hedonists, but more refined, more intellectual, and — more *blasé*.

2. *Pyrrho's* Hedonism took another direction, inasmuch as he sought to draw the practical result from the sceptical teachings of

the Sophists. According to the exposition of his disciple, Timon, he held it to be the task of science to investigate the constitution of things, in order to establish man's appropriate relations to them, and to know what he may expect to gain from them.[1] But according to Pyrrho's theory it has become evident that we can never know the true constitution of things but at the most can know only states of feelings (πάθη) into which these put us (Protagoras, Aristippus). If, however, there is no knowledge of things, it cannot be determined what the right relation to them is, and what the success that will result from our action. This scepticism is the negative reverse side to the Socratic-Platonic inference. As there, from the premise that right action is not possible without knowledge, the demand had been made that knowledge must be possible, so here the argument is, that because there is no knowledge, right action is also impossible.

Under these circumstances all that remains for the wise man is to resist as far as possible the seducements to opinion and to action, to which the mass of men are subject. All action proceeds, as Socrates had taught, from our ideas of things and their value; all foolish and injurious actions result from incorrect opinions. The wise man, however, who knows that nothing can be affirmed as to things themselves (ἀφασία), and that no opinion may be assented to (ἀκαταληψία),[2] restrains himself, as far as possible, from judgment, and thereby also from action. He withdraws into himself, and in the *suspension* (ἐποχή)[3] of judgment, which preserves him from passion and from false action, he finds imperturbability, rest within himself, *ataraxy*.

This is the Sceptical virtue, which also aims to free man from the world, and it finds its limit only in the fact that there are, nevertheless, relations in which even the wise man, withdrawn within himself, must act, and when nothing else remains for him than to act according to that which appears to him, and according to tradition.

3. A deeper conception of the process of overcoming the world in man was formed by the *Stoics*. At the beginning, to be sure, they professed quite fully the Cynic indifference toward all goods of the outer world, and the self-control of the virtuous wise man remained stamped upon their ethics also as an ineradicable feature; but they

[1] Euseb. *Præp. Ev.* XIV. 18, 2. The doctrine of Pyrrho is shown by this to be in exact coincidence with the tendency of the time; it asks, "What are we to do, then, if there is no knowledge?"

[2] An expression which was probably formed in the polemic against the Stoic conception of κατάληψις; cf. § 17.

[3] The Sceptics were called also the ἐφεκτικοί ["Suspenders"] with reference to this term, characteristic for them.

soon dulled the edge of the radical naturalism of the Cynics by a penetrating psychology of the impulsive life, which shows a strong dependence upon Aristotle. They emphasise, still more than the Stagirite, the unity and independence of the individual soul, as contrasted with its particular states and activities, and so, with them, *personality* first becomes a determinative principle. The leading-power, or governing part of the soul (τὸ ἡγεμονικόν), is, for them, not only that which makes perceptions out of the excitations of the individual organs in sensation, but also that which by its assent[1] (συγκατάθεσις) transforms excitations of the feelings into activities of the will. This consciousness, whose vocation is to apprehend and form its contents as a unity, is, according to its proper and true nature, reason (νοῦς); the states, therefore, in which consciousness allows itself to be hurried along to assent by the violence of excitement contradict, in like measure, its own nature and reason. These states (*affectus*) are, then, those of passion (πάθη) and dis-ease of the soul; they are perturbations of the soul, contrary to Nature and contrary to reason.[2] Hence the wise man, if he cannot defend himself from those excitations of feeling in presence of the world, will deny them his assent with the power of reason; he does not allow them to become passions or emotions, his virtue is the *absence of emotions* (ἀπάθεια). His overcoming of the world is his overcoming of his own impulses. It is not until we give our assent that we become dependent upon the course of things; if we withhold it, our personality remains immovable, resting upon itself. If man cannot hinder fate from preparing for him pleasure and pain, he may, nevertheless, by esteeming the former as not a good, and the latter as not an evil, keep the proud consciousness of his self-sufficiency.

Hence, in itself, virtue is for the Stoics the sole good, and on the other hand, vice, which consists in the control of the reason by the passions, is the sole evil, and all other things and relations are regarded as in themselves indifferent (ἀδιάφορα).[3] But in their

[1] This assent, to be sure, even according to the Stoics, rests upon the judgment; in the case of passion, therefore, upon a false judgment, but it is yet at the same time the act of the will which is bound up with the judgment. Cf. § 17.

[2] Diog. Laert. VII. 110: τὸ πάθος — ἡ ἄλογος καὶ παρὰ φύσιν ψυχῆς κίνησις ἢ ὁρμὴ πλεονάζουσα. The psychological theory of the emotions was developed especially by Chrysippus. Zeno distinguished, as fundamental forms, pleasure and pain, desire and fear. As principles of division among the later Stoics there seem to have been used, partly characteristics of the ideas and judgments which call out the emotion, and partly the characteristics of the states of feeling and will which proceed from it. Cf. Diog. Laert. VII. 111 ff.; Stob. *Ecl.* II. 174 f.

[3] By reckoning even life in this division, they came to their well-known defence or commendation of suicide (ἐξαγωγή). Cf. Diog. Laert. VII. 130; Seneca, *Ep.* 12, 10.

doctrine of goods they moderate the rigour of this principle by the distinction of the desirable and that which is to be rejected (προηγμένα and ἀποπροηγμένα). Strongly as they emphasised in this connection that the worth (ἀξία) which belongs to the desirable is to be distinguished strictly from the Good of virtue, which is a good in itself, there yet resulted from this, in opposition to the Cynic one-sidedness, an at least secondary appreciation of the good things of life. For since the desirable was valued for the reason that it seemed adapted to further the Good, and, on the other hand, the demerit of that which was to be rejected consisted in the hindrances which it prepares for virtue, the threads between the self-sufficient individual and the course of the world, which the Cynic paradoxical theory had cut, were thus more and more knit together again. The mean between what is desirable and what is to be rejected, the absolutely indifferent, survived ultimately only in that which could be brought in no relation whatever to morality.

As these distinctions, by repression of the Cynic element, gradually made Stoicism more viable and, so to speak, better able to get on in the world, so we may see a like modification, by means of which it became more usable pedagogically, in the later removal of the abrupt contrast which at the beginning was made between the virtuous wise and the vicious fools (φαῦλοι, μωροί). The wise man, so it was said at the beginning, is wise and virtuous entirely, and in everything the fool is just as entirely and universally foolish and sinful; there is no middle ground. If man possesses the force and soundness of reason, with which he controls his passions, then he possesses with this one virtue all the individual particular virtues[1] at the same time, and this possession, which alone makes happy, cannot be lost; if he lacks this, he is a plaything of circumstances and of his own passions, and this radical disease of his soul communicates itself to his entire action and passion. According to the view of the Stoics, therefore, the few sages stood as perfect men over against the great mass of fools and sinners, and in many declamations they lamented the baseness of men with the Pharisaic pessimism which thus gratifies its self-consciousness. But over against this first opinion, which looked upon all fools as to be rejected alike, the consideration presented itself that among these fools there were always noticeable differences with regard to their departure from the ideal virtue, and thus between wise men and fools there was inserted the conception of the man who is progressive and in a state of *improvement* (προκόπτων). The, Stoics, indeed

[1] The Stoics also made the Platonic cardinal virtues the basis for their systematic development of their doctrine of the virtues. Stob. *Ecl.* II. 102 ff.

held fast to the view that no gradual transition takes place from this process of improvement to true virtue, and that the entrance into the condition of perfection results rather from a sudden turn about. But when the different stages of ethical progress (προκοπή) were investigated and a state was designated as the highest stage, in which apathy is indeed attained, but not yet with full sureness and certainty,[1] — when this was done, the rigorous boundary lines were in some measure effaced.

4. Yet in spite of these practical concessions, the withdrawal of the individual personality within itself remained ultimately an essential characteristic in the Stoic ideal of life; on the other hand, this which these Greek epigones in common regarded as the mark of wisdom, was nowhere so valuably supplemented as among the Stoics. Scepticism, so far as we can see, never desired such a positive supplementation — consistently enough; and *Epicureanism* sought it in a direction which expressed in the sharpest form the restriction of ethical interest to individual happiness. For the positive content of the wise man's peace of soul, hidden from the storms of the world, is, for Epicurus and his followers, at last only *pleasure*. In this they lacked, indeed, that spirited joy of the sensuous nature with which Aristippus had exalted the enjoyment of the moment and the joys of the body to be the supreme end, and we find, as already mentioned, that in their doctrine of the highest good the *blasé*, critically appreciative epicurism of the cultivated man, is declared to be the content of the ethical life. To be sure, in his psycho-genetic explanation Epicurus reduced all pleasure without exception to that of the senses, or, as they said later, to that of the flesh;[2] but, combating the Cyrenaics, he declared[3] that just these derivative and therefore refined joys of the mind were far superior to those of the senses. He recognised very properly that the individual, upon whose independence of the outer world all hinges, is much surer and much more the master of mental than of material enjoyments. The joys of the body depend on health, riches, and other gifts of fortune, but what is afforded by science and art, by the intimate friendship of noble men, by the calm, self-contented and free from wants, of the mind freed from passions, — this is the sure possession of the wise man, almost or wholly untouched by the change of fortune. The *æsthetic self-enjoyment of the cultured man* is hence the highest good for the Epicureans.

[1] Cf. the account (probably with regard to Chrysippus) in Seneca, *Ep.* 75, 8 ff.

[2] Athen. XII. 546 (Us. *Fr.* 409); Plut. *Ad. Col.* 27, 1122 (Us. *Fr.* 411); id. *Contr. Epic. Orat.* 4, 1088 (Us. *Fr.* 429). [3] Diog. Laert. X. 137.

Thus, to be sure, the coarse and sensuous in Hedonism fell away, and the Gardens of Epicurus were a nursery of fair conduct of life, finest morals, and noble employments; but the principle of individual enjoyment remained the same, and the only difference was that the Greeks, in the old age of the national life, together with their Roman disciples, enjoyed in a more refined, intellectual, and delicate manner than did their youthful and manly ancestors. Only the content had become more valuable, because it was the content presented to enjoyment by a civilisation more richly developed and deeply lived out; the disposition with which life's cup was smilingly emptied, no longer in hasty quaffing, but in deliberate draughts, was the same egoism, devoid of all sense of duty. Hence the inner indifference of the wise man toward ethical tradition and rules of the land, which we find here also, though with greater caution; hence, above all, the putting aside of all metaphysical or religious ideas that might disturb the wise man in this self-complacent satisfaction of enjoyment, and burden him with the feeling of responsibility and duty.

5. To this, the *Stoic* ethics forms the strongest contrast. Already, in the thought reminding us of Aristotle (§ 13, 11), that the soul exercises its own proper nature in the rational power with which it refuses assent to impulses, we may recognise the peculiar antagonism which the Stoics assumed in the human psychical life. For just what we now are likely to call the natural impulses, viz. the excitations of feeling and will called forth by things of the outer world through the senses, and referring to these things, — just these seemed to them, as above mentioned, that which was contrary to nature (παρὰ φύσιν). Reason, on the other hand, was for them the "nature," not only of man, but of the universe in general. When, for this reason, they adopt the Cynic principles in which the moral is made equivalent to the natural, the same expression contains in this latter case a completely changed thought. As a part of the World-reason the soul excludes from itself, as an opposing element, the determination by sensuous impulses to which the Cynics had reduced morality: the demands of Nature, identical with those of reason, are in contradiction with those of the senses.

Accordingly, the positive content of morality among the Stoics appears as *harmony with Nature*, and thus, at the same time, as a *law* which claims normative validity as it confronts the sensuous man (νόμος).[1] In this formula, however, "Nature" is used in a

[1] With this is completed an interesting change in Sophistic terminology in which (§ 7, 1) νόμος and θέσις had been made equivalent to one another, and set over against φύσις; with the Stoics νόμος = φύσις.

double sense.[1] On the one hand is meant universal Nature, the creative, cosmic power, the world-thought acting according to ends (cf. § 15), the λόγος; and agreeably to this meaning, man's morality is his subordination to the law of Nature, his willing obedience to the course of the world, to the eternal necessity, and in so far as this World-reason is designated in the Stoic doctrine as deity, it is also obedience to God and to the divine law, as well as subordination to the world-purpose and the rule of Providence. The virtue of the perfect individual, who, as over against other individual beings and their action upon him through the senses, ought to withdraw within himself, his own master, and rest within himself, appears thus under obligation to something universal and all-ruling.

Nevertheless, since according to the Stoic conception the ἡγεμονικόν, the life-unity of the human soul, is a consubstantial part of this divine World-reason, the life in conformity with Nature must be also that which is adapted to *human nature*, to the essential nature of man; and this, too, as well in the more general sense that morality coincides with genuine, complete humanity and with the reasonableness which is valid in like measure for all, as also in the special meaning, that by fulfilling the command of Nature, each person brings to its unfolding the inmost germ of his own individual essence. Uniting these two points of view, it seemed to the Stoics that a rationally guided consistency in the conduct of life was the ideal of wisdom, and they found the supreme task of life in this, that the virtuous man has to preserve this complete harmony with himself[2] in every change of life, as his true strength of character. The political doctrinairism of the Greeks found thus its philosophical formulation and became a welcome conviction for the iron statesmen of republican Rome.

But whatever the particular terms in which the Stoics gave expression to their fundamental thought, this thought itself was everywhere the same, — that life according to Nature and according to reason is a *duty* (καθῆκον) which the wise man has to fulfil, a law to which he has to subject himself in opposition to his sensuous inclinations. And this *feeling of responsibility*, this strict consciousness of the "ought," this recognition of a higher order, gives to their doctrine, as to their life, backbone and marrow.

This demand also, for a life according to duty, we occasionally meet among the Stoics in the one-sided form, that the ethical consciousness requires some things on rational grounds, forbids the opposites, and declares all else to be ethically indifferent. What is not commanded and not forbidden, remains morally indifferent (ἀδιάφορον), and from this the Stoics sometimes drew lax consequences, which they perhaps defended more in words than in actual intention. But here, too, the systematic development of the theory created valuable intermediate links. For even if only the Good is unconditionally commanded, yet, in a secondary degree, the desirable must be regarded as ethically advisable; and though baseness proper consists only in willing that which is unconditionally forbidden, the moral man will yet seek to avoid also that which is "to be rejected." Thus, corresponding to the gradation of goods, there was introduced a like gradation of duties, which were distinguished as absolute and "intermediate." So, on the other hand, with regard to the valuation of human actions, a distinction was made on a somewhat different basis between those actions which fulfil the demand of reason[1] externally — these are called "befitting," conformable to duty in the broader sense (καθήκοντα) — and such as fulfil the demand of reason solely from the intention to do the Good. Only in the latter case[2] is there a perfect fulfilment of duty (κατόρθωμα), the opposite of which is the intention that is contrary to duty, as evinced in an action, — sin (ἁμάρτημα). Thus the Stoics, proceeding from the consciousness of duty, entered upon a profound and earnest study, extending sometimes to considerations of casuistry, of the ethical values of human will and action, and we may regard as their most valuable contribution the universally applied thought, that man in all his conduct, outer and inner, is responsible to a higher command.

6. The great difference in apprehension of the ethical life which exists between the Epicureans and the Stoics, in spite of a number of deep and far-reaching common qualities, becomes most clearly manifest in their respective theories of *society* and of the *state*. In this, to be sure, they are both at one almost to verbal agreement in the doctrine that the wise man, in the self-sufficiency of his virtue, needs the state[3] as little as he needs any other society; yes, that in certain circumstances, he should even avoid these in the interest, either of his own enjoyment or of the fulfilment of duty. In this sense, even the Stoics, especially the later Stoics, dissuaded from

[1] Cf. Diog. Laert. VII. 87.

[2] Thus the formulas ὁμολογουμένως τῇ φύσει ζῆν and ὁμολογουμένως ζῆν have ultimately the same meaning. Stob. *Ecl.* II. 132.

[1] ὅσα ὁ λόγος αἱρεῖ ποιεῖν; Diog. Laert. VII. 108.

[2] For the contrast here alluded to by the Stoics Kant has made customary the expressions legality and morality; the Latin distinguishes according to Cicero's precedent, *rectum* and *honestum*.

[3] Epic. in Plut. *De Aud. Poet.* 14, 37 (Us. *Fr.* 548).

entrance into the family life and political activity; and for the Epicureans, the responsibility which marriage and public activity bring with them was sufficient to justify a very sceptical attitude toward both, and especially to make the latter appear advisable for the wise man, only in the case where it is unavoidable, or of quite certain advantage. In general, the Epicureans hold to the maxim of their master, to live in quiet,[1] λάθε βιώσας, in which the inner crumbling of ancient society found its typical expression.

But a greater distinction between the two conceptions of life shows itself in the fact that, to the Stoics, human society appeared as a command of reason, which must give way only occasionally to the wise man's task of personal perfection, while *Epicurus* expressly denied all natural society among men,[2] and therefore reduced every form of social conjunction to considerations of utility. So the theory of friendship, which in his school was so zealously pledged, even to the point of sentimentality, did not find the ideal support which it had received in Aristotle's splendid exposition;[3] it finds ultimately only the motives of the wise man's enjoyment of culture as heightened in society.[4]

In particular, however, Epicureanism carried through systematically the ideas already developed in Sophistic teaching concerning the origin of the political community from the well-weighed interest of the individuals who formed it. The state is not a natural structure, but has been brought about by men as the result of reflection, and for the sake of the advantages which are expected and received from it. It grows out of a compact (συνθήκη) which men enter into with each other in order that they may not injure one another,[5] and the formation of the state is hence one of the mighty processes through which the human race has brought itself up from the savage state to that of civilisation, by virtue of its growing intelligence.[6] Laws, therefore, have arisen in every particular case from a convention as to the common advantage (σύμβολον τοῦ συμφέροντος). There is nothing in itself right or wrong; and since in the formation of a compact the greater intelligence asserts itself to its own advantage

[1] Plutarch wrote against this the extant treatise (1128 ff.), εἰ καλῶς λέγεται τὸ λάθε βιώσας.

[2] Arrian, *Epict. Diss.* I. 23, 1 (Us. *Fr.* 525); ib. II. 20, 6 (523).

[3] Cf. § 13, 12. The extensive literature on friendship is in this respect a characteristic sign of the time which found its chief interest in the individual personality and its relations. Cicero's dialogue *Lælius* (*De Amicitia*) reproduces essentially the Peripatetic conception.

[4] Diog. Laert. X. 120 (Us. *Fr.* 540).

[5] Cf. among the κύριαι δόξαι of Epicurus the terse sentences in Diog. Laert. X. 150 f.

[6] Cf. the description in Lucretius, *De Rer. Nat.* V. 922 ff., especially 1103 ff.

as a matter of course, it is for the most part the advantages of the wise that disclose themselves as motives in the enaction of laws.[1] And as is the case for their origin and content, so also for their validity and acknowledgment, the amount of pain which they are adapted to hinder and pleasure which they are adapted to produce, is the only standard. All the main outlines of the *utilitarian theory of society* are logically developed by Epicurus from the atomistic assumption that individuals first exist by and for themselves, and enter voluntarily and with design into the relations of society, only for the sake of the goods which as individuals they could not obtain or could not protect.

7. The *Stoics*, on the contrary, regarded man as already, by virtue of the consubstantiality of his soul with the World-reason, a being constituted by Nature for society,[2] and by reason of this very fact as under obligation by the command of reason to lead a social life, — an obligation which admits of exception only in special cases. As the most immediate relation we have here also friendship, the ethical connection of virtuous individuals who are united in the common employment of proving in action the moral law.[3] But from these purely personal relations the Stoic doctrine at once passes over to the most general, to all rational beings taken as an entirety. As parts of the same one World-reason, gods and men together form one great rational living structure, a πολιτικὸν σύστημα, in which every individual is a necessary member (μέλος), and from this results for the human race the ideal task of forming a *realm of reason* that shall embrace all its members.

The ideal state of the Stoics as it had been already delineated by Zeno, partly in a polemic parallel to that of Plato, knows, accordingly, no bounds of nationality or of the historic state; it is a rational society of all men, — an ideal universal empire. Plutarch, indeed, recognised[4] that in this thought philosophy constructed as rational that which was historically prepared by Alexander the Great, and completed, as we know, by the Romans. But it must not remain unnoticed that the Stoics thought of this empire only secondarily as a political power; primarily it was a spiritual unity of knowledge and will.

It is comprehensible that with such a high-flying idealism the

[1] Stob. *Flor.* 43, 139 (Us. *Fr.* 530).

[2] τῶν φύσει πολιτικῶν ζώων: Stob. *Ecl.* II. 226 ff.

[3] It was, to be sure, extraordinarily difficult for the Stoics to bring the need, which they were obliged to recognise as a fact lying at the basis of the social impulse, into accord with the independence of the wise man, so baldly emphasised by them.

[4] Plut. *De Alex. M. Fort.* I. 6.

Stoics retained only a very weak interest for actual political life in the proper sense. Although the wise man was permitted and indeed charged to take part in the life of some particular state, in order to fulfil his duty to all even in this base world, yet both the particular forms of the state and the individual historical states were held to be ultimately indifferent to him. As to the former, the Stoa could not become enthusiastic for any of the characteristic kinds of government, but, following the Aristotelian suggestion, held rather to a mixed system, something such as Polybius[1] presented as desirable on the ground of his philosophico-historical consideration of the necessary transitions of one-sided forms into each other. To the splitting up of mankind in different states, the Stoics opposed the idea of *cosmopolitanism*, — world-citizenship, — which followed directly from their idea of an ethical community of all men. It corresponded to the great historical movements of the age, that the difference in worth between Hellenes and Barbarians, which had been still maintained even by Aristotle,[2] was set aside by the Stoics as overcome,[3] and though, in accordance with their ethical principle, they were too indifferent to the outer relations of position to enter upon active agitation for social reforms, they demanded, nevertheless, that *justice and the universal love of man*, which resulted as the highest duties from the idea of the realm of reason, should be applied also in full measure, even to the lowest members of human society — the slaves.

In spite of the fact, therefore, that it turned aside from the Greek thought of the national state, to the Stoic ethics belongs the glory that in it the ripest and highest which the ethical life of antiquity produced, and by means of which it transcended itself and pointed to the future, attained its best formulation. The intrinsic worth of moral personality, the overcoming of the world in man's overcoming of himself, the subordination of the individual to a divine law of the world, his disposition in an ideal union of spirits by means of which he is raised far above the bounds of his earthly life, and yet, in connection with this, the energetic feeling of duty that teaches him to fill vigorously his place in the actual world, — all these are the characteristics of a view of life which, though from a scientific point of view it may appear rather as put together than as produced from one principle, presents, nevertheless, one of the most powerful and pregnant creations in the history of the conceptions of human life.

[1] In the extant part of the sixth book.
[2] Arist. *Pol.* I. 2, 1252 b 5.
[3] Seneca, *Ep.* 95, 52 ; cf. Strabo, I. 4, 9. The personal composition also of the Stoic school was from its beginning decidedly international.

8. In a concentrated form all these doctrines appear in the conception of the law of life, determined by Nature and reason for all men equally, τὸ φύσει δίκαιον, and this conception, through *Cicero*,[1] became the formative principle of *Roman jurisprudence*.

For, in his eclectic attachment to all the great men of Attic philosophy, Cicero not only held fast objectively with all his energy to the thought of a moral world-order which determines with universal validity the relation of rational beings to each other, but he thought also with regard to the subjective aspect of the question — in correspondence with his epistemological theory (§ 17, 4) — that this command of reason was innate in all men equally, and that it had grown into inseparable connection with their instinct of self-preservation. Out of this *lex naturæ*, the universally valid natural law which is exalted above all human caprice, and above all change of historical life, develop both the commands of morality in general, and in particular those of human society, — the *jus naturale*. But while Cicero proceeds to project from this standpoint the ideal form of political life, the Stoic universal state takes on under his hands[2] the outlines of the Roman Empire. Cosmopolitanism, which had arisen among the Greeks as a distant ideal, in the downfall of their own political importance, becomes with the Romans the proud self-consciousness of their historical mission.

But even in this theoretical development of what the state should be, Cicero interweaves the investigation of what it is. Not sprung from the consideration or the voluntary choice of individuals, it is rather a product of history, and therefore the ever-valid principles of the law of Nature are mingled in the structures of its life with the historical institutions of positive law. These latter develop partly as the domestic law of individual states, *jus civile*, partly as the law which the confederates of different states recognise in their relation to one another, *jus gentium*. Both kinds of positive law coincide to a large extent in their ethical content with the law of Nature, but they supplement this by the multitude of historical elements which in them come into force. The conceptions thus formed are important not only as constructing the skeleton for a new special science soon to branch off from philosophy; they have also the significance that in them the worth of the *historical* for the first time reaches full philosophical appreciation: and at this point Cicero

[1] Two of his treatises, only partly preserved, come into consideration here, *De Republica* and *De Legibus*. Cf. M. Voigt, *Die Lehre vom jus naturale*, etc. (Leips. 1856), and K. Hildenbrand, *Geschichte und System der Rechts- und Staatsphilosophie*, I. 523 ff.
[2] Cic. *De Rep.* II. 1 ff.

knew how to transform the political greatness of his people into a scientific creation.

§ 15. Mechanism and Teleology.

The practice of the schools in the post-Aristotelian period separated philosophical investigations into three main divisions, — ethics, physics, and logic (the latter called canonic among the Epicureans). The chief interest was everywhere given to ethics, and theoretically the two others were allowed importance only so far as correct action presupposes a knowledge of things, and this in turn a clearness with regard to the right methods of knowledge. Hence the main tendencies of physical and logical theories are undoubtedly determined in this period by the ethical point of view, and the practical need is easily contented by taking up and re-shaping the older teachings; but yet in scientific work the great objects of interest, especially metaphysical and physical problems, assert their fascinating power, and so notwithstanding we see these other branches of philosophy often developing in a way that is not in full conformity with the nature of the ethical trunk from which they spring. Particularly in the case of physics, the rich development of the special sciences must ultimately keep general principles always alive and in a state of flux.

In this respect we notice first that the *Peripatetic* School, during the first generations, made a noteworthy change in the principles for explaining Nature which it had received from its master.

1. The beginning of this is found already with *Theophrastus*, who doubtless defended all the main doctrines of Aristotelianism, especially against the Stoics, but yet in part went his own ways. The extant fragment of his metaphysics discusses, among the aporiæ, principally such difficulties as were contained in the Aristotelian conceptions of the relation of the world to the deity. The Stagirite had conceived of Nature (φύσις) as a being in itself alive (ζῷον), and yet had conceived of its entire motion as a (teleological) effect of the divine Reason; God, as pure Form, was separated from the world, transcendent; and yet, as animating, first-moving power, he was immanent in it. This chief metaphysical problem of the following period was seen by Theophrastus, though his own attitude toward it remained fixed by the bounds of Aristotle's doctrine. On the other hand, he shows a more definite tendency in the closely connected question regarding the relation of reason to the lower psychical activities. The νοῦς was regarded, on the one hand (considered as Form of the animal soul), as immanent, inborn; on the other hand, in its purity, as different in essence, and as having come into the individual soul from without. Here now Theophrastus decided absolutely against transcendence; he subsumed the νοῦς also as a self-developing activity, under the concept of a cosmic process,[1] of motion (κίνησις), and set it beside the animal soul as something different, not in kind, but in degree only.

Strato proceeded still more energetically in the same direction. He removed completely the limits between reason and the lower activities of ideation. Both, he taught, form an inseparable unity; there is no thought without perceptions, and just as little is there sense-perception without the co-operation of thought; both together belong to the unitary consciousness, which he, with the Stoics, calls τὸ ἡγεμονικόν (cf. § 14, 3). But Strato applied the same thought, which he carried out psychologically, to the analogous metaphysical relation also. The ἡγεμονικόν of the φύσις, also, the Reason of Nature, cannot be regarded as something separated from her. Whether now this may be expressed in the form that Strato did not think the hypothesis of the deity necessary for the explanation of Nature and its phenomena, or in the form that he postulated Nature itself as God, but denied it not only external resemblance to man, but even consciousness,[2] — in any case, Stratonism, regarded from the standpoint of Aristotle's teaching, forms a one-sidedly *naturalistic* or pantheistic modification. He denies spiritual monotheism, the conception of the transcendence of God, and by teaching that a pure Form is as unthinkable as mere matter, he pushes the Platonic element in the Aristotelian metaphysics, which had remained just in the thought of the separation (χωρισμός) of reason from matter, so far into the background that the element derived from Democritus becomes again entirely free. Strato sees in what takes place in the world, only an immanent necessity of Nature, and no longer the working of a spiritual, extramundane cause.

Yet this naturalism remains still in dependence upon Aristotle, in so far as it seeks the natural causes of the cosmic processes, not in the atoms and their quantitative determinations, but expressly in the original qualities (ποιότητες) and powers (δυνάμεις) of things. If among these it emphasised especially warmth and cold, this was quite in the spirit of the *dynamic* conceptions held by the older Hylozoism, and to this, also, Strato seems most nearly related in his undecided, intermediate position between mechanical and teleological explanation of the world. Just for this reason, however, this side-development ran its course with Strato himself without further result, for it was already outrun at the beginning by the Stoic and

[1] Simpl. *Phys.* 225 a. [2] Cic. *Acad.* II. 38, 121; *De Nat. Deor.* I. 13, 35.

the Epicurean physics. These both defended also the standpoint of the immanent explanation of Nature, but the former was as outspokenly teleological as the latter was mechanical.

2. The peculiarly involved position of the *Stoics*, in the department of metaphysical and physical questions, resulted from the union of different elements. In the foreground stands the ethical need of deducing from a most general metaphysical principle the content of individual morality which could no longer find its roots in state and nationality as in the period of Grecian greatness, and therefore of so shaping the conception of this principle as to make this deduction possible. But, in opposition to this, stood, as an inheritance from Cynicism, the decided disinclination to regard this principle as a transcendent, supersensuous, and incorporeal principle, out of the world of experience. All the more decisive was the force with which the thoughts suggested in the Peripatetic philosophy of Nature came forward, in which the attempt was made to understand the world as a living being, in purposive motion of itself. For all these motives, the *logos doctrine of Heraclitus* seemed to present itself as in like measure a solution of the problem, and this became, therefore, the central point of the Stoic metaphysics.[1]

The fundamental view of the Stoics is, then, that the entire universe forms a single, unitary, living, connected whole, and that all particular things are the determinate forms assumed by a divine primitive power which is in a state of eternal activity. Their doctrine is in its fundamental principles *pantheism*, and (in opposition to Aristotle) conscious pantheism. The immediate consequence of it, however, is the energetic effort to overcome the Platonic-Aristotelian dualism,[2] and remove the opposition between sensuous and supersensuous, between natural necessity and reason acting according to ends, between Matter and Form. The Stoa attempts this through simple identification of those conceptions whose opposing characters, to be sure, cannot by this means be put out of the world.

Hence it declares the divine World-being to be the primitive power in which are contained in like measure the conditioning laws and the purposeful determination of all things and of all cosmic processes, — the World-ground and the World-mind. As actively productive and formative power, the deity is the λόγος σπερματικός,

[1] Cf. H. Siebeck, *Die Umbildung der peripatetischen Naturphilosophie in die der Stoiker* (*Unters. z. Philosophie der Griechen*, 2 Aufl., pp. 181 ff.).

[2] If we were obliged to conceive of the relation of Aristotle to Plato in a similar manner (§ 13, 1–4), just in this point the Stoic philosophy of Nature shows a farther development in the same direction which the Peripatetic takes in Strato.

the *vital principle*, which unfolds itself in the multitude of phenomena as their peculiar, particular λόγοι σπερματικοί or *formative forces*. In this organic function, God is, however, also the purposefully creating and guiding Reason, and thus with regard to all particular processes the all-ruling *Providence* (πρόνοια). The determination of the particular by the universe (which constitutes the dominant fundamental conviction of the Stoics) is a completely purposeful and rational *order*,[1] and forms as such the highest *norm* (νόμος), according to which all individual beings should direct themselves in the development of their activity.[2]

But this all-determining "law" is for the Stoics, as it was for Heraclitus, likewise the all-compelling power which, as inviolable *necessity* (ἀνάγκη), and so, as inevitable *destiny* (εἱμαρμένη, *fatum*), brings forth every particular phenomenon in the unalterable succession of causes and effects. Nothing takes place in the world without a preceding cause (αἰτία προηγουμένη), and just by virtue of this complete causal determination of every particular does the universe possess its character of a purposeful, connected whole.[3] Hence Chrysippus combated in the most emphatic manner the conception of chance, and taught that apparent causelessness in a particular event could mean only a kind of causation hidden from human insight.[4] In this assumption of a *natural necessity, admitting of no exceptions* even for the most particular and the least important occurrence, — a conviction which naturally found expression also in the form that the divine providence extends even to the smallest events of life,[5] — the Stoic school agrees even verbally with Democritus, and is the only school in antiquity which carried this most valuable thought of the great Abderite through all branches of theoretical science.

In all other respects, indeed, the Stoics stand in opposition to Democritus and in closer relation to Aristotle. For while in the Atomistic system the natural necessity of all that comes to pass results from the motive impulses of individual things, with the Stoics it flows immediately from the *living activity of the whole*, and

[1] As the Platonic Timæus had already taught, § 11, 10.

[2] The normative character in the conception of the *logos* appeared clearly even with Heraclitus (§ 6, 2, p. 63, note 5).

[3] Plut. *De Fato*, 11, 574.

[4] Ib. 7, 572.

[5] Plutarch makes Chrysippus say (*Comm. Not.* 34, 5, 1076) that not even the meanest thing can sustain any other relation than that which accords with the decree of Zeus. Cf. Cic. *De Nat. Deor.* II. 65, 164. Only the circumstance that the Stoa limited the *immediate* action of the divine providence to the purposeful determination of the whole, and derived from this that of the particular, explains such modes of expression as the well-known *Magna dii curant, parva negligunt*. Cf. § 16, 3.

as over against the reduction of all qualities to quantitative differences, they held fast to the reality of properties as the peculiar forces of individual things, and to qualitative alteration (ἀλλοίωσις, in opposition to motion in space). They directed their polemic particularly against the purely mechanical explanation of natural processes by pressure and impact; but in carrying out their *teleology*, they sank from the great conception of Aristotle, who had everywhere emphasised the immanent purposiveness of the formations in which the Forms were realised, to the consideration of the benefits which flow from the phenomena of Nature to meet the needs of beings endowed with reason, "of gods and men."[1] In particular, they exaggerated, even to ridiculous Philistinism, the demonstration of the manner in which heaven and earth and all that in them is, are arranged with such magnificent *adaptation for man*.[2]

3. In all these theoretical views, and just in these, the *Epicureans* are diametrically opposed to the Stoics. With the Epicureans, employment with metaphysical and physical problems had in general only the negative purpose[3] of setting aside the religious ideas through which the quiet self-enjoyment of the wise man might be disturbed. Hence it was the chief concern of Epicurus to exclude from the explanation of Nature every element that would allow a government of the world, guided by universal ends, to appear as even possible; hence, on the other hand, the Epicurean view of the world was absolutely lacking in a positive principle. This explains the fact that Epicurus, at least, had only a sceptical shrug of the shoulders for all questions of natural science from which no practical advantage was to be gained; and though many of his later disciples seem to have been less limited, and to have thought more scientifically, the ruts of the school's opinion were worn too deep to allow the attainment of essentially broader aims. The more the teleological conception of Nature formed, in the course of time, the common ground on which Academic, Peripatetic, and Stoic doctrines met in syncretistic blending, the more Epicureanism insisted upon its isolated standpoint of negation; theoretically, it was essentially *anti-teleological*, and in this respect brought forth nothing positive.

It was successful only in combating the anthropological excrescences to which the teleological view of the world led, especially

[1] Cic. *De Fin.* III. 20, 67; *De Nat. Deor.* II. 53 ff.

[2] If one might trust Xenophon's *Memorabilia*, the Stoics had in this no less a man than Socrates as their predecessor; yet it seems that even in this account, which is tinctured with Cynicism if not worked over from the Stoic point of view (Krohn), the general faith of Socrates in a purposeful guiding of the world by divine providence has descended into the petty. Cf. § 8, 8.

[3] Diog. Laert. X. 143; Us. p. 74.

with the Stoics,[1] — a task which was undoubtedly not so very difficult, — but to create from principles a counter-theory it was not prepared. Epicurus, indeed, availed himself for this purpose of the external data of the materialistic metaphysics, as he was able to receive them from Democritus; but he was far from attaining the latter's scientific height. He could follow the great Atomist only so far as to believe that he himself also, for explaining the world, needed nothing more than empty space and the corporeal particles moving within it, countless in number, infinitely varied in form and size, and indivisible; and to their motion, impact, and pressure he traced all cosmic processes, and all things and systems of things (worlds) which arise and again perish, thereby seeking to deduce all qualitative differences from these purely quantitative relations.[2] He accepted, accordingly, the purely *mechanical* conception of natural processes, but denied expressly their unconditioned and exceptionless necessity. The doctrine of Democritus, therefore, passed over to the Epicureans only in so far as it was Atomism and mechanism; with regard to the much deeper and more valuable principle of the universal reign of law in Nature, his legacy, as we have seen above, passed to the Stoics.

Meanwhile, just this peculiar relation is most intimately connected with the Epicurean ethics and with the decisive influence which that exercised upon their physics; indeed, one may say that the individualising tendency taken by the ethical reflection of the post-Aristotelian age found its most adequate metaphysics just in the doctrine of Epicurus. To a morals, which had for its essential content the independence of the individual and his withdrawal upon himself, a view of the world must have been welcome which regarded the prime constituents of reality as completely independent, both of each other and of a single force, and regarded their activity as determined solely by themselves.[3] Now the doctrine of Democritus which taught the inevitable, natural necessity of all that comes to pass, contains unmistakably a (Heraclitic) element which removes this autonomy of individual things, and just to their adoption of this element did the Stoics owe the fact (cf. § 14, 5) that their ethics outgrew the one-sided Cynic presuppositions with which they started. It is all the more comprehensible that Epicurus let just this element fall away; and his conception of the

[1] Cf. especially Lucret. *De Rer. Nat.* I. 1021; V. 156; Diog. Laert. X. 97.

[2] Sext. Emp. *Adv. Math.* X. 42.

[3] Thus Epicurus grounded his deviation from Democritus's explanation of the world by an appeal to human freedom of the will. Cf. § 16, and also the citations in Zeller IV.[3] 408, 1 [Eng. tr. *Stoics*, etc., p. 446].

world as contrasted with that of the Stoa is characterised precisely by this, that while the latter regarded every individual as determined by the whole, he rather regarded the whole as a product of originally existing and likewise originally functioning individual things. His doctrine is in every respect consistent *Atomism.*

Thus the system of Democritus had the misfortune to be propagated for traditions of antiquity, and so also for those of the Middle Ages, in a system which indeed retained his Atomistic view, looking in the direction of the exclusive reality of quantitative relations and of the mechanical conception of the cosmic processes, but set aside his thought of Nature as a connected whole, regulated by law.

4. Following this latter direction, Epicurus gave a new form to the doctrine of the origin of the world maintained by Atomism.[1] In contrast with what had been already seen, perhaps by the Pythagoreans, but, at all events, by Democritus, Plato, and Aristotle, that in space in itself there is no other direction than that from the centre toward the periphery, and the reverse, he appeals to the declaration of the senses,[2] — agreeably to his doctrine of knowledge, — according to which there is an absolute up and down, and maintains that the atoms were all originally in motion from above downward by virtue of their weight. But, in order to derive the origination of atom groups from this universal rain of atoms, he assumed that some of them had voluntarily deviated from the direct line of fall. From this deviation were explained the impacts, the grouping of atoms, and, ultimately, the whirling motions which lead to the formation of worlds, and which the old Atomism had derived from the meeting of atoms which were moving about in an unordered manner.[3]

It is noteworthy, however, that after he had in this way spoiled the inner coherence of the doctrine of Democritus, Epicurus renounced the voluntary choice of the atoms as a means for the further explanation of the individual processes of Nature, and from the point when the whirling motion of the atom-complexes seemed to him to be explained, allowed only the principle of mechanical

[1] Ps.-Plut. *Plac.* I. 3; *Dox.* D. 285; Cic. *De Fin.* I. 6, 17; Guyau, *Morale d'Epic.* 74.

[2] Diog. Laert. X. 60.

[3] Cf. § 4, 9. It seems that later Epicureans who held fast to the sensuous basis of this idea and yet would exclude the voluntary action of the atoms and carry out more thoroughly the Democritic thought of Nature's conformity to law, hit upon the plan of explaining the grouping (*ἀθροισμός*) of the atoms on the hypothesis that the more massive fell faster in empty space than the "lighter"; at least, Lucretius combats such theories (*De Rer. Nat.* II. 225 ff.).

necessity to stand.[1] He used, therefore, the voluntary self-determination of the atoms only as a principle to explain the *beginning* of a whirling motion which afterwards went on purely mechanically. He used it, therefore, just as Anaxagoras used his force-matter, *νοῦς* (cf. p. 52). For upon this metaphysical substructure Epicurus erected a physical theory which acknowledged only the mechanics of atoms as explanation for all phenomena of Nature without any exception, and carried this out, for organisms especially, by employing for the explanation of their purposive formation the Empedoclean thought of the survival of the fit.

Lastly, the Democritic principle of natural necessity asserts itself in the system of Epicurus in his assumption that in the continuous arising and perishing of the worlds which become formed by the assemblages of atoms, every possible combination, and thus every form of world-construction, must ultimately repeat itself. This was proved in a manner which would now be put upon the basis of the theory of probabilities, and the result of this repetition was held to be, that considering the infinitude of time, nothing can happen which has not already existed in the same way.[2] In this doctrine, again, Epicurus agrees with the Stoics, who taught a plurality of worlds, not co-existent, but following one another in time, and yet found themselves forced to maintain that these must be always completely alike, even to the last detail of particular formation and particular events. As the world proceeds forth from the divine primitive fire, so it is each time taken back again into the same after a predetermined period: and then when after the world-conflagration the primitive power begins the construction of a new world, this *φύσις* (Nature), which remains eternally the same, unfolds itself again and again in the same manner, in correspondence with its own rationality and necessity. This return of all things (*παλιγγενεσία* or *ἀποκατάστασις*) appears, accordingly, as a necessary consequence of the two alternative conceptions of the Stoics, *λόγος* and *εἱμαρμένη*.

5. The theoretical ideas of these two main schools of later antiquity are accordingly at one only in being completely *material-*

[1] Hence in a certain sense it might be said, from the standpoint of present criticism, that the difference between Democritus and Epicurus was only a relative one. The former regards as an unexplained primitive fact the direction which each atom has from the beginning, the latter regards as an unexplained primitive fact a voluntary deviation, taking place at some point of time, from a direction of fall which is uniform for all. The essential difference, however, is that with Democritus this primitive fact is something timeless, while with Epicurus it is a *single* voluntary act *occurring in time*, an act which is expressly compared with the causeless self-determination of the human will (cf. § 16).

[2] Plut. in Euseb. *Dox.* D. 581, 19; Us. *Fr.* 266.

istic, and it was just in opposition to Plato and Aristotle that they expressly emphasised this position of theirs. Both maintain that the real (τὰ ὄντα), because it manifests itself in action and passion (ποιεῖν καὶ πάσχειν), can be only corporeal; the Epicureans declared only empty space to be incorporeal. On the contrary, they combated the (Platonic) view that the properties of bodies are something incorporeal *per se* (καθ' ἑαυτό),[1] and the Stoics even went so far as to declare that even the qualities, forces, and relations of things, which present themselves in changing modes in connection with things and yet as actual or real, are "bodies,"[2] and with a mode of thought which reminds us of the coming and going of the homoiomeriæ with Anaxagoras,[3] they regarded the presence and change of properties in things as a kind of intermixture of these bodies with others, a view from which resulted the theory of the universal mingling and reciprocal interpenetration of all bodies (κρᾶσις δι' ὅλων).

In carrying out the materialistic theory the Epicureans produced scarcely anything new; on the contrary, the *Stoic doctrine of Nature* shows a number of new views, which are interesting not only in themselves, but also as having marked out the essential lines for the idea of the world held during the following centuries.

First of all, in the Stoic system the two antitheses, which were to be removed or identified in the conception of Nature as one, again part company. The divine primitive essence divides into the active and the passive, into force and matter. As force, the deity is fire or warm, vital breath, *pneuma*; as matter, it changes itself out of moist vapour (air) partly into water, partly into earth. Thus fire is the soul, and the "moist" is the body, of the World-god; and yet the two form a single being, identical within itself. While the Stoics thus attach themselves, in their doctrine of the transmutation and re-transmutation of substances, to Heraclitus, and in their characterisation of the four elements principally to Aristotle, and follow Aristotle also in the main in their exposition of the world-structure and of the purposive system of its movements, the most important thing in their physics is doubtless the doctrine of the pneuma.

God as creative reason (λόγος σπερματικός) is this warm vital breath, the formative fire-mind which penetrates all things and is

[1] Diog. Laert. X. 67.
[2] Plut. *C. Not.* 50, 1085.
[3] A similar materialising of the Platonic doctrine of Ideas (Plat. *Phædo*, 102), which reminds us of Anaxagoras, was apparently worked out by Eudoxos, who belonged to the Academy (p. 103). Arist. *Met.* I. 9, 991 a 17, and also Alex. Aphr. *Schol.* in Arist. 573 a 12.

dominant in them as their active principle; he is the universe regarded as an animate being, spontaneously in motion within itself, and purposefully and regularly developed. All this is comprehended by the Stoics in the conception of the πνεῦμα,[1] an extraordinarily condensed conception, full of relations, — an idea in which suggestions from Heraclitus (λόγος), Anaxagoras (νοῦς), Diogenes of Apollonia (ἀήρ), Democritus (fire-atoms), and not least the Peripatetic natural philosophy and physiology, became intricately combined.[2]

6. The most effective element in this combination proved to be the *analogy between macrocosm and microcosm*, universe and man, which the Stoics adopted from Aristotle. The individual soul, also, the vital force of the body, which holds together and rules the flesh, is fiery breath, pneuma; but all the individual forces which are active in the members and control their purposive functions, are also such vital minds or spirits (*spiritus animales*). In the human and the animal organism the activity of the pneuma appears connected with the blood and its circulation; nevertheless, the pneuma itself — just because it is also a body, said Chrysippus[3] — is separable in detail from the lower elements which it animates, and this separation takes place in death.

At the same time, however, the individual soul, as it is only a part of the universal World-soul, is completely determined in its nature and its activity by this World-soul; it is consubstantial with the divine Pneuma and dependent upon it. Just for this reason the World-reason, the λόγος, is for the soul the highest law (cf. above, § 14, 3). The soul's independence is therefore only one that is limited by time, and in any case it is its ultimate destiny to be taken back into the divine All-mind at the universal conflagration of the world. With regard to the continuance of this independence, *i.e.* as to the extent of individual immortality, various views were current in the school; some recognised the duration of all souls until the time of the universal conflagration, others reserved this for the wise only.

As now the one Pneuma of the universe (whose seat was located by the Stoics sometimes in heaven, sometimes in the sun, sometimes in the midst of the world) pours itself forth into all things as animating force, so the ruling part of the individual soul (τὸ ἡγεμονικόν or λογισμός) in which dwell ideas, judgments, and impulses, and

[1] Stob. *Ecl.* I. 374. *Dox.* D. 463, 16: εἶναι τὸ ὂν πνεῦμα κινοῦν ἑαυτὸ πρὸς ἑαυτὸ καὶ ἐξ αὐτοῦ, ἢ πνεῦμα ἑαυτὸ κινοῦν πρόσω καὶ ὀπίσω κτλ.
[2] Cf. H. Siebeck *Zeitsch. f. Völkerpsychologie*, 1881, pp. 364 ff.
[3] Nemesius, *De Nat. Hom.* p. 34.

as whose seat the heart was assumed, was regarded as extending its particular ramifications throughout the whole body, like the "arms of a polyp." Of such particular "pneumata" the Stoa assumed seven, — the five senses, the faculty of speech, and the reproductive power. As the unity of the divine Primitive Being dwells in the universe, so the individual personality lives in the body.

It is characteristic that the Epicureans could entirely adopt this external apparatus of psychological views. For them, too, the soul — which according to Democritus consists of the finest atoms — is a fiery, atmospheric breath (they apply likewise the term "pneuma"); but they see in this breath something that is introduced into the body from without, something held fast by the body and mechanically connected with it, which in death is forthwith scattered. They also distinguish between the rational and the irrational part of the soul, without, however, being able to attribute to the former the metaphysical dignity which it acquired in the Stoic theory. Here, too, their doctrine is, on the whole, insufficient and dependent.

7. In accordance with the pantheistic presupposition of the system, the metaphysics and physics of the *Stoics* form also a *theology*, a system of *natural religion* based on scientific demonstration, and this found also poetic presentations in the school, such as the hymn of Cleanthes. *Epicureanism*, on the contrary, is in its whole nature *anti-religious*. It takes throughout the standpoint of "Enlightenment," that religion has been overcome by science, and that it is the task and triumph of wisdom to put aside the phantoms of superstition which have grown out of fear and ignorance. The poet of this school depicts in grotesque outlines the evils which religion brought on man, and sings the glory of their conquest by scientific knowledge.[1] It is all the more amusing that the Epicurean theory itself fell to depicting a mythology of its own which it regarded as harmless. It believed that a certain degree of truth must attach to the universal faith in gods,[2] but it found that this correct idea was disfigured by false assumptions. These it sought in the myths which feigned a participation of the gods in human life, and an interference on their part in the course of things; even the Stoics' belief in Providence appeared to them in this respect as but a refined illusion. Epicurus, therefore, — following Democritus in his doctrine of the *eidola*, or images (§ 10, 4), — saw in the gods giant forms resembling men, who lead a blessed life of contemplation and spiritual intercourse in the intermediate spaces between the

[1] Lucret. *De Rer. Nat.* I. 62 ff.

[2] Diog. Laert. X. 123 f.; Us. p. 59 f.

worlds (*intermundia*), undisturbed by the change of events, and unconcerned as to the destiny of lower beings; and thus this doctrine, also, is fundamentally only the attempt of Epicureanism to put in mythological form its ideal of æsthetic self-enjoyment.

8. It was in an entirely different way that the ideas of the popular religion were fitted into the *Stoic* metaphysics. Whereas, up to this time in the development of Greek thought philosophical theology had separated itself farther and farther from the indigenous mythology, we meet here, for the first time, the systematic attempt to bring *natural and positive religion* into harmony. Accordingly, when the Stoics, also, yielded to the need of recognising the warrant of ideas universally present throughout the human race (cf. § 17, 4), their pneuma doctrine offered them not only a welcome instrument, but suggestions that were determinative. For consideration of the universe must teach them that the divine World-power has evidently taken on mightier forms and those of more vigorous life than individual human souls; and so, beside the one deity without beginning and end, which for the most part they designated as Zeus, a great number of "*gods that had come into existence*," made their appearance. To these the Stoics, as Plato and Aristotle had already done, reckoned first of all the stars, which they too honoured as higher intelligences and especially pure formations of the primitive fire, and further, the personifications of other natural forces in which the power of Providence, benevolent to man, reveals itself. From this point of view we can understand how an extensive interpretation of myths was the order of the day in the Stoic school, seeking to incorporate the popular figures in its metaphysical system by all kinds of allegories. In addition to this there was an equally welcome use of the Euemeristic theory, which not only explained and justified the deification of prominent men, but taught also to consider the demons sacred, as the guardian spirits of individual men.

Thus the Stoic world became peopled with a whole host of higher and lower gods, but they all appeared as ultimately but emanations of the one highest World-power, — as the subordinate powers or forces which, themselves determined by the universal Pneuma, were conceived of as the ruling spirits of the world's life. They formed, therefore, for the faith of the Stoics, the mediating organs, which represent, each in its realm, the vital force and Providence of the World-reason, and to them the piety of the Stoics turned in the forms of worship of positive religion. The *polytheism* of the popular faith was thus philosophically re-established, and taken up as an integrant constituent into metaphysical pantheism.

In connection with this scientific reconstruction of positive religion stands the theoretical justification of *divination* in the Stoic system where it awakened great interest, except in the case of a few men like Panætius, who thought more coolly. The interconnection and providentially governed unity of the world's processes was held to show itself — as one form of manifestation — in the possibility that different things and processes which stand in no direct causal relation to one another, may yet point to one another by delicate relations, and therefore be able to serve as signs for one another. The human soul is capable of understanding these by virtue of its relationship with the all-ruling Pneuma, but for the full interpretation of such ecstatic revelations the art and science of divination, resting upon experience, must be added. On this basis Stoicism regarded itself as strong enough to elaborate philosophically all the divination of the ancient world. This was especially true of its younger representatives, and in particular, as it seems, of Posidonius.

§ 16. The Freedom of the Will and the Perfection of the World.

The sharp definition of the contrasted mechanical and teleological views of the world, and especially the difference in the conceptional forms in which the thought, common to a certain extent, of Nature's universal conformity to law had been developed, led, in connection with the ethical postulates and presuppositions which controlled the thought of the time, to two new problems, which from the beginning had various complications. These were the problems of the freedom of the human will and of the goodness and perfection of the world. Both problems grew out of contradictions which made their appearance between moral needs and just those metaphysical theories which had been formed to satisfy those needs.

1. The proper home for the formation of these new problems was the *Stoic* system, and they may be understood as the necessary consequence of a deep and ultimately irreconcilable antagonism between the fundamental principles of the system. These principles are *metaphysical monism* and *ethical dualism*. The fundamental moral doctrine of the Stoics, according to which man should overcome the world in his own impulses by virtue, presupposes an anthropological duality, an opposition in human nature in accordance with which reason stands over against a *sensuous nature contrary to reason*. Without this antithesis the whole Stoic ethics is ready to fall. The metaphysical doctrine, however, by which the command of reason in man is to be explained, postulates such an unrestricted and all-

controlling reality of the World-reason that the reality of what is contrary to reason, either in man or in the course of the world, cannot be united therewith. From this source grew the two questions which since then have never ceased to employ man's critical investigation, although all essential points of view that can come into consideration in the case were more or less clearly illumined at that time.

2. The conceptions which form the presuppositions for the *problem of freedom* lie ready at hand in the ethical reflections on the voluntary nature of wrongdoing, which were begun by Socrates and brought to a preliminary conclusion by Aristotle in a brilliant investigation.[1] The motives of these thoughts are ethical throughout, and the domain in which they move is exclusively psychological. The question at issue is hence essentially that of freedom of choice, and while the reality of this is doubtless affirmed upon the basis of immediate feeling, and with reference to man's consciousness of his responsibility, difficulty arises only in consequence of the intellectualistic conception of Socrates, who brought the will into complete dependence upon insight. This difficulty develops primarily in the double meaning of "freedom," or, as it is here still called, "voluntariness" (ἑκούσιον), an ambiguity which has since been repeated again and again in the most variously shifted forms. According to Socrates, all ethically wrong action proceeds from a wrong view — a view clouded by desires. He who thus acts does not "know," therefore, what he is doing, and in this sense he acts involuntarily.[2] That is, only the wise man is free; the wicked is not free.[3] From this *ethical* conception of freedom, however, the *psychological* conception of freedom — *i.e.* the conception of freedom of choice as the ability to decide between different motives — must be carefully separated. Whether Socrates did this is a question;[4] at all events, it was done by Plato. The latter expressly affirmed man's freedom of choice,[5] appealing to his responsibility, — a psychological decision on essentially ethical grounds, — and, at the same time, he held fast to the Socratic doctrine that the wicked man acts involuntarily, *i.e.* is ethically not free. He even connects the two directly when he develops the thought[6] that man may sink into the

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[1] *Eth. Nic.* III. 1–8.
[2] Xen. *Mem.* III. 9, 4; *Cyrop.* III. 1, 38.
[3] Cf. Arist. *Eth. Nic.* III. 7, 113 b 14.
[4] According to a remark in the Peripatetic *Magna Moralia* (I. 9, 1187 a 7) Socrates, indeed, had expressly said, "it is not in our power" to be good or bad. According to this, therefore, he had denied psychological freedom.
[5] Plat. *Rep.* X. 617 ff.
[6] Plat. *Phæd.* 81 B.

condition of ethical non-freedom by his own fault, and, therefore, with psychological freedom.

With *Aristotle*, who separated himself farther from the Socratic intellectualism, the psychological conception of freedom comes out more clearly and independently. He proceeds from the position that ethical qualification in general is applicable only in the case of "voluntary" actions, and discusses in the first place the prejudices which this voluntariness sustains, partly from external force (βία) and psychical compulsion, and partly from ignorance of the matter. That action only is completely voluntary which has its origin in the personality itself, and of which the relations are fully known.[1] The whole investigation[2] is maintained from the standpoint of responsibility, and the discovered conception of voluntariness is designed to lead to the conception of accountability. It contains within itself the characteristics of external freedom of action, and of a conception of the situation unclouded by any deception. But, on this account, it must be still further restricted, for among his voluntary acts a man can be held accountable for those only that proceed from a choice (προαίρεσις).[3] *Freedom of choice*, therefore, which proceeds by reflecting upon ends as well as upon means, is the condition of ethical accountability.

Aristotle avoided a farther entrance upon the psychology of motivation and upon the determining causes of this choice; he contents himself with establishing the position that the personality itself is the sufficient reason for the actions[4] which are ascribed to it; and to this maintenance of the freedom of choice his school, and especially Theophrastus, who composed a treatise of his own on freedom, held fast.

3. On this same basis we find also the *Stoics*, in so far as purely ethical considerations are concerned. Precisely that lively feeling of responsibility which characterises their morals demanded of them the recognition of this free choice on the part of the individual, and they sought therefore to maintain this in every way.

Their position became critical, however, by reason of the fact that their metaphysics, with its doctrine of fate and providence, drove them beyond this attitude. For since this theory of fate made man, like all other creatures, determined in all his external and internal formation and in all that he does and suffers, by the

[1] *Eth. Nic.* III. 3, 1111 a 73: οὗ ἡ ἀρχὴ ἐν αὐτῷ εἰδότι τὰ καθ' ἕκαστα ἐν οἷς ἡ πρᾶξις.

[2] As the reference at the beginning to the right of punishment clearly shows (*Eth. Nic.* 1109 b 34).

[3] Ib. 4, 1112 a 1.

[4] Ib. 5, 1112 b 31: ἔοικε δὴ . . . ἄνθρωπος εἶναι ἀρχὴ τῶν πράξεων.

all-animating World-power, personality ceased to be the true ground (ἀρχή) of his actions, and these appeared to be, like all else that occurs, but the predetermined and unavoidably necessary operations of the God-Nature. In fact, the Stoa did not shrink from this extreme consequence of *determinism;* on the contrary, Chrysippus heaped up proof on proof for this doctrine. He based it upon the principle of sufficient reason (cf. above, § 15, 2); he showed that only by presupposing this could the correctness of judgments concerning the future be maintained, since a criterion for their truth or falsity is given only if the matter is already determined;[1] he also gave to this argument the changed form, that since only the necessary can be known, and not that which is still undecided, the foreknowledge of the gods makes necessary the assumption of determinism; he even did not scorn to adduce the fulfilment of predictions as a welcome argument.

In this doctrine, which, from the standpoint of the Stoic doctrine of the logos, was completely consistent, the opponents of the system saw of course a decided denial of freedom of the will, and of the criticisms which the system experienced this was perhaps the most frequent and at the same time the most incisive. Among the numerous attacks the best known is the so-called *ignava ratio*, or "lazy reason" (ἀργὸς λόγος), which from the claim of the unavoidable necessity of future events draws the fatalistic conclusion that one should await them inactively, — an attack which Chrysippus did not know how to avoid except by the aid of very forced distinctions.[2] The Stoics, on the contrary, concerned themselves to show that in spite of this determinism, and rather exactly by virtue of it, man remains the cause of his actions in the sense that he is to be made responsible for them. On the basis of a distinction[3] between main and accessory causes (which, moreover, reminds us throughout of the Platonic αἴτιον and ξυναίτιον) Chrysippus showed that every decision of the will does indeed necessarily follow from the co-operation of man with his environment, but that just here the outer circumstances are only the accessory causes, while the assent proceeding from the personality is the main cause, and to this accountability applies. While, however, this voluntarily acting ἡγεμονικόν, or ruling faculty of man, is determined from the universal Pneuma, this Pneuma takes on in every separate being a self-subsistent

[1] Cic. *De Fato*, 10, 20. So far as concerns disjunctive propositions Epicurus also for this reason gave up the truth of disjunction; Cic. *De Nat. Deor.* I. 25, 70.

[2] Cic. *De Fato*, 12, 28 ff.

[3] Cic. *De Fato*, 16, 36 ff.

nature, different from that of others, and this is to be regarded as a proper ἀρχή.[1] In particular, the Stoics make prominent the point that responsibility, as a judgment pronounced on the ethical quality of actions and characters, is quite independent of the question whether the persons or deeds might, in the course of events, have been other than they were, or not.[2]

4. The problem of the freedom of the will, which had been already complicated ethically and psychologically, experienced in this way still further a metaphysical and (in the Stoic sense) theological complication, and the consequence was that the *indeterminists* who were opponents of the Stoa gave a new turn to the conception of freedom which they regarded as threatened by the Stoic doctrine, and brought it into sharp definition. The assumption of the exceptionless causal nexus to which even the functions of the will were to be subordinated, seemed to exclude the capacity of free decision; but this freedom of choice had, since Aristotle, been regarded in all schools as the indispensable presupposition of ethical accountability. On this account the opponents thought — and this gave the controversy its especial violence — that they were defending an ethical good when they combated the Stoic doctrine of fate, and with that the Democritic principle of natural necessity. And if Chrysippus had appealed to the principle of sufficient reason to establish this, *Carneades*, to whom the freedom of the will was an incontestable fact, did not fear to draw in question the universal and invariable validity of this principle.[3]

Epicurus went still farther. He found the Stoic determinism so irreconcilable with the wise man's self-determination which formed the essential feature of his ethical ideal, that he would rather still assume the illusory ideas of religion than believe in such a slavery of the soul.[4] Therefore he, too, denied the universal validity of the causal law and subsumed freedom together with chance under the conception of *uncaused occurrence*. Thus in opposition to Stoic determinism, the *metaphysical conception of freedom* arose, by means of which Epicurus put the uncaused function of the will in man upon a parallel with the causeless deviation of the atoms from their line of fall (cf. § 15, 4). The freedom of *indeterminism* means, accordingly, a choice between different possibilities that is determined by no causes, and Epicurus thought thereby to rescue moral responsibility.

This metaphysical conception of *freedom as causelessness* is not at

[1] Alex. Aphr. *De Fato*, p. 112.
[2] Ib. p. 106.
[3] Cic. *De Fato*, 5, 9; 11, 23; 14, 31.
[4] Diog. Laert. X. 133 f.; Us. p. 65.

all isolated in the scientific thought of antiquity. Only the Stoa held fast inviolably to the principle of causality. Even Aristotle had not followed into details the application of his general principles (cf. p. 143); he had contented himself with the ἐπὶ τὸ πολύ, "for the most part," and had based his renunciation of the attempt fully to comprehend the particular upon the assumption of the contingent in Nature, *i.e.* of the lawless and causeless. In this respect the Stoics alone are to be regarded as forerunners of the modern study of Nature.

5. Stoicism encountered difficulties which were no less great, in carrying out its teleology. The pantheistic system which regarded the whole world as the living product of a divine Reason acting according to ends, and found in this its sole ground of explanation, must of course maintain also the purposiveness, goodness, and *perfection* of this universe; and conversely the Stoics were accustomed to prove the existence of the gods and of Providence by pointing to the purposiveness, beauty, and perfection of the world; that is, by the so-called *physico-theological* method.[1]

The attacks which this line of thought experienced in antiquity were directed not so much against the correctness of the reasoning (though Carneades applied his criticism at this point also) as against the premises; and conversely, the easy exhibition of the many defects and maladaptations, of the evils and the ethical harm in the world was employed as a counter-reason against the assumption of a rational, purposeful World-cause and of a Providence. This was done first and with full energy, naturally, by Epicurus, who asked whether God would remove the evil in the world but could not, or could remove it but would not, or whether perhaps neither of these was true,[2] — and who also pointed to the instances of injustice in which the course of life so often makes the good miserable and the wicked happy.[3]

These objections, intensified and carried out with especial care, were brought into the field by *Carneades*.[4] But to the reference to the evil and injustice of the course of events he added the objection to which the Stoics were most sensitive:[5] "Whence then in this world which has been created by Reason comes that which is void of reason and contrary to reason, whence in this world animated by the divine Spirit come sin and folly, the greatest of all

[1] Cic. *De Nat. Deor.* II. 5, 13 ff.
[2] Lactant. *De Ira Dei*, 13, 19; Us. *Fr.* 374.
[3] Id. *Inst. Div.* III. 17, 8; Us. *Fr.* 370.
[4] Cic. *Acad.* II. 38, 120; *De Nat. Deor.* III. 32, 80 ff.
[5] Cic. *De Nat. Deor.* III. 25–31.

evils?" And if the Stoics, as perhaps occurred in spite of their determinism,[1] wished to make free will responsible for these things, the further question arose, why the almighty World-reason should have given man a freedom which was thus to be abused, and why it should permit this abuse.

6. In the presence of such questions the Stoics with their monistic metaphysics were in a much worse case than Plato and Aristotle, who had been able to trace the maladaptations and evil back to the resistance of the "Not-being," or of matter respectively. In spite of this the Stoics came forward boldly to master these difficulties, and brought to light, not without acute thought, most of those arguments in which at later periods *theodicy* has moved again and again.

The teleological doctrine of the perfection of the universe can be protected against such attacks either by denying the dys-teleological facts, or by justifying them as the indispensable means or attendant result in the purposefully connected whole. Both methods were pursued by the Stoa.

Their psychological and ethical theories permitted the claim that what is called a physical evil is not such in itself, but becomes such by man's assent, that hence, if diseases and the like are brought about by the necessity of the natural course of events, it is only man's fault that makes an evil out of them; just as it is frequently only the wrong use which the foolish man makes of things that makes these injurious,[2] while in themselves they are either indifferent or even beneficial. So the objection based on the injustice of the course of the world is rebutted by the claim that in truth for the good man and the wise man physical evils are no evils at all, and that for the bad man, on the other hand, only a sensuous illusory satisfaction is possible, which does not make him truly happy, but rather only aggravates and strengthens the moral disease which has laid hold of him.[3]

On the other hand, physical evils may also be defended on the ground that they are the inevitable consequences of arrangements of Nature which are in themselves adapted to their ends and do not fail of their purpose, — as Chrysippus, for example, attempted to show in the case of diseases.[4] In particular, however, they have the moral significance of serving partly as reformatory punishments of Providence;[5] partly, also, as a useful stimulus for the exercise of our moral powers.[6]

[1] Cleanth. *Hymn.* v. 17.
[2] Seneca, *Qu. Nat.* V. 18, 4.
[3] Seneca, *Ep.* 87, 11 ff.
[4] Gell. *N. A.* VII. 1, 7 ff.
[5] Plut. *Stoic. Rep.* 35, 1.
[6] Marc. Aurel. VIII. 35.

While external evils were thus justified principally by pointing out their ethical purposiveness, it appeared for the Stoics an all the more urgent problem, though one which proved also the more difficult, to make moral evil or sin comprehensible. Here the negative way of escape was quite impossible, for the reality of baseness in the case of the great majority of men was the favourite subject of declamation in the Stoic discourses on morals. Here, then, was the centre of the whole theodicy, namely, to show how in this world which is the product of divine Reason, that which is contrary to reason in the impulses, dispositions, and actions of rationally endowed beings is possible. Here, therefore, the Stoics resorted to universal considerations. They showed how the perfection of the whole not only does not include that of all the individual parts, but even excludes it,[1] and in this way substantiated their claim that God must necessarily allow even the imperfection and baseness of man. In particular, they emphasised the point that it is only through opposition to evil that good as such is brought about; for were there no sin and folly, there would be no virtue and wisdom.[2] And while vice is thus deduced as the necessary foil for the good, the Stoics give as a final consideration,[3] that the eternal Providence ultimately turns even the evil to good, and has in it but an apparently refractory means for the fulfilment of its own highest ends.[4]

§ 17. The Criteria of Truth.

The philosophical achievements of the post-Aristotelian time were least important in the department of logic. Such a powerful creation as the *Analytics* of the Stagirite, which brought the principles of Greek science in so masterly a fashion to the consciousness of all in a conclusive form, must naturally rule logical thought for a long time, and, in fact, did this until the close of the Middle Ages, and even beyond. The foundations of this system were so firmly laid that at first nothing there was shaken, and there remained for the activity of the schools but to build up individual parts, — an activity in connection with which, even at that time, much of the artificial adornment characteristic of a degenerate age displayed itself.

1. The *Peripatetics* had already attempted to develop the Aristotelian *Analytics* systematically in this direction by a more detailed treatment, by partially new proofs, by farther subdivision, and by more

[1] Plut. *Stoic. Rep.* 44, 6.
[2] Ib. 36, 1.
[3] Ib. 35, 3.
[4] Cleanth. *Hymn.* vv. 18 f.

methodical formulation. In particular, *Eudemus* and *Theophrastus* undertook investigations concerning the hypothetical and disjunctive judgments, and the extension of the theory of the syllogism occasioned by the appearance of these judgments and premises. The Stoics continued these efforts; they set these new forms of judgment (ἀξίωμα) as composite over against the simple[1] categorical forms, developed into all their details the resulting forms of the syllogism, emphasised also especially the quality[2] of judgments, and deduced the laws of thought in altered forms. In general, however, they spun out the logical rules into a dry schematism and genuine scholastic formalism which thereby became farther and farther removed from the significant fundamental thoughts of the Aristotelian *Analytics*, and became a dead mass of formulæ. The unfruitful subtlety of this process took special delight in the solution of sophistical catches, in which the real meaning was inextricably involved in the contradiction of forms.

It was in these elaborations by the schools that the science of *logic* created by Aristotle first took on the purely *formal* character that it retained up to the time of KANT. The more pedantic the form taken in the development of the particular features, the more the consciousness of the living thought, to which Aristotle had aspired, was replaced by a schoolmaster-like network of rules, — essentially designed to catch thoughts and examine their formal legitimacy, but incapable of doing justice to the creative power of scientific activity. While, even with Aristotle, regard for proof and refutation had occupied the foreground, here it occupies the whole field. Antiquity did not attain a theory of investigation; for the weak beginnings which we find toward this end in the investigations of a younger Epicurean,[3] Philodemus,[4] concerning conclusions from induction and analogy, are relatively isolated, and have no result worthy of mention.

2. In the *doctrine of the Categories*, of the elaboration of which the Stoics made much account, more that was real was to be expected. Here it was indeed quite correct, and yet not very fruitful, to call attention to the fact that the supreme category, of which the rest

[1] Sext. Emp. *Adv. Math.* VIII. 93.
[2] Diog. Laert. VII. 65.
[3] Epicurus himself, and his school also, as a whole, did not trouble themselves as to the principles of formal logic. One might regard this as an evidence of taste and intelligence, but it was in truth only indifference toward all that did not promise directly practical advantages.
[4] On his treatise περὶ σημείων καὶ σημειώσεων, discovered in Herculaneum, cf. Th. Gompertz, *Herculanensische Studien*, Heft 1 (Leips. 1865); Fr. Bahusch (Lyck, 1879); R. Philippson (Berlin, 1881).

represent only special determinations, is that of Being (τὸ ὄν)[1] or *Something* (τι); and the co-ordination of the categories which, at least as regards the method of their enumeration, was Aristotle's plan, was replaced by an expressly systematic succession, according to which each category was to be more exactly determined by the following one. "What is," or Being, as abiding substrate of all possible relations, is substance (ὑποκείμενον); this is the supporter (*Träger*) of fixed qualities (ποιόν), and only in this aspect is it involved in changing states (τὸ πῶς ἔχον), and, in consequence of these latter, in relations to other substances (τὸ πρός τί πως ἔχον).

Out of the doctrine of the categories grows thus an *ontology*, that is, a metaphysical theory as to the most general formal relations of reality, and this theory in the system of the Stoics, agreeably to their general tendency (cf. § 15, 5), takes on a thoroughly *materialistic* character. As substance, the existent is matter which is in itself destitute of properties (ὕλη), and the qualities and forces which are inherent in matter as a whole, as well as in a particular part (ποιότητες — δυνάμεις), are likewise kinds of matter (atmospheric currents) which are commingled with it (κρᾶσις δι' ὅλων). In this connection both substance and attributes are regarded, as well from the point of view of the general conception as from that of the individual thing, and in the latter aspect it is emphasised that every individual thing is essentially and definitely distinguished from all others.[2]

Besides these categories of Being, we find making their appearance among the Stoics those conceptional forms by which the relation of thought to Being is expressed, and in these the *separation of the subjective from the objective*, for which a preparation had been growing more and more complete in the development of Greek thought, now attains definite expression. For while the Stoics regarded all objects to which thought relates as corporeal, while they regarded the activity of thought itself, and no less its expression in language[3] as corporeal functions, they were still obliged to confess that the *content of consciousness* as such (τὸ λεκτόν) is of in-

[1] That the Peripatetics also busied themselves with this category is proved by the definition preserved by Strato: τὸ ὄν ἐστι τὸ τῆς διαμονῆς αἴτιον (Proclus *in Tim.* 242 E).
[2] In contrasting the first two with the last two categories, the language relation of noun and verb appears here also (in Stoic terminology πτῶσις and κατηγόρημα).
[3] The Stoics laid great weight upon the discriminative comparison of thought and of speech, of the inner activity of reason (λόγος ἐνδιάθετος), and of its expression through the voice (λόγος προφορικός). Hence, too, the assumption (cf. § 15, 6) of the faculty of speech as a proper part of the soul; hence their thorough treatment of rhetoric and grammar side by side with logic.

corporeal nature. But since the distinction was thus sharply drawn between Being and content of consciousness, the *fundamental epistemological problem* came forward, how the relations by which the ideational content refers to Being and agrees with it, are to be thought.

3. This question was, moreover, also brought home by the vigorous development which *Scepticism* had meanwhile undergone, and by the relatively strong position which it occupied as compared with the dogmatic systems.

Whether by Pyrrho or Timon it matters not, it was at all events at about the same time at which the great school-systems became dogmatically developed and fortified, that all those arguments were systematised into a complete whole, by which the Sophistic period had shaken the naïve trust in man's capacity for knowledge. Although the ethical end of making man independent of fate by withholding judgment was ultimately decisive (cf. § 14, 2), this Scepticism still forms a carefully carried out theoretical doctrine. It doubts the possibility of knowledge in both its forms, the form of perception as truly as that of judging thought, and after it has destructively analysed each of these two factors singly, it adds expressly that just on this account their union can have no certain result.[1]

As regards perception, the Sceptics availed themselves of the Protagorean relativism, and in the so-called *ten Tropes*[2] in which Ænesidemus[3] sets forth the sceptical theory with very defective arrangement, this tendency still occupies the broadest space. Perceptions change not only with the different species of animate beings (1), not only with different men (2), according to their customs (9) and their whole development (10), but even in the case of the same individual at different times (3), in dependence upon bodily conditions (4), and upon the different relations in which the individual finds himself with regard to his object spatially (5). They alter, also, because of the difference in the states of the object (7), and have, therefore, no claim to the value of an immediate report of things, because their origination is conditioned by intermediate states in media such as the air, the co-operating elements furnished by which we are not able to deduct (6). Man is, therefore, in all ways, not in a condition to know things purely (8), and in the face of the multiplicity of impressions so full of contradictions he has no means of distinguishing a true from a false impression. One is *no more* (οὐ μᾶλλον) valid than another.

[1] From two deceivers combined it is only right to expect no truth. Diog. Laert. IX. 114.

[2] Sext. Emp. *Pyrrh. Hyp.* I. 38 ff.

[3] It was said by the ancient writers that Ænesidemus was attached, not only to Scepticism, but also to the metaphysics of Heraclitus. The question whether this was actually so, or whether such a relation was only ascribed to him by mistake, has solely antiquarian significance. For had the former been the case, it would have been but another manifestation of a real relationship in thought, to which Plato had already directed attention, *Theæt.* 152 E ff.; cf. p. 92, note 2.

Equally relative with man's perceptions are also his opinions (δόξαι). In this aspect the influences of the Eleatic dialectic assert themselves in Pyrrhonism. It is shown that to every opinion the opposite can be opposed with equally good reasons, and this *equilibrium of reasons* (ἰσοσθένεια τῶν λόγων) does not permit us, therefore, to distinguish true and false: in the case of such a contradiction (ἀντιλογία) the one holds *no more* than the other. All opinions accordingly stand — according to the phrase of the Sophists, adopted by the Sceptics — only by convention and custom (νόμῳ τε καὶ ἔθει), not by their essential right and title (φύσει).

More energetically still did the later Scepticism attack the possibility of scientific knowledge, by disclosing the *difficulties of the syllogistic procedure*, and of the methods which Aristotle had built up upon this.[1] In this *Carneades* seems to have led the way, showing that every proof, since it presupposes other proofs for the validity of its premises, makes necessary a *regressus in infinitum* — an argument that was completely in place for the Sceptic who did not, as did Aristotle, recognise anything as immediately certain (ἄμεσον; cf. § 12, 4). The same argument was carried further by *Agrippa*, who formulated Scepticism in five Tropes[2] much more clearly and comprehensively than Ænesidemus. He called attention again to the relativity of perceptions (3) and of opinions (1); he showed how every proof pushes on into infinity (2: ὁ εἰς ἄπειρον ἐκβάλλων), and how unjustifiable it is in the process of proof to proceed from premises that are only hypothetically to be assumed (4), and finally, how often it occurs, even in science, that that must be postulated as ground of the premises which is only to be proved by means of the syllogism in question (5: ὁ διάλληλος). In the latter aspect attention was also called to the fact that in the syllogistic deduction of a particular proposition from a general one, the general would yet from the outset be justified only on condition that the particular were valid.[3]

Since the essential nature of things is thus inaccessible to human

[1] Sext. Emp. *Adv. Math.* VIII. 316 ff.

[2] Sext. Emp. *Pyrrh. Hyp.* I. 164 ff.: (1) The conflict of opinions. (2) The endless regress in proving. (3) The relativity of all perceptions. (4) The impossibility of other than hypothetical premises. (5) The circle in the syllogism.

[3] Sext. Emp. *Pyrrh. Hyp.* II. 194 ff. Renewed in J. S. Mill, *Logic*, II. 3, 2; corrected in Chr. Sigwart, *Logik*, I. § 55, 3.

knowledge,[1] the Sceptics demanded that man should suspend judgment so far as possible (ἐποχή). We can say nothing concerning things (ἀφασία); we can only assert that this and that appears so or so, and in so doing we report only our own momentary states (as the Cyrenaics had already taught, § 8, 3). Even the sceptical maintenance of the impossibility of knowledge (in order to avoid the contradiction that here something of a negative character, at least, seems to be maintained and proved)[2] should be conceived of rather as a profession of belief than as knowledge,—more as a withholding of opinion than as a positive assertion.

Cf. V. Brochard, *Les Sceptiques Grecs* (Paris, 1877).

4. The attack of Scepticism was most sharply concentrated in the principle[3] that, in the presence of the deceptions to which man is exposed in all his ideas of whatever origin, there is no univocal, sure sign of knowledge, no *criterion of truth*. If, therefore, the dogmatic schools held fast to the reality of knowledge, even from the Socratic motive that virtue is impossible without knowledge,[4] they found the task assigned them by this sceptical position of announcing such a criterion and of defending it against the sceptical objections. This was done also by the *Epicureans* and *Stoics*, although their materialistic metaphysics and the *sensualistic* psychology connected with it prepared for them serious, and, ultimately, insurmountable difficulties.

In fact, it was the psycho-genetic doctrine of both these schools that the content of all ideas and knowledge arises solely from *sensuous perception*. The origin of sense-perception the Epicureans explained by the image theory of Democritus (§ 10, 3). This theory gave even to the illusions of the senses, to dreams, etc., the character of perceptions corresponding to reality; and even the constructions of the combining fancy or imagination could be explained on this theory by unions which had already taken place objectively between the images. But the Stoics also regarded perception as a bodily process, as an *impression* of outer things upon the soul (τύπωσις), the possibility of which seemed to them to be self-evident, in view of the universal commingling of all bodies. This

[1] The simplest formulation of Scepticism, finally, was that which brought Agrippa's five Tropes together into two; there is nothing immediately certain, and just on this account nothing mediately certain; accordingly nothing whatever that is certain. Sext. Emp. *Pyrrh. Hyp.* I. 178 f.

[2] Cic. *Acad.* II. 9, 28 and 34, 109; Sext. Emp. *Adv. Math.* VIII. 463 ff.

[3] Sext. Emp. *Adv. Math.* VII. 159.

[4] Diog. Laert. X. 146 f. K. Δ; Us. p. 76 f., on the other hand, Plut. *Stoic. Rep.* 47, 12.

crassly sensuous conception they expressed by the since frequently repeated comparison, that the soul is originally like a blank tablet, on which the outer world imprints its signs in the course of time.[1] More refined, but more indefinite, and yet absolutely mechanical still in its tone is the designation of Chrysippus, who called perception an alteration of qualities (ἑτεροίωσις) in the soul; for, at all events, the idea or mental presentation (φαντασία) remains for him, too, a corporeal effect or product of that which is presented (φανταστόν).

Both schools explained the presence of conceptions and of general ideas (προλήψεις, and among the Stoics also κοιναὶ ἔννοιαι) solely by the persistence of these impressions, or of parts of them, and by their combination. They combated, therefore, as the Cynics especially had already done, the Platonic-Aristotelian doctrine of Ideas and Forms,[2] especially the assumption of an independent activity or power of forming conceptions, and traced even the most general and abstract conceptions back to this mechanism of elementary perceptions (to which they scarcely gave any further analysis). To these general ideas of experience (ἐμπειρία), which arise naturally and involuntarily (φυσικῶς), the Stoics indeed opposed the conceptions of science produced by the aid of a methodical consciousness; but even the content of these scientific conceptions was held to be exclusively derived from sensations. In this connection, both schools laid especial weight upon the co-operation of language in the origination of conceptions.

But now, in so far as the total content of impressions, and likewise also the nature of thought, are the same among all men, it necessarily follows that under these circumstances the same general ideas will be formed, in both the theoretical and the practical domain, by means of the psychological mechanism. This consequence was drawn especially by the Stoics, whose attention was by their whole metaphysics directed vigorously to the common nature of the psychical functions, which were all held to arise from the divine Pneuma. They taught, therefore, that the surest truth is to be sought in those ideas which develop uniformly among all men with natural necessity, and they liked to take as their starting-point, even for scientific reasonings, these κοιναὶ ἔννοαι, or *communes notiones*. They have a

[1] Plut. *Plac.* IV. 11; *Dox.* D. 400; Plut. *Comm. Not.* 47; cf. besides Plat. *Theæt.* 191 C.

[2] Hence the Stoics regard Platonic "Ideas" (class-concepts) as merely structures of the human mind (ἐννοήματα ἡμέτερα; cf. Plut. *Plac.* I. 10, *Dox.* D. 309), and thus gave the first suggestion for the later subjective meaning of the term "idea." Cf. § 19.

predilection for appealing to the *consensus gentium* — the consent of all men, — an argument whose validity it was easy for the Sceptics to shake by pointing to the negative instances of experience.[1]

It was, therefore, not in the spirit of the Stoics that in the later Eclectic literature these common ideas were called *innate* (*innatæ*), and that *Cicero* especially saw in them not only that which Nature teaches equally to all, but also that which Nature or the deity has originally implanted in every one at the same time with his reason. Cicero maintains this, not only for the fundamental conceptions of morality and right, but also for the belief in the deity and in the immortality of the soul: the knowledge of God especially is held to be only man's recollection of his true origin.[2] This doctrine formed the best bridge between the Platonic and the Stoic theories of knowledge, and under the Stoic name of κοιναὶ ἔννοιαι the *rationalistic doctrine of knowledge* was propagated on into the beginnings of modern philosophy. Just by this means it retained the *accessory psychologistic meaning* that rational knowledge consists in *innate ideas*.

5. While now the Stoics as well as the Epicureans originally traced back all the contents of ideas to sense-impressions psychogenetically, it was only the Epicureans who drew from this the consistent inference that the sign for the recognition of truth is solely the feeling of the necessity with which a perception forces itself upon consciousness, the irresistible *clearness or vividness* (ἐνάργεια) conjoined with the taking up of reality in the function of the senses. Every perception is as such true and irrefutable; it exists, so to speak, as a self-certain atom of the world of consciousness, free from doubt, independent, and unmovable by any reasons whatever.[3] And if different and mutually contradictory perceptions of the same objects seem to exist, the error lies only in the opinion which refers them, and not in the perceptions which by the very fact of their difference prove that different outer causes correspond to them; relativity is accordingly nothing in point against the correctness of all perceptions.[4]

Meanwhile, opinions (δόξαι) constantly and necessarily go beyond this immediate presence of sense-impressions: for the knowledge requisite for acting needs also knowledge of that which is not immediately perceptible: it needs to know, on the one hand, grounds

[1] Cic. *De Nat. Deor.* I. 23, 62 f.
[2] Id. *De Leg.* I. 8, 24: . . . *ut is agnoscat deum, qui unde ortus sit quasi recordetur ac noscat.*
[3] The parallelism of this epistemological Atomism with the physical and ethical Atomism of the Epicureans is obvious.
[4] Sext. Emp. *Adv. Math.* VII. 203 ff.

of phenomena (ἄδηλον), and on the other hand the expectation as to the future that may be inferred from them (προσμένον). But for all these farther functions of the psychical mechanism there is, according to the Epicureans, no other guaranty than perception again. For if conceptions (προλήψεις) are only sense-impressions retained in the memory, they have their own certainty in the clearness or vividness of these impressions, a certainty susceptible neither of proof nor of attack;[1] and hypotheses (ὑπολήψεις), both with regard to the imperceptible grounds of things and also with regard to future events, find their criterion solely in perception, in so far as they are verified by it, or at least not refuted; the former holds for the prediction of the future, the latter for explanatory theories.[2] There is therefore among the Epicureans nothing said of an independent faculty of conviction or belief; whether our expectation of any event is correct we can know only when the event occurs. Thus they renounce on principle any attempt at an actual theory of investigation.

6. It is evident from this that the Epicureans might regard their own Atomistic metaphysics as a hypothesis not refuted by facts, but that they were not permitted to regard it as a hypothesis that was proved. It was a hypothesis, indeed, of which the essential end, as they employed it, was to displace other hypotheses which seemed to them ethically objectionable. Their dogmatism is accordingly only problematical, and their doctrine of knowledge, in so far as it has to do with rational knowledge, is very strongly permeated with scepticism. In so far as they recognise only that which passes with sense-perception as a "fact," but regard such facts as completely certain, their standpoint is to be designated as that of *Positivism*.

This positivism was developed in antiquity still more consistently, and in a form freed from the ethical and metaphysical tendencies of Epicurus, by the theories of the later schools of empirical physicians. These schools went with the Sceptics as regards knowledge of all that is imperceptible by the senses and as regards all rational theories; on the other hand, in their recognition of the sensuous evidence of perceptions, they went with the Epicureans. Observation (τήρησις) is here portrayed as the basis of the physician's art, and observation retained in memory is regarded as the sole essence of his theory: ætiological explanations especially are rejected on principle.

Connected with this is the circumstance that the later Sceptics treated the conception of *causality* in searching investigations and

[1] As the final criterion even for the intellectually good is, with Epicurus, sensuous pleasure, so the criterion of the truth of conceptions is only sensuous vividness (*Evidenz*).
[2] Sext. Emp. VII. 211.

discovered its difficulties. Ænesidemus had already propounded a series of such aporiæ,[1] and in Sextus Empiricus we find them developed more broadly and comprehensively.[2] With him not only such defects of ætiological theories are designated as, that they reduce the known to the unknown which is just as inexplicable, that they maintain one possibility among many without a sufficient reason, that they do not examine experience carefully enough with a view to possible negative instances, and finally that they after all explain that which is inaccessible to perception by some sort of a scheme known from perception, which is especially simple and therefore apparently intelligible in itself; besides these, he searches out, also, all the general difficulties which prevent us from gaining a clear (picturate) idea of the causal relation. The process of the action of one thing upon another, the passing over of motion from one thing to another, can be made intelligible neither on the assumption that that which acts (as force) is immaterial, nor on the opposite assumption; nor does contact (ἀφή) which is assumed as a *conditio sine qua non* of the causal process (as had been already done by Aristotle) make it any more explicable. So, too, the time relation of cause and effect is extremely difficult to determine. The most important thought in these discussions, however, is the pointing out of the *relativity of the causal relation:* nothing is in itself a cause or effect; each of the two is such only with reference to the other; αἴτιον and πάσχον are correlative terms which must not be absolutely postulated or asserted. The (Stoic) conception of an essentially efficient cause, the conception of a creative deity, is then thereby excluded.

7. The *Sceptics of the Academy* sought in another direction a substitute for the certainty of rational knowledge which they also had given up. Since in practical life suspense cannot be carried out as a principle of conduct and action is indispensable, and since for action determining ideas are requisite, Arcesilaus brought out the view that ideas, even though one refuse them his complete assent, are yet able to move the will,[3] and that in practical life one must content himself with a certain kind of confidence or trust (πίστις), according to which some ideas may in a greater degree than others be regarded as probable (εὔλογον), adapted to the purpose of life, and reasonable.[4]

[1] Sext. Emp. *Pyrrh. Hyp.* I. 180 ff.
[2] *Adv. Math.* IX. 195 ff.; cf. K. Göring, *Der Begriff der Ursache in der griechischen Philosophie* (Leips. 1874).
[3] Plut. *Adv. Col.* 26, 3.
[4] Sext. Emp. *Adv. Math.* VII. 158.

The *theory of Probabilism* was carried out farther by *Carneades*[1] in an attempt to define more exactly, according to logical relations, the particular degrees of this "belief." The least degree of *probability* (πιθανότης) is that which (as an indistinct and imperfect form of sensuous clearness or vividness — ἐνάργεια) belongs to the single idea that stands in no farther connections. A higher degree of probability belongs to that idea which can be united (ἀπερίσπαστος), without any contradictions, with other ideas in connection with which it belongs. Lastly, the highest stage of belief is reached where a whole system of such connected ideas is examined as to its complete harmony and verification in experience (περιωδευμένη). Empirical confidence rises, therefore, from the sensuously isolated to the logical systems of scientific research. But though in the latter form it may be completely sufficient for practical life (as Carneades assumed), it is yet not able to lead to a completely certain conviction.

8. In contrast with this, the *Stoics* made the most strenuous efforts to gain an epistemological substructure for their metaphysics, to which they attributed so high a value from considerations of ethical interest, and in spite of psycho-genetic sensualism, to rescue the *rational* character of science.[2] On the principle that like is known by like, their doctrine of the World-reason demanded a knowledge of the external Logos by the internal logos of man, — by his reason;[3] and the ethical antagonism or dualism between virtue and the sensuous impulses required a parallel distinction between knowledge and sensuous ideas. Although, therefore, the whole material of knowledge was held to grow out of sensuous presentations, the Stoics pointed out, on the other hand, that in perception as such, no knowledge whatever is contained; that it is not to be characterised as either true or false. Truth and falsity can be predicated only when *judgments* (ἀξιώματα) have been formed in which something is asserted or denied as to the relation of ideas.[4]

Judgment, nevertheless, is conceived of by the Stoics — and in this they take a new and important position, which, in antiquity, only the Sceptics approach in some degree — by no means merely as the theoretical process of ideation and combination of ideas. They recognised, as the essential characteristic in judgment, the peculiar act of *assent* (συγκατάθεσις), of approval, and of being convinced, with which the mind makes the content of the idea its own, grasps

[1] Ib. 166 ff.
[2] Cf. M. Heinze, *Zur Erkenntnisslehre der Stoiker* (Leips. 1880).
[3] Sext. Emp. *Adv. Math.* VII. 93.
[4] Sext. Emp. *Adv. Math.* VIII. 10.

it, and in a certain way takes possession of it (καταλαμβάνειν). This act of apprehension the Stoics regard as an independent function of consciousness (ἡγεμονικόν), in the same way as they regard the assent to the impulses, which makes its appearance in passion. The arising of ideas, like that of the excitations of feeling, is a process which is of natural necessity and completely independent of human will (ἀκούσιον); but the assent by which we make the one class, judgments, and the other, passions, is a decision (κρίσις) of consciousness, free (ἑκούσιον) from the outer world.[1]

But now in the case of the wise man, by virtue of the identity of the universal with the individual logos, this assent appears only in the case of those ideas which are true: the soul, therefore, in apprehending the content of these ideas, apprehends reality. Such an idea the Stoics called φαντασία καταληπτική,[2] and they were of the conviction that such an idea must call forth the reasonable man's assent with immediate evidence or clearness. Hence assent itself (συγκατάθεσις) is conceived of as an activity of the thinking soul, but individual perceptions appear as the objects of assent as truly as do the intellectual activities of conception, judgment, and reasoning, based upon the individual perceptions.

If thus the Stoics understood by the φαντασία καταληπτική that idea by which the mind lays hold of reality, and which, therefore, so illumines the mind that this, in its assent, makes reality its own, this was indeed the correct expression for the *requirement* which they set up for the true idea,[3] but the definition was not at all adapted to the end for which it was framed: that is, for a sign by which to recognise truth. For as the Sceptics[4] very justly objected, the subjective mark, assent, might be shown as a psychological fact in the case of a multitude of evidently false ideas.

Thus the anthropological discord in the Stoic doctrine manifests

[1] Ib. VIII. 39, 7.

[2] In the interpretation of this term there is a wide divergence. According to the sources, it seems now as if the idea were intended which the mind lays hold of, now that which apprehends the real fact, now that by which the mind apprehends reality, and now again that which on its part so lays hold of the mind that the mind must assent to it. It has hence been supposed that the Stoics purposely constructed the expression in this ambiguous form, inasmuch as all these relations would harmonise in it, and perhaps E. Zeller (IV.[3] 83) [Eng. tr., *Stoics*, etc., p. 89] intended to repeat this ambiguity by his translation, "conceptional idea or perception" (*begriffliche Vorstellung*), which, however, has an accessory logical sense that the Stoics certainly did not intend.

[3] It is worth while to point out the fact that in their designations for the relation of the knowing mind to the external reality, the Stoics employ, for the most part, expressions from the field of the sense of touch (impression, apprehending, or grasping, etc.), while formerly optical analogies had been preferred. Cf. § 11, 2.

[4] Sext. Emp. *Adv. Math.* VII. 402 ff.

itself even in this central conception of their theory of knowledge. As it could not be explained in accordance with their metaphysics how the individual soul arising from the World-reason should fall under the mastery of sensuous impulses, so it is equally impossible to understand how theoretical assent should, under certain circumstances, be given even to false ideas. Both difficulties, however, have ultimately a common ground. The Stoics agreed with Heraclitus in identifying in their metaphysics the *normative and the actual ordering of things*, although these conceptions had meanwhile become much more clearly separated. Reason was for them that which should be, as well as that which is; it was at the same time νόμος and φύσις. And this antithesis, the two sides of which came into strenuous opposition in their doctrine of freedom and their theodicy, was the problem of the future.

CHAPTER II.

THE RELIGIOUS PERIOD.

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The gradual transition of the Hellenistic-Roman philosophy from the ethical to the *religious standpoint* had its inner causes in this philosophy itself, and its external occasion in the imperious demands made by the felt need of the time. For the farther the contact between the systems extended, the more it became evident how little able philosophy was to fulfil the task which it had set itself: namely, that of educating man by a sure insight to a state of virtue and happiness, to inner independence of the world. While the sceptical mode of thought, which was extending more and more, already taught that virtue consists rather in the renunciation of the attempt to know, than in knowledge itself, the view forced its way more and more, even among the Stoics, that their ideal of the wise man, so sharply and rigidly drawn, was not entirely realised in any

human being, and thus it was felt in every direction that man in his own strength can become neither knowing, nor virtuous and happy.

If, then, a disposition to welcome a higher help for ethical ends was necessarily evoked in philosophy itself, it was also true that the theoretical doctrines of the time contained a great number of religious elements. The Epicureans, to be sure, purposely excluded such, but the Stoics, on the contrary, granted them an entrance that was all the freer. With the Stoics, not only did metaphysics lead to seeking the principle of morals in a divine command, but in their *pneuma* doctrine, the possibility presented itself of giving to the creations of myth a philosophical meaning, which might be shared also by all forms of worship. Finally, the spiritual monotheism in Aristotle's teaching, and that ideal tendency with which Plato sought the abiding essence of things in a higher world of the supersensuous, were not forgotten.

Just this *dualism*, which opposed the earthly world of the perishable to a supersensuous world of the divine, ultimately proved to be the right expression for that inner discord which ran through the entire life of the aging Greek and Roman world. The old craving for sensuous pleasure might still celebrate its orgies in full power and to the intoxication of the senses; but in the midst of it all, out of surfeit and loathing grew a new craving for a purer, higher joy: and in the presence of the tremendous contrasts which the social condition of the Roman Empire brought with it, the look of all the millions that saw themselves excluded from the good things of this earth turned longingly toward a better world. Thus in all ways a deep, passionate need for true salvation of the soul (σωτηρία) came to be increasingly felt, a hunger for something beyond the earthly, a religious urgency without an equal.

This *religious movement* proved its vigour first of all in the eager reception which foreign forms of worship found in the Græco-Roman world, in the mingling and fusing of Oriental and Occidental religions. But with the adjustment which their oppositions found here and there, their strife for the mastery over men's spirits became still more energetic, and thus the soil of the ancient world of civilisation, after bearing the fruits of art and science, became the battleground of religions. Man's essential interest became thereby transferred for long centuries from the earthly to the heavenly sphere; he began to seek his salvation beyond the world of sense.

But the forms in which this *contest of the religions* was waged prove in spite of all what a spiritual and intellectual power Greek science had grown to be. For so strongly was the ancient world

"sicklied o'er with the pale cast of thought," so deeply had it become permeated by the feeling of a need for knowledge, that each of the religions desired to satisfy not only the feelings but also the intellect, and was therefore anxious to transform its life into a doctrine. This is true even of *Christianity*, and indeed precisely true of it. The true, victorious power of the religion of Jesus lay, to be sure, in the fact that it entered this decrepit, *blasé* world with the youthful force of a pure, high, religious feeling, and a conviction that was courageous to the death; but it was able to conquer the ancient civilised world only by taking it up into itself and working it over; and as in its external conflict with the old world it shaped its own constitution[1] and thereby ultimately became so strong as to be able to take possession of the Roman state, so also in its defence against the ancient philosophy it made the world of that philosophy's ideas its own, in order thereby to build up its own dogmatic system.

Thus the needs of science and of life met. The former sought the solution of the problems at which it had been labouring in vain, in religion, and the latter desired a scientific formulation and basis for its religious longing or conviction. Hence from this time on, for many centuries, the history of philosophy is grown together with that of dogmatic theology,[2] and the period of *religious metaphysics* begins. The thought of antiquity described a peculiar curve, separating itself farther and farther from religion from which it proceeded, reaching its extreme separation in Epicureanism, and then again steadily drawing near to religion, to return at last entirely within it.

Under these conditions it is possible to understand how that *Weltanschauung* which separated the supersensuous and the sensuous, — looking upon them, from the point of view of value, as divine perfection and earthly baseness, respectively, — constituted the common ground of the whole religious-philosophical movement. This view had already, indeed, been introduced by the Pythagoreans (cf. § 5, 7), and had been maintained even by Aristotle, but it had, without doubt, found its most forcible formulation in the *Platonic metaphysics*. It was, therefore, this latter system which formed the controlling centre for the religious closing development of ancient thought. A religious development of Platonism is the fundamental character of this period.

[1] Cf. K. J. Neumann, *Der römische Staat und die allgemeine Kirche bis auf Diocletian* (Vol. I. Leips. 1890).

[2] It will be understood as a matter of course that the following exposition has left at one side all specifically dogmatic elements, except where they are quite inseparably interwoven with philosophical principles.

The geographical centre of the movement, however, is found in that city which, by its history, as well as by its population, represented most distinctly the mingling of peoples and of religions, — *Alexandria*. Here, where in the active work of the museum all treasures of Grecian culture were garnered, all religions and forms of worship crowded together in the great throngs of the commercial metropolis to seek a scientific clarification of the feelings that surged and stormed within them.

The first line of the *Alexandrian philosophy* is the so-called *Neo-Pythagoreanism*, a mode of thought which, proceeding from the religious practice of the Pythagorean mysteries, makes only an external use of the number-mysticism of the old Pythagoreans after whom it calls itself and its writings, while it finds the theoretical setting for its world-renouncing, religious-ascetic ethics in a transformation of the Platonic metaphysics, which became of the profoundest value for the conception of the spiritual nature in the following period. *Apollonius of Tyana*, the founder of a religion, is to be regarded as typical representative of this school.

Not without influence from this school, the *Stoa*, also, in the time of the Empire, brought out more energetically the religious elements in its theory of the world, so that not only did the anthropological dualism of the system become sharpened, but a more theistic mode of thought gradually became substituted for the original pantheism of the school. In men like *Seneca*, *Epictetus*, and *Marcus Aurelius*, the Stoic doctrine became completely a philosophy of deliverance or redemption.

Even *Cynicism* revived again about this time in a religious garb, as a rude, popular preaching of renunciation, and *Demonax* passes for its best-known representative.

Scarcely to be separated from the Neo-Pythagoreans are the *Eclectic Platonists* of the first centuries of our era, such as *Plutarch* of Chæronea and *Apuleius* of Madaura. Later appear *Numenius* of Apamea and *Nicomachus* of Gerasa, who, besides, already stand under Jewish and Christian influences as witnesses of a complete fusion of the two tendencies.

But while, in all these forms, the Hellenic element ever maintains the ascendency over the Oriental, the latter makes its appearance in very much stronger force in the *Jewish philosophy of religion*. As the sect of the Essenes[1] probably proceeded from a contact of Neo-Pythagoreanism with the Hebrew religious life, so the various attempts of learned Jews to draw nearer to Greek science in the

[1] Cf. E. Zeller V.[3] 277 ff.

presentation of their dogmas, led ultimately to the doctrine of *Philo of Alexandria*, whose original elaboration of these fermenting bodies of thought influenced their further formation and movement in the most important points.

The *philosophy of Christianity*, which for these first centuries is usually designated by the name *Patristics*, unfolded in an analogous manner upon a larger scale. This philosophical secularisation of the gospel begins with the *Apologists*, who sought to present its religious belief as the only true philosophy, with the purpose of protecting Christianity in the eyes of the cultured world from contempt and persecution, and therefore began to adapt this content of religious faith to the conceptional forms of Greek science: the most important of them are *Justin* and *Minucius Felix*.

But the need of changing faith (πίστις) into knowledge or wisdom (γνῶσις) asserted itself vigorously in the Christian communities, even without this polemical tendency. The first attempts, however, which the *Gnostics* made to create an adequate view of the world for the new religion, proceeded from the excited phantasies of a Syrian mingling of religions, and, in spite of the employment of Hellenistic philosophemes, led to such grotesque constructions, that the Church as it grew stronger and more definitive was obliged to reject them. *Saturninus*, *Basileides*, and *Valentinus* are to be named as the best known of this class.

In reaction against such over-hasty attempts of religious fantasticalness, a violent aversion toward all philosophical interpretation and adjustment of Christian faith set in, for a time, in Christian literature in the writings of men like *Tatian*, *Tertullian*, and *Arnobius*. An express *anti-rationalism* thus came forward which nevertheless found it necessary on its part also to return to the related doctrines of Greek philosophy. Without this one-sidedness and with a closer approximation to the older Hellenising Apologists, Gnosticism was combated by *Irenæus* and his disciple *Hippolytus*.

It was not until the beginning of the third century, and after all these preceding attempts, that a positive Christian theology, a system of dogmatics in a complete conceptional form, was established. This came about in the *School for Catechists at Alexandria*, through the leaders of the school, *Clement* and *Origen*. The latter especially is to be regarded as philosophically the most important representative of Christianity in this period.

By his side, however, there went out from the Alexandrian philosophic school the man who undertook to bring the religion-forming tendency of philosophy to an issue solely upon the Hellenistic basis, — *Plotinus*, the greatest thinker of this period. His attempt to

systematise all the main doctrines of Greek and Hellenistic philosophy under the religious principle is designated as *Neo-Platonism*. His doctrine is the most definitive and thoroughly constructed system of science that antiquity produced. His disciple *Porphyry*, however, showed himself already inclined to make a religion out of this religious teaching, and *Jamblichus*, who is termed the leader of Syrian Neo-Platonism, transformed it into a *dogmatic theology of polytheism*, with which the learned and political opponents of Christianity, such as the Emperor Julian, hoped to revive the forms of worship of the heathen religions, then in a state of dissolution. After this attempt had miscarried, the Athenian school of Neo-Platonism, as the heads of which *Plutarch* of Athens, *Proclus*, and *Damascius* appear, returned finally to a methodical, scholastic development of the system of Plotinus.

Thus the Hellenistic efforts to attain to a new religion by means of science remained without result in this form: the scholars discovered no church. On the other hand, the need felt by positive religion to complete and strengthen itself in a scientific doctrine did attain its goal: the Church created its dogma. And the great course of history in this movement was, that the defeated Hellenism in its powerful death-struggle still created the conceptions by means of which the new religion shaped itself into a dogma.

While the Pythagorean mysteries had maintained their existence through all antiquity, scientific **Pythagoreanism** vanished as a proper school after its incorporation into the Academy (cf. p. 31). It is not until during the first century B.C. that specifically Pythagorean doctrines become noticeable again: they appear in the Pythagorean writings, of which Diogenes Laertius (VIII. 24 ff.), following Alexander Polyhistor, gives an account that leads us to infer an essentially Stoic influence. They are renewed expressly by Cicero's learned friend, **P. Nigidius Figulus** (died 45 B.C.), and find approval also with other men in Rome. Cf. M. Herz, *De P. Nig. Fig. Studiis atque Operibus* (Berlin, 1845).

But **Neo-Pythagoreanism** proper was first presented in literary form by the great number of writings which became public in Alexandria at about the beginning of our era, under the names of Pythagoras, or Philolaus, or Archytas, or other older Pythagoreans, the fragments of which give rise to so great difficulties in forming a conception of genuine Pythagoreanism. Cf. the lit. p. 31.

Of the personalities of the new school, on the contrary, very little is known. The only distinct figure is **Apollonius** of Tyana, of whose life and nature the rhetorician Philostratus (ed. by C. L. Kayser, Leips. 1870) gave a romantic representation at the beginning of the third century, in order to portray in it the ideal of the Pythagorean life. Of the works of Apollonius himself, who lived in the first century A.D., fragments of a biography of Pythagoras and of a treatise on Sacrifice are extant. Cf. Chr. Baur, *Apollonius und Christus* in *Drei Abhandl. zur Gesch. d. alt. Philos.* (Leips. 1876). [Tredwell, *Life of Apollonius of Tyana*, contains a good bibliography, N.Y. 1886.] His contemporary, **Moderatus** of Gades, might perhaps also be mentioned.

Neo-Pythagorean and Stoic doctrines appear mingled in the Eclectic **Sotion** of Alexandria, who was affiliated with the Sextians (cf. p. 163). His disciple, **L. Annæus Seneca** of Cordova (4–65 A.D.), was the leader of the **Stoics** in the time of the Empire. He was instructor of Nero, was well known because of his tragic fate, and also as tragic poet unfolded the rigid conceptions of life held

by his school. Of his writings a considerable number of mainly ethical treatises are preserved besides his *Epistolæ* (ed. by Haase, 3 vols., Leips. 1852–3) [Eng. tr. (or rather paraphrase) by T. Lodge, Lond. 1614, Selections from this and from L'Estrange's *Seneca's Morals by Way of Abstract*, Lond. 1888, Camelot series]. Cf. Chr. Baur, *S. und Paulus* in the *Drei Abhandl.*; see above.

Besides him we mention L. Annæus **Cornutus** (Phurnutus), a chief representative of the Stoic interpretation of myths (Περὶ τῆς τῶν θεῶν φύσεως, ed. by Osann, Göttingen, 1844), the satiric poet **Persius**, the moralist C. **Musonius** Rufus, and especially **Epictetus**, who lived at the time of Domitian, and whose doctrines were published by **Arrian** in two works, Διατριβαί and Ἐγχειρίδιον (ed. together with the commentary of Simplicius by J. Schweighauser, Leips. 1799 f.) [tr. by G. Long, Bohn's library; also by T. W. Higginson, Boston, 1865]. Cf. A. Bonhöffer *E. und die Stoa* (Stuttgart, 1890).

With the noble **Marcus Aurelius Antoninus** the Stoa mounted the Roman imperial throne (161–180). His reflections τὰ εἰς αὐτόν (ed. by J. Stich, Leips. 1882) are the characteristic monument of this eclectic-religious Stoicism. [Eng. tr. by G. Long. *The Thoughts of the Emperor, M. Aurelius Antoninus*, Lond. Bohn's lib.; W. Pater, *Marius the Epicurean*, Lond. and N.Y. 1888; M. Arnold in *Essays.*]

In the ancient Grecian period, an original figure, that of the monkish wandering preacher Teles, had gone out from the **Cynic** school (cf. v. Wilamovitz-Möllendorf, *Philol. Unters*, IV. 292 ff.). In the time of the Empire this quaint creature was frequently copied and exaggerated even to the most ridiculous extent. Demetrius, Oinomaos of Gadara, Demonax (cf. Fritsche, Leips. 1866), and Peregrinus Proteus, known through Lucian, belong to these figures. Cf. J. Bernays, *Lukian und die Kyniker* (Berlin, 1879).

Of the representatives of **religious Platonism** who kept at a distance from the number theory, may be mentioned the eclectic commentators **Eudorus** and **Arius Didymus**, **Thrasyllus**, the editor of the works of Plato and Democritus, and especially **Plutarch** of Chæronea (about 100 A.D.), from whom, in addition to his famous biographies, a great number of other writings are preserved, especially philosophical treatises of dogmatic and polemical content (*Moralia*, ed. Dübner; Paris, Didot, Vols. III. and IV. 1855) (cf. R. Volkmann, *Leben, Schriften und Philosophie des P.*, Berlin, 1872). [Plutarch's *Morals*, trans. ed. by Goodwin, 5 vols., Boston, 1870; also tr. by Shilleto and by C. W. King, both in Bohn's lib., Lond. 1888 and 1882 resp.] We mention further **Maximus** of Tyre of the time of the Antonines; his contemporary, **Apuleius** of Madaura, who belongs in this series not only on account of his philosophical writings (ed. by A. Goldbacher, Vienna, 1876), but also on account of his allegorico-satirical romance, "The Golden Ass" (cf. Hildebrand in the introduction to his collected works, Leips. 1842) [*The Works of Apuleius*, Bohn's lib.]; the opponent of Christianity, **Celsus**, whose treatise ἀληθὴς λόγος (about 180) is known only from the counter-treatise of Origen, κατὰ Κέλσου (cf. Th. Keim, *C.* "*wahres Wort*," Zürich, 1873); and lastly the physician Claudius **Galen**, who died about 200, and might, to be sure, with his broad eclecticism be likewise classed as a Peripatetic and also as a Stoic (cf. K. Sprengel, *Beiträge zur Gesch. d. Medicin*, I. 117 ff.). From the same circle of ideas arose also the writings circulated under the name of **Hermes** Trismegistus, which belong to the third century (French tr. by L. Ménard, Paris, 1866; partially published by G. Parthey, Berlin, 1854).

Among the Platonists of the second century **Nicomachus** of Gerasa in Arabia, of whose writings arithmetical text-books and (through Photius) an extract from a work Ἀριθμητικὰ θεολογούμενα are extant, and **Numenius** of Apamea, concerning whom we owe our instruction mainly to Eusebius, are strongly Neo-Pythagorean. Cf. F. Thedinga (Bonn, 1875).

The entrance of Greek philosophy into **Jewish** theology may be traced back to the middle of the second century B.C., where it can be recognised in the Biblical explanation of **Aristobulus**; it appears then in a particularly marked manner, and in a form that is already much nearer the Alexandrian sphere of thought, in the pseudo-Solomonic *Book of Wisdom*. Yet these are but weak forerunners of the important creation of **Philo** of Alexandria, of whose life little more is known than that in the year 39, when already in advanced age, he was a member of an embassy from his native community to the Emperor Caligula. His numerous writings, among which there is also much that is not genuine, were edited by Th. Mangey (Lond. 1742), Leips. stereotype ed., 8 vols., 1851–53; [Eng. tr. by C. D. Yonge, 4 vols., Lond., Bohn's lib.].

F. Dähne, *Die jüdisch-alexandrinische Religionsphilosophie* (Halle, 1834).

A. Gfrörer, *Philon und die alexandrinische Theosophie* (Stuttgart, 1835); M. Wolff, *Die philonische Philosophie* (Gothenburg, 1858); Ewald, *Gesch. des Volkes Israel*, VI. 231 ff.

Among the **Christian Apologists** whose writings are collected in the *Corpus Apologetarum Christianorum secundi sæculi*, ed. by Otto (Jena, 1842 ff.), the most prominent is Flavius **Justin Martyr** of Sichem, who lived in the middle of the second century. Two defensive writings and a dialogue with Trypho the Jew are preserved [Eng. tr. in Ante-Nicene Ch. lib., ed. by Roberts and Donaldson. Edinburg, T. & T. Clark, 1867 —]. K. Semisch (2 vols., Breslau, 1840–42), and B. Aubé (Paris, 1861) treat of him. Further Apologists from the Hellenic circle of culture are **Aristides** (whose discourses, discovered in the Armenian language, were printed with a Latin translation, Venice, 1878), **Athenagoras** of Athens (πρεσβεία περὶ Χριστιανῶν addressed to Marcus Aurelius about 176), **Theophilus** of Antioch (a treatise addressed to Autolycus about 180), **Melito** of Sardis, Apollinaris of Hierapolis, and others. — Latin literature presents especially **Minucius Felix**, whose dialogue *Octavius* was written about 200 (ed. in the *Corpus scriptorum ecclesiasticorum latinorum*, by C. Halm, Vienna, 1867). The rhetorician, Firmianus **Lactantius** (about 300), is to be placed in the same series. His main treatise is the *Institutiones Divinæ* [tr. of the above authors in Ante-Nicene lib., see above].

Of the **Gnostics** our information comes essentially through their opponents, Irenæus (140–200; his treatise Ἔλεγχος καὶ ἀνατροπὴ τῆς ψευδωνύμου γνώσεως, ed. by A. Stieren, Leips. 1853), Hippolytus (Κατὰ πασῶν [illegible]οέσεων ἔλεγχος, ed. by Duncker and Schneidewin, Göttingen, 1859), Tertul[illegible]n (*Adversus Valentinianos*), etc. [Eng. tr. of the above writings in Ante-[illegible]cene lib., above]. Of Gnostic treatises only one, and that by an unknown author, is extant, Πίστις σοφία (ed. by Petermann, Berlin, 1851). Of the main representatives of this doctrine there were active in the first half of the second century **Saturninus** of Antioch, **Basilides**, a Syrian, and **Carpocrates** in Alexandria; toward the middle of the century **Valentinus**, the most important of them (died about 160); and toward the end of the century **Bardesanes** of Mesopotamia. — *Expositions of the Gnostic Systems* by A. W. Neander (Berlin, 1818) [Eng. tr. by Torrey, Boston, 1865], E. Malter (Paris, 1843), Chr. Baur (Tübingen, 1835), A. Hilgenfeld (Jena, 1884), same author, *Bardesanes, der letzte Gnostiker* (Leips. 1864). — A. Harnack, *Zur Quellenkritik der Geschichte des Gnosticismus* (Leips. 1873); [H. L. Mansel, *Gnostic Heresies*, Lond. 1876].

The most radical opponent of Greek science was **Tatian**, an Assyrian, whose treatise Πρὸς Ἕλληνας arose about 170, but who later became himself an adherent of the Valentinian Gnosticism. The passionate Apologist Qu. Septimius Florens **Tertullian** (165–220, for a time Presbyter in Carthage) ended likewise in opposition to the Catholic Church, in the sect of the Montanists. His works have been edited by Fr. Oehler (3 vols., Leips. 1853 f.), recently by A. Reifferscheid and Wissowa (Vol. I. Vienna, 1890, in *Corp. script. eccl. lat.*) [Eng. tr. in Ante-Nicene lib.]. Cf. A. W. Neander, *Antignosticus, Geist des Tertullian*, etc. (2d ed. Berlin, 1849) [Eng. tr. Bohn's lib., 1851]; A. Hauck, *T.'s Leben und Schriften*, Erlangen, 1877). — In the same series, but from a later time, is the African rhetorician **Arnobius**, whose seven books, *Adversus Gentes*, were composed about 300 (ed. by A. Reifferscheid in *Corp. script. eccl. lat.*, Vienna, 1875).

Of the writings of **Clement** of Alexandria (died about 217) three treatises are preserved, Λόγος προτρεπτικὸς πρὸς Ἕλληνας — Παιδαγωγός — Στρωματεῖς (ed. by J. Potter, Oxford, 1715) [tr. in Ante-Nicene lib.]. From his school (cf. on the Alex. Catechetical school, Guericke, Halle, 1824 f., and Hasselbach, Stettin, 1826) went forth the founder of Christian theology, **Origen**, surnamed the Adamantine. Born 185 A.D. in Alexandria, equipped with the full education of the time, he came forward early as a teacher, fell into conflicts on account of his doctrines with the Synod, was by it removed from his office, and later lived in Cæsarea and Tyre, dying in the latter place 254. Of his writings, aside from the above-mentioned treatise against Celsus, his work Περὶ ἀρχῶν is of chief importance; it is extant almost only in the Latin version of Rufinus (ed. by

Redepenning, Leips. 1836) [tr. in Ante-Nicene lib.]. Cf. J. Reinkens, *De Clemente Presbytero Al.* (Breslau, 1851); Redepenning, *O., Darstellung seines Lebens und seiner Lehre* (Bonn, 1841–46) [cf. Bigg, *The Christian Platonists of Alexandria*, Oxford, 1887; A. Harnack, Art. *Origen* in *Enc. Brit.*].

A collection of the sources for all the Church writers of this period has been issued by J. P. Migne, *Patrologiæ Cursus Completus* (Paris, 1840 ff.).

A certain **Ammonius Saccus** appears in old traditions as the founder of **Neo-Platonism**, but nothing is known to justify this tradition. To his pupils belonged Plotinus, Origen, the rhetorician **Longinus** (213–273), to whom the book Περὶ ὕψους was ascribed, and another **Origen**.

The true founder of the school was **Plotinus** (204–269). Born in Lycopolis in Egypt, and educated in Alexandria, he became a member of an expedition against the Persians in order to promote his religious studies, made a highly successful appearance as teacher in Rome about 244, and died on a country estate in Campania. His works, written in late old age, were published by his disciple Porphyry, arranged in six enneads. Ed. by H. Müller (Leips. 1878–80), with a German translation [Eng. tr. in part by Th. Taylor, Lond. 1787, 1794, 1817, French tr. by Bouillet, Paris, 1857–60]. Cf. H. Kirchner, *Die Philos. des Pl.* (Halle, 1854). — A. Richter, *Neuplatonische Studien* (Halle, 1864 ff.). — H. v. Kleist, *Neuplat. Studien* (Heidelberg, 1883). — [A. Harnack, Art. *Neo-Platonism* in *Enc. Brit.*]

To the **Alexandrian** Neo-Platonism are reckoned further Gentilianus **Amelius** of Ameria, and the Tyrian **Porphyry** (about 230–300). Among the extant writings, aside from the biographies of Plotinus and Pythagoras, are to be mentioned Ἀφορμαὶ πρὸς τὰ νοητά, an aphoristic abridgment of the system of Plotinus (printed in Creuzer's ed. of the works of Plotinus, Paris, 1855), the treatise *On Abstemiousness* (περὶ ἀποχῆς τῶν ἐμψύχων, important on account of its use of the περὶ εὐσεβείας of Theophrastus; cf. J. Bernays, Berlin, 1866), and of the commentaries the Εἰσαγωγὴ εἰς τὰς κατηγορίας (ed. by Busse, Berlin, 1877; and also in the Berlin ed. of Aristotle, Vol. IV.).

Syrian Neo-Platonism was founded by **Jamblichus** of Chalcis in Cœle-Syria (died about 330), a hearer of Porphyry. His writings were principally commentaries upon Hellenistic and Oriental theology. The following are partially preserved: Περὶ τοῦ Πυθαγορικοῦ βίου (ed. by Westermann, Paris, 1850), Λόγος προτρεπτικὸς εἰς φιλοσοφίαν (ed. by Kiessling, Leips. 1813), Περὶ τῆς κοινῆς μαθηματικῆς ἐπιστήμης (ed. by Villoison, Venice, 1781) [Eng. tr. *Life of Pyth.* by Taylor, Lond. 1818, *Egyptian Mysteries*, by same, Chiswick, 1821].

Of the disciples of the school, **Dexippus** commented on the Aristotelian Categories (ed. by L. Spengel, Munich, 1859), **Sallustius** wrote a compendium of metaphysics (ed. by Orelli, Zürich, 1821), and **Themistius** (about 317–387) made himself known as a paraphrast and commentator upon Aristotelian works. From the same circle comes the treatise *De Mysteriis Ægyptiorum* (ed. by G. Parthey, Berlin, 1857; cf. Harless, Munich, 1858).

This movement had a transient political success by the accession of the Emperor **Julian**, who hoped by its help to renew the old religion and displace Christianity. His writings against the Christians have been edited with a German translation by K. J. Neumann (Leips. 1880). Cf. A. W. Neander, *Ueber den Kaiser J. und sein Zeitalter* (Berlin, 1812). — D. Fr. Strauss, *J. der Abtrünnige, der Romantiker auf dem Throne der Cäsaren* (Mannheim, 1847). — A. Mücke, *J. nach den Quellen* (Gotha, 1866-68).

The founder of **Athenian Neo-Platonism** was **Plutarch** of Athens (died after 430), with his pupils **Syrianus** and **Hierocles**. All these, as well as the following, composed commentaries upon Platonic and Aristotelian or Pythagorean writings, which are in part preserved. More important was **Proclus** (411–485), among whose works the most important is Περὶ τῆς κατὰ Πλάτωνα θεολογίας (ed. of his works by V. Cousin, Paris, 1820–25) [Eng. tr. by Th. Taylor]. Cf. H. Kirchner, *De Procl. Metaphysica* (Berlin, 1846). K. Steinhart's Art. in Ersch und Grüber's *Enc.*

The last head of the Platonic Academy was **Damascius**, of whose writings the beginning of a treatise περὶ τῶν πρώτων ἀρχῶν, and the conclusion of a commentary upon the *Parmenides* are extant (ed. by J. Kopp, Frankfort a. M. 1826; cf. E. Heitz in *Strass. Abhdl. für Philos.*, 1884), and also a biography of his teacher Isidorus. Among the commentators of this time **Simplicius** is prominent (on the *Physics*, ed. pr. Venice, 1526, the first four books, Diels, Berlin, 1882; on the *De Cœlo*, Karsten, Utrecht, 1865; on the *De Anima*, Hayduck, Berlin, 1882).

The two latter wandered with their immediate associates for a time toward Persia, when in the year 529 the Emperor Justinian closed the Academy, confiscated its property, and by forbidding lectures on heathen philosophy gave the external confirmation to its close.

§ 18. Authority and Revelation.

The imperturbable self-certainty and self-mastery which the post-Aristotelian philosophy had sought and in part claimed for the wise man, had been so deeply shaken with the progress of time that it had given place to a *feeling of the need of help*, both in the ethical and in the theoretical spheres. The philosophising individual no longer had confidence that he could attain to right insight or to his soul's salvation by his own strength, and sought his help accordingly, partly amid the great monuments of the past, partly in a divine *revelation*. Both tendencies, however, are ultimately upon the same basis, for the confidence which was placed in the men and writings of a previous time rested only upon the fact that they were regarded as especially favoured vessels of higher revelation. *Authority*, therefore, acquired its value as the mediate, historically accredited revelation, while the divine illumination of the individual as immediate revelation came to its assistance. Differently as the relation between these two forms was conceived of, it is yet the common mark of all Alexandrian philosophy that it regards *divine revelation as the highest source of knowledge*. Already in this innovation in the theory of knowledge, we find expressed the heightened value which this period put upon *personality*, and on personality as evincing itself in the feelings. The longing of this time desired that the truth might be found by experience, as an inner communion of man with the Supreme Being.

1. The *appeal to authority* often makes its appearance in Greek and Hellenistic philosophy in the sense of a confirmation and strengthening of an author's own views, but not as a decisive and conclusive argument. The *jurare in verba magistri* might be usual enough among the subordinate members of the schools,[1] but the heads of schools, and in general the men who engaged in independent research, maintained an attitude toward the teachings of the former time that was much more one of criticism than of unconditional subjection;[2] and though in the schools, chiefly the Academic

[1] Though even the well-known αὐτὸς ἔφα [*ipse dixit*] of the Pythagoreans is attested only through later writers (Cicero).

[2] Even the admiration of Socrates, in which all the following schools were at one, did not in itself lead to his being regarded as the valid authority for definite philosophical doctrines.

and Peripatetic, the inclination to preserve and maintain the teaching of the founder as an unassailable treasure was fostered by the custom of commenting upon his works, yet in all the conflict as to the criteria of truth the principle had never been brought forward that something must be believed because this or that great man had said it.

How strongly the need for authority had come to be felt in the later time, we may recognise even from the countless interpolations which were the order of the day in the whole Alexandrian literature. Their authors, who, perhaps, for the most part acted in good faith, since they themselves regarded their thoughts as only developments and continuations of the old doctrines, evidently believed that they could get a hearing for their works in no better way than by assigning to them the name of one of the heroes of wisdom, of an Aristotle, a Plato, or a Pythagoras. This phenomenon appeared most extensively among the Neo-Pythagoreans, whose chief concern it was to invest their new doctrine with the halo of ancient wisdom. But the more the convictions that were to be established in this manner bore a religious character, the more lively became the need to conceive of these authorities themselves as the bearers of a religious revelation, and therefore all the traits that might stamp them as such were sought for within them or even read into them. Not contented, however, with this, the later Greeks believed that they could give a higher sanction to their philosophy, as well as to their entire civilisation, by deriving it from the Oriental religions: thus Numenius[1] did not hesitate to maintain that Pythagoras and Plato had presented only the old wisdom of the Brahmans, Magi, Egyptians, and Jews. As a result of this, the extent of literary authorities increased extraordinarily; the later Neo-Platonists, a Jamblichus and Proclus, commented not only on Greek philosophers, but also upon the entire Hellenic and barbarian theology,[2] and credulously adopted myths and miraculous tales from these sources.

In quite a similar manner Oriental literature testified also to its esteem for Hellenism. Among the predecessors of Philo, Aristobulus especially appealed to verses which were interpolated in Orpheus and Linus, in Homer and Hesiod; and with Philo himself, the great Jewish theologian, the great men of Greek philosophy appear side by side with the Old Testament, as bearers of wisdom.

The felt need of authority naturally asserts itself most strongly in the unconditional faith in religious records. Here the Old Testament was from the beginning the firm foundation for the science and philosophy of Judaism and also for that of (orthodox) Christianity. But in the Christian Church the need of establishing a collection of writings in which the system of faith should be defined with certainty, first developed with Marcion, and then was gradually satisfied in the completion and conclusion of the New Testament: with Irenæus and Tertullian both Testaments already appear with the full value and validity of churchly authority.

[1] In Eus. *Præp. Ev.* IX. 7.

[2] Marinus, *Procl. Vit.* 22.

2. If now in this way even scientific thought, which in consequence of sceptical disintegration no longer gave itself credit for the power of truth, subjected itself voluntarily to the authorities of antiquity and to religious institution, it was yet in nowise bound thereby to the extent that we might suppose. This relation rather took the form, along all lines, of extracting from the authoritative sources, and also of reading into them, the scientific doctrines which arose from the new religious movements.[1]

Where in so doing they did not resort expressly to those interpolations which are found more or less in the entire literature of the period as well as in Neo-Pythagoreanism, they employed as their instrument the method of *allegorical interpretation.*

This meets us first in Jewish theology. It had its prototype indeed in the allegorical interpretation of myths, which made its appearance early in Grecian literature, was employed by the Sophists, and extensively prosecuted by the Stoics. It was applied to religious documents by Aristobulus, but it was *Philo*[2] who carried it through methodically, proceeding from the conviction that a distinction must be made in Scripture between the literal and the spiritual meaning, between its body and its soul. In order to teach his commands to the great mass of men, who in their sensuous nature are unable to apprehend the divine purely, God gave to revelation the anthropomorphic form, behind which only the spiritually mature man penetrates to the true sense. This sense is to be sought in the philosophical conceptions which lie hidden in the historical husks. Accordingly, since Philo the task of theology has been directed toward interpreting *religious documents into a system of scientific doctrines;* and if he uses Greek philosophy for this purpose, and finds in it the higher meaning of the Scripture, he

[1] Even a man like Plutarch of Chæronea, who follows the writings of Plato as he would the revelations of a religious document, does not scruple to introduce into the teaching of his master Aristotelian and Stoic doctrines as well as his own religious view.

[2] Cf. Siegfried, *Philon v. Alexandria als Ausleger des alten Testaments* (Jena, 1875).

explains this relation on the ground that the thinkers of Greece have drawn from Mosaic documents.[1]

Following his example, the Gnostics then attempted to transform Oriental myths into Greek conceptions by allegorical interpretation, and thought thus to develop a secret doctrine of the Apostolic tradition, — the Apologists maintained the harmony of Christian doctrine with the dogmas of Greek philosophy, — even men like Irenæus and Tertullian worked upon the New Testament, — and finally *Origen* knew how to bring the philosophy of Christianity into accord with its documents. The great Alexandrian theologian, like the Gnostics who first attempted to create a Christian theology, distinguished between the carnal (somatic), psychical, and spiritual (pneumatic) conceptions of the religious records, — corresponding to the metaphysico-anthropological ideas of the time (cf. § 19 f.). For him the literal historical tradition yields only a "Christianity according to the flesh" (χριστιανισμὸς σωματικός), and it is the task of theology to lead out of this, through the moral significance at which the "psychical" readers stop, to the ideal content of the Scripture, which must then illumine the reader as self-evident truth. Only he who grasps this last belongs to the pneumatic or spiritual readers, to whom the *eternal gospel* thus disclosed reveals itself.

This extraction of philosophical meaning from religious tradition is found in fullest extent among the Neo-Platonists. Jamblichus practises it, in accordance with the Stoic model, on all forms of Oriental and Occidental mythology, and Proclus, too, declares expressly that myths veil the truth from sensuous men who are not worthy of it.[2]

3. But in all such doctrines, the interest of science (in the Christian teachings, γνῶσις) ultimately predominates over that of faith; they are accommodations of philosophy to the need of religious authority, felt at this time. The essential *identity of authority and of rational knowledge* obtains, therefore, as the fundamental presupposition; it obtains in such a degree, that just where it seems threatened, all artifices of allegorical interpretation are attempted in order to rescue it. This confidence, nevertheless, with which science proceeded to develop its own content as that of the religious documents, rested ultimately upon the conviction that both historical authority and scientific doctrine are but different *revelations* of the same divine Power.

We have seen that the belief in authority in this period grew out of the felt need of salvation and help. Another psychological root of

[1] Phil. *Vit. Mos.* 657 a. (137 m.). [2] Procl. *In Remp.* 369.

this belief was the enhanced importance of *personality*. This shows itself in the lively expression of admiration for the great men of the past, as we find it in Philo and in all lines of Platonism, and not less in the unconditional trust of the disciples in their masters, which, especially in later Neo-Platonism, degenerated to exaggerated veneration of the heads of schools.[1] This same motive appears in grandest form as a power in the world's history, in the stupendous, overpowering impression of the personality of Jesus. Faith in him was the uniting bond which held together victoriously the various and manifold tendencies of early Christianity.

But this psychological motive justified itself to theory by the consideration that the admired personality was regarded, in teaching and life, as a revelation of the divine World-reason. The metaphysical and epistemological bases for this were given in Platonism and especially in Stoicism. Attachment to the Platonic doctrine that knowledge is recollection, with the turn already expressed in Cicero that right knowledge is implanted by God in the soul, is innate within it, the carrying out of the Stoic logos doctrine, and of the idea contained in it that the rational part of the soul is a consubstantial emanation from the divine World-reason, — all this led to regarding every form of right knowledge as a kind of divine revelation in man.[2] All knowledge is, as Numenius said,[3] the kindling of the small light from the great light which illumines the world.

It was from this point of view that *Justin*, especially, conceived of the relationship maintained by him between the old philosophy and Christianity, and at the same time conceived the superiority of the latter. God has indeed revealed himself internally through the rational nature[4] (σπέρμα λόγου ἔμφυτον) of man who is created in his image, as he has revealed himself externally through the perfection of his creation; but the development of this *universal*, more potential than actual revelation, is retarded by evil demons and man's sensuous impulses. God has, therefore, for man's help, employed the *special* revelation, which has appeared not only in Moses and the prophets, but also in the men of Greek science.[5] Justin calls the revelation which is extended to the entire human race, the

[1] From the point of view of the history of civilisation we may notice the parallel in the boundless deification of the Roman Emperors.

[2] So also by the Stoics of the time of the Empire, philosophy, which among them likewise aimed to be a cure for sick souls (Epictetus, *Dissert.* III. 23, 30), is set forth as a sermon of the deity himself, through the mouth of the wise man (ib. I. 36).

[3] In Euseb. *Præp. Ev.* XI. 18, 8.

[4] *Apol.* II. 8; cf. Min. Fel. *Oct.* 16, 5.

[5] On the other hand, to be sure, Justin as well as Philo derives the Greek philosophy from the Jewish religion, as a borrowing.

λόγος σπερματικός. But that which has appeared in former time, so dispersed and often obscured, is not the full truth: the entire, pure logos has been revealed in Christ, Son of God, and second God.

In this teaching there prevails, on the one hand, with the Apologists, the effort to set forth *Christianity as the true and highest philosophy*, and to show that it unites in itself all teachings[1] of abiding worth that can be discovered in the earlier philosophy. Christ is called the teacher (διδάσκαλος), and this teacher is Reason itself. While Christianity was by this means brought as near as possible to rational philosophy, and philosophy's principle of knowledge made essentially equivalent to that of religion, this had yet at the same time the consequence, that the conception of the religious content itself became strongly rationalistic with Justin and similar Apologists, such as *Minucius Felix:* the specifically religious elements appear more repressed, and Christianity takes on the character of a moralising deism, in which it acquires the greatest similarity to religious Stoicism.[2]

On the other hand, in this relation the self-consciousness of Christianity speaks out, for with its *perfect* revelation it regarded all other kinds of revelation, universal as well as particular, as superfluous; and at this point the Apologetic doctrine became of itself polemic, as is shown especially in *Athenagoras.* Revelation here, too, is still regarded as the truly reasonable, but just on this account the reasonable is not to be demonstrated, but only believed. Philosophers have not found the full truth, because they have not been willing or able to learn God from God himself.

4. Thus, although in the Apologetic doctrine the rational is regarded as supernaturally revealed, there is gradually preparing *an opposition between revelation and knowledge by the reason.* The more the Gnostics, in developing their theological metaphysics, separated themselves from the simple content of Christian faith, the more *Irenæus*[3] warned against the speculations of worldly wisdom, and the more violently *Tatian,* with Oriental contempt of the Greeks, rejected every delusion of the Hellenic philosophy which was always at variance with itself, and of whose teachers each would exalt only his own opinions to the rank of law, while the Christians uniformly subjected themselves to the divine revelation.

This opposition becomes still sharper with *Tertullian* and *Arnobius.* The former, as Tatian had already done in part, adopted the

[1] Apol. II. 13, ὅσα παρὰ πᾶσι καλῶς εἴρηται ἡμῶν Χριστιανῶν ἐστιν.
[2] Cf. Min. Fel. *Oct.* 31 ff., where the Christian fellowship of love appears precisely as the Stoic world-state of philosophers.
[3] *Ref.* II. 25 ff.

Stoic materialism in its metaphysical aspect, but drew from it only the logical consequence of a purely sensualistic theory of knowledge. This was carried out in an interesting way by Arnobius, when, to combat the Platonic and Platonising theory of knowledge, he showed that a man left in complete isolation from his birth on would remain mentally empty, and not gain higher knowledge.[1] Since the human soul is by nature limited solely to the impressions of the senses, it is therefore of its own power absolutely incapable of acquiring knowledge of the deity, or of any vocation or destiny of its own that transcends this life. Just for this reason it needs revelation, and finds its salvation only in faith in this. So *sensualism* here shows itself for the first time *as basis for orthodoxy.* The lower the natural knowing faculty of man, and the more it is limited to the senses, the more necessary does revelation appear.

Accordingly, with *Tertullian,* the content of revelation is not only *above reason,* but also in a certain sense *contrary to reason,* in so far as by reason man's natural knowing activity is to be understood. The gospel is not only incomprehensible, but is also in necessary contradiction with worldly discernment: *credibile est quia ineptum est; certum est, quia impossibile est — credo quia absurdum.* Hence Christianity, according to his view, has nothing to do with philosophy, Jerusalem nothing to do with Athens.[2] Philosophy as natural knowledge is unbelief; there is therefore no Christian philosophy.

5. But rationalistic theory also found occasions enough for such a *defining of boundaries between revelation and natural knowledge.* For by their identification the criterion of truth threatened to become lost. The quantity of that which presented itself as revelation, in this time of such agitation in religion, made it indispensable to decide on the right revelation, and the criterion for this could not be sought in turn in the individual's rational knowledge, because the principle of revelation would be thereby injured. This difficulty made itself very noticeable, especially in the Hellenistic line of thought. Plutarch, for example, who regards all knowledge as revelation, follows the Stoic division of theology into three kinds, — viz. of the poets, of the law-givers, and of philosophers, — and would concede to science or philosophy the supreme decision as to religious truth,[3] declaring himself vigorously against superstition[4]

[1] Arn. *Adv. Gent.* II. 20 ff.
[2] Tertull. *De Carne Chr.* 5; *De Præscr.* 7. In the latter passage he directs his polemic also expressly against those who present a Stoic or Platonic Christianity. He is the extreme opponent of the Hellenising of dogma; he knows no compromise, and with his hot-blooded nature demands unconditional surrender to revelation. In a still more popular manner Arnobius sets forth the helplessness of natural knowledge (*Adv. Gent.* II. 74 ff.).
[3] *De Isid.* 68.
[4] *De Superst.* 14.

(δεισιδαιμονία); but he shows himself to be ultimately as naïve and credulous as his time, since he takes up into his writings all kinds of tales of prophecies and miracles; and the incredible absence of criticism with which the later Neo-Platonists, a Jamblichus and Proclus proceeded in this respect, shows itself as the consistent result of the renunciation of the thinker's own discernment, — a renunciation which the need of revelation brought with it from the beginning.

Here the development of the Church, which was then in process of organisation, set in with its principle of *tradition* and *historically accredited authority*. It regards the religious documents of the Old and New Testaments as entirely, and also as alone, *inspired*. It assumes that the authors, in recording this highest truth, were always in a state of pure receptivity in their relation to the divine spirit,[1] and finds the verification of this divine origin, not in the agreement of this truth with the knowledge derived from human reason, but essentially in the *fulfilment of the prophecies* which are therein contained, and in the purposeful *connection of their succession in time*.

The *proof from prophecy*, which became so extraordinarily important for the further development of theology, arose accordingly from the need of finding a criterion for distinguishing true and false revelation. Since man is denied knowledge of the future through natural processes of cognition, the fulfilled predictions of the prophets serve as marks of the *inspiration*, by means of which they have propounded their doctrines.

To this argument a second is now added. According to the doctrine of the Church, which on this point was supported chiefly by Irenæus,[2] Old and New Testaments stand in the following connection: the same one God has revealed himself in the course of time to man in a constantly higher and purer manner, corresponding to the degree of man's receptive capacity: to the entire race he reveals himself in the rational nature, which, to be sure, may be misused; to the people of Israel, in the strict law of Moses; to entire humanity again, in the law of love and freedom which Jesus announced.[3] In this connected *succession of prophets* there is thus developed the *divine plan of education*, according to which the revelations of the Old Testament are to be regarded as preparations for

[1] Just. *Apol.* I. 31.
[2] *Ref.* III. 12; IV. 11 ff.
[3] The Alexandrian theology added, as fourth phase of revelation, the "eternal gospel," which is to be sought in the pneumatic interpretation of the New Testament. Cf. the carrying out of these thoughts in Lessing's *Education of the Human Race*.

the New, which in turn confirms them. Here, too, in patristic literature, the fulfilment of prophecies is regarded as the connecting link between the different phases of revelation.

These are the forms of thought in which the divine revelation became fixed for the Christian Church as *historical authority*. But the fundamental psychological power which was active in this process remained, nevertheless, devotion in faith to the person of Jesus, who, as the sum total of divine revelation, formed the centre of Christian life.

6. The development of the doctrine of revelation in the *Hellenistic philosophy* took an entirely different direction. Here the scientific movement lacked the living connection with the Church community, and therefore the support of a historical authority; here, therefore, revelation, which was demanded as a supplement for the natural faculties of knowledge, must be sought in an *immediate illumination of the individual by the deity*. On this account revelation is here held to be a *supra-rational apprehension of divine truth*, an apprehension which the *individual man* comes to possess in immediate contact (ἀφή) with the deity itself: and though it must be admitted that there are but few who attain to this, and that even these attain only in rare moments, a definite, historically authenticated, special revelation, authoritative for all, is nevertheless here put aside. This conception of revelation was later called the mystic conception, and to this extent *Neo-Platonism is the source of all later mysticism*.

The origins of this conception again are to be sought with *Philo*. For he had already taught that all man's virtue can arise and continue only through the working of the divine Logos within us, and that the knowledge of God consists only in the renunciation of self, — in giving up individuality, and in becoming merged in the divine Primordial Being.[1] Knowledge of the Supreme Being is unity of life with him, — immediate contact. The mind that wishes to behold God must *itself become God*.[2] In this state the soul's relation is entirely passive and receptive;[3] it has to renounce all self-activity, all its own thought, and all reflection upon itself. Even the νοῦς, the reason, must be silent in order that the blessedness of the perception of God may come upon man. In this state of *ecstasy* (ἔκστασις) the divine spirit, according to Philo, dwells in man. Hence, in this state, he is a prophet of divine wisdom, a foreteller and miracle-worker. As the Stoa had already traced mantic arts

[1] Phil. *Leg. All.* 48 e.; 55 d.; 57 b. (53–62 M.).
[2] Ἀποθεωθῆναι is found also in the Hermetic writings; *Poemand.* 10. 5 ff. The θεοῦσθαι (*deificatio*) is later a general term of Mysticism.
[3] Cf. Plut. *De Pyth. Orac.* 21 ff. (404 ff.).

to the consubstantiality of human and divine spirits (πνεύματα), so too the Alexandrians conceive of this "*deification*" of man from the standpoint of his oneness in essence with the ground of the world. All thought, Plotinus teaches, is inferior to this state of ecstasy; for thought is motion, — a desiring to know. Ecstasy, however, is certainty of God, blessed rest in him;[1] man has share in the divine θεωρία, or contemplation (Aristotle) only when he has raised himself entirely to the deity.

Ecstasy is then a state which transcends the self-consciousness of the individual, as its object transcends all particular determinateness (cf. § 20, 2). It is a sinking into the divine essence with an entire loss of self-consciousness: it is a possession of the deity, a unity of life with him, which mocks at all description, all perception, and all that abstract thought can frame.[2]

How is this state to be attained? It is, in all cases, a gift of the deity, a boon of the Infinite, which takes up the finite into itself. But man, with his free will, has to make himself worthy of this deification. He is to put off all his sensuous nature and all will of his own; he is to turn back from the multitude of individual relations to his pure, simple, essential nature (ἁπλωσις);[3] the ways to this are, according to Proclus, love, truth, and faith; but it is only in the last, which transcends all reason, that the soul finds its complete unification with God, and the peace of blessed rapture.[4] As the most effective aid in the preparation for this operation of divine grace, prayer[5] and all acts[6] of religious worship are commended. And if these do not always lead to the highest revelations of the deity, they yet secure at least, as Apuleius[7] had before this supposed, the comforting and helpful revelations of lower gods and demons, of saints and guardian spirits. So, also, in later Neo-Platonism, the raptures of prophecy which the Stoics had taught appear as lower and preparatory forms for the supreme ecstasy of deification. For, ultimately, all forms of worship are to the Neo-Platonist but exercises symbolic of that immediate union of the individual with God.

Thus the theory of inspiration diverged, in Christianity and Neo-Platonism, into two wholly different forms. In the former, divine

[1] Plot. *Ennead.* VI. 7.
[2] Ib. V. 3.
[3] An expression which is found even with Marcus Aurelius (Πρὸς ἑαυτ. IV. 26), and which Plotinus also employs (*Enn.* VI. 7, 35).
[4] Procl. *Theol. Plat.* I. 24 f.
[5] Jambl. in Procl. *Tim.* 64 C.
[6] *De Myst. Æg.* II. 11 (96).
[7] Apul. *De Socr.* 6 ff.

revelation is fixed as historical authority; in the latter, it is the process in which the individual man, freed from all eternal relation, sinks into the divine original Ground. The former is for the Middle Ages the source of *Scholasticism;* the latter, that of *Mysticism.*

§ 19. Spirit[1] and Matter.

Among the arguments in which the felt need of revelation develops in the Alexandrian philosophy, none is so incisive as that which proceeds from the premise that man, ensnared in the world of sense, can attain to knowledge of the higher spiritual world only by supernatural help: in this is shown the *religious dualism* which forms the fundamental mode of view of the period. Its roots are partly anthropological, partly metaphysical: the Stoic antithesis of reason and what is contrary to reason is united with the Platonic distinction between the supersensuous world, which remains ever the same, and the sensuous world which is always changing.

The *identification of the spiritual and the immaterial,* which was in nowise made complete with Plato although he prepared the way for it, had been limited by Aristotle to the divine self-consciousness. All the spiritual and mental activities of man, on the contrary, were regarded, even by Plato, as belonging to the world of phenomena (γένεσις), and remained thus excluded from the world of incorporeal Being (οὐσία), however much the rational might be opposed to the sensuous in the interest of ethics and of the theory of knowledge; and while, in the antagonistic motives which crossed in the Aristotelian doctrine of the νοῦς, the attempt had been made to regard Reason as an immaterial principle, entering the animal soul from without, the development of the Peripatetic School (cf. § 15, 1) at once set this thought aside again. It was, however, in the doctrines of Epicurus and the Stoa that the conscious materialising of the psychical nature and activities attained its strongest expression.

On the other hand, the ethical dualism, which marked off as strongly as possible, man's *inner nature,* withdrawn into itself, as over against the sensuous outer world, became more and more sharply accentuated, and the more it took on religious form, the more it pressed, also, toward a theory of the world that made this opposition its metaphysical principle.

[1] [The German "*Geist,*" corresponding to both "mind" and "spirit," as used in this period leans sometimes to one, sometimes to the other meaning. In view of the prevailingly religious character of the ideas of the period I have usually rendered it in this section by "spirit," sometimes by the alternative "mind or spirit."]

1. This relation appears in clearest form, perhaps, in the expressions of the *later Stoics*, who emphasise anthropological *dualism* so strongly that it comes into palpable contradiction with the metaphysics of the school. The idea of the oneness of man's nature, which the Stoics had taught hitherto, had indeed been already questioned by Posidonius, when he expressed the Platonising opinion, that the passions could not arise from the ἡγεμονικόν, but must come from other irrational parts of the soul.[1] Now, however, we find in Seneca[2] a bald opposition between *soul and "flesh"*; the body is only a husk, it is a fetter, a prison for the mind. So, too, Epictetus calls reason and body the two constituent elements of man,[3] and though Marcus Aurelius makes a distinction in man's sensuous nature between the coarse material and the psychical breath or pneuma which animates it, it is yet his intention to separate all the more sharply from the latter the soul proper, the rational spirit or intelligence (νοῦς and διάνοια), as an incorporeal being.[4] In correspondence with this, we find in all these men an idea of the deity, that retains only the intellectual marks from the Stoic conception, and looks upon matter as a principle opposed to the deity, hostile to reason.[5]

These changes in the Stoa are due, perhaps, to the rising influence of *Neo-Pythagoreanism*, which at first made the Platonic dualism, with its motives of ethical and religious values, the centre of its system. By the adherents of this doctrine the essential difference of soul and body is emphasised in the strongest manner,[6] and with this are most intimately connected,[7] on the one hand, the doctrine which will have God worshipped only spiritually, as a purely spiritual being,[8] by prayer and virtuous intention, not by outward acts, —and on the other hand, the completely *ascetic morals* which aims to free the soul from its ensnarement in matter, and lead it back to its spiritual prime source by washings and purifications, by avoiding certain foods, especially flesh, by sexual continence, and by mortifying all sensuous impulses. Over against the deity, which is the principle of good, matter (ὕλη) is regarded as the ground of all evil, propensity toward it as the peculiar sin of man.

[1] Cf. Galen, *De Hipp. et Plat.* IV. 3 ff.
[2] Senec. *Epist.* 65, 22; 92, 13; *Ad Marc.* 24, 5.
[3] Epict. *Dissert.* I. 3, 3.
[4] Marc. Aur. *Med.* II. 2; XII. 3.
[5] Senec. *Ep.* 65. 24; Epict. *Diss.* II. 8, 2; Marc. Aur. *Med.* XII. 2.
[6] Claud. Mam. *De Statu Anim.* II. 7.
[7] In so far as here, too, man is regarded as a microcosm. Ps.-Pythag. in Phot. *Cod.* 249, p. 440 a.
[8] Apollonius of Tyana (περὶ θυσιῶν) in Eus. *Præp. Ev.* IV. 13.

We meet this same conception ethically, among the Essenes, and theoretically, everywhere in the teaching of *Philo*. He, too, distinguishes between the soul, which as vital force of the bodily organism has its seat in the blood, and the pneuma, which as emanation of the purely spiritual deity, constitutes the true essential nature of man.[1] He, too, finds that this latter is imprisoned in the body, and retarded in its unfolding by the body's sensuous nature (αἴσθεσις), so that since man's universal sinfulness[2] is rooted in this, salvation from this sinfulness must be sought only in the extirpation of all sensuous desires; for him, too, matter is therefore the corporeal substratum, which has indeed been arranged by the deity so as to form the purposive, good world, but which, at the same time, has remained the ground of evil and of imperfection.

2. The Christian Apologists' idea is related to this and yet different. With them the Aristotelian conception of God as pure intellect or spirit (νοῦς τέλειος) is united with the doctrine that God has created the world out of shapeless matter: yet here matter is not regarded immediately as an independent principle, but the ground of evil is sought rather in the perverted use of freedom on the part of man and of the demons who seduce him. Here the ethical and religious character of the dualism of the time appears in its complete purity: matter itself is regarded as something of an indifferent nature, which becomes good or evil only through its use by spiritual powers. In the same manner Hellenistic Platonists like *Plutarch*, proceeding from the conception of matter as formless Not-being, sought the principle of evil not in it, but rather in a force or power, standing in opposition to the good deity,[3] —a force which, to a certain degree, contends with the deity about the formation of matter. Plutarch found this thought in the myths of different religions, but he might also have referred to a passage where Plato had spoken of the *evil world-soul* in opposition to the good.[4]

Meanwhile, the tendency to identify the antithesis of good and evil with that of mind (or spirit) and matter asserts itself here too, in the fact that the essence of evil is sought again in a propensity

[1] In this connection Philo calls πνεῦμα that which among the Stoics, Aristotelians, and Platonists of the time is called νοῦς; cf. Zeller V.[3] 395, 3. Yet there occur with him again other expressions in which, quite in the Stoic fashion, the pneuma appears as air, in the sense of a most refined physical reality. Cf. H. Siebeck, *Gesch. d. Psych.* I. b 302 ff.
[2] It is also characteristic that the sinfulness of all men, a doctrine which is completely at variance with the old Stoic faith in the realisation of the ideal of the wise man, is generally acknowledged by the Stoics of the time of the Empire, and regarded as motive for the necessity of supernatural help. Cf. Seneca, *Benef.* I. 10; VII. 27; Epict. *Dissert.* II. 11, 1.
[3] Plut. *De Isid.* 46 ff.
[4] Plat. *Laws*, 896 E.

toward the sensuous and fleshly, — toward matter; while the good, on the contrary, is sought in love to the purely spiritual deity. This is not only a fundamental feature of the early Christian morals, but it is found also, in the same form, among the Platonists above mentioned. For Plutarch, too, liberation from the body is the necessary preparation for that reception of the working of divine grace which forms the goal of human life, and when Numenius carried out his theory further, by teaching that, as in the universe, so also in man, two souls, one good and one evil, contend with each other,[1] he yet also seeks the seat of the evil soul in the body and its desires.

In these doctrines, also, we find everywhere emphasised, not only the pure spirituality and incorporeality of God, but likewise the incorporeality of the individual spirit or mind. With Plutarch this is shown once more in the form that he would separate the νοῦς, the rational spirit, from the ψυχή, which possesses the sensuous nature and the passions together with the power to move the body. So, too, *Irenæus*[2] distinguishes the psychical breath of life (πνοὴ ζωῆς), which is of a temporal nature and bound to the body, from the animating spirit (πνεῦμα ζωοποιοῦν), which is in its nature eternal.

These views of course appear everywhere in connection with the doctrines of immortality or of the pre-existence and transmigration of souls, of the Fall through which or as a punishment for which man has been placed in matter, and of the purification through which he is to free himself from it again; and just in this, too, the synthesis in question is completed more and more effectively, inasmuch as the immutable Eternal which remains ever the same (the Platonic οὐσία) is recognised in spirit; the perishable and changeable in matter.

3. In these connections we find developing gradually a separation of the two characteristics which had been originally united in the conception of the soul, — the physiological and the psychological, the characteristic of vital force and that of the activity of consciousness. As in the scheme that had already been employed by Aristotle, so now, side by side with the "soul" which moves the body, appears the "spirit" as self-subsisting and independent principle, and in this spirit is found no longer merely a general rational activity, but the proper essence of the individual (as also of the divine) *personality*. The triple division of man into body, soul, and spirit is introduced in all lines, in the most various modes of expression,[3]

[1] Jambl. in Stob. *Ecl.* I. 894.
[2] Iren. *Adv. Hær.* V. 12, 2.
[3] Of the various terminology (ψυχή, *anima*, πνεῦμα, *spiritus*, *animus*, etc.), in which these doctrines appear, examples have already been given above, and

and it is easily understood that in this case, the boundaries, on the one hand between soul and body, and on the other to a still greater degree between soul and spirit, were very fluctuating; for the soul plays here the part of a mean between the two extremes, matter and spirit.

An immediate consequence of this was that a new and deeper idea could be gained of the *activities of consciousness*, which now as "mental" or "spiritual" were separated from the physiological functions of the soul. For, when once removed in essence from the corporeal world, the spirit could not be thought as dependent upon sensuous influences, either in its activity or in the object of its activity; and while, in all Greek philosophy, cognition had been regarded as the perception and taking up of something given, and the attitude of thought as essentially receptive, now the idea of mind or spirit as an independent, productive principle forces its way through.

4. The beginnings for this lie already in the *Neo-Pythagorean* doctrine, in so far as in it the *spirituality of the immaterial world* was first maintained. The immaterial substances of Platonic metaphysics, the Ideas, appear no longer as self-subsistent essences, but as *elements constituting the content of intellectual or spiritual activity;* and while they still remain for human cognition something given and determining, they become *original thoughts of God.*[1] Thus the bodiless archetypes of the world of experience are taken up into the inward nature of mind; reason is no longer merely something which belongs to the οὐσία or which is only akin to it, it is the entire οὐσία itself; the *immaterial world is recognised as the world of mind or spirit.*[2]

In correspondence with this, the rational spirit or intellect (νοῦς) is defined by *Plotinus*[3] as the unity which has plurality within itself, *i.e.* in metaphysical language, as duality determined by unity but in itself indeterminate (cf. § 20), and in anthropological lan-

might very easily be multiplied. This doctrine was developed in an especially interesting way by Origen (*De Princ.* III. 1–5), where the "soul" is treated partly as motive power, partly as faculty of ideation and desire, while the spirit, on the contrary, is presented as the principle of judging, on the one hand between good and evil, on the other hand between true and false; in this alone, teaches Origen, consists man's freedom. The like triple division appears then with Plotinus in connection with his whole metaphysical construction. *Enn.* II. 9, 2. Cf. § 20.

[1] Cf. Nicomachus, *Arithm. Intr.* I. 6.
[2] With this change the Platonic doctrine of Ideas passed over to the future, because Plotinus, and with him all Neo-Platonism, accepted it. Yet this did not take place without opposition. Longinus at least protested against it, and Porphyry as his disciple wrote a treatise of his own ὅτι ἔξω τοῦ νοῦ ὑφέστηκε τὰ νοητά. Porph. *Vit. Plot.* 18 ff.
[3] Plot. *Enn.* V. 9, 6; 3, 15; 4, 2.

guage, as the *synthetic* function which produces plurality out of its higher unity. From this general point of view the *Neo-Platonists* carried out the psychology of cognition under the principle of the *activity of consciousness.* For according to this, the higher soul can no longer be looked upon as passive, but must be regarded as essentially active in all its functions.[1] All its intelligence (σύνεσις) rests upon the synthesis (σύνθεσις) of various elements;[2] even where the cognition refers to what is given by the senses, it is only the body which is passive, while the soul in becoming conscious (συναίσθεσις and παρακολούθησις) is active;[3] and the same is true of the sensuous feelings and passions. Thus in the field of sensation a distinction is made between the state of excitation and the conscious perception of this; the former is a passive or receptive state of the body (or also of the lower soul); the latter even already in conscious perception (ἀντίληψις) is an act of the higher soul, which Plotinus describes as a kind of bending back of thought — reflection.[4]

While *consciousness* was thus conceived as the active noting of the mind's own states, functions, and contents, — a theory, which, according to Philoponus, was carried out especially by the Neo-Platonic Plutarch also, — there resulted from this with Plotinus the conception of *self-consciousness* (παρακολουθεῖν ἑαυτῷ).[5] His conception of this was that the intellect, as thought active and in motion (νόησις), has for its object itself as a resting, objective thought (νοητόν): intellect as knowledge, and intellect as Being, are in this case identical.

But the conception of self-consciousness takes on also an ethico-religious colouring in accordance with the thought of the time. The σύνεσις is at the same time συνείδησις — *conscience, i.e.* man's knowledge, not only of his own states and acts, but also of their ethical worth, and of the commandment by the fulfilment of which the estimate of this worth is governed; and for this reason the doctrine of self-consciousness is developed in the doctrine of the Church Fathers, not only as man's knowledge of his sins, but also as *repentance* (μετάνοια) in actively combating them.

5. The conception of *mind* or *spirit as self-active, creative principle* did not stop with its significance for psychology, ethics, and theory

[1] Porph. *Sentent.* 10, 19 *et al.*
[2] Plot. *Enn.* IV. 3, 26.
[3] Ib. IV. 4, 18 f. The term συναίσθησις — whose meaning reminds us besides of the κοινὸν αἰσθητήριον in Aristotle, and thus ultimately of Plato, *Theæt.* 184 f. — is found in similar use already in Alexander Aphrodisias, *Quæst.* III. 7, p. 177, and so, too, Galen employs the expression διάγνωσις to designate the becoming conscious of the change in the bodily organ as contrasted with that change itself.
[4] Plot. *Enn.* I. 4, 10.
[5] Ib. III. 9.

of knowledge, but as the ancient world passed out, this conception rose to be the *dominant thought of religious metaphysics.* For by making the attempt to derive matter also from this creative spirit, this conception offered the possibility of finally overcoming that dualism which formed the presupposition of the whole movement of the religious thought of the time.

Hence it became the last and highest problem of ancient philosophy to understand *the world as a product of spirit,* to comprehend even the corporeal world with all of its phenomena as essentially intellectual or spiritual in its origin and content. The *spiritualisation of the universe* is the final result of ancient philosophy.

Christianity and Neo-Platonism, Origen and Plotinus, alike worked at this problem. The dualism of spirit and matter remains, indeed, persisting in full force for both so far as they have to do with the conception of the phenomenal world, and especially when they treat ethical questions. The sensuous is still regarded as that which is evil and alien to God, from which the soul must free itself in order to return to unity with pure spirit. But even this dark spot is to be illumined from the eternal light, matter is to be recognised as a creation of spirit. The last standpoint of ancient philosophy is thus *spiritual monism.*

But in the solution of this common problem the philosophy of Christianity and that of Neo-Platonism diverge widely; for this development of the divine spirit into the world of phenomena, even down to its material forms, must evidently be determined by the ideas which obtained of the nature of God and of his relation to the world, and just in this Hellenism found itself working under presuppositions that were completely different from those of the doctrine of the new religion.

§ 20. God and the World.

The peculiar suspense between metaphysical monism and ethico-religious dualism, which defines the character of the entire Alexandrian philosophy, forces together all the thoughts of the time, and condenses them into the most difficult of problems, that of the relation of God and the World.

1. This problem had already been suggested from the purely theoretical side, by the opposition between the Aristotelian and the Stoic philosophy. The former maintained the transcendence of God, *i.e.* his complete separation from the world, as strongly as the latter maintained the immanence of God, *i.e.* the doctrine that God is completely merged in the world. The problem, and the fundamental tendency adopted in its solution, may, therefore, be

recognised already in the eclectic mingling[1] of Peripatetic and Stoic cosmology, as type of which the pseudo-Aristotelian treatise, *Concerning the World* is regarded.[2] With the Aristotelian doctrine that the *essence of God* must be set far above Nature (as the sum-total of all particular things which are moved), and especially above the mutation of earthly existence, is connected here the Stoic endeavour to follow the working of the divine power through the entire universe, even into every detail. While, accordingly, the world was regarded among the Stoics as God himself, while Aristotle saw in it a living being, purposefully moved, whose outermost spheres were set in revolution only by longing for the eternally unmoved, pure Form, — a revolution communicating itself with ever-lessening perfection to the lower spheres, — here the macrocosm appears as the system of individual things existing in relations of mutual sympathy, in which the power of the supra-mundane God is dominant under the most varied forms as the principle of life. The mediation between theism and pantheism is gained, partly by the distinction between the essence and the power of God, partly by the graded scale of the divine workings, which descends from the heaven of the fixed stars to the earth. The pneuma doctrine is united with the Aristotelian conception of God, by conceiving of the forces of Nature's life as the workings of pure Spirit.[3]

This turn, however, but increased the difficulty already inherent in the Aristotelian doctrine of the action of the deity upon the world. For this action was regarded as consisting in the motion of matter, and it was hard to reconcile this materialisation of the divine action with the pure spirituality which was to constitute the essence of the deity. Even Aristotle had not become clear as to the relation of the unmoved mover to that which was moved (cf. § 13.).[4]

2. The problem became more severe as the religious dualism became more pronounced, a dualism which, not satisfied with contrasting God as spirit with matter, the supersensuous sphere with the sensuous, rather followed the tendency to raise the divine being

[1] Stratonism as a transformation of the Aristotelian doctrine in the direction of pantheistic immanence, a transformation allied to the doctrine of the Stoa, has been treated above, § 15, 1.

[2] This book (printed among the writings of Aristotle, 391 ff.) may perhaps have arisen in the first century A.D. Apuleius worked it over into Latin.

[3] Cf. principally Ch. 6, 397 b 9.

[4] These difficulties in Aristotle's case became condensed in the concept of the ἀφή. For since the "contact" of the mover with the moved was regarded as the condition of motion, it was necessary to speak also of a "contact" between God and the heaven of the fixed stars. This, however, was liable to objection on account of the purely spiritual essence of the deity, and the ἀφή in this case received a restricted and intellectually transformed meaning ("immediate relation"). Cf. Arist. *De Gen. et Corr.* I. 6, 323 a 20.

above all that can be experienced and above every definite content, and thus to make the *God who is above the world also a God above mind or spirit.* This is found already with the *Neo-Pythagoreans*, among whom a wavering between various stadia of dualism lurks behind their mode of expression in the symbolism of numbers. When the "One" and the "indefinite duality" are maintained to be principles, the latter indeed always means matter as the impure, as the ground of the imperfect and the evil; the One, however, is treated now as pure Form, as spirit, now also as the "cause of causes" which lies above all reason, — as the primordial being which has caused to proceed forth from itself the opposition of the derivative One and duality, of spirit and matter. In this case the second One, the first-born One (πρωτόγονον ἕν) appears as the perfect image of the highest One.[1]

Inasmuch as mind or spirit was thus made a product of the deity, though the first and most perfect product, this effort led to raising the conception of the deity even to *complete absence of all qualities.* This had been already shown in *Philo*, who emphasised so sharply the contrast between God and everything finite that he designated God expressly as devoid of qualities (ἄποιος[2]) : for since God is exalted above all, it can be said of him only that he has none of the finite predicates known to human intelligence; no name names him. This type of thought, later called "negative theology," we find also among those Christian *Apologists* that were influenced in their conceptions by Philo, especially with Justin,[3] and likewise in part among the *Gnostics.*

The same meets us also in *Neo-Platonism* in a still more intensified form, if possible. As in the Hermetic writings[4] God had been considered as infinite and incomprehensible, as nameless, exalted above all Being, as the ground of Being and Reason, neither of which exists until created by him, so for Plotinus, the deity is the absolutely transcendent primordial being, exalted as a perfect unity above mind, which, as the principle that contains plurality already in its unity (§ 19, 4), must have proceeded forth from God (and not have been eternal). This One, τὸ ἕν, precedes all thought and Being; it is infinite, formless, and "beyond" (ἐπέκεινα) the intellectual as well as the sensuous world, and therefore without consciousness and without activity.[5]

[1] Nicomachus, *Theol. Arithm.* p. 44.

[2] Phil. *Leg. Alleg.* 47 a; *Qu. D. S. Immut.* 301 a.

[3] Just. *Apol.* I. 61 ff.

[4] *Poemand.* 4 f.

[5] It is easy to understand how a state of ecstasy devoid of will and consciousness and raised above reason, appeared requisite for man's relation to this supra-rational God-Being, exalted above all action, will, and thought. Cf. above, § 18, 6.

Finally, while Plotinus still designates this inexpressible First (τὸ πρῶτον) as the One, which is the cause of all thought and of all Being, and as the Good, as the absolute end of all that comes to pass, even this did not satisfy the later members of the school. Jamblichus set above the ἕν of Plotinus a still higher, completely ineffable One (πάντη ἄρρητος ἀρχή[1]), and Proclus followed him in this.

3. In opposition to such dialectical subtilisations, the *development of Christian thought in the Church* preserved its impressive energy by holding fast to the *conception of God as spiritual personality.* It did this, not as the result of philosophical reflection and reasoning, but by virtue of its immediate attachment to the living belief of the Church community, and just in this consisted its psychological strength, its power in the world's history. This faith is breathed in the New Testament; this is defended by all the supporters of patristic theology, and just by this are the limits of the Christian doctrine everywhere defined, as against the Hellenistic solutions of the chief problem in the philosophy of religion.

Hellenism sees in personality, in however purely spiritual a manner it may be conceived, a restriction and a characteristic of the finite, which it would keep at a distance from the Supreme Being, and admit only for the particular gods. Christianity, as a living religion, demands a *personal relation of man to the ground of the world conceived of as supreme personality,* and it expresses this demand in the thought of the *divine sonship* of man.

If, therefore, the conception of personality as intrinsic spirituality (*geistiger Innerlichkeit*) expresses the essentially new result, to yield which, theoretical and ethical motives intertwined in Greek and Hellenistic thought, then it was Christianity which entered upon this inheritance of ancient thought, while *Neo-Platonism* turned back to the old idea that saw in personality only a transitory product of *a life which as a whole is impersonal.* It is the essential feature of the Christian conception of the world that it regards the person and the relations of persons to one another as the essence of reality.

4. In spite of this important difference, all lines of the Alexandrian philosophy were confronted by the same problem, that of placing the deity, thus taken from the sensible world, in those relations which religious need demanded. For the more deeply the opposition between God and the world was felt, the more ardent became the longing to overcome it — to overcome it by a *knowledge* that should understand the world also through God, and by a *life* that should return out of the world to God.

[1] Damasc. *De Princ.* 43.

Hence the dualism of God and the world, as well as that of spirit and matter, is but the starting-point — taken in the feelings — and the presupposition of the Alexandrian philosophy: its goal is everywhere, theoretically as well as practically, to vanquish this dualism. Just in this consists the peculiarity of this period, that it is anxious to close, in knowledge and will, the cleft which it finds in its feelings.

This period, to be sure, produced also theories of the world in which *dualism* asserted itself so predominantly as to become fixed as their immovable basis. Here belong primarily Platonists like Plutarch, who not only treated matter as an original principle side by side with the deity, because the deity could in nowise be the ground of the evil, but also assumed beside God, the "evil world-soul" as a third principle in the formation of this indifferent matter into a world. A part of the *Gnostic* systems present themselves here, however, for especial consideration.

This first fantastic attempt at a Christian theology was ruled throughout by the thoughts of sin and redemption, and the fundamental character of Gnosticism consists in this, that from the point of view of these ruling thoughts the conceptions of Greek philosophy were put in relation with the myths of Oriental religions. Thus with *Valentinus*, side by side with the deity (προπάτωρ) poured out into the Pleroma or fulness (τὸ πλήρωμα) of spiritual forms, appears the Void (τὸ κένωμα), likewise original and from eternity; beside Form appears matter, beside the good appears the evil, and though from the self-unfolding of the deity (cf. 6, below) an entire spiritual world has been formed in the "fulness" above mentioned, the corporeal world is yet regarded as the work of a fallen Æon (cf. § 21) who builds his inner nature into matter. So, too, *Saturninus* set matter, as the domain of Satan, over against God's realm of light, and regarded the earthly world as a contested boundary province for whose possession the good and evil spirits strive by their action upon man; and in a similar manner the mythology of *Bardesanes* was arranged, which placed beside the "Father of Life" a female deity as the receptive power in the formation of the world.

But dualism reached its culmination in a mixed religion which arose in the third century under the influence of the Gnostic systems combined with a return to the old Persian mythology, — *Manichæism.*[1] The two realms of good and evil, of light and darkness,

[1] The founder, Mani (probably 240–280 A.D.), regarded his doctrine as the consummation of Christianity and as a revelation of the Paraclete. He fell a victim to the persecution of the Persian priests, but his religion soon became

of peace and strife, stand here opposed as eternally as their princes, God and Satan. Here, too, the formation of the world is conceived of as a mixture of good and evil elements, — brought about by a violation of the boundaries; in man the conflict of a good soul belonging to the realm of light, and of an evil soul arising from darkness, is assumed, and a redemption is expected that shall completely separate both realms again.

Thus at the close of the period it is shown in the clearest manner that the dualism of the time rested essentially upon ethico-religious motives. By adopting as their point of view for theoretical explanation the judgment of worth, in accordance with which men, things, and relations are characterised as good or bad, these thinkers came to trace the origin of the thus divided universe back to two different causes. In the proper sense of the judgment, only one of these causes, that of the good, should be regarded as positive and have the name of deity, but in a theoretical aspect the other also fully maintains its claim to metaphysical originality and eternity (οὐσία). But even from this relation it may be seen that as soon as the metaphysical relation was completely adapted to the ethical, this must in itself lead to a removal of the dualism.

5. In fact, dualism, from motives that were most peculiarly its own, produced a series of ideas through which it prepared its own overcoming. For the sharper the antithesis between the spiritual God and the material world, and the greater the distance between man and the object of his religious longing, the more the need asserted itself of bringing about again, by *intermediate links*, a union of what was thus separated. The theoretical significance of this was to render comprehensible and free from objections the action of the deity upon matter alien to him and unworthy of him; practically these links had the significance of serving as *mediators* between man and God, having the power to lead man out of his sensuous vileness to the Supreme Being. Both interests were alike suggestive of the methods by which the Stoics had known how to utilise, in their religion of Nature, the popular faith in the lower deities.

This mediation theory was first attempted on a large and thorough plan by *Philo*, who gave it its definite direction by bringing it into close relations, on the one hand, with the Neo-Pythagorean doctrine of Ideas, on the other hand with the doctrine of angels in his

greatly extended, and maintained itself in vigour far on into the Middle Ages. We are best instructed with regard to it through Augustine, who was himself for a time an adherent of it. Cf. F. C. Baur, *Das manichäische Religionssystem* (Tübingen, 1836); O. Flügel, *Mani und seine Lehre* (Leips. 1862).

religion. The mediating powers, in considering which Philo had in mind more the theoretical significance and the explanation of the influence of God upon the world, he designates according to the changing point of view of his investigation, now as Ideas, now as acting forces, or again as the angels of God; but with this is always connected the thought that these intermediate members have part in God as in the world, that they belong to God and yet are different from him. So the Ideas are regarded, on the one hand, in Neo-Pythagorean fashion as thoughts of God and content of his wisdom, but again, after the old Platonic thought, as an intelligible world of archetypes, created by God: and if these archetypes are held to be at the same time the active forces which shape the unordered matter according to their purposeful meaning, the forces appear in this case sometimes as powers so independent that by assigning them the formation and preservation of the world, all immediate relation between God and the world is avoided, and sometimes again as something attached to the divine essence and representing it. Finally, as angels they are indeed real mythical forms, and are designated as the servants, the ambassadors, the messengers, of God, but on the other hand they represent the different sides and qualities of the divine essence, which, it is true, is as a whole unknowable and inexpressible in its depth, but which reveals itself just in them. This double nature, conditioned by the fundamental thought of the system itself, brings with it the consequence that these ideal forces have the significance of the contents of general conceptions, and yet are at the same time furnished with all the marks of personality; and just this peculiar amalgamation of scientific and mythical modes of thought, this indefinite twilight in which the entire doctrine remains, is the essential and important therein.

The same is true of the last inference, with which Philo concluded this line of thought. The fulness of Ideas, forces, and angels was itself in turn an entire world, in which plurality and motion ruled: between it and the one unmoved, changeless deity there was need of still a higher intermediate link. As the Idea is related to the individual phenomena, so the highest of the Ideas (τὸ γενικώτατον), the "Idea of the Ideas," must be related to the Ideas themselves, — as force is related to its activities in the world of sense, so the rational World-force in general must be related to the forces: the world of angels must find its unitary conclusion in an archangel. This sum-total of the divine activity in the world, Philo designates by the Stoic conception of the *Logos*. This also appears with him, on this account, in wavering, changing light. The Logos is, on the one hand, the divine wisdom, resting within

itself (σοφία — λόγος ἐνδιάθετος; cf. p. 200, note 1), and the producing rational power of the Supreme Being; it is, on the other hand, Reason as coming forth from the deity (λόγος προφορικός, "uttered Reason"), the self-subsistent image, the first-born son, who is not, as is God, without origin, nor yet has he arisen, as have we men; he is the *second God*.[1] Through him God formed the world, and he is in turn also the high priest, who, through his intercession, creates and preserves relations between man and the deity. He is knowable, while God himself, as exalted above all determination, remains unknowable: he is God in so far as God forms the life-principle of the world.

Thus the transcendence and immanence of God divide as separate potencies, to remain united, nevertheless; the Logos, as the God within the world, is the "dwelling-place" of the God without the world. The more difficult the form which this relation assumes for abstract thought, the richer the imagery in which it is set forth by Philo.[2]

6. With this Logos doctrine the first step was taken toward filling the cleft between God and the sensible world by a definite graded succession of forms, descending, with gradual transitions, from unity to plurality, from unchangeableness to changeableness, from the immaterial to the material, from the spiritual to the sensuous, from the perfect to the imperfect, from the good to the bad; and when this series, thus arranged by rank, was conceived of at the same time as a system of causes and effects which again were themselves causes, there resulted from this a new exposition of the *cosmogonic process*, in which the world of sense was derived from the divine essence by means of all these intermediate members. At the same time, the other thought was not far distant, that the stages of this process should be regarded also in their reverse order, as the stages by which man, ensnared in the world of sense, becomes reunited with God. And so, both theoretically and practically, the path is broken on which dualism is to be overcome.

A problem was thus taken up again which Plato in his latest Pythagoreanising period had had in mind, and the oldest Academicians as well, when they sought, with the aid of the number theory,

[1] Philo in Eus. *Præp. Ev.* VII. 13, 1. With a somewhat stronger emphasis upon personality, these same conceptions are found in Justin, *Apol.* I. 32; *Dial. c. Tryph.* 56 f.

[2] Connected with all these doctrines is the fact, that with Philo the spiritual in the world of experience occupies a doubtful position between the immaterial and the material: the νοῦς of man, the faculty of thought and will, is a part of the divine Logos (even the demons are designated after the Stoic analogy as λόγοι), and yet it is again characterised as finest pneuma.

to comprehend how Ideas and things proceeded forth from the divine unity. But it had been shown at that time that this scheme of the development of plurality out of the One, as regards its relation to the predicates of worth, admitted two opposite interpretations: viz. the Platonic mode of view, defended by Xenocrates, that the One is the good and the perfect, and that that which is derived from this is the imperfect and, ultimately, the bad, and the opposing theory, held by Speusippus, that the good is only the final product, not the starting-point of the development, and that this starting-point is to be sought, on the contrary, in the indefinite, the incomplete.[1] It is customary to distinguish the above-described doctrines as the *system of emanation* and the *system of evolution*. The former term arises from the fact that in this system, which was decidedly prevalent in the religious philosophy of Alexandrianism, the separate formations of the world-producing Logos were often designated by the Stoic term, as "emanations" (ἀπόρροιαι) of the divine essence.

Yet the Alexandrian philosophy is not lacking in attempts at evolutionary systems. In particular, these were especially available for *Gnosticism;* for, in consequence of the degree to which it had strained the dualism of spirit and matter, this system was necessarily inclined to seek the monistic way of escape rather in an indifferent, original ground, which divided itself into the opposites. Hence where the Gnostics sought to transcend dualism, — and this was the case with the most important of them, — they projected not only a cosmogonic but a *theogonic process*, by which the deity unfolded himself from the darkness of his primeval essence, through opposition, to complete revelation. Thus, with *Basileides*, the nameless, original ground is called the not (yet) existing God (ὁ οὐκ ὢν θεός). This being, we hear, produced the world-seed (παναπερμία), in which the spiritual forces (νιάτητες) lay unordered side by side with the material forces (ἀμορφία). The forming and ordering of this chaos of forces is completed by their longing for the deity. In connection with this process the various "sonships," the spiritual world (ὑπερκοσμία), separate themselves from the material world (κόσμος), and in the course of the process of generation all the spheres of the thus developed deity ultimately become separate; each attains its allotted place, the unrest of striving ceases, and the peace of glorification rests over the All.

Motives from both systems, that of evolution and that of emanation, appear peculiarly mingled in the doctrine of *Valentinus*. For

[1] Cf. Arist. *Met.* XIV. 4, 1091 b 16; XII. 7, 1072 b 31.

here the spiritual world (πλήρωμα) or system of the "Æons," the eternal essences, is developed first as an unfolding of the dark and mysterious primitive Depth (βυθος) to self-revelation, and in the second place as a descending production of more imperfect forms. The mythical schema in this is the Oriental pairing of male and female deities. In the highest pair or "syzygy" there appears side by side with the original Ground "Silence" (σιγή), which is also called "Thought" (ἔννοια). From this union of the Original Being with the capacity of becoming conscious there proceeds as the firstborn the Spirit (here called νοῦς) which in the second syzygy has as its object "Truth," *i.e.* the intelligible world, the realm of Ideas. Thus, having itself come to full revelation, the deity in the third syzygy takes the form of "Reason" (λόγος) and "Life" (ζωή), and in the fourth syzygy becomes the principle of external revelation as "Ideal Man" (ἄνθρωπος) and "Community" (ἐκκλησία, church). While the descending process has thus already begun, it is continued still farther by the fact that from the third and fourth syzygies still other Æons proceed, which, together with the sacred Eight, form the entire Pleroma, but which stand farther and farther removed from the original Ground. It is the last of these Æons, "Wisdom" (σοφία), that, by sinful longing after the original Ground, gives occasion for the separation of this Longing and of its being cast into the material Void, the κένωμα, there to lead to the formation of the earthly world.

If we look at the philosophical thoughts which lie back of these highly ambiguous myth-constructions, it is easy to understand that the school of the Valentinians diverged into various theories. For in no other system of that time are dualistic and monistic motives of both kinds, from the system of evolution as well as from that of emanation, so intricately mingled.

7. Clarified conceptionally, and freed from mythical apparatus, the like motives appear in the doctrine of *Plotinus*, yet in such a manner that in the system as completed the principle of *emanation* almost entirely crowds out the other two.

The synthesis of transcendence and immanence is sought by Plotinus also in the direction of preserving the essence of God as the absolutely one and unchangeable, while plurality and changeability belong only to his workings.[1] Of the "First," which is exalted above all finite determinations and oppositions, nothing whatever can be predicated in the strict sense (cf. above, 2). It is

[1] In so far we find here, coined into theological form, the problem of the Eleatics and Heraclitus, with which Greek metaphysics began, — a problem which also determined the nature of Platonism.

only in an improper sense, in its relation to the world, that it can be designated as the infinite One, as the Good, and as the highest Power or Force (πρώτη δύναμις), and the workings of this Power which constitute the universe are to be regarded, not as ramifications and parts into which the substance of the First divides, and so not as "emanations" in the proper sense, but rather as overflowing by-products which in nowise change the substance itself, even though they proceed from the necessity of its essence.

To express this relation in figurative form Plotinus employs the analogy of *light*, — an analogy which, in turn, has also an influence in determining his conception. Light, without suffering at all in its own essence or itself entering into motion, shines into the darkness and produces about itself an atmosphere of brightness that decreases in intensity more and more from the point which is its source, and finally of itself loses itself in darkness. So likewise the workings of the One and Good, as they become more and more separate from their source, proceeding through the individual spheres, become more and more imperfect and at last change suddenly into the dark, evil opposite — matter.

The first sphere of this divine activity is, according to Plotinus, *mind* or *rational spirit* (νοῦς), in which the sublime unity differentiates itself into the duality of thought and Being, *i.e.* into that of consciousness and its objects. In mind the essence of the deity is preserved as the unity of the thought-function (νόησις); for this thought which is identical with Being is not regarded as an activity that begins or ceases, changing as it were with its objects, but as the eternal, pure perception, ever the same, of its own content, which is of like essence with itself. But this content, the world of Ideas, the eternal Being (οὐσία in the Platonic sense) as contrasted with phenomena, is, as intelligible world (κόσμος νοητός), at the same time the principle of plurality. For the Ideas are not merely thoughts and archetypes, but are at the same time the moving forces (νοεραὶ δυνάμεις) of lower reality. Because, therefore, unity and variety are united in this intelligible world as the principles of persistence and of occurrence and change, and are yet again separated, the fundamental conceptions (categories) of this world are these five,[1] viz. Being or Existing (τὸ ὄν), Rest (στάσις), Motion or Change (κίνησις), Identity (ταὐτότης), and Difference (ἑτερότης). Mind, then, as a function which has determinate contents, and carries plurality within itself, is the form through which the deity causes all empiri-

[1] Well known from the dialogue, the *Sophist*, of the *Corpus Platonicum*. Cf. 254 B. ff.

cal reality to proceed forth from itself: God as productive principle, as ground of the world, is mind or rational spirit.

But spirit needs to shine out in a similar manner in order to produce the world from itself; its most immediate product is the *soul*, and this in turn evinces its activity by shaping matter into corporeality. The peculiar position of the "soul" therefore consists in this, that it, perceiving or beholding, receives the content of spirit, the world of Ideas, and after this archetype (εἰκών) forms the world of sense. Contrasted with the creative spirit, it is the receptive, contrasted with matter, the active principle. And this duality of the relations toward the higher and the lower is here so strongly emphasised that just as "spirit" divided into thought and Being, so the soul, for Plotinus, is out and out doubled: as sunk into the blissful contemplation of the Ideas it is the higher soul, the soul proper, the ψυχή in the narrower sense of the word; as formative power, it is the lower soul, the φύσις (equivalent to the λόγος σπερματικός of the Stoics).

All these determinations apply on the one hand to the universal soul (world-soul — Plato), and on the other to the individual souls which have proceeded from it as the particular forms which it has taken on, especially therefore to human souls. The φύσις, the formative power of Nature, is distinguished from the pure, ideal world-soul: from the latter emanate the gods, from the former the demons. Beneath man's knowing soul, which turns back to the spirit, its home, stands the vital force which forms the body. Thus the separation in the characteristics of the concept of the soul — a separation which developed materially from dualism (cf. § 19, 3) — is here demanded formally by the connected whole of the metaphysical system.

In this connection, this working of the soul upon matter is of course conceived of as purposive, that is, as appropriate or adapted for ends, because it ultimately goes back to spirit and reason (λόγος); but since it is a work of the lower soul, it is regarded as undesigned, unconscious direction, which proceeds according to natural necessity. As the outer portions of the rays of light penetrate into the darkness, so it belongs to the nature of the soul to illumine matter with its glory which arises from spirit and from the One.

This *matter*, however, — and this is one of the most essential points in the metaphysics of Plotinus, — must not be looked upon as a corporeal mass subsisting in itself beside the One; it is, rather, itself without body, immaterial.[1] Bodies are indeed formed out of

[1] ἀσώματος: *Ennead.* III. 6, 7.

it, but it is itself no body; and since it is thus neither spiritual nor corporeal in its nature, it cannot be determined by any qualities (ἄποιος). But for Plotinus, this epistemological indeterminateness has, at the same time, the force of metaphysical indeterminateness. Matter is for him absolute negativity, pure privation (στέρησις), complete absence of Being, absolute *Non-being:* it is related to the One as darkness to light, as the empty to the full. This ὕλη of the Neo-Platonists is not the Aristotelian or the Stoic, but is once more the Platonic; it is *empty, dark space.*[1] So far in ancient thought does the working of the Eleatic identification of empty space with Non-being, and of the farther extension of this doctrine by Democritus and Plato, extend: in Neo-Platonism, also, space serves as the presupposition for the multiplication which the Ideas find in the phenomenal world of sense. For this reason, with Plotinus, also, the lower soul, or φύσις, whose office it is to shine out upon matter, is the principle of divisibility,[2] while the higher soul possesses the indivisibility which is akin to the rational spirit.

In this pure negativity lies a ground for the possibility of determining by a predicate of worth this matter thus devoid of qualities; it is *the evil.* As absolute want (πενία παντελής), as the negation of the One and of Being, it is also the negation of the Good, ἀπουσία ἀγαθοῦ. But by introducing the conception of evil in this manner, it receives a special form: evil is not itself something positively existent; it is want, or deficiency; it is lack of the Good, *Non-being.* This conception thus formed gave Plotinus a welcome argument for *theodicy;* if the evil *is* not, it need not be justified, and so it follows from the sheer conceptions as so determined that all that is, is good.

For Plotinus, therefore, the world of the senses is not in itself evil any more than it is in itself good; but because in it light passes over into darkness, because it thus presents a mixture of Being and Non-being (the Platonic conception of γένεσις here comes into force anew), it is *good* so far as it has part in God or the Good; i.e. *so far as it is;* and on the other hand, it is *evil* in so far as it has part in matter or the Evil; i.e. *in so far as it is not* [has no real, positive existence]. Evil proper, the true evil (πρῶτον κακόν), is matter, negation; the corporeal world can be called evil only because it is formed out of matter: it is secondary evil (δεύτερον κακόν); and the predicate "evil" belongs to souls only if they give

[1] *Ennead.* III. 6, 18. Universal empty space forms the possibility (ὑποκείμενον) for the existence of bodies, while, on the other hand, the particular spatial determinateness is conditioned by the nature of the bodies, II. 4, 12.

[2] Ib. III. 9, 1.

themselves over to matter. To be sure, this entrance into matter belongs to the essential characteristics of the soul itself; the soul forms just that sphere in which the shining forth of the deity passes over into matter, and this participation in evil is, therefore, for the soul, a natural necessity which is to be conceived of as a continuation of its own proceeding forth from the rational spirit.[1]

By this distinction of the world of sense from matter, Plotinus was able to do justice, also, to the positive element in phenomena.[2] For since the original power works through spirit and soul upon matter, all that in the world of sense really exists or *is*, is evidently itself soul and spirit. In this is rooted the spiritualisation of the corporeal world, the idealising of the universe, which forms the characteristic element in the conception of Nature held by Plotinus. The material is but the outer husk, behind which, as the truly active reality, are souls and spirits. A body or corporeal substance is the copy or shadow of the Idea which in it has shaped itself to matter; its true essence is this spiritual or intellectual element which appears as a phenomenon in the image seen by sense.

It is in such shining of the ideal essence through its sensuous phenomenon that *beauty* consists. By virtue of this streaming of the spiritual light into matter the entire world of the senses is beautiful, and likewise the individual thing, formed after its archetype. Here in the treatise of Plotinus on beauty (*Ennead.* I. 6) this conception meets us for the first time among the fundamental conceptions of a theory of the world; it is the first attempt at a metaphysical æsthetics. Hitherto the beautiful had always appeared only in homonomy with the good and the perfect, and the mild attempts to separate the conception and make it independent, which were contained in Plato's *Symposium*, were now taken up again for the first time by Plotinus; for even the theory of art, to which æsthetic science had restricted itself as it appeared most clearly in the fragment of the Aristotelian *Poetic*, considered the beautiful essentially according to its ethical effects (cf. § 13, 14). Ancient life must run its entire course, and that turning toward the inner life, that internalising, as it were, which this life experienced in the religious period, must be completed, to bring about the scientific

[1] Therefore, though Plotinus in his ethics emphasised strongly freedom in the sense of responsibility, the great tendency of his metaphysical thought is shown just in this, that he did not make this freedom of "power to the contrary" his explaining principle, but sought to understand the transition of the world into evil as a metaphysical necessity.

[2] Very characteristic in this respect is the treatise (*Ennead.* II. 9) which he wrote against the barbarian contempt of Nature shown by the Gnostics.

consciousness of this finest and highest content of the Grecian world; and the conception in which this takes place is on this account characteristic for the development from which it comes forth; the beauty which the Greeks had created and enjoyed is now recognised as the victorious power of spirit in externalising its sensuous phenomena. This conception also is a triumph of the spirit, which in unfolding its activities has at last apprehended its own essential nature, and has conceived it as a world-principle.

As regards the phenomenal world, Plotinus takes a point of view which must be designated as the *interpretation* of *Nature in terms of psychical life*, and so it turns out that with reference to this antithesis ancient thought described its course from one extreme to the other. The oldest science knew the soul only as one of Nature's products side by side with many others, — for Neo-Platonism the whole of Nature is regarded as real only in so far as it is soul.

But by employing this idealistic principle for explaining individual things and processes in the world of sense, all sobriety and clearness in natural research is at an end. In place of regular, causal connections appears the mysterious, dreamily unconscious weaving of the world-soul, the rule of gods and demons, the spiritual sympathy of all things expressing itself in strange relations among them. All forms of divination, astrology, faith in miracles, naturally stream into this mode of regarding Nature, and man seems to be surrounded by nothing but higher and mysterious forces: this world created by spirit, full of souls, embraces him like a *magic* circle.

The whole process in which the world proceeds forth from the deity appears, accordingly, as a timeless, eternal necessity, and though Plotinus speaks also of a periodical return of the same particular formations, the world-process itself is yet for him without beginning or end. As it belongs to the nature of light to shine forever into the darkness, so God does not exist without the streaming forth with which he creates the world out of matter.

In this *universal life of spirit* the individual personality vanishes, as a subordinate, particular phenomenon. Released from the all-soul as one of countless forms in which that unfolds, it is cast into the sensuous body out of the purer pre-existent state, on account of its guilty inclination toward what is void and vain, and it is its task to estrange itself from the body and from material essence in general, and to "purify" itself again from the body. Only when it has succeeded in this can it hope to traverse backward the stages by which it has proceeded forth from the deity, and so to return to the deity. The first positive step to this exaltation is civic and

political virtue, by which man asserts himself as a rationally formative force in the phenomenal world; but since this virtue evinces itself only in reference to objects of the senses, the dianoëtic virtue of knowledge stands far above it (cf. Aristotle),— the virtue by which the soul sinks into its own spiritual intrinsic life. As a help stimulating to this virtue, Plotinus praises the contemplation of the beautiful, which finds a presentiment of the Idea in the thing of sense, and, in overcoming the inclination toward matter, rises from the sensuously beautiful to the spiritually beautiful. And even this dianoëtic virtue, this æsthetic *θεωρία* and self-beholding of the spirit, is only the preliminary stage for that ecstatic rapture with which the individual, losing all consciousness, enters into unity with the ground of the world (§ 18, 6). The salvation and the blessedness of the individual is his sinking into the All-One.

The later Neo-Platonists, — Porphyry first, and, still more, Jamblichus and Proclus, — in the case of this exaltation emphasise, far more than Plotinus, the help which the individual finds for it in positive religion and its acts of worship. For these men largely increased the number of different stages through which the world proceeds forth from the "One," and identified them with the forms of the deities in the different ethnic religions by all kinds of more or less arbitrary allegories. It was therefore natural, in connection with the return of the soul to God, since it must traverse the same stages up to the state of ecstatic deification, to claim the support of these lower gods: and thus as the metaphysics of the Neo-Platonists degenerated into mythology, their ethics degenerated into *theurgic* arts.

8. On the whole, therefore, the derivation of the world from God as set forth by Plotinus, in spite of all its idealising and spiritualising of Nature, follows the *physical* schema of natural processes. This streaming forth of things from the original Power is an eternal necessity, founded in the essence of this Power; creation is a purposive working, but unconscious and without design.

But at the same time, a *logical* motive comes into play here, which has its origin in the old Platonic character of Ideas as class-concepts. For just as the Idea is related to individual things of sense, so in turn the deity is related to Ideas, as the universal to the particular. God is the absolute universal, and according to a law of formal logic, in accordance with which concepts become poorer in contents or intension in proportion as their extension increases so that the content 0 must correspond to the extension ∞, the absolutely universal is also the concept of the "First," void of all content. But if from this First proceed first the intelligible, then the psychical, and finally the sensuous world, this metaphysical relation corresponds to the logical process of *determination* or *partition*. This point of view, according to which the more general is throughout regarded as the higher, metaphysically more primitive reality, while

the particular is held to be, in its metaphysical reality also, a derivative product from the more general, — a view which resulted from hypostatising the syllogistic methods of Aristotle (cf. § 12, 3), — was expressed among the older Neo-Platonists principally by *Porphyry*, in his exegesis of Aristotle's categories.

Meanwhile *Proclus* undertook to carry out methodically this logical schema of emanation, and out of regard for this principle subordinated a number of simple and likewise unknowable "henads" beneath the highest, completely characterless *ἕν*. In so doing he found himself under the necessity of demanding a proper *dialectical principle* for this logical procession of the particular from the universal. Such a schematism the systematiser of Hellenism found in the logico-metaphysical relation which Plotinus had laid at the basis of the development of the world from the deity. The procession of the Many forth from the One involves, in the first place, that the particular remains like the universal, and thus that the effect abides or persists within the cause; in the second place, that this product is a new self-subsisting entity in contrast with that which has produced it, and that it proceeds forth from the same; and finally, that by virtue of just this antithetic relation the individual strives to return again to its ground. *Persistence*, *procession*, and *return* (*μονή*, *πρόοδος*, *ἐπιστροφή*), or identity, difference and union of that which has been distinguished, are accordingly the three *momenta* of the dialectical process; and into this formula of emanistic development, by virtue of which every concept should be thought of as in itself — out of itself — returning into itself, Proclus pressed his entire combined metaphysical and mythological construction, — a construction in which he assigned to the systems of deities of the different religions their place in the mystical and magical universe, arranging them in the series divided again and again by threes, according to his law of the determination of concepts.[1]

9. In contrast with this, the peculiarity of *Christian philosophy* consists essentially in this, that in its apprehension of the relation of God to the world, it sought to employ throughout the ethical point of view of free, creative action. Since from the standpoint of its religious conviction it held fast to the conception of the *personality of the Original Being*, it conceived of the proceduro of the world forth from God, not as a physical or logical necessity of the

[1] Personally, Proclus is characterised by the mingling of a superabundant credulous piety with a logical formalism carried even to pedantry, a combination which is highly interesting psychologically. Just for this reason he is, perhaps, the most pronounced type of this period which is concerned in putting its ardent religiosity into a scientific system.

unfolding of his essence, but as an *act of will*, and in consequence of this the creation of the world was regarded not as an eternal process, but as a *fact in time that had occurred once for all*. The conception, however, in which these motives of thought became concentrated, was that of the *freedom of the will*.

This conception had had at first the meaning (with Aristotle) of conceding to the finite personality acting ethically the capacity of a decision between different *given* possibilities, independently of external influence and compulsion. The conception had then taken on, with Epicurus, the metaphysical meaning of a causeless activity of individual beings. Applied to the absolute, and regarded as a quality of God, it is developed in the Christian philosophy into the thought of "creation out of nothing," into the doctrine of an uncaused *production of the world from the will of God*. Every attempt at an explanation of the world is thereby put aside; the world is because God has willed it, and it is such as it is because God has willed it so to be. At no point is the contrast between Neo-Platonism and orthodox Christianity sharper than at this.

Meanwhile, this same principle of the freedom of the will is employed to overcome the very difficulties which resulted from it. For the unlimited creative activity of the omnipotent God forces the problem of "theodicy" forward still more urgently than in the other theories of the universe, — the problem how the reality of evil in the world can be united with God's perfect goodness. The *optimism involved in the doctrine of creation*, and the *pessimism involved in the felt need of redemption*, the theoretical and the practical, the metaphysical and the ethical *momenta* of religious faith strike hard against each other. But faith, supported by the feeling of responsibility, finds its way of escape out of these difficulties in the assumption that God provided the spirits and human souls which he created, with a freedom analogous to his own, and that through their guilt evil came into the good world.[1]

This guilt, the thinkers of the Church find not to consist properly in the inclination toward matter or the sensuous; for matter as created by God cannot in itself be evil.[2] The sin of free spirits consists rather in their rebellion against the will of God, in their

[1] This is expressed abstractly by Clement of Alexandria (*Strom.* IV. 13, 605) in the form, that evil is only an action, not a substance (οὐσία), and that it therefore cannot be regarded as the work of God.

[2] Just for this reason the metaphysical dualism of the Gnostics must be in its principle heterodox, and that, too, no matter whether it bore the stamp rather of Oriental mythology or of Hellenistic abstract thought — even though in the ethical consequences which it drew it coincided in great part with the doctrine of the Church.

longing after an unlimited power of self-determination, and only secondarily in the fact that they have turned their love toward God's creations, toward the world instead of toward God himself. Here too, therefore, there prevails in the content of the conception of evil the negative element of departure and falling away from God;[1] but the whole earnestness of the religious consciousness asserts itself in this, that this falling away is conceived of not merely as absence of the good, but as a positive, perverted act of will.

In accordance with this the dualism of God and the world, and that of spirit and matter, become indeed deeply involved in the Christian theory of the world. God and the eternal life of the spirit, the world and the transitory life of the flesh, — these are here, too, sharply enough contrasted. In contradiction with the divine pneuma the world of sense is filled with "hylic" spirits,[2] evil demons, who ensnare man in their pursuits which are animated by hostility to God, stifle in him the voice of universal natural revelation, and thereby make special revelation necessary; and without departure from them and from the sensuous nature there is for the early Christian ethics, also, no rescue of the soul possible.

But still this dualism is not regarded as being in its intrinsic nature either necessary or original. It is not the opposition between God and matter, but that between God and fallen spirits; it is the *purely inner antagonism of the infinite and the finite will*. In this direction Christian philosophy completed through *Origen* the metaphysical *spiritualising* and internalising or idealising of the world of the senses. In it the corporeal world appears as completely permeated and maintained by spiritual functions, — yes, even as much reduced to spiritual functions, as is the case with Plotinus; but here the essential element in these functions is relations of *will*. As the passing over of God into the world is not physical necessity, but ethical freedom, so the material world is not a last streaming forth of spirit and soul, but a creation of God for the punishment and for the overcoming of sin.

To be sure, Origen, in developing these thoughts, took up a motive which was allied to Neo-Platonism, a motive which brought him into conflict with the current mode of thought in the Church. For strongly as he held fast to the conception of the divine personality and to that of creation as a free act of divine goodness, the scientific thought which desires to see action grounded in essence was yet too strong in him to allow him to regard this creation as a causeless

[1] In this sense even Origen could call the evil τὸ οὐκ ὄν (in *Joh.* II. 7, 65).

[2] Tatian, *Orat. ad Græc.* 4.

act taking place once for all in time. The eternal, unchangeable essence of God demands rather the thought that he is creator from eternity even to all eternity, that he never can be without creating, that he creates timelessly.[1]

But this creation of the *eternal* will is, therefore, only one that relates to eternal Being, to the spiritual world (οὐσία). In this eternal manner, so Origen teaches, God begets the eternal Son, the *Logos*, as the sum-total of his world-thoughts (ἰδέα ἰδεῶν), and through him the *realm of free spirits*, which, limited within itself, surrounds the deity as an ever-living garment. Those of the spirits that continue in the knowledge and love of the Creator remain in unchanged blessedness with him; but those that become weary and negligent, and turn from him in pride and vainglory, are, for punishment, cast into matter created for this purpose. So arises the world of sense, which is, therefore, nothing self-subsistent, but a symbolic eternalisation of spiritual functions. For what may be regarded as Real in it is not the individual bodies, but rather the spiritual Ideas which are present, connected and changing within them.[2]

So, with Origen, Platonism becomes united with the theory of the creative will. The eternal world of spirits is the eternal product of the changeless divine will. The principle of the temporal and the sensuous (γένεσις) is the changing will of the spirits. Corporeality arises on account of their sin, and will vanish again with their improvement and purification. Thus will, and the *relation of personalities* to one another, in particular that of the finite to the infinite personality, are recognised as the ultimate and deepest meaning of all reality.

[1] Orig. *De Princ.* I. 2, 10; III. 4, 3.

[2] This idealising of the world of sense was treated in great detail, quite according to the Platonic model, by the most important of the Oriental Church fathers, *Gregory of Nyssa* (331–394). His main treatise is the λόγος κατηχητικός. Edition of his works by Morellus (Paris, 1675) [Eng. tr. in Vol. V., 2d series, Lib. Nicene and Post-Nicene Fathers, ed. Schaff and Wace, Oxford, Lond., and N.Y. 1890]. Cf. J. Rupp, *G. des Bischofs von N. Leben und Meinungen*, Leips. 1834. — This transformation of Nature into psychical terms found an extremely poetic exposition among the Gnostics, particularly with the most ingenious among them, *Valentinus*. The origin of the world of sense is portrayed as follows in his theogonic-cosmogonic poetic invention: When the lowest of the Æons, Wisdom (σοφία), in over-hasty longing, would fain have plunged into the original Ground and had been brought back again to her place by the Spirit of Measure (ὅρος), the Supreme God separated from her her passionate longing (πάθος) as a lower Wisdom (κάτω σοφία), called Achamoth, and banished it into the "void" (cf. § 20, 4). This lower σοφία, nevertheless, impregnated by ὅρος for her redemption, bore the Demiurge and the world of sense. On this account that ardent longing of σοφία expresses itself in all forms and shapes of this world; it is her feelings that constitute the essence of phenomena; her pressure and complaint thrills through all the life of Nature. From her tears have come fountains, streams, and seas; from her benumbing before the divine word, the rocks and mountains; from her hope of redemption, light and ether, which in reconciliation stretch above the earth. This poetic invention is farther carried out with the lamentations and penitential songs of σοφία in the Gnostic treatise, Πίστις σοφία.

§ 21. The Problem of Universal History.

With this triumph of religious ethics over cosmological metaphysics, thus sealed by Christianity, is connected the emergence of a farther problem, to solve which a number of important attempts were made — the problem of the *philosophy of history*.

1. Here something which is in its principle *new* comes forward, as over against the Greek view of the world. For Greek science had from the beginning directed its questions with reference to the φύσις, the abiding essence (cf. p. 73), and this mode of stating the question, which proceeded from the need of apprehending Nature, had influenced the progress of forming conceptions so strongly that the chronological course of events had always been treated as something of secondary importance, having no metaphysical interest of its own. In this connection Greek science regarded not only the individual man, but also the whole human race, with all its fortunes, deeds, and experiences, as ultimately but an episode, a special formation of the world-process which repeats itself forever according to like laws.

This is expressed with plain grandeur in the cosmological beginnings of Greek thought; and even after the anthropological tendency had obtained the mastery in philosophy the thought remained in force as theoretical background for every projected plan of the art of living, that human life, as it has sprung forth from the unchanging process of Nature, must flow again into the same (Stoa). Plato had indeed asked for an ultimate end of earthly life, and Aristotle had investigated the regular succession of the forms assumed by political life; but the inquiry for a meaning in *human history taken as a whole*, for a connected plan of historical development, had never once been put forward, and still less had it occurred to any of the old thinkers to see in this the intrinsic, essential nature of the world.

The most characteristic procedure in just this respect is that of Neo-Platonism. Its metaphysics, also, follows the religious motive as its guide; but it gives this motive a genuine Hellenic turn when it regards the procession of the imperfect forth from the perfect as an eternal process of a necessary nature, in which the human individual also finds his place and sees it as his destiny to seek salvation *alone by himself* by return to the infinite.

2. *Christianity*, however, found from the beginning the essence of the whole world-movement in the *experiences of personalities:* for it external nature was but a theatre for the development of the relation of person to person, and especially of the relation of the finite spirit to the deity. And to this were added, as a further determining power, the principle of love, the consciousness of the solidarity of the human race, the deep conviction of the universal sinfulness, and the faith in a common redemption. All this led to regarding the history of the fall and of redemption as the true metaphysical import of the world's reality, and so instead of an eternal process of Nature, the drama of *universal history* as an onward flow of events that were activities of free will, became the content of Christian metaphysics.

There is perhaps no better proof of the power of the impression which the personality of *Jesus of Nazareth* had left, than the fact that all doctrines of Christianity, however widely they may otherwise diverge philosophically or mythically, are yet at one in seeking in him and his appearance the *centre of the world's history*. By him the conflict between good and evil, between light and darkness, is decided.

But this consciousness of victory with which Christianity believed in its Saviour had still another side: to the evil which had been overcome by him belonged also the other religions, as by no means its least important element. For the Christian mode of thought of those days was far from denying the reality of the heathen gods; it regarded them rather as evil demons, fallen spirits who had seduced man and persuaded him to worship them, in order to prevent his returning to the true God.[1]

By this thought the *conflict of religions*, which took place in the Alexandrian period, acquires in the eyes of Christian thinkers a metaphysical significance: the powers whose struggling forms the world's history are the gods of the various religions, and the history of this conflict is the inner significance of all reality. And since every individual man with his ethical life-work is implicated in this great complex process, the importance of individuality becomes raised far above the life of sense, into the sphere of metaphysical reality.

3. With almost all Christian thinkers, accordingly, the world's history appears as a course of inner events which draw after them the origin and fortunes of the world of sense, — a course which takes place *once for all*. It is essentially only Origen who holds fast

[1] So even Origen; cf. *Cont. Cels.* III. 28.

to the fundamental character of Greek science (cf. p. 27, ch. 1). so far as to teach the eternity of the world-process. Between the two motives, the Christian and the Greek, he found a way of escape by making a succession of temporal worlds proceed forth from the eternal spiritual world, which he regarded as the immediate creation of God, and by holding that these temporal worlds take their origin with the declension and fall of a number of free spirits, and are to find their end with the redemption and restitution of the same (ἀποκατάστασις).[1]

The fundamental tendency of Christian thought, on the contrary, was to portray the historical drama of fall and redemption as a connected series of events taking place once for all, which begins with a free decision of lower spirits to sin, and has its turning-point in the redemptive revelation, the resolve of divine freedom. In contrast with the naturalistic conceptions of Greek thought, *history is conceived of as the realm of free acts of personalities, taking place but once*, and the character of these acts, agreeably to the entire consciousness of the time, is of essentially religious significance.

4. It is highly interesting now to see how in the mythico-metaphysical inventions of the *Gnostics*, the peculiar relation of Christianity to *Judaism* is brought to expression in cosmogonic garb. In the Gnostic circles the so-called Gentile Christian tendency is predominant, the tendency which desires to define the new religion as sharply as possible, as over against Judaism, and this tendency just through the Hellenistic philosophy grows to the most open hostility against Judaism.

The mythological form for this is, that the God of the Old Testament, who gave the Mosaic law, is regarded as the fashioner of the world of sense, — for the most part under the Platonic name of the *Demiurge*, — and is assigned that place in the hierarchy of cosmic forms or Æons, as well as in the history of the universe, which belongs to him in accordance with this function.

At the beginning this relation is not yet that of pronounced opposition. A certain *Cerinthus* (about 115 A.D.) had already distinguished the God of the Jews as Demiurge, from the Supreme God who was not defiled by any contact with matter, and had taught that in contrast with the "law" given by the God of the Jews, Jesus had brought the revelation of the Supreme God.[2] So, too,

[1] Orig. *De Princ.* III. 1, 3. These worlds, on account of the freedom from which they proceed, are not at all like one another, but are of the most manifold variety; Ib. II. 3, 3 f.

[2] A distinction which Numenius also adopted, evidently under Gnostic influences. Cf. Euseb. *Præp. Ev.* XI. 18.

with *Saturninus*, the God of the Jews appears as the head of the seven planetary spirits, who, as lowest emanation of the spiritual realm, in their desire to rule tore away a portion of matter to form from it the world of sense, and set man as guardian over it. But a conflict arises, since Satan, to conquer back this part of his kingdom, sends against man his demons and the lower "hylic" race of men. In this conflict the prophets of the Demiurge prove powerless until the Supreme God sends the Æon νοῦς as Saviour, in order that he may free pneumatic men and likewise the Demiurge and his spirits from the power of Satan. This same redemption of the Jewish God also is taught by *Basilides*, who introduces him under the name of the "great Archon" as an efflux of the divine world-seed, as head of the world of sense, and represents him as made to tremble by the Supreme God's message of salvation in Jesus, and as brought to repentance for his undue exaltation.

In a similar manner, the God of the Old Testament, with *Carpocrates*, belongs to the fallen angels, who, commissioned to form the world, completed it according to their own caprice, and founded separate realms in which they got themselves reverenced by subordinate spirits and by men. But while these particular religions are, like their Gods, in a state of mutual conflict, the Supreme Deity reveals in Jesus the one true universal religion which has Jesus as its object, even as he had already before made revelation in the great educators of humanity, a Pythagoras and a Plato.

In more decided polemic against Judaism *Cerdo* the Syrian further distinguished the God of the Old Testament from that of the New. The God announced by Moses and the prophets, as the purposeful World-fashioner and as the God of justice is accessible even to natural knowledge — the Stoic conception; the God revealed through Jesus is the unknowable, the good God — the Philonic conception. The same determinations more sharply defined are employed by *Marcion*[1] (about 150), who conceives of the Christian life in a strongly ascetic manner, and regards it as a warfare against the Demiurge and for the Supreme God revealed through Jesus,[2] and Marcion's disciple *Apelles* even treated the Jewish God

[1] Cf. Volkmar, *Philosophoumena und Marcion* (*Theol. Jahrb.* Tübingen, 1854). Same author, *Das Evangelium Marcion's* (Leips. 1852).

[2] An extremely piquant mythological modification of this thought is found in the sect of the *Ophites*, who gave to the Hebraic narrative of the fall the interpretation, that the serpent which taught man to eat of the tree of knowledge in Paradise made a beginning of bringing the revelation of the true God to man who had fallen under the dominion of the Demiurge, and that after man had on this account experienced the wrath of the Demiurge, the revelation had appeared victorious in Jesus. For this knowledge which the serpent desired to teach is the true salvation of man.

as Lucifer, who brought carnal sin into the world of sense which had been formed by the good "Demiurge," the highest angel, so that, at the petition of the Demiurge, the Supreme God sent the Redeemer against him.

5. In contrast with this view we find the doctrine firmly held, not only by the *Recognitions*,[1] ascribed to Clement of Rome (which arose about 150 A.D.), but in the entire orthodox development of Christian doctrine, that the Supreme God and the creator of the world, the God of the New and the God of the Old Testaments, are the same. But a *well-planned educative development of the divine revelation* is assumed, and in this the history of salvation, *i.e.* the inner history of the world, is sought. Proceeding in accordance with the suggestions of the Pauline epistles,[2] Justin, and especially Irenæus, took this standpoint. The theory of revelation did not become complete until it found this elaboration in the philosophy of history (cf. § 18).

For the anticipations of Christian revelation, that emerge on the one hand in Jewish prophecy, on the other in Hellenic philosophy, are regarded from this point of view as *pedagogic preparations* for Christianity. And since the redemption of sinful man constitutes, according to the Christian view, the sole significance and value of the world's history, and so of all that is real aside from God, the well-ordered *succession of God's acts of revelation* appears as the essential thing in the entire course of the world's events.

In the main, corresponding to the doctrine of revelation, three stages of this divine, saving activity are distinguished.[3] As divided theoretically there are, first, the universal-human revelation, given objectively by the purposiveness of Nature, subjectively through the rational endowment of the mind; second, the special revelation imparted to the Hebrew people through the Mosaic law and the promises of the prophets; and third, the complete revelation through Jesus. Divided according to time, the periods extended from Adam to Moses, from Moses to Christ, from Christ to the end of the world.[4] This triple division was the more natural for ancient Christianity, the stronger its faith that the closing period of the world's redemp-

[1] Edited by Gersdorf (Leips. 1838). Cf. A. Hilgenfeld, *Die clementinischen Recognitionen und Homilien* (Jena, 1848); G. Uhlhorn, *Die Homilien und Recognitionen des Cl. R.* (Göttingen, 1854).

[2] Which treat the "law" as the "schoolmaster" unto Christ (παιδαγωγὸς εἰς Χριστόν); Gal. iii. 24.

[3] This had been done in part already by the Gnostics, by Basilides at least, according to Hippolytus.

[4] The later (heretical) development of eschatology added to these three periods yet a fourth, by the appearance of the "Paraclete." Cf., *e.g.*, Tertullian, *De Virg. Vel.* 1, p. 884 O.

tion, which had begun with the appearance of the Saviour, would be ended in a very short time. The *eschatological* hopes are an essential constituent of the early Christian metaphysics; for the philosophy of history which made Jesus the turning-point of the world's history had, as by no means its slighest support, the expectation that the Crucified would return again to judge the world, and to complete the victory of light over darkness. However varied these ideas become with time and with the disappointment of the first hopes, however strongly the tendencies of dualism and monism assert themselves here also, by conceiving of the last Judgment either as a definite separation of good and evil, or as a complete overcoming of the latter by the former (ἀποκατάστασις πάντων with Origen), and however much a more material and a more spiritual view of blessedness and unhappiness, of heaven and hell, interplay here also, — in every case the last Judgment forms the conclusion of the work of redemption, and so the consummation of the divine plan of salvation.

6. The points of view from which the world's history is regarded by Christian thinkers are thus indeed exclusively religious; but the more general principle of a *historical teleology* gains recognition within them. While Greek philosophy had reflected upon the purposiveness of Nature with a depth and an energy which religious thought could not surpass, the completely new thought rises here that the course of events in human life also has a purposeful meaning as a whole. The teleology of history becomes raised above that of Nature, and the former appears as the higher in worth, in whose service the latter is employed.[1]

Such a conception was possible only for a time that from a ripe result looked back upon the vivid memory of a great development in the world's history. The universal civilisation of the Roman Empire found dawning in the self-consciousness of its own inner life the presentiment of a purpose in that working together of national destinies through which it had itself come into existence, and the idea of this mighty process was yielded especially by the continued tradition of *Greek literature* embracing a thousand years. The religious theory of the world, which had developed from this ancient civilisation, gave to that thought the form that the meaning of the historical movement was to be sought in the preparations of God for the salvation of man; and since the peoples of the ancient civilisation themselves felt that the time of their efficient working was complete, it is comprehensible that they believed they saw the

[1] Cf. Irenæus, *Ref.* IV. 38, 4, p. 702 f. St.

end of history immediately before them, where the sun of their day was sinking.

But hand in hand with this idea of a systematically planned unity in human history goes the thought of a *unity of the human race*, exalted above space and time. The consciousness of common civilisation, breaking through national boundaries, becomes complete in the belief in a common revelation and redemption of all men. Inasmuch as the salvation of the whole race is made the import of the divine plan for the world, it appears that among the provisions of this plan, the most important is that fellowship (ἐκκλησία) to which all members of the race are called, by sharing in faith the same work of redemption. The conception of the *Church*, shaped out from the life of the Christian community, stands in this connection with the religious philosophy of history, and accordingly, among its constitutive marks or notes, universality or catholicity is one of the most important.

7. In this way, *man and his destiny* becomes the centre of the universe. This *anthropocentric* character distinguishes the Christian view of the world essentially from the Neo-Platonic. The latter, indeed, assigned a high metaphysical position to the human individual, whose psychico-spiritual nature it even held to be capable of deification; it regarded the purposeful connected whole of Nature also from the (Stoic) point of view of its usefulness for man, — but never would Neo-Platonism have consented to declare man, who for it was a part of the phenomena in which divine efficiency appears, to be the end of the whole.

Just this, however, is the case in the philosophy of the Fathers. According to *Irenæus*,[1] man is the end and aim of creation: it is to him as a knowing being that God would reveal himself, and for his sake the rest, the whole of *Nature*, has been created; he it is, also, who by abuse of the freedom granted him, made farther revelation and redemption necessary; it is he, therefore, for whose sake all *history* also exists. Man as the highest unfolding of psychical life is, as Gregory of Nyssa[2] teaches, the crown of creation, its master and king: it is creation's destiny to be contemplated by him, and taken back into its original spirituality. But with Origen, too, men are just those fallen spirits, who, for punishment and improvement, have been clothed with the world of sense: Nature exists only on account of their sin, and it will cease again when the historical process has attained its end through the return of all spirits to the Good.

[1] *Ref.* V. 29, 1, p. 767 St. [2] *Conf.* I. 50–60 Mor.

Thus the *anthropological movement*, which at first forced its way into Greek science only as a shifting of the interest, as a change in the statement of the problem, developed during the Hellenistic-Roman period to be more and more the real principle from which the world was considered, and at last in league with the religious need it took possession of metaphysics. The human race has gained the consciousness of the unity of its historical connection and regards the *history of its salvation* as the measure of all finite things. What arises and passes away in space and time has its true significance only in so far as it is taken up into the relation of man to his God.

Being and Becoming were the problems of ancient philosophy at its beginning: the conceptions with which it closes are God and the human race.

PART III.

THE PHILOSOPHY OF THE MIDDLE AGES.

Rousselot, *Études sur la Philosophie du Moyen Âge.* Paris, 1840–42.
B. Haurćau, *De la Philosophie Scholastique.* Paris, 1850.
B. Haurćau, *Histoire de la Philosophie Scholastique.* Paris, 1872–80.
A. Stöckl, *Geschichte der Philosophie des Mittelalters.* Mainz, 1864–66.

WHEN the migration of the peoples broke in devastation over the Roman Empire, and the latter lacked the political strength to defend itself against the northern barbarians, scientific civilisation, also, was in danger of becoming completely crushed out; for the tribes to whom the sceptre now passed brought still less mind and understanding for the finely elaborated structures of philosophy than for the light forms of Grecian art. And, withal, ancient civilisation was in itself so disintegrated, its vital force was so broken, that it seemed incapable of taking the rude victors into its school.

Thus the conquests of the Greek spirit would have been given over to destruction beyond hope of rescue, if in the midst of the breaking down of the old world, a new spiritual power had not grown strong, to which the sons of the North bowed, and which, with firm hand, knew how to rescue for the future the goods of civilisation, and preserve them during the centuries of subversion. This power was the *Christian Church.* What the State could not do, what art and science could not achieve, religion accomplished. Inaccessible still for the fine workings of æsthetic imagination and abstract thought, the Germans were laid hold of in their deepest feelings by the preaching of the gospel, which worked upon them with all the power of its grand simplicity.

Only from this point of religious excitation, therefore, could the process of the appropriation of ancient science by the peoples of the Europe of to-day begin; only at the hand of the Church could the new world enter the school of the old. The natural consequence, however, of this relation was, that at first only that portion of the intellectual content of ancient civilisation remained alive

which had been taken up into the doctrine of the Christian Church, and that the teaching authority rigidly excluded all else, and especially that which was opposed to her. By this means, to be sure, confusion in the youthful mind of these nations, which would not have been able to comprehend and elaborate much and many kinds of material, was wisely guarded against; but thereby whole worlds of the intellectual life sank to the depth from which they could only be drawn forth again long after, by toil and conflict.

The Church had grown to its great task of becoming the educator of the European nations, first of all, because from the invisible beginnings of a religious society it had developed with steadily growing power to a unified organisation, which amid the dissolution of political life presented itself as the only power that was firm and sure of itself. And since this organisation was supported by the thought that the Church was called to become the means of bringing the salvation of redemption to all humanity, the religious education of the barbarians was a task prescribed by its own nature. But the Church was all the more able to take this in hand, since in her inner life she had proceeded with the same certainty amid numerous deviating paths, and had attained the goal of a unified and completed system of doctrine. To this was further added the especially favourable circumstance, that at the threshold of the new epoch she was presented with the sum-total of her convictions, worked out into the form of a thorough scientific system by a mind of the first order, — *Augustine*.

Augustine was the true teacher of the Middle Ages. Not only do the threads of Christian and Neo-Platonic thought, the ideas of Origen and of Plotinus, unite in his philosophy, but he also concentrated the entire thought of his time with creative energy about the need of salvation and the fulfilment of this need by the church community. His doctrine is the *philosophy of the Christian Church*. Herewith was given, in pregnant unity, the system which became the basis of the scientific training of the European peoples, and in this form the Romanic and Germanic peoples entered upon the inheritance of the Greeks.

But for this reason the Middle Ages retraced in the reverse direction the path which the Greeks had gone over in their relations to science. In antiquity science had arisen from the pure æsthetic joy in knowledge itself, and had only gradually entered into the service of practical need, of ethical tasks, and of religious longings. The Middle Ages begins with the conscious subordination of knowledge to the great ends of faith; it sees in science at the beginning only the task of the intellect to make clear to itself and express in

abstract thought that which it possesses surely and unassailably in feeling and conviction. But in the midst of this work the joy in knowledge itself wakes anew, at first timorously and uncertainly, then with ever-increasing force and self-certainty; it unfolds itself at first scholastically, in fields which seem to lie far distant from faith's unassailable sphere of ideas, and at the end breaks through victoriously when science begins to define her limits as against faith, philosophy hers as against theology, and to assume a conscious independent position.

The *education of the European peoples*, which the history of the philosophy of the Middle Ages sets forth, has then for its starting-point the Church doctrine, and for its goal the development of the scientific spirit. The intellectual civilisation of antiquity is brought to modern peoples in the religious form which it assumed at its close, and develops in them gradually the maturity for properly scientific work.

Under such conditions it is easy to understand that the history of this education awakens psychological interest and an interest connected with the history of civilisation, rather than presents new and independent fruits of philosophical insight. In the appropriation of the presented material the peculiar personality of the disciple may assert itself here and there; the problems and conceptions of ancient philosophy may, therefore, find many fine transformations when thus taken up into the spirit of the new peoples, and in forging out the new Latin terminology in the Middle Ages acuteness and depth often contend emulously with pedantry and insipidity; but in its fundamental philosophical thoughts, mediæval philosophy remains enclosed within the system of conceptions of the Greek and the Hellenistic-Roman philosophy, — not only as regards its problems, but also as regards their solutions. Highly as we must estimate the worth of its labours for the intellectual education of European peoples, its highest achievements remain in the last instance just brilliant productions of scholars or disciples, not of masters, — productions in which only the eye of the most refined detailed investigation can discover the gently germinating beginnings of a new thought, but which show themselves to be, on the whole, an appropriation of the world of thought of the departing antiquity. Mediæval philosophy is, in its entire spirit, solely the continuation of the Hellenistic-Roman, and the essential distinction between the two is that what in the first centuries of our era had been coming into existence amid struggles was, for the Middle Ages, given and regarded as something in the main complete and definitive.

This period, in which the humanity of to-day was at school, lasted a full thousand years, and as if in systematically planned pedagogic steps its education proceeds toward science by the *successive addition of ancient material of culture.* Out of the antitheses which appear in this material grow the problems of philosophy, and the ancient conceptions taken up and amplified give the form to the scientific theories of the world prevalent in the Middle Ages.

An original discord exists in this tradition between Neo-Platonism and the Church doctrine defended by Augustine, — a discord which indeed was not equally strong at all points, since Augustine in very essential points had remained under the control of Neo-Platonism, and yet a discord which amounted to an opposition with reference to the fundamental character of the relation of philosophy to faith. The system of Augustine is concentrated about the conception of the Church; for it philosophy has as its main task to present the Church doctrine as a scientific system, to establish and develop it: in so far as it prosecutes this task mediæval philosophy is the science of the schools, *Scholasticism.* The Neo-Platonic tendency, on the contrary, takes the direction of guiding the individual, through knowledge, to blessed oneness of life with the deity: in so far as the science of the Middle Ages sets itself this end it is *Mysticism.*

Scholasticism and Mysticism accordingly supplement each other without being reciprocally exclusive. As the intuition of the Mystics may become a part of the Scholastic system, so the proclamation of the Mystics may presuppose the system of the Scholastics as its background. Throughout the Middle Ages, therefore, Mysticism is more in danger than Scholasticism of becoming heterodox; but it would be erroneous to see in this an essential mark for distinguishing between the two. Scholasticism is, no doubt, in the main entirely orthodox; but not only do the theories of the Scholastics diverge widely in the treatment of dogmas which are still in the process of formulation, but many of the Scholastics, even in the scientific investigation of the doctrines which were given, proceeded to completely heterodox theories, the expression of which brought them into more or less severe conflicts without and within. As regards Mysticism, the Neo-Platonic tradition often forms the theoretical background of the secret or open opposition offered to the monopolising of the religious life on the part of the Church;[1]

[1] Cf. H. Reuter, *Geschichte der religiösen Aufklärung im Mittelalter*, 2 vols. (Berlin, 1875–77). Cf. also H. v. Eicken, *Geschichte der mittelalterlichen Weltanschauung* (Stuttgart, 1888).

but we meet on the other hand enthusiastic Mystics who feel themselves called to take the true faith into their protection against the excesses of Scholastic science.

It appears thus to be inappropriate to give to the philosophy of the Middle Ages the general name of "Scholasticism." It might rather prove, as the result of a more exact estimate, that in the maintenance of scientific tradition as well as in the slow adaptation and transformation of those philosophical doctrines which were effective for the after time, a part belongs to Mysticism which is at least as great as the part played by Scholasticism, and that on the other hand a sharp separation of the two currents is not practicable in the case of a great number of the most prominent philosophic thinkers of the Middle Ages.

Finally, it must be added that even when we put together Scholasticism and Mysticism, we have in nowise exhausted the characteristics of mediæval philosophy. While the nature of both these tendencies is fixed by their relation to the religious presuppositions of thought, — in the one case the established doctrine of the Church, in the other personal piety, — there runs along side by side with these, especially in the later centuries of the Middle Ages though noticeable still earlier, a secular side-current which brings in an increasing degree the rich results of Greek and Roman experience of the world, to science building itself anew. Here, too, at the outset the effort prevails to introduce organically into the Scholastic system this extensive material and the forms of thought which are dominant in it; but the more this part of the sphere of thought develops into an independent significance, the more the entire lines of the scientific consideration of the world become shifted, and while the reflective interpretation and rationalisation of the religious feeling becomes insulated within itself, philosophical knowledge begins to mark off anew for itself the province of purely theoretical investigation.

From this multiplicity of variously interwoven threads of tradition with which ancient science weaves its fabric on into the Middle Ages, we can understand the wealth of colour in which the philosophy of this thousand years spreads out before historical research. In the frequent exchange of friendly and hostile contact, these elements of a tradition changing in compass and content from century to century play back and forth to form ever new pictures; a surprising fineness in the transitions and shadings becomes developed as these elements are woven together, and thus there is developed also a wealth of life in the work of thought, which manifests itself in a considerable number of interesting personalities, in an astonishing

amount of literary production, and in a passionate agitation of scientific controversies.

Such living variety in form has as yet by no means everywhere received full justice at the hands of literary-historical research,[1] but the main lines of this development lie before us clearly and distinctly enough for the history of philosophic principles, which nevertheless finds but a meagre field in this period for the reasons already adduced. We must, indeed, be on our guard against aiming to reduce the complex movement of this process to formulas that are all too simple, and against overlooking the multitude of positive and negative relations that have come and gone in shifting forms between the elements of ancient tradition which found their entrance in the course of centuries by irregular intervals into mediæval thought.

In general, the course of science among the European peoples of the Middle Ages proceeded along the following lines.

The profound doctrine of *Augustine* had its first efficiency, not in the direction of its philosophical significance, but as an authoritative presentation of the doctrine of the Church. Side by side with this a Neo-Platonic Mysticism maintained itself, and scientific schooling was limited to unimportant compendiums, and to fragments of the Aristotelian logic. Nevertheless, a logico-metaphysical problem of great importance developed from the elaboration of the logic, and about this problem arose a highly vigorous movement of thought, which, however, threatened to degenerate into barren formalism in consequence of the lack in knowledge to form the content of thought. In contrast with this the Augustinian psychology began gradually to assert its mighty force; and at the same time the first effects of contact with *Arabian* science disclosed themselves, a science to which the West owed, primarily at least, a certain stimulus toward employment with realities, and further a complete widening

[1] The grounds for this lie, certainly in part, in the but gradually vanishing prejudices which long stood in the way of a just appreciation of the Middle Ages; but in no less a degree they lie also in this literature itself. The circumstantial and yet for the most part sterile prolixity of the investigations, the schematic uniformity of the methods, the constant repetition and turning of the arguments, the lavish expenditure of acuteness upon artificial and sometimes absolutely silly questions, the uninteresting witticisms of the schools, — all these are features which perhaps belong inevitably to the process of learning, appropriating, and practising, which mediæval philosophy sets forth, but they bring with them the consequence that in the study of this part of the history of philosophy the mass of the material, and the toil involved in its elaboration, stand in an unfavourable relation to the real results. So it has come about that just those investigators who have gone deeply, with industry and perseverance, into mediæval philosophy have often not refrained from a harsh expression of ill-humour as to the object of their research.

and transformation of its horizon. This development was in the main attached to the acquaintance gained by such by-ways with the entire system of *Aristotle*, and the immediate consequence of this acquaintance was that the structure of Church doctrine was projected in the grandest style and carefully wrought out in all its parts with the help of his fundamental metaphysical conceptions. Meanwhile Aristotelianism had been accepted from the Arabians (and Jews) not only in their Latin translation, but also with their commentaries, and in their interpretation which was under strong *Neo-Platonic* influence; and while by this means the Neo-Platonic elements in previous tradition, even in the Augustinian form, found vigorous confirmation in various directions, the specific elements of the *Augustinian metaphysics* were forced into sharper and more energetic expression, in violent reaction against the Neo-Platonic tendency. Thus while both sides lean upon Aristotelianism, a cleft in scientific thought is produced, which finds its expression in the separation of theology and philosophy. This cleft became widened by a new and not less complicated movement. *Empirical research* in medicine and natural science had also made its way from the East, hand in hand with Aristotelianism; it began now to rise also among the European peoples; it conquered the domain of *psychology* not without assistance from the Augustinian current, and favoured the development of the Aristotelian *logic* in a direction which led far from the churchly Aristotelian metaphysics. And while thus the interwoven threads of tradition were separating on all sides, the fine filaments of new beginnings were already finding their way into this loosening web.

With such various relations of mutual support or retardation, and with such numerous changes of front, the thoughts of ancient philosophy move through the Middle Ages; but the most important and decisive turn was doubtless the *reception of Aristotelianism*, which became complete about the year 1200. This divides the whole field naturally into two sections which in their philosophical import are so related that the interests and the problems, the antitheses and the movements, of the first period are repeated in broader, and at the same time deeper, form in the second. The relation of these two divisions, therefore, cannot be generally designated in this case by differences in the subject matter.

CHAPTER I. FIRST PERIOD.

(Until about 1200.)

W. Kaulich, *Geschichte der scholastichen Philosophie*, I. Theil. Prague, 1863.

The line of thought in which mediæval philosophy essentially moved, and in which it continued the principles of the philosophy of antiquity, was prescribed for it by the doctrine of *Augustine*. He had moved the principle of *internality* (*Innerlichkeit*), which had been preparing in the whole closing development of ancient science, for the first time into the controlling central position of philosophic thought, and the position to which he is entitled in the history of philosophy is that of the beginner of a new line of development. For the bringing together of all lines of the Patristic as well as the Hellenistic philosophy of his time, which he completely accomplished, was possible only as these were consciously united in that new thought which was itself to become the germ of the philosophy of the future. But only of a more distant future: his philosophical originality passed over his contemporaries and the immediately following centuries without effect. Within the circuit of the old civilisation the creative power of thought had become extinguished, and the new peoples could only gradually grow into scientific work.

In the cloister and court schools which formed the seats of this newly beginning civilisation, permission for instruction in *dialectic* by the side of the arts most necessary for the training of the clergy had to be conquered step by step. For this elementary logical instruction they possessed in the first centuries of the Middle Ages only the two least important treatises of the Aristotelian Organon, *De Categoriis* and *De Interpretatione*, in a Latin translation with the introduction of Porphyry, and a number of commentaries of the Neo-Platonic time, in particular those of Boethius. For the material of knowledge (of the Quadrivium) they used the compendiums of departing antiquity, which had been prepared by Marcianus Capella, Cassiodorus, and Isidorus of Sevilla. Of the

great original works of ancient philosophy, only the Platonic *Timæus* in the translation of Chalcidius was known.

Under these circumstances, scientific activity in the schools was mainly directed toward learning and practising the schematism of formal logic, and the treatment even of the material parts of knowledge, in particular of religious dogma which was indeed regarded as something essentially complete and in its contents unassailable, took the direction of elaborating and setting forth what was given and handed down by tradition, in the forms and according to the rules of the Aristotelian-Stoic logic. In this process the main emphasis must necessarily fall upon formal arrangement, upon the formation and division of class-concepts, upon correct syllogistic conclusions. Already in the Orient the ancient school logic had been put into the service of a rigidly articulated development of Church doctrine by John Damascenus, and now this took place in the schools of the West also.

Meanwhile this pursuit, which had its basis in the conditions of the tradition, had not only the didactic value of a mental exercise in the appropriation of material, but also the consequence that the beginnings of independent reflection necessarily took the direction of an inquiry as to the *significance of logical relations*, and so we find emerging early in the Western literature, investigations as to the relation of the conception on the one hand to the word, and on the other to the thing.

The problem thus formed became strengthened by a peculiar complication. By the side of the Church doctrine there persisted, half tolerated and half condemned, a mystical transmission of Christianity in Neo-Platonic form. It went back to writings which had arisen in the fifth century, but which were ascribed to Dionysius the Areopagite, and it gained wider extension when these writings were translated in the ninth century by *John Scotus Erigena*, and made the basis of his own doctrine. In this doctrine, however, a main point was that identification of the different grades of abstraction with the stages of metaphysical reality, which had been already propounded in the older Platonism and in Neo-Platonism (cf. § 20, 8).

In consequence of these incitements the question as to the *metaphysical significance of logical genera* became, during the next centuries, the centre of philosophic thought. About this were grouped the other logical and metaphysical problems, and the answer given to this question decided the party position of individual thinkers. Amid the great variety of decisions given in this *controversy over universals*, three tendencies are prominent: *Realism*, which main-

tains the independent existence of genera and species, is the doctrine of Anselm of Canterbury, of William of Champeaux, and of the Platonists proper, among whom Bernard of Chartres is prominent; *Nominalism*, which sees in universals only designations or terms which apply commonly, is defended in this period principally by Roscellinus; finally a mediating theory, which has been called *Conceptualism* or *Sermonism*, is attached principally to the name of Abelard.

These conflicts came to an issue principally in the endless disputations at the Paris University, which for this period and on into the following period formed the centre of scientific life in Europe; and these battles, conducted with all the arts of dialectical dexterity, exercised upon this age a fascinating power like that which the disputes of the Sophists and Socratic circles had once exercised upon the Greeks. Here as there the unreflective life of the popular consciousness was awakened to thought, and here as there wider circles were seized by a feverish thirst for knowledge, and by a passionate desire to take part in such hitherto unwonted intellectual games. Far beyond the narrow circles of the clergy, who had previously been the transmitters of scientific tradition, the impulse toward knowledge, thus awakened, forced its way to the surface.

But this excessive vigour in dialectical development found at the same time manifold opposition. In fact, it hid within itself a serious danger. This brilliant performance, in which abstract thought proved its power, lacked all basis of real knowledge. With its distinctions and conclusions it was carrying on to a certain extent a juggler's game in the open air, which indeed set the formal mental powers into beneficial motion, but which, in spite of all its turns and windings, could lead to no material knowledge. Hence, from intelligent men like Gerbert, who had received information from the empirical studies of the Arabians, went out the admonition to abandon the formalism of the schools and turn to the careful examination of Nature and to the tasks of practical civilisation.

But while such a call still echoed mainly unheard, dialectic met a more forcible resistance in the piety of faith and in the power of the Church. The result was inevitable that the logical working over of the metaphysics of the Church's faith, and the consequences which were developed in the strife about universals, — at first without any reference to their religious bearing, — should come into contradiction with the dogma of the Church; and the more this was repeated, the more dialectic appeared not only superfluous for the simply pious mind, but also dangerous to the interests of the Church. In this spirit it was attacked, sometimes with extreme violence, by the

orthodox Mystics, among whom the most combative was Bernard of Clairvaux, while the Victorines turned back from the excesses of dialectical arrogance to the study of Augustine, and sought to bring out the rich treasure of inner experience which his writings contained, by transferring the fundamental thoughts of his psychology from the metaphysical to the empirical sphere.

Aurelius Augustinus (354–430), born at Thagaste in Numidia, and educated for a jurist there and also in Madaura in Carthage, passed through in his youth almost all phases of the scientific and religious movement of his time. He sought at first in Manichæism religious relief for his burning doubts, then fell into the Academic Scepticism which he had early absorbed from Cicero, passed over from this gradually to the Neo-Platonic doctrine, and was at last won by Ambrose, Bishop of Milan, for Christianity, whose philosopher he was to become.

As priest, and later as bishop at Hippo Regius, he was unwearied in practical and literary activity for the unity of the Christian Church and doctrine; his doctrinal system was developed especially in the Donatist and Pelagian controversies. Among his works (in Migne's collection, 16 vols., Paris, 1835 ff. [tr. ed. by Dods, 15 vols., Edin. 1871–77; also in Schaff's lib., Nicene and Post-Nicene Fathers, Vols. 1–8, Buffalo, 1886–88]) those of chief importance for philosophy are his autobiographical *Confessions*, and further *Contra Academicos*, *De Beata Vita*, *De Ordine*, *De Quantitate Animæ*, *De Libero Arbitrio*, *De Trinitate*, *Soliloquia*, *De Immortalitate Animæ*, *De Civitate Dei*. — Cf. C. Bindemann, *Der. hig. A.* (3 Bde. 1844–1869). — Fr. Böhringer, *Kirchengeschichte in Biographien*, XI. Bd. in 2 Thl. (Stuttgart, 1877–78). — A. Dorner, *A.* (Berlin, 1873). — W. Dilthey, *Einleitung in die Geisteswissenschaften*, I. (Leips. 1883), pp. 322 ff.

The *Εἰσαγωγὴ εἰς τὰς κατηγορίας* of Porphyry (ed. by Busse, Berlin, 1887), in its translation by Boethius, gave the external occasion for the controversy over universals. **Boethius** (470–525), aside from this, exercised an influence upon the early Middle Ages by his translations and commentaries upon the two Aristotelian treatises, and upon a number of Cicero's writings. In addition to his books there were still others which circulated under the name of Augustine. Cf. Prantl, *Gesch. d. Log. im Abendl.*, II., and A. Jourdain, *Recherches critiques sur l'âge et l'origine des traductions latines d'Aristotle* (Paris, 2 ed., 1843).

Among the *scientific encyclopedias* of departing antiquity, Marcianus Capella (from Carthage, the middle of the fifth century), in his *Satyricon* (ed. by Eyssenhardt, Leips. 1866), after his whimsical introduction *De Nuptiis Mercurii et Philologiæ*, treats the seven liberal arts, of which, as is well known, in the activity of the schools grammar, rhetoric, and dialectic formed the Trivium, arithmetic, geometry, astronomy, and music, including poetics, the Quadrivium. A valuable commentary on Capella was written later by Scotus Erigena (ed. by B. Haurĕau, Paris, 1861). — The *Institutiones Divinarum et Sæcularium Lectionum* and *De Artibus ac Disciplinis Litterarum Liberalium* of the Senator Cassiodorus (480–570, Works, Paris, 1588), and the *Originum sive Etymologiarum, Libri XX.* (in Migne) of Isidorus Hispalensis (died 636) are already completely upon theological ground. **John Damascenus** (about 700) in his *Πηγὴ γνώσεως* (Works, Venice, 1748) gave the classical example for the employment of the ancient school logic in the service of systematising the Church doctrines.

While the storms of the national migrations were blustering upon the continent, scientific study had fled to the British Isles, in particular to Ireland, and later flourished to a certain extent in the school at York under the Venerable Bede. From here learned education was won back to the continent through Alcuin, upon the inducement of Charles the Great; beside the episcopal and the cloister schools arose the palatinal school, whose seat was fixed by Charles the Bald at Paris. The most important cloister schools were those of Fulda and Tours. At the former worked Rabanus (Rhaban) Maurus (of Mainz, 776–856; *De Universo, Libri XXII.*), and Eric (Heiricus) of Auxerre; from it went out, at the end of the ninth century, Remigius of Auxerre and the probable author

of the commentary *Super Porphyrium* (printed in Cousin's *Ouvrages Inédits d'Abélard*, Paris, 1836). In Tours Alcuin was followed by the Abbot Fredegisus, whose letter, *De Nihilo et Tenebris*, is preserved (in Migne, Vol. 105). Later the cloister at St. Gall (Notker Labeo, died 1022) formed a principal seat of scientific tradition.

Cf. also for the literary relations, the *Histoire Littéraire de la France.*

The writings ascribed to the Areopagite (cf. *Acts of the Apostles*, 17 : 34), among which those of chief importance are *περὶ μυστικῆς θεολογίας* and *περὶ τῆς ἱεραρχίας οὐρανίου* (in Migne; German by Engelhardt, Sulzbach, 1823), show the same mixture of Christian and Neo-Platonic philosophy which appeared frequently in the Orient (the result of Origen's influence) and in an especially characteristic form in the Bishop Synesius (about 400; cf. R. Volkmann, *S. von Cyrene*, Berlin, 1869). The above-named writings of the Pseudo-Dionysius, which probably arose in the fifth century, are first mentioned, 532, and their genuineness is there contested; nevertheless, this was defended by Maximus Confessor (580–662; *De Variis Difficilioribus Locis Patrum Dionysii et Gregorii*, ed. Oehler, Halle, 1857).

In connection with this Mysticism develops the first important scientific personality of the Middle Ages, John **Scotus Erigena** (sometimes Jerugena, from Ireland, about 810–880), of whose life it is certainly known that he was called by Charles the Bald to the court school at Paris, and was for a time active there. He translated the writings of the Areopagite, wrote against Gottschalk the treatise *De Prædestinatione*, and put his own theories into his main work, *De Divisione Naturæ* (German by Noack, Leips. 1870–76). The works form Vol. 122 in Migne's collection. Cf. J. Huber, *J. S. E.* (Munich, 1861).

Anselm of Canterbury (1033–1109) came from Aosta, was active for a long time in the Norman cloister at Bec, and was called to become Archbishop of Canterbury in 1093. Of his works (Migne, Vol. 155) the most important for philosophy besides the treatise *Cur Deus Homo?* are the *Monologium* and the *Proslogium*. The two latter are edited by C. Haas (Tübingen, 1863), together with the refutation of a monk, Gaunilo (in the cloister Marmoutier near Tours), *Liber pro Insipiente*, and the reply of Anselm. Cf. Ch. Rémusat, *A. de C., tableau de la vie monastique et de la lutte du pouvoir spirituel avec le pouvoir temporel au 11me siècle* (2d ed., Paris, 1868).

William of Champeaux (died 1121 as Bishop of Châlons-sur-Marne) was a teacher who was much heard at the cathedral school in Paris, and established studies there in the Augustinian cloister at St. Victor. We are chiefly informed as to his philosophical views by his opponent Abelard; his logical treatise is lost. Cf. E. Michaud, *G. de Ch. et les écoles de Paris au 12me siècle* (Paris, 1868).

The **Platonism** of the earlier Middle Ages attached itself essentially to the *Timæus*, and under the influence of the Neo-Platonic interpretation gave to the doctrine of Ideas a form which did not completely correspond to the original sense. The most important figure in this line is **Bernard of Chartres** (in the first half of the twelfth century). His work *De Mundi Universitate sive Megacosmus et Microcosmus* has been edited by C. S. Barach (Innsbruck, 1876). **William of Conches** (*Magna de Naturis Philosophia; Dragmaticon Philosophiæ*) and **Walter** of Montagne are regarded as his disciples. **Adélard** of Bath also wrote in the same spirit (*De Eodem et Diverso; Questiones Naturales*).

Roscellinus of Armorica in Brittany came forward as teacher at various places, especially at Locmenach where Abelard was his hearer, and was obliged to retract his opinions at the Council at Soissons. Of his own writings only a letter to Abelard is extant (printed in the *Abhandl. der bair. Akad.*, 1851); the sources for his doctrine are Anselm, Abelard, John of Salisbury.

Abelard (Abeillard), the most impressive and energetic personality among the thinkers of this period, was born 1079 at Pallet, in the county of Nantes, and was a pupil of William of Champeaux and of Roscellinus. His own activity as a teacher was developed at Melun and Corbeil, and most successfully in Paris at the cathedral school, and at the logical school St. Geneviève. The misfortune into which his well-known relationship to Heloise plunged him, and the conflicts into which his teaching brought him with the Church authority, chiefly at the instigation of his unwearied prosecutor, Bernard of Clairvaux

(Synods at Soissons 1121, and Sens 1141), did not allow the restless man to attain complete clearness in his mind, and impelled him to seek resting-places in various cloisters: he died 1142 in St. Marcel, near Châlons-sur-Saône. Cf. his *Historia Calamitatum Mearum*, and his correspondence with Heloise (M. Carrière, *A. u. H.*, 2d ed., Giessen, 1853). His works have been edited by V. Cousin in two volumes (Paris, 1849–59). Among these the most important are his *Dialectic*, *Introductio in Theologium*, *Theologia Christiana*, *Dialogus inter Philosophum, Christianum et Judæum*, the treatise *Sic et Non*, and the ethical treatise *Scito Te Ipsum*. Cf. Ch. d. Rémusat, *Abelard* (2 vols., Paris, 1845).

A number of anonymous treatises (published by V. Cousin) occupy a position allied to that of Abelard. Of this description are a commentary on *De Interpretatione*, *De Intellectibus*, and *De Generibus et Speciebus* (the latter is possibly from Joscellinus, a Bishop of Soissons who died 1151). Related to Abelard is also the philosophico-theological position of **Gilbert** de la Porrée (Gilbertus Porretanus, died 1154 as Bishop of Poitiers), who taught in Chartres and Paris, and was drawn into the prosecution of Abelard by Bernard of Clairvaux. Besides a commentary on the *De Trinitate* and *De Duabus Naturis in Christo* of Pseudo-Boethius, he wrote the *De sex Principiis*, which was much commented upon later.

The consequences of the "dialectic" that were objectionable for the Church showed themselves at an early date especially with **Berengar** of Tours (999–1088), whose doctrine of the Sacrament was combated by **Lanfranc** (1005–1089, Anselm's predecessor at Bec and Canterbury). The latter is probably the author of the treatise formerly ascribed to Anselm and printed among his works, *Elucidarium sive Dialogus Summam Totius Theologiæ Complectens*. In this compendium the effort first appears to give the whole compass of what had been established by the Church, in the form of a logically arranged textbook, putting aside dialectical innovations. From this proceeded later the works of the **Summists** [so called from their writings which took the form of a "Sum" of theology], among whom the most important is **Peter Lombard** (died 1164 as Bishop of Paris). His *Libri IV. Sententiarum* form Vol. 192 in Migne. Among the earlier we may perhaps mention Robert Pulleyn (Robertus Pullus, died 1150); among the later, Peter of Poitiers (died 1205) and Alanus Ryssel ("*ab insulis*"; died 1203).

Gerbert (died 1003 as Pope Sylvester II.) has the merit of having pointed out energetically the necessity of the study of mathematics and natural science. He became acquainted with the work of the Arabians while in Spain and Italy, and acquired an amount of knowledge that made him an object of amazement and suspicion to his contemporaries. Cf. K. Werner, *G. von Aurillac, die Kirche und Wissenschaft seiner Zeit* (2d ed., Vienna, 1881). Like him his disciple, Fulbert (died 1029 as Bishop of Chartres), called men back from dialectic to simple piety, and in the same spirit **Hildebert** of Lavardin was active (1057–1133, Bishop of Tours).

The same thing was done upon a large scale by the orthodox **Mysticism** of the twelfth century. As its most zealous supporter we are met by **Bernard of Clairvaux** (1091–1153). Among his writings those prominent are *De Contemptu Mundi*, and *De Gradibus Humilitatis* (ed. by Mabillon, last ed., Paris, 1839 f.). Cf. Neander, *Der heilige B. und seine Zeit* (3d ed., 1865); Morison, *Life and Times of St. B.* (Lond. 1868); [R. S. Storrs, *B. of C.* (N.Y. 1892)].

Mysticism became scientifically fruitful among the **Victorines**, the conductors of the cloister school of St. Victor, in Paris. The most important was **Hugo of St. Victor** (born 1096 as Count of Blankenburg in the Harz, died 1141). Among his works (in Migne, Vols. 175–177) the most important is *De Sacramentis Fidei Christianæ;* for the psychology of Mysticism the most important works are the *Soliloquium de Arrha Animæ*, *De Arca Noe* and *De Vanitate Mundi*, and besides these the encyclopedic work *Eruditio Didascalica*. — Cf. A. Liebner, *H. v. St. V. und die theologischen Richtungen seiner Zeit* (Leips. 1836).

His pupil, **Richard of St. Victor** (a Scot, died 1173), wrote *De Statu*, *De Eruditione Hominis Interioris*, *De Preparatione Animi ad Contemplationem*, and *De Gratia Contemplationis*. His works form Vol. 194 in Migne. Cf. W. A. Kaulich, *Die Lehren des H. und R. von St. V.* (in the *Abhandl. der Böhm. Ges. der Wiss.*, 1863 f.). His successor, Walter of St. Victor, distin-

guished himself in a less scientific polemic against the heretical dialectic (*In Quattuor Labyrinthos Franciæ*).

At the close of this period appear the beginnings of a Humanist reaction against the one-sidedness of the work of the schools, in **John of Salisbury** (Johannes Saresberiensis, died 1180 as Bishop of Chartres), whose writings *Policraticus* and *Metalogicus* (Migne, Vol. 199) form a valuable source for the scientific life of the time. Cf. C. Schaarschmidt, *J. S. nach Leben und Studien, Schriften und Philosophie* (Leips. 1862).

§ 22. The Metaphysics of Inner Experience.

The philosophy of the great Church teacher Augustine is not presented in any of his works as a complete system; rather, it develops incidentally in all his literary activity in connection with the treatment of various subjects, for the most part theological. But from this work as a whole we receive the peculiar impression that these rich masses of thought are in motion in two different directions, and are held together only by the powerful personality of the man. As theologian Augustine throughout all his investigations keeps the *conception of the Church* in mind, as criterion; as philosopher he makes all his ideas centre about the *principle of the absolute and immediate certainty* (*Selbstgewissheit*) *of consciousness*. By their double relation to these two fixed postulates, all questions come into active flux. Augustine's world of thought is like an elliptic system which is constructed by motion about two centres, and this, its inner duality, is frequently that of contradiction.[1]

It becomes the task of the history of philosophy to separate from this complicated system those ideas by which Augustine far transcended his time and likewise the immediately following centuries, and became one of the *founders of modern thought*. All these ideas, however, have their ultimate ground and inner union in the principle of the *immediate certainty of inner experience* (*selbstgewissen Innerlichkeit*), which Augustine first expressed with complete clearness, and formulated and used as the starting-point of philosophy. Under the influence of the ethical and religious interest, metaphysical interest had become gradually and almost imperceptibly shifted from the sphere of the outer to that of the inner life. Psychical conceptions had taken the place of physical, as the fundamental factors in the conception of the world. It was reserved for Augustine to bring into full and conscious use, this, which had already become an accomplished fact in Origen and Plotinus.[2]

[1] It is unmistakable that Augustine himself in the course of his development transferred the emphasis of his personality more and more from the philosophical to the Church centre. This comes forward with especial distinctness in his backward look over his own literary activity, the *Retractationes*.

[2] Aug. *De Ver. Rel.* 39, 72. *Noli foras ire; in te ipsum redi:* IN INTERIORE HOMINE *habitat veritas.*

This tendency toward *inner experience* even constitutes his peculiar literary quality. Augustine is a virtuoso in self-observation and self-analysis; he has a mastery in the portrayal of psychical states, which is as admirable as is his ability to analyse these in reflection and lay bare the deepest elements of feeling and impulse. Just for this reason it is from this source almost exclusively that he draws the views with which his metaphysics seeks to comprehend the universe. So there begins, as over against the Greek philosophy, a new course of development, which indeed, during the Middle Ages, made but little progress beyond what was achieved by Augustine in his first cast, and the full development of which is not to be found until the modern period.

1. This makes its appearance clearly already in Augustine's doctrine of the *starting-point* of philosophical knowledge. In correspondence with the course of his personal development he seeks the way to certainty through doubt, and in this process, sceptical theories themselves must break the path. At first, to be sure, with the indomitable thirst of his ardent nature for happiness, he strikes down doubt by the Socratic postulate that the possession of truth (without the presupposition of which there is also no probability) is requisite for happiness, and therefore is to be regarded as attainable: but with greater emphasis he shows that even the sceptic who denies the external reality of the content of perception, or at least leaves it undecided, can yet not involve in doubt the internal existence of the sensation as such. But instead of contenting himself with the relativistic or positivistic interpretations of this fact, Augustine presses forward just from this basis to victorious certainty. He points out that together with the sensation there is given not only its content, which is liable to doubt in one direction or another, but also the reality of the perceiving subject, and this certainty which consciousness has in itself follows first of all from the very act of doubt. In that I doubt, or since I doubt, he says, I know that I, the doubter, am: and thus, just this doubt contains within itself the valuable truth of the *reality of the conscious being*. Even if I should err in all else, I cannot err in this; for in order to err I must exist.[1]

This fundamental certainty extends equally to all *states of con-*

[1] Augustine attributed fundamental importance to this line of argument, which he frequently worked out (*De Beata Vita*, 7; *Solil.* II. 1 ff.; *De Ver. Rel.* 72 f.; *De Trin.* X. 14, etc.). That it, however, was not completely unknown to Greek literature also is proved by the passage (III. 6 f.) of the compilation current under the name of "Metaphysics of Herennios." The source of this passage has not as yet been discovered, but is probably late Stoic. Cf. on this E. Heitz in *Sitz.-Ber. der Berl. Ak. d. W.*, 1889, pp. 1167 ff.

sciousness (*cogitare*), and Augustine sought to show that all the various kinds of these states are already included in the act of doubt. He who doubts knows not only that he lives, but also that he remembers, that he knows, and that he wills: for the grounds of his doubt rest upon his former ideas; in estimating the *momenta* of the doubt are developed thought, knowledge, and judgment; and the motive of his doubt is only this, that he is striving after truth. Without particularly reflecting upon this, or drawing farther conclusions from it, Augustine proves in this example his deep insight into the psychical life, since he does not regard the different kinds of psychical activity as separate spheres, but as the aspects of one and the same act, inseparably united with one another. The soul is for him — and by this he rises far above Aristotle, and also above the Neo-Platonists — the living whole of *personality*, whose life is a unity, and which, by its self-consciousness, is certain of its own reality as the surest truth.

2. But from this first certainty Augustine's doctrine at once leads farther, and it is not only his religious conviction, but also a deep epistemological reflection, that makes him regard the idea of God as immediately involved in the certainty which the individual consciousness has of itself. Here, too, the fundamental fact of doubt is of authoritative importance; in this case, also, it already contains implicitly the full truth. How should we come to question and doubt the perceptions of the external world which force themselves upon us with such elementary power, asks Augustine, if we did not possess, besides these, and from other sources, criteria and standards of truths by which to measure and examine these perceptions? He who doubts must know the truth, for only for its sake does he doubt.[1] In reality, continues the philosopher, man possesses, besides sensation (*sensus*), the higher capacity of *reason* (*intellectus, ratio*), *i.e.* of the immediate perception of incorporeal truths;[2] under the latter Augustine understands, not only the logical laws, but also the norms of the good and the beautiful; in general, all those truths not to be attained by sensation, which are requisite to elaborate and judge what is given, — the principles of judging.[3]

[1] *De Ver. Rel.* 39, 72 f.

[2] Aspectus animi, quo *per se ipsum* non per corpus verum intuetur: *De Trin.* XII. 2, 2. Cf. *Contra Acad.* III. 13, 29.

[3] The apprehension of these intelligible truths by human consciousness was at the first designated by Augustine quite Platonically ἀνάμνησις. It was orthodox scruples against the assumption of the pre-existence of the soul that led him to regard the reason as the intuitive faculty for the incorporeal world. Cf. also J. Stortz, *Die Philosophie des hl. Augustinus* (Freiburg i. B. 1882).

Such norms of reason assert themselves as standards of judgment in doubt as in all activities of consciousness; but they transcend, as something higher, the individual consciousness into which they enter in the course of time: they are the same for all who think rationally, and experience no alteration in this their worth. Thus the individual consciousness sees itself attached in its own function to something *universally valid* and far reaching.[1]

But it belongs to the essence of truth that it *is* or exists. Augustine also proceeds from this fundamental conception of the ancient, as of every naïve theory of knowledge. But the Being or existence of those universal truths, since they are absolutely incorporeal in their nature, can be thought only as that of the *Ideas in God* — after the Neo-Platonic mode; they are the changeless Forms and norms of all reality (*principales formæ vel rationes rerum stabiles atque incommutabiles, quæ in divino intellectu continentur*), and the determinations of the content of the divine mind. In him they are all contained in highest union; he is the absolute unity, the all-embracing truth; he is the highest Being, the highest Good, perfect Beauty (*unum, verum, bonum*). All rational knowledge is ultimately knowledge of God. Complete knowledge of God, indeed, even according to Augustine's admission, is denied to human insight in the earthly life. Perhaps only the negative element in our idea of him is completely certain; and, in particular, we have no adequate idea of the way in which the different elements of divine truth which the reason beholds are united in him to form the highest real unity. For his incorporeal and changeless essence (*essentia*) far transcends all forms of relation and association that belong to human thought; even the category of substance applies to him as little as do the rest.[2]

3. Directly consistent as these thoughts are with Neo-Platonism,[3] their Christian character is yet preserved in Augustine's presentation by the fact that the religious idea of the deity as absolute personality is inseparably fused with the philosophical conception of the deity as the sum and essence of all truth. But just for this reason the whole Augustinian metaphysics is built up upon the

[1] *De Lib. Arb.* II. 7 ff.

[2] The essential thing in this is the insight, that the categories acquired in knowing Nature are inadequate for the peculiar nature of spiritual synthesis (according to which the divine essence should be thought). The new categories of internality are, however, with Augustine only in the process of coming into existence; cf. the following.

[3] In fact, Augustine seeks throughout to identify the νοῦς of Plotinus with the λόγος of Origen; but by dropping from the Neo-Platonic doctrine the emanistic derivation of the νοῦς and its acquirement of independent existence, he abrogates the physical schema of the world potencies in favour of the psychical.

self-knowledge of the finite personality; that is, upon the fact of inner experience. For so far as a comprehension of the divine essence is at all possible for man, it can be gained only after the analogy of human self-knowledge. This, however, shows the following fundamental composition of the inner life: the permanent existence of spiritual Being is given in the sum-total of its content of consciousness, or reproducible ideas; its movement and living activity consists in the processes of uniting and separating these elements in judgments; and the impelling force in this motion is the will, directed toward the attainment of highest blessedness. Thus the three aspects of psychical reality are *idea* (*Vorstellung*), *judgment*, and *will*: *memoria*, *intellectus*, *voluntas*,[1] and Augustine is expressly on his guard against conceiving of these modes of functioning which are peculiar to personality, as the properties of bodies are conceived. Just as little do they mean different strata or spheres of its existence; they form in their indissoluble unity the substance of the soul itself. In accordance with these relations thus recognised in man's mental life, Augustine then not only seeks to gain an analogical idea of the mystery of the Trinity, but recognises, also, in the *esse*, *nosse*, and *velle* the fundamental determinations of all reality. Being, knowing, and willing comprise all reality, and in omnipotence, omniscience, and perfect goodness, the deity encompasses the universe.

The outspoken opinion of the inadequacy of the physical (Aristotelian) categories reminds us only seemingly of Neo-Platonism, whose intelligible categories (cf. p. 245), as well as its entire metaphysical schema, are throughout physical. It is Augustine who is first in earnest in the attempt to raise the peculiar forms of relation characteristic of the inner nature, to metaphysical principles. Aside from this, his cosmology runs on in the track laid by Neo-Platonism without peculiarities worthy of mention. The doctrine of the two worlds, with its anthropological correlates, forms here the presupposition. The world of sense is known through perceptions, the intelligible world through the reason, and these two given constituents of knowledge are brought into relation with each other by intellectual thought (*ratiocinatio*). For apprehending Nature, the teleology conditioned by the doctrine of Ideas presents itself. The corporeal world also is created out of nothing by divine power, wisdom, and goodness, and bears in its beauty and perfection the sign of its origin. Evil (including moral evil, yet cf. below) is here, too, nothing properly real; it is not a thing, but an act; it has no *causa efficiens*, but only a *causa deficiens*; its origin is to be sought not in the positive Being (God), but in the lack of Being of finite natures; for these latter, as having been created, possess only a weakened and therefore a defective reality. Augustine's theodicy stands thus essentially upon the ground of that of Origen and Plotinus.

4. A farther and essential consequence of placing philosophy upon a consciously anthropological basis is, in Augustine's case, the central position which he assigned in his theory of the universe to

[1] The same triple division of the psychical activities is found among the Stoics. Cf. p. 187.

the *will*. The leading motive in this is doubtless the man's own experience; himself a nature ardent and strong in will, as he examined and scrutinised his own personality he came upon the will as its inmost core. On this account the will is for him the essential element in all: *omnes nihil aliud quam voluntates sunt.*

In his psychology and theory of knowledge this is shown especially in the fact that he seeks to set forth on all sides the controlling position of the will in the entire process of ideation and knowledge.[1] While with reference to sense perception the Neo-Platonists had distinguished between the state of corporeal stimulation and the becoming conscious of the same, Augustine demonstrates by an exact analysis of the act of seeing, that this becoming conscious is essentially an act of will (*intentio animi*). And as physical attention is accordingly a matter of the will, so too the activity of the inner sense (*sensus interior*) shows a quite analogous dependence upon the will. Whether we bring our own states and actions as such to our consciousness or not, depends as truly upon voluntary reflection as does the intentional consideration of something which belongs to our memory, and as does the activity of the combining fantasy when directed toward a definite goal. Finally, the thinking of the intellect (*ratiocinatio*), with its judging and reasoning, is formed completely under the direction of the purposes of the will; for the will must determine the direction and the end according to which the data of outer or inner experience are to be brought under the general truths of rational insight.

In the case of these *cognitions of rational insight* the relation assumes a somewhat more involved form, for in its relation to this higher divine truth the activity of the human mind cannot be given the same play as in the case of its intellectual relation to the outer world and to its own inner world. This is true even on philosophical grounds, for according to the fundamental metaphysical scheme the active part in the causal connection must belong to the more universal as the higher and more efficient Being (*Sein*). The relation of the human mind to this truth, which is metaphysically its superior, can in the main be only a passive one. The knowledge of the intelligible world is for Augustine also, essentially — illumination, revelation. Here, where the mind stands in the presence of its creator, it lacks not only the creative, but even the receptive initiative. Augustine is far from regarding the intuitive knowledge of the intelligible truths as possibly an independent production of the

[1] Cf. principally the eleventh book of the treatise *De Trinitate*, and besides, especially W. Kahl, *Die Lehre vom Primat des Willens bei Augustinus, Duns Scotus und Descartes* (Strassburg, 1886).

mind out of its own nature; indeed, he cannot even ascribe to it the same spontaneity of attention or of directing its consciousness (*intentio*) that he ascribes to the empirical cognitions of outer and inner perception: he must, on the contrary, regard the illumination of the individual consciousness by the divine truth as essentially an act of grace (cf. below), in the case of which the individual consciousness occupies an expectant and purely receptive attitude. These metaphysical considerations, which might also have been possible upon the basis of Neo-Platonism, experience in Augustine's case a powerful reinforcement by the emphasis which he laid in his theology upon the divine grace. Knowledge of the truths of reason is an element in blessedness, and blessedness man owes not to his own will, but to that of God.

Nevertheless Augustine here, too, sought to save a certain co-operation for the will of the individual, at least at first. He not only emphasises that God bestows the revelation of his truths upon him only, who through good endeavour and good morals, *i.e.* through the qualities of his will, shows himself a worthy subject for this revelation; he teaches also that the appropriation of divine truth is effected not so much by insight, as through *faith* or belief. Faith or belief, however, as ideation plus assent, though without the act of conception, presupposes indeed the idea of its object, but contains in the factor of assent, which is determined by no intellectual compulsion, an original volitional act of the affirming judgment. The importance of this fact extends so far, in Augustine's opinion, that not only in divine and eternal things, but also in the human and earthly and temporal things, this conviction produced immediately by the will yields the original elements of thought. The insight which conceives and comprehends grows out of these elements by means of the combining reflective procedure of the understanding. Thus even in the most important things, *i.e.* in questions of salvation, faith in the divine revelation and in its appearance in the tradition of the Church — faith dictated by the good will — must precede the knowledge which appropriates and comprehends it intellectually. Full rational insight is indeed first in dignity, but faith in revelation is the first in time.

5. In all these considerations of Augustine, the central point is the conception of the *freedom of the will*, as a decision, choice, or assent of the will, independent of the functions of the understanding, not conditioned by motives of cognition, but rather determining these motives without grounds in consciousness for its acts, and Augustine faithfully exerted himself to maintain this conception against various objections. In addition to the consciousness of

ethical and religious responsibility, it is principally the cause of the divine justice that he here aims to defend: and, on the other hand, most of his difficulties arise from the attempt to unite uncaused action whose opposite is alike possible and objectively thinkable, with the divine prescience. He helps himself here by appealing to the distinction between eternity (timelessness) and time. In an extremely acute investigation[1] he maintains that time has real significance only for the functions of inner experience as they measure and compare: its significance for outer experience also arises only in consequence of this. The so-called foreknowledge of the deity, which is in itself timeless, has as little causally determining power for future events as memory has for those of the past. In these connections, Aristotle is justly regarded as one of the most zealous and forcible defenders of the freedom of the will.

But in opposition to this view, championed essentially with the weapons of former philosophy, there now appears in Augustine's system another line of thought, increasing in force from work to work, which has its germ in the conception of the *Church* and in the doctrine of its redeeming power. Here the principle of historical universality encounters victoriously the principle of the absolute certainty of the individual mind. The idea of the Christian Church, of which Augustine was the most powerful champion, is rooted in the thought that the whole human race is in need of redemption. This latter idea, however, excludes the completely undetermined freedom of the will in the individual man; for it requires the postulate that every individual is necessarily sinful, and therefore in need of redemption. Under the overpowering pressure of this thought, Augustine set another theory by the side of his theory of freedom of the will which was so widely carried out in his philosophical writings; and this second theory runs counter to the first throughout.

Augustine desires to solve the question as to the origin of evil, which is so important for him personally, and to solve it — in opposition to Manichæism — by the conception of the freedom of the will, in order to maintain in this, human responsibility and divine justice; but in his theological system it seems to him to be sufficient to restrict this freedom of will to Adam, the first man. The idea of the substantial oneness of the human race — an idea which was a co-operating element in the faith in the redemption of all by the one Saviour — permitted likewise the doctrine that in

[1] In the eleventh book of the *Confessions*. Cf. C. Fortlage, *A. De Tempore Doctrina* (Heidelberg, 1836).

the one man Adam all humanity had sinned. By the abuse of this freedom of the will on the part of the first man, the whole human nature has been so corrupted that it cannot do otherwise than sin (*non posse non peccare*). This loss of freedom applies without exception, to the whole race arising from Adam. Every man brings with him into the world this corrupted nature which is no longer capable of good in its own strength or freedom, and this *inherited sin* is the punishment for original sin. Just from this it follows that all men, without exception, are *in need* of redemption and of the Church's means of grace. One as little as another deserves to receive this grace: therefore, thinks Augustine, no injustice can be seen in the fact that God bestows this grace, to which no one has any claim, not upon all, but only upon some; and it is never known upon whom. But, on the other hand, the divine justice demands that, at least in the case of some men, the punishment for Adam's fall should be permanently maintained, that these men, therefore, should remain excluded from the working of grace and from redemption. Since, finally, in consequence of their corrupted nature, all are alike sinful and incapable of any improvement of themselves, it follows that the choice of the favoured ones takes place not according to their worthiness (for there are none worthy before the working of grace), but according to an unsearchable decree of God. Upon him whom he will redeem he bestows his revelation with its irresistible power: he whom he does not choose, — he can in nowise be redeemed. Man in his own strength cannot make even a beginning toward the good: all good comes from God and only from him.

In the *doctrine of predestination*, accordingly (and this is its philosophical element), the absolute causality of God suppresses the free will of the individual. The latter is refused both metaphysical independence and also all spontaneity of action; the individual is determined either by his nature to sin or by grace to the good. So in Augustine's system two powerful streams of thought come into violent opposition. It will always remain an astonishing fact that the same man who founded his philosophy upon the absolute and independent certainty of the individual conscious mind, who threw the plummet of the most acute examination into the depths of inner experience and discovered in the will the vital ground of spiritual personality, found himself forced by the interests of a theological controversy to a theory of the doctrine of salvation which regards the acts of the individual will as unalterably determined consequences, either of a general corruption or of the divine grace. *Individualism* and *universalism* in the conception of psychical reality

stand here in bald opposition, and their clashing contradiction is scarcely concealed by the ambiguity of the word "freedom," which, in the one line, is defended according to its psychological meaning, in the other, according to its ethico-religious meaning. The opposition, however, of the two motives of thought which here lie side by side so irreconcilable, had influence in the succeeding development of philosophy until long past the Middle Ages.

6. In the light of the doctrine of predestination the grand picture of the historical development of humanity, which Augustine drew in the manner and spirit of the old patristic philosophy, takes on dark colours and peculiarly stiff, inflexible forms. For if not only the course of the history of salvation taken as a whole, but also, as in Augustine's system, the position which every individual is to occupy within it, has been previously fixed by divine decree, one cannot rid one's self of the gloomy impression that all man's volitional life in history, with all its thirst for salvation, sinks to a play of shadows and puppets, whose result is infallibly fixed from the beginning.

The spiritual world throughout the whole course of history falls apart, for Augustine, into two spheres, — the realm of God and the realm of the devil. To the former belong the angels that have not fallen, and the men whom God has chosen for his grace; the other embraces, together with the evil demons, all those men who are not predestined to redemption, but are left by God in the state of sin and guilt: the one is the kingdom of heaven, the other that of the world. The two occupy in the course of history a relation like that of two different races which are mingled only in outer action, while internally they are strictly separate. The community of the elect has no home on earth; it lives in the higher unity of divine grace. The community of the condemned, however, is divided within itself by discord; it fights in earthly kingdoms for the illusory worth of power and rule. Christian thought at this stage of development is so little able to master the reality presented by the world, that Augustine sees in the historical states only the provinces of a community of sinners in hostility to God, condemned to quarrel with one another. For him, in fact, the kingdom of God is still not of this world; and the Church is for him the saving institution of the divine kingdom, which enters the temporal life.

The course of the world's history under these presuppositions is so conceived that we find a division entering between the two realms, which becomes sharper and sharper in the course of history, and ultimately results in the complete and definitive separation of the same. In six periods, which correspond to the creative days of

the Mosaic cosmogony and are attached to dates of Israelitic history, Augustine constructs his history of the world. In this process he combines a depreciatory estimate of the Roman world with slight understanding of the essential nature of the Grecian. The decisive point in this development is for him, also, the appearance of the Saviour, by which not only the redemption of those chosen by grace is brought to completion, but also their separation from the children of the world. With this begins the last world-period, whose end will be the Judgment: then after the stress of conflict shall enter the Sabbath, the peace of the Lord — but peace only for the elect; for those not predestined to salvation will then be completely separated from the saints, and entirely given over to the pain of their unhappiness.

However spiritually sublime (though never without attendant physical imagery) the conception of happiness and pain here presented, — and this sublimity is especially noteworthy in the thought of unhappiness as a weakening of Being, due to the lack of divine causality, — the dualism of the Good and the Evil is yet unmistakably, for Augustine, the final issue of the world's history. The man assailed by so many powerful motives of thought has not overcome the *Manichæism* of his youthful belief; he has taken it up into Christian doctrine. Among the Manichæans the antithesis of good and evil is held to be original and indelible: with Augustine this antithesis is regarded as one that has come into being, and yet as one that is ineradicable. The omnipotent, omniscient, supremely benevolent God has created a world which is divided forever into his own realm and that of Satan.

7. Among the complicated problems and ideas of universal historical importance which Augustinianism contains, there is still one to be brought forward. It lies in the conception of *blessedness* itself in which all motives of his thought cross. For, strongly as Augustine recognised in the will the inmost motive energy of human nature, deeply as he penetrated the striving after happiness as the impelling motive of all psychical functions, he yet remained firmly convinced that the satisfaction of all this stress and urging is to be found only in *beholding divine truth*. The highest good is God; but God is the truth, and one enjoys truth by beholding it and resting in its contemplation. All urging of the will is but the path to this peace in which it ceases. The last task of the will is to be silent in the gracious working of divine revelation, — to remain quiet when the vision of truth, produced from above, comes over it.

Here are united in common opposition to individualism of will, the Christian idea of the absolute causality of God, and the contemplative mysticism of the Neo-Platonists. From both sides, the same

tendency is at work to bring about the conception of man's sanctification as a working of God in him, as a becoming filled and illumined by the highest truth, as a will-less contemplation of the one, infinite Being. Augustine, indeed, worked out forcibly the practical consequences which the working of grace should have in the earthly life, — purification of the disposition and strictness in the conduct of life, — and just in this is shown the comprehensive breadth of his personal nature and his spiritual vision. He develops the vigorous energy of his own combative nature into an ethical doctrine, which, far removed from the asceticism of Neo-Platonism with its weariness of life, sets man in the midst of the world-battle between Good and Evil as a brave fighter for the heavenly kingdom. But the highest reward which beckons this fighter for God is yet, for Augustine, not the restless activity of the will, but the rest of contemplation. *For the temporal life*, Augustine demands the full and never-resting exertion of the struggling and acting soul; *for eternity* he offers the prospect of the peace of becoming absorbed in divine truth. He indeed designates the state of the blessed as the highest of the virtues, as love [1] (*charitas*), but in the eternal blessedness where the resistance of the world and of the sinful will is no longer to be overcome, where love has no longer any want that must be satisfied, there this love is no longer anything other than a God-intoxicated contemplation.

In this duality, also, of the Augustinian ethics, old and new lie close together. With the tense energy of will which is demanded for the earthly life, and with the transfer of the ethical judgment so as to make it apply to the inner disposition, the modern man appears; but in the conception of the highest goal of life the ancient ideal of intellectual contemplation retains the victory.

Here lies in Augustine's doctrine itself a contradiction with the individualism of the will, here at a decisive point an Aristotelian, Neo-Platonic element maintains itself, and this internal opposition unfolds itself in the formation of the problems of the Middle Ages.

§ 23. The Controversy over Universals.

Johannes Saresberiensis, *Metalogicus*, II. cap. 17 f.
J. H. Löwe, *Der Kampf zwischen Nominalismus und Realismus im Mittelalter, sein Ursprung und sein Verlauf* (Prague, 1876).

The schooling in formal logic which the peoples that entered upon the scientific movement at the beginning of the Middle Ages

[1] In his system the three Christian virtues, faith, hope, and love, are placed above the practical and dianoëtic virtues of Greek ethics.

were obliged to undergo, developed in connection with the question as to the logical and metaphysical significance of genera and species (*universalia*). But it would be a grave mistake to suppose that this question had only the didactic value of serving as a subject for mental drill, in connection with which the rules of conceptional thought, division, judgment, and inference, were impressed for centuries upon ever new and increasing throngs of scholars. On the contrary, the tenacity with which the science of the Middle Ages — and it is significant that this occurred independently in the Orient as well as in the Occident — held fast to the elaboration of this problem in endless discussions, is rather in itself a proof that in this question a very real and very difficult problem lies before us.

In fact, when Scholasticism, in its timorous beginnings, made the passage in Porphyry's Introduction[1] to the *Categories* of Aristotle which formulated this problem, the starting-point of its own first attempts at thought, it hit with instinctive sagacity upon precisely the same problem which had formed the centre of interest during the great period of Greek philosophy. After Socrates had assigned to science the task of thinking the world in conceptions, the question how the class-concepts, or generic conceptions, are related to reality, became, for the first time, a chief motive of philosophy. It produced the Platonic doctrine of Ideas and the Aristotelian logic; and if the latter had as its essential content (cf. § 12) the doctrine of the forms in which the particular is dependent upon the universal, it is easy to understand that even from so scanty remains and fragments of this doctrine as were at the service of the earliest Middle Ages, the same problem must arise with all its power for the new race also. And it is likewise easy to understand that the old enigmatic question worked upon the naïve minds of the Middle Ages, untrained in thought, in a manner similar to that in which it worked upon the Greeks. In fact, the delight in logical dispute, as this developed after the eleventh century at the schools of Paris, finds its counterpart as a social phenomenon only in the debates of the philosophers at Athens, and in these latter, too, as numerous anecdotes prove, the question as to the reality of universals, which was connected with the doctrine of Ideas, played a leading part.

Nevertheless the problem was renewed under conditions that were essentially less favourable. When this question emerged for the Greeks, they possessed a wealth of proper scientific experience

[1] The formulation of the problem in the translation of Boëthius is as follows: "*. . . de generibus et speciebus — sive subsistant sive in solis nudis intellectibus posita sint, sive subsistentia corporalia an incorporalia, et utrum separata a sensibilibus an in sensibilibus posita et circa hæc consistentia. . . .*"

and a store of real information and knowledge, which, if not always, yet for the most part and on the whole, prevented them from making their discussion solely a game with the abstractions of formal logic. But mediæval science, especially in its beginnings, lacked just this counterpoise, and on this account was obliged to move so long in a circle with the attempt to construct its metaphysics out of purely logical considerations.

That the Middle Ages, however, once more locked its teeth so pertinaciously in this controversy which had previously been waged principally between Plato and the Cynics, and afterward between the Academy, the Lyceum, and the Stoa, was not due solely to the fact that in consequence of the defective character of their traditions the thinkers of the Middle Ages knew as good as nothing of those earlier debates; it had yet a deeper ground. The feeling of the peculiar, intrinsic worth of personality, which had gained so powerful expression in Christianity and especially in the Augustinian doctrine, found the liveliest echo and the strongest sympathy among precisely those tribes which were called to become the new bearers of civilisation; and in the hearts of these same peoples surged also the youthful delight in richly coloured reality, in the living, particular appearance. But with the Church doctrine they received a philosophy which, with the measured calm of Greek thought, conceived the essential nature of things to lie in universal connections, a metaphysics which identified the stages of logical universality with intensities of Being of varying worths. In this lay an inconsistency which covertly asserted itself, even in Augustinianism, and became a constant stimulus for philosophical reflection.

1. The question as to the individual's ground of Being or existence, from which mediæval thought never became free, was the more natural for it just at its beginning in proportion as the Neo-Platonic metaphysics still maintained itself under the veil of a Christian mysticism. Nothing could be more adapted to call out the contradiction of a natural individualism than the high degree of consistency with which *Scotus Erigena* carried through the fundamental thoughts of the *Neo-Platonic Realism*. Perhaps no philosopher has expressed more clearly and frankly than he the final consequences of the metaphysics which, from the standpoint of the Socratic-Platonic principle that the truth, and therefore also Being, is to be sought in the universal, identifies the stages of universality with those of the intensity and priority of Being. The universal (the class-concept or logical genus) appears here as the essential and original reality, which *produces from itself and contains within itself*

the particular (the species and ultimately the individual). The universals are, therefore, not only substances (*res;* hence the name "Realism"), but, as contrasted with the corporeal individual things, they are the more primitive, the producing and determining substances; they are the more Real substances, and they are *the more Real in proportion as they are the more universal.* In this conception, therefore, the logical relations of concepts immediately become metaphysical relations; formal arrangement contains real significance. Logical subordination becomes changed into a production and inclusion of the particular by the general; logical partition and determination become transformed into a causal process by means of which the universal takes on form and unfolds itself in the particular.

The pyramid of concepts, thus raised to a metaphysical significance, culminates in the concept of the deity as the most universal. But the last product of abstraction, the absolutely universal, is that which has no determinations (cf. p. 250). Hence this doctrine becomes identical with the old "negative theology," according to which we can predicate of God only what he is not;[1] and yet here, too, this highest Being is designated, quite in accord with the thought of Plotinus, as the "uncreated, but self-creating Nature." For this most universal Being produces out of itself all things; these, therefore, contain nothing else than its manifestations, and are related to it as particular specimens or instances are to the class; they are in it and exist only as its modes of appearance. The result of these presuppositions is thus a *logical pantheism:* all things of the world are "theophanies"; the world is God developed into the particular, proceeding out of himself to take on a definite form (*deus explicitus*). God and the world are one. The same "Nature" (φύσις) is, as creative unity, God, and as created plurality, the world.

The process of unfolding (*egressus*) proceeds in the graded scale of logical universality. Out of God comes at first the intelligible world as "the Nature which is created and itself creates," the realm of universals, of Ideas which (as νοῦ in the sense of Plotinus) form the working forces in the sensuous world of phenomena. The Ideas are built up as a heavenly *hierarchy* according to their various grades of universality, and therefore also of intensity of Being, and in connection with this thought Christian Mysticism constructs a

[1] In carrying out this Philonic thought (cf. p. 237) the Church Fathers had already employed a course of thought which proceeds by successive abstraction to the concept of God as the undetermined. Cf., *e.g.*, Clement Alex. *Strom.* V. 11 (689).

doctrine of angels after a Neo-Platonic pattern. But in every case beneath the mythical covering the important thought is really active, that real dependence consists in logical dependence; the logical consequence, by which the particular follows from the general, is spuriously substituted for the causal relation.

Hence, then, even in the world of the senses, it is only the universal that is properly active and efficient: corporeal things, as a whole, form the "Nature which is created and does not itself create."[1] In this world the individual thing is not as such active; it is rather active according to the proportion of universal attributes which attain manifestation in it. The individual thing of sense, accordingly, possesses the least force of Being, the weakest and completely dependent species of reality: the Neo-Platonic Idealism is maintained by Scotus Erigena in full.

To the stages of unfolding corresponds in a reverse order the return of all things into God (*regressus*), the resolution of the world of individual forms into the eternal primitive Being, the deification of the world. So thought, as the final goal of all generation and change, as the extinction of all that is particular, God is designated as "the Nature which neither is created nor creates": it is the ideal of motionless unity, of absolute rest at the end of the world-process. All theophanies are destined to return into the unity of the divine All-Being, — that unity which knows no distinctions. Thus, even in the final destiny of things, the superior reality of the universal, which swallows up all that is particular, preserves itself.

2. As in antiquity (cf. § 11, 5), so here, in consequence of the effort to assure truth and reality to universals, the peculiar thought of a graded scale of *Being* appears. Some things (universals), is the doctrine, *are* more than others (particulars). "Being" is looked upon as, like other qualities, capable of comparison, of increase and diminution; it belongs to some things more than to others. So it became the custom to think that the concept of Being (*esse, existere*) has a relation to that which *is* (*essentia*), and a relation of different degrees of intensity, just as other marks and qualities are related to the objects in which they are formed. As a thing possesses more or less extension, force, permanence, so it has also more or less "Being"; and as it can receive or lose other qualities, so it can receive or lose that of Being. This line of thought, peculiar to Realism, must be kept in mind to understand a great number of the

[1] It need only be briefly mentioned that this "division of Nature" obviously recalls the Aristotelian distinction of the unmoved mover, the moved mover, and that which neither moves nor is moved. Cf. § 13, 5.

metaphysical theories of the Middle Ages. It explains, in the first place, the most important doctrine which Realism produced, the *ontological argument for the existence of God* which *Anselm of Canterbury* brought forward.

The more universality, the more Reality. From this it follows that if God is the most universal being, he is also the most Real; if he is the absolutely universal being, he is also the absolutely Real being, *ens realissimum*. He has, therefore, according to the conception of him, not only the comparatively greatest Reality, but also absolute Reality; that is, a Reality than which a greater and higher cannot be thought.

But through the whole development which this line of thought had already taken in antiquity, we find that the worth-predicate of *perfection* was inseparably fused with the conception of Being. The degrees of Being are those of perfection; the more anything *is*, the more perfect it is, and, *vice versa*, the more perfect anything is, the more it *is*.[1] The conception of the highest Being is, therefore, also that of an absolute perfection; that is, of a perfection such that it cannot be thought higher and greater: *ens perfectissimum*.

In accordance with these presuppositions, Anselm is perfectly correct in his conclusion that, from the mere conception of God as most perfect and most real Being, it must be possible to infer his existence. But to do this he attempts various modes of proof. In his *Monologium* he follows the old cosmological argument that because there is Being at all, a highest and absolute Being must be assumed from which all else that exists has its Being, and which itself exists only from itself, according to its own essential nature (*aseïtas*). Whereas every individual existent entity can be also thought as non-existent, and therefore owes the reality of its essence not to itself, but to another (the Absolute), the most perfect Being can be thought only as being or existent, and exists accordingly only by virtue of the necessity of its own nature. God's *essence* (and only God's) involves his *existence*. The nerve of this argument is thus ultimately the Eleatic basal thought, ἔστιν εἶναι, Being is, and cannot be thought otherwise than as being or existing.

Anselm, however, involved this same thought in a peculiar complication, while he intended to simplify it and render it independent in itself. In the *Proslogium* he entered upon the ontological argument, properly so called, which maintains that without any reference to the Being of other things, the mere conception of the most perfect Being involves its Reality. Inasmuch as this conception is thought, it possesses psychical reality: the most perfect being *is* as a content in consciousness (*esse in intellectu*). But if it existed only as a content in consciousness, and not also in metaphysical reality (*esse etiam in re*), a still more perfect being could evidently be thought, which should possess not only psychical, but also metaphysical reality; and thus the former would not be the most perfect being possible. It belongs, accordingly, to the conception of the most perfect being (*quo majus cogitari non potest*) that it possesses not only reality in thought, but also absolute reality.

[1] A principle which lies at the basis of Augustine's theodicy, in so far as with both the existent is held to be *eo ipso* good, and the evil, on the contrary, as not truly existent.

It is obvious that Anselm in this formulation was not fortunate in his shift, and that what hovered before him attained in this proof but a very awkward expression. For it takes little acuteness to see that Anselm proved only that *if* God is thought (as most perfect being), he must be thought also necessarily as being or existent, and cannot be thought as non-existent. But the ontological argument of the *Proslogium* did not show even in the remotest degree that God, *i.e.* that a most perfect being, must be thought. The necessity for this stood fast for Anselm personally, not only because of the conviction of his faith, but also by the cosmological argumentation of the *Monologium*. When he believed that he could dispense with this presupposition and with the help of the mere conception of God arrive at the proof of his existence, he exemplified in typical manner the fundamental idea of Realism, which ascribed to conceptions without any regard to their genesis and basis in the human mind, the character of truth, *i.e.* of Reality. It was on this ground alone that he could attempt to reason from the psychical to the metaphysical reality of the conception of God.

The polemic of *Gaunilo*, therefore, in a certain respect hit the vulnerable point. He argued that according to the methods of Anselm, in quite the same manner the reality of any idea whatever, *e.g.* that of an island, if the mark of perfection were only included within it, might be proved. For the most perfect island, if it were not really in existence, would evidently be surpassed in perfection by the real island, which should possess the same other marks; the former would be inferior to the latter in the attribute of Being. But instead of showing in his rejoinder, as might have been expected, that the conception of a perfect island is a completely unnecessary arbitrary fiction, or that this conception contains an inner contradiction, while the conception of the most real being is necessary and not contradictory, Anselm expatiates further upon his argument, that if the most perfect being is in the intellect, it must be also *in re*.

However slight the cogency of this attempted proof remains for him who does not, as Anselm does without acknowledging it, regard the conception of an absolute Being as a necessity of thought, the ontological argument is yet valuable as the characteristic feature of mediæval Realism, of which it forms the most consistent expression. For the thought that the highest being owes its reality only to its own essential nature, and that therefore this reality must be capable of being proved from its conception alone, is the natural conclusion of a doctrine which traces the Being of things of perception back to a participation in conceptions, and again within the conceptions themselves sets up a graded scale of reality, employing the degree of universality as the standard.

3. When now the question arose as to the kind of reality which belongs to universals, and as to their relation to the individual things known to the senses, mediæval Realism found itself involved in difficulties quite similar to those which had faced the Platonic Realism. The thought of a second, higher, immaterial world, which at that former period had to be born, was now indeed received as a complete and almost self-evident doctrine, and the religiously disposed thinking could be only sympathetic in its attitude toward the Neo-Platonic conception of the Ideas as contents of the divine mind. Following the pattern of the Platonic Timæus, whose mythical mode of presentation was favourable to this conception, *Bernard of Chartres* sketched an imaginative cosmogonic work of fantastic grotesqueness, and we find with his brother Theodoric, attempts, suggested by the same source, to construct a symbolism of numbers, which undertook not only, as was done in other instances, to develop the dogma of the Trinity, but also to develop further fundamental metaphysical conceptions out of the elements of unity, likeness, and unlikeness.[1]

In addition to this question concerning the archetypal reality of the Ideas in the mind of God, the question is also, what significance is to be conceded to them in the created world. Extreme Realism, as it had been maintained at the outset by *William of Champeaux*, taught the full substantiality of the class-concept in this world also; the universal is present in all its individuals as the undivided essence, everywhere identical with itself. The class accordingly appears as the unitary substance, and the specific marks of the individuals belonging to it appear as the accidents of this substance. It was Abelard's objection that according to this theory mutually contradictory accidents would have to be ascribed to the same sub-

[1] Cf. the extracts in Hauréau, *Hist. d. l. ph. sc.*, I. 396 ff.

stance, which first forced the defender of Realism to give up this extreme position and restrict himself to the defence of the proposition, that the class exists in the individuals, *individualiter*;[1] *i.e.* that its universal, identical essence clothes itself in each particular example in a particular substantial Form. This view was in touch with the conception of the Neo-Platonists, which had been maintained by Boëthius and Augustine and also occasionally mentioned in the literature of the intervening period, and its exposition moves readily in the Aristotelian terminology, according to which the universal appears as the more indeterminate possibility which realises itself in individuals by means of their peculiar *Forms*. The conception is then no longer substance in the proper sense, but the common substratum which takes on different forms in individual instances.

Walter of Mortagne sought to remove the difficulty in another way, by designating the individualising of the classes or genera to species, and of the species to individual things, as the entering of the substratum into different states (*status*), and yet regarding these states as *realiter* specialising determinations of the universal.

In both these lines of thought, however, Realism was only with difficulty held back from a final consequence which at the first lay in nowise within the purpose of its orthodox supporters. The relation of the universal to the particular might be regarded as the self-realising of the substratum into individual Forms, or as its specialisation into individual states,—in either case one came ultimately in the ascending line of abstract conceptions to the idea of the *ens generalissimum*, whose self-realisations, or whose modified states, formed in descending line the genera, species, and individuals, *i.e.* to the doctrine that in all phenomena of the world only the one divine substance is to be seen. *Pantheism* inhered in the blood of Realism by reason of its Neo-Platonic descent and was always making its appearance here and there; and opponents like Abelard did not fail to cast this consequence in the face of Realism.

Meanwhile realistic pantheism did not come to be expressly maintained in this period; on the other hand, Realism in its theory of universals found an instrument for establishing some of the fundamental dogmas, and therefore rejoiced in the approbation of the Church. The assumption of a substantial reality of the logical genera not only seemed to make possible a rational exposition of the doctrine of the Trinity, but also, as was shown by Anselm and Odo (Odardus) of Cambrey, proved to be a fit phil-

[1] For the reading "indifferenter," which it is difficult to support, cf. Löwe, *op. cit.*, pp. 49 ff.

osophical basis for the doctrines of inherited sin and vicarious satisfaction.

4. On the same grounds, we find at first the reverse lot befalling *Nominalism*, which during this period remained more repressed and stifled. Its beginnings[1] were harmless enough. It grew out of the fragments of Aristotelian logic, in particular out of the treatise *De Categoriis*. In this the individual things of experience were designated as the true "first" substances, and here the logico-grammatical rule was propounded that "substance" could not be predicate in a judgment: *res non predicatur*. Since now the logical significance of universals is essentially that of affording the predicates in the judgment, (and in the syllogism), it seemed to follow — this the commentary *Super Porphyrium* had already taught — that universals could not be substances.

What are they, then? It could be read in Marcianus Capella that a universal was the comprehension of many particularities by one name (*nomen*), by the same word (*vox*); but a word, Boethius had defined as a "motion of the air produced by the tongue." With this all elements of the thesis of extreme Nominalism were given: universals are nothing but collective names, common designations for different things, sounds (*flatus vocis*), which serve as signs for a multiplicity of substances or their accidents.

In what degree the thus formulated Nominalism, which in this extreme form must have ignored even the real occasions for such collective names, was actually propounded and defended during that period[2] can no longer be determined.[3] But the *metaphysics of individualism* which corresponds to such a theory of knowledge meets us clearly and firmly with the claim that only individual things are to be regarded as substances, as truly real. This was doubtless most sharply expressed by *Roscellinus*, when he presented it in a two-fold aspect: as the comprehension of many individuals under the same name is only a human designation, so, too, the distinguishing of parts in individual substances is only an analysis for human thought and communication;[4] the truly real is the individual thing, and that alone.

[1] Cf. C. S. Barach, *Zur Geschichte des Nominalismus vor Roscellin* (Vienna, 1866).

[2] It is certain that this did not as yet occur in the beginnings of Nominalism (with Eric of Auxerre, with the author of the commentary *Super Porphyrium*, etc.), for with these writers we find at the same time the expression of Boëthius that *genus* is *substantialis similitudo ex diversis speciebus in cogitatione collecta*.

[3] John of Salisbury says (*Policr.* VII. 12; cf. *Metal.* II. 17) that this opinion vanished again with its author Roscellinus.

[4] The example of the house and its wall, which, according to Abelard (*Ouvr. Inéd.* 471), he employed in this connection, was certainly the most unfortunate that could be thought of. How inferior such considerations are to the beginnings of Greek thought!

The individual, however, is that which is given in the world of sensible reality; hence for this metaphysics, knowledge consists only in the experience of the senses. That this *sensualism* appeared in the train of Nominalism, that there were men who allowed their thinking to go on entirely in corporeal images, we are assured, not only by Anselm, but also by Abelard: but who these men were and how they carried out their theory we do not learn.

This doctrine became momentous through its application to theological questions by Berengar of Tours and Roscellinus. The one contested, in the doctrine of the Sacrament, the possibility of the transmutation of the substance while the former accidents were retained; the second reached the consequence that the three persons of the divine Trinity were to be looked upon as three different substances, agreeing only in certain qualities and workings (tritheism).

5. In the literary development of these antitheses Realism passed current as Platonic, Nominalism as Aristotelian. The latter designation was evidently much more distorted than the former, but when we consider the defective nature of the transmitted material, we can understand that the mediating tendencies which thrust themselves in between Realism and Nominalism introduced themselves with the endeavour to harmonise the two great thinkers of antiquity. Of such attempts, two are chiefly worthy of mention: from the party of Realism the so-called Indifferentism, from that of Nominalism the doctrine of Abelard.

As soon as Realism abandoned the doctrine of the separate existence of the concepts (the Platonic χωρισμός) and supported only the "*universalia in re*," the tendency asserted itself to conceive of the different stages of universality as the real states of one and the same substratum. One and the same absolute reality is, in its different "*status*," animate being, man, Greek, Socrates. As the substratum of these states the moderate Realists regarded the universal, and ultimately the *ens realissimum;* it was therefore a significant concession to Nominalism when others made the individual the supporter of these states. The truly existent, these latter thinkers conceded, is the individual thing, but the individual thing supports within itself as essential determinations of its own nature certain qualities and groups of qualities which it has in common with others. This real similarity (*consimilitudo*) is the indifferent ("not different") element in all these individuals, and thus the genus is present in its species, the species in its individual examples, *indifferenter*. Adélard of Bath appears as the chief supporter of this line of thought, yet it must have had a

wider extension, perhaps with a somewhat stronger nominalistic accent.[1]

6. But it was Abelard[2] with his all-sided activity who formed the vigorous centre in the controversy over universals. The pupil and at the same time the opponent both of Roscellinus and of William of Champeaux, he fought Nominalism and Realism each by means of the other, and since he takes the weapons of his polemic now from the one side now from the other, it could not fail to result that his position should be interpreted and judged oppositely.[3] And yet the outlines of this position are clear and distinct before us. In his polemic against all kinds of Realism, the thought that the logical consequence of Realism is pantheism returns so frequently and energetically that we must see in it, not merely a convenient weapon for use in the ecclesiastical conditions then prevailing, but rather the expression of an individualistic conviction easy to understand in the case of a personality so energetic, self-conscious, and proudly self-reliant. But this individuality had at the same time its inmost essence in clear, sharp, intellectual activity, in genuine French rationality. Hence its no less powerful opposition against the sensualistic tendencies of Nominalism.

Universals, Abelard teaches, cannot be things, but just as little can they be mere words. The word (*vox*) as a complex of sounds, is indeed something singular; it can acquire universal meaning only mediately, by becoming a predicate (*sermo*). Such an employment of a word for a predicate is possible only through conceptional thought (*conceptus*), which, by comparing the contents of perception, gains that which is by its nature adapted to become a predicate (*quod de pluribus natum est prædicari*).[4] The universal is then the conceptual predicate (*Sermonism*), or the concept itself (*Conceptualism*).[5] But if the universal as such gains its existence first in thought and judgment, and in the predicate which is possible only by this means, and exists only there, it is not therefore entirely without relations to absolute reality. Universals could not be the indispensable forms of all knowledge, as they in fact actually are, if there were not something in the nature of things which we

[1] According to the statements in the treatise *De Generibus et Speciebus* and the communications of Abelard in his gloss on Isagoge. It seems, too, that William of Champeaux inclined toward Indifferentism at the last.

[2] Cf. S. M. Deutsch, *Peter Abaelard, ein kritischer Theolog. des zwölften Jahrhunderts* (Leips. 1883).

[3] Thus Ritter makes him a Realist; Hauréau, a Nominalist.

[4] Cf. Arist. *De Interpr.* 7, 17 a 39.

[5] It seems that Abelard at different times emphasised sometimes the one alternative, sometimes the other, and perhaps his school also developed differently in accordance with these two lines of thought.

apprehend and predicate in these universals. This something is the likeness or similarity (*conformitas*) of the essential characteristics of individual substances.[1] Not as numerical or substantial identity, but as a multiplicity with like qualities, does the universal exist in Nature, and it becomes a unitary concept which makes predication possible, only when it has been apprehended and conceived by human thought. Even Abelard, however, explains this likeness of character in a multiplicity of individuals upon the hypothesis that God created the world according to archetypes which he carried in his mind (*noys*). Thus, according to his view, the universals exist firstly, *before the things*, as *conceptus mentis* in God; secondly, *in the things*, as likeness of the essential characteristics of individuals; thirdly, *after things*, in the human understanding as its concepts and predicates acquired by comparative thought.

Thus, in Abelard the different lines of thought of the time become united. But he had developed the individual elements of this theory incidentally, partly in connection with his polemic, and perhaps, also, at different times with varying emphasis on this or that element: a systematic solution of the whole problem he never gave. As regards the real question at issue he had advanced so far that it was essentially his theory that became the ruling doctrine in the formula accepted by the Arabian philosophers (Avicenna), "*universalia ante multiplicitatem, in multiplicitate et post multiplicitatem;*" to universals belongs equally a significance *ante rem* as regards the divine mind, *in re* as regards Nature, and *post rem* as regards human knowledge. And since Thomas and Duns Scotus in the main agreed in this view, the problem of universals, which, to be sure, has not yet been solved,[2] came to a preliminary rest, to come again into the foreground when Nominalism was revived (cf. § 27).

[1] Others, who in the main had the same thought, *e.g. Gilbert* de la Porrée, aided themselves with the Aristotelian distinction between first and second substances, or between substance and subsistence; yet Gilbert uses the latter terms in a changed meaning as compared with their use by Abelard.

[2] Even if the problem as to the universals be restricted, according to the mode of Scholasticism, to the reality of the class-concepts, the problem has gone through essentially new phases in its further development, and cannot be regarded as finally solved by the position taken by science to-day. Behind this, however, rises the more general and more difficult question, what metaphysical significance belongs to those universal determinations, in a knowledge of which all explanatory science practically consists. Cf. H. Lotze, *Logik* (Leips. 1874), §§ 313–321. [Eng. tr. ed. by B. Bosanquet, Oxford and N.Y. 1888.]

To the investigators of to-day, therefore, who would throw the controversy over universals to the lumber pile of past theories, or treat it as a long-outgrown children's disease, so long as they do not know how to state with complete certainty and clearness in what consists the metaphysical reality and efficiency of that which we call a *law of Nature*, we must still cry, "*mutato nomine de te fabula narrata.*" Cf., also, O. Leibmann, *Zur Analysis der Wirklichkeit* (2d ed., Strassburg, 1880), 313 ff., 471 ff., and *Gedanken und Thatsachen* (1 Heft, Strassburg, 1882), 89 ff.

7. But Abelard has a still greater significance than that due to this central position in the controversy over universals, for he manifested in his own person, and expressed in typical form, the attitude which the *dialectic*, unfolding in connection with that controversy, occupied in the mental and spiritual life of that time. He is, so far as it was possible within the limits of the ideas of his time, the spokesman of free science, the prophet of the newly awakened impulse toward real and independent knowledge. Abelard (and with him Gilbert) is first of all a *rationalist;* thought is for him the norm of truth. Dialectic has the task of distinguishing between true and false. He may, indeed, subject himself to revelation preserved in tradition, but, he says, we believe divine revelation only because it is reasonable. Hence dialectic has, in his case, no longer really the task which Anselm, following Augustine, prescribed it, of making the content of faith comprehensible for the intellect; he demands for it also the *critical* right of deciding in doubtful cases according to its own rules. Thus, in the treatise "*Sic et Non*," he set the views of the Church Fathers over against each other to their reciprocal disintegration dialectically, in order to find at last what is worthy of belief only in what is capable of proof. So, too, in his *Dialogus*, the cognising reason appears as judge over the various religions, and while Abelard regards Christianity as the ideal consummation of the history of religions, there are expressions in his works[1] in which he reduces the content of Christianity to the original moral law, which was re-established by Jesus in its purity. From this standpoint, too, Abelard was the first to win once more a free, unbiassed view for the interpretation of antiquity. Little as he knew of them, he was an admirer of the Greeks; he sees in their philosophers Christs before Christianity, and regarding men like Socrates and Plato as inspired, he asks (reversing the thought of the Church Fathers, cf. p. 223, note 5) whether religious tradition may not perhaps have been partly created by these philosophers. Christianity is regarded by him as the philosophy of the Greeks made democratic.

Abelard, like almost all the "Enlighteners" of the Middle Ages,[2] was an obedient son of the Church. But if this fact were to put us in error as to the significance of his personality in the line just mentioned, — a significance rather for the history of religion and civilisation than as producing something philosophically new, — it would be sufficient to take into account the attacks which he met.

[1] Cf. the evidence for what follows in Reuter, *Gesch. der Aufklärung im M.-A.*, I. 183 ff.
[2] A. Harnack, *Dogmengeschichte*, III. 322.

In fact, his controversy with Bernard of Clairvaux is the conflict of knowledge with faith, of reason with authority, of science with the Church. And if Abelard lacked ultimately the weight and staying power of personality to prevail in such a contest,[1] it will be remembered, on the other hand, that a science such as the twelfth century could offer — even aside from the external power to which the Church at that time had attained — must have been inferior to the mighty inward strength of faith, even if it had not been supported by so great and high a personality. For that bold postulate, so full of the future, that only unprejudiced scientific insight should determine faith, — what means did it then possess for its fulfilment? Its only means were the hollow rules of dialectic; and the content which this science had to exhibit, it owed just to that tradition against which it rebelled with its intellectualistic criticism. This science lacked the material strength to carry out the part to which she felt herself called; but she set herself a problem which, while she herself was not able to solve it, has never again vanished from the memory of European peoples.

We hear, indeed, of the disturbing practices of those who would have everything treated only "scientifically";[2] complaints multiply after the time of Anselm over the growing rationalism of the *Zeitgeist*, over the evil men who will believe only what they can comprehend and prove, over the Sophists who, with impudent dexterity, know how to dispute *pro et contra*, over the "deniers," who from rationalists are said to have become materialists and nihilists; — but not even the names of the men who answer to this description have been preserved, to say nothing of their doctrines. And just this lack in proper material of its own was the reason that the dialectic movement, whose prince was Abelard, in spite of all its zeal and all its acuteness, ran out and became exhausted without direct and immediate results.

§ 24. The Dualism of Body and Soul.

On these grounds it is explicable that in the twelfth and, in part, even in the eleventh century, we find the feeling of the unfruitfulness of dialectic as widely extended as the feverish impulse to attain through it to true knowledge. A tendency that indicates disillusion is manifested in this period by the side of the ardent desire for knowledge. Discontented with the subtilties of dialectic, which, even in men like Anselm, had laid itself under obligation to

[1] Cf. Th. Ziegler, *Abaelard's Ethica*, in *Strassburg. Abh. z. Philos.* (Freiburg, 1884), p. 221.
[2] "*Puri philosophi.*"

place the ultimate mysteries of faith upon a rational basis, some plunged from unfruitful theory into practical life, "in das Rauschen der Zeit, ins Rollen der Begebenheit," — into the rush of time, the rolling of events, — others plunged into a revelry in supra-rational Mysticism; others, finally, into diligent work in empirical research. All the opposites, into which an intellectual activity that is predominantly logical can pass over, develop by the side of dialectic, and take their position against it in a more or less firmly concluded league, — Practice, Mysticism, and Empiricism.

There resulted from this at first a peculiarly distorted relation to scientific tradition. Aristotle was known only as the father of formal logic and master of dialectic, and in consequence of this ignorance was regarded as the hero of the purely intellectual mode of considering the world. Plato, on the contrary, was known partly as the creator of the doctrine of Ideas (unwittingly falsified in accordance with Neo-Platonic processes), partly, by virtue of the preservation of the *Timæus*, as the founder of a philosophy of Nature whose fundamental teleological character found the liveliest assent in religious thought. Hence when *Gerbert*, as a counterpoise against the pride of dialectic in which he himself had at first made some not very successful attempts, commended the *study of Nature*, to which he had been stimulated by the example of the Arabians, and which corresponded to his own vigorous practical bent toward active life, he could count on approval for this endeavour only among men who, like him, were working toward an extension of material information, and who, in aid of this, were appropriating the results of ancient researches. Thus the *return to antiquity* makes here its first appearance as the source of material knowledge in opposition to the Aristotelian dialectic, — a first weak Renaissance which, half humanistic, half naturalistic, aims to gain a living content of knowledge.[1] Gerbert's disciple, Fulbert (died 1029), opened the school of Chartres, which, in the following period, became the seat of the Platonism that was intimately associated with the study of Nature. Here worked the brothers Theodoric and Bernard of Chartres; from this school William of Conches received his tendency. In their writings the powerful stimulus of classical antiquity unites with the interest of an active and vigorous

[1] The cloister Monte Cassino in Italy formed one of the main seats of this movement. Here (about 1050) the monk Constantinus Africanus worked, who, as is known to have been the case also with the Platonist Adélard of Bath, gathered his learning on his journeys in the Orient, and was especially active in the translation of medical treatises by Hippocrates and Galen. The effects of the activity in this cloister are shown not only in literature, but also in the founding of the famous school of Salerno in the middle of the twelfth century.

knowledge of Nature. We see here one of the most peculiar shiftings that have occurred in the history of literature. Plato and Aristotle have exchanged their rôles: the latter appears as the ideal of an abstract science of conceptions, the former as the starting-point for a concrete knowledge of Nature. The knowledge of external reality that meets us in this period of mediæval science is attached to the name of Plato. So far as there is a natural science in this age, it is that of the Platonists, — of a Bernard of Chartres, of a William of Conches, and their associates.[1]

But this disposition toward concrete reality, which makes the *Platonists* of the Middle Ages conspicuous as contrasted with the high-soaring metaphysics of the dialecticians, assumed still another form, which was much more valuable. Incapable as yet of gaining from outer experience better results than those already at its hand in the transmitted Greek science, the empirical impulse of the Middle Ages directed its activity to the investigation of the mental life, and unfolded the full energy of real observation and acute analysis in the domain of inner experience — in *psychology*. This is the field of scientific work in which the Middle Ages attained the most valuable results.[2] In this, the experience of practical life as well as that of the sublimest piety was filled with a substantial content, and as such set itself in opposition to the dialectical play of conceptions.

1. The natural leader in this field was *Augustine*, whose psychological views exercised a mastery that was the stronger in proportion as his views were interwoven with the current religious conviction, and in proportion, also, to the slight extent to which the Aristotelian psychology was known. But Augustine had maintained in his system the complete dualism which regarded the soul as an immaterial substance, and man as a union of two substances, body and soul. Just for this reason he could not expect to gain a knowledge of the soul from its relations to the body, and took with full consciousness of his procedure the *standpoint of inner experience*.

The new principle of method which had thus arisen from metaphysical presuppositions could unfold itself undisturbed so long as the monistic metaphysical psychology of the Peripatetic school re-

[1] This humanistic natural science of the early Middle Ages was not at all discriminating in its adoption of ancient tradition; so, for example, if we may trust the account of Walter of St. Victor (in the extracts made by Bulæus, *Migne*, Vol. 190, p. 1170), William of Conches regarded an atomistic conception of Nature as capable of union with his Platonism.

[2] Cf. for this and for what follows (as also for § 27, later) the articles by H. Siebeck in Vols. I.–III. of the *Archiv für Geschichte der Philosophie*, and also in Vols. 93, 94, *Zeitschrift für Philos. u. philos. Krit.* (1888–90).

mained unknown. And this unfolding was furthered emphatically by those needs which brought the Middle Ages to psychology. Faith sought knowledge of the soul for the purpose of the soul's salvation, and this salvation was found just in those transcendent activities through which the soul, estranged from the body, strives toward a higher world. It was, therefore, principally the *Mystics* who sought to spy out the secrets of the inner life, and thus became psychologists.

Weightier and philosophically more significant than the individual doctrines propounded in this line, which were often very fantastic and hazy, is the fact that by means of these and connected theories, the *dualism of the sensuous and super-sensuous worlds* was maintained in its full strength, and thus formed a strong counterpoise to the Neo-Platonic monism. But it was not destined to exercise this metaphysical influence till later: at first, in the more limited form of the *anthropological dualism* of body and soul, it became the starting-point for *psychology as the science of inner experience*.[1]

It is, therefore, a very noteworthy phenomenon that the supporters of this psychology as "natural science of the inner sense," as it was later called, are precisely the same men who are faithfully exerting themselves to gain a knowledge of the outer world from all available material. Having turned away from dialectic, they seek a knowledge of what is real in experience, a philosophy of Nature; but they divide this into two completely separated fields, *physica corporis* and *physica animæ*. Among the Platonists the preference for the study of external Nature is predominant, among the Mystics that for the study of the internal Nature.[2]

2. But we must regard as the characteristic, the essentially new and beneficial mark of this empirical psychology, the endeavour, not only to classify the psychical activities and states, but to apprehend them in the living stream of mental life, and to comprehend their *development*. These men in their pious feelings, in their struggles for the enjoyment of divine grace, were conscious of an inner *experience*, of a history of the soul, and were impelled to write this history; and while in so doing they used Platonic, Augustinian,

[1] Cf. also K. Werner, *Kosmologie und Naturlehre des scholastischen Mittelalters, mit specieller Beziehung auf Wilhelm von Conches;* and *Der Entwicklungsgang der mittelalterlichen Psychologie von Alcuin bis Albertus Magnus* (off-prints from the *Sitzungsberichten* (Vol. 75), and *Denkschriften* (Vol. 25) respectively of the *Vienna Acad.*, 1876).

[2] Nevertheless it must be mentioned that Hugo of St. Victor not only shows an encyclopædic knowledge in his *Eruditio Didascalica*, but also shows that he is acquainted, even to the most exact detail, with the teachings of ancient medicine, particularly with the theories of physiological psychology (explanation of perceptions, temperaments, etc.).

and Neo-Platonic conceptions in motley mixture to designate individual facts, the essential and decisive point is that they undertook to exhibit the development of the inner life.

These Mystics, who were not seeking a metaphysics but already possessed one in their faith, were not much troubled by the question which later became so important, of how this duality of body and soul should be understood. *Hugo of St. Victor* is indeed conscious that though the soul is lowest in the immaterial world, and the human body highest in the material world, the two are yet so opposite in constitution that their union (*unio*) remains an incomprehensible enigma; but he thinks that in this very fact God has shown, and desired to show, that for him nothing is impossible. Instead of racking their brains dialetically upon this point, the Mystics rather assume this dualism as a presupposition, in order to isolate the soul for their scientific consideration, and to observe its inner life.

This life, however, is, for Mysticism, a development of the soul to God, and so this *first form of the psychology of the inner sense is the history of salvation in the individual soul.* The Mystics regarded the soul essentially as *Gemüth* ["heart," the seat of sentiment and feeling, rather than intellect]. They show the development of its vital process out of the *feelings*, and prove their literary virtuosoship in their depicting of the states and movements of feeling. They are also the genuine successors of Augustine in examining, in their analysis of this process, the motive *forces of the will*, in investigating the decisions of the will, by virtue of which faith conditions the course of knowledge, and finally in the fact that they ultimately regard as the highest stage in the soul's development the mystical contemplation of God, which, to be sure, is here held to be the same with love. Such, at least, was the activity of the two Victorines, Hugo and Richard, who were completely sustained by the spirit of science, while in the case of Bernard of Clairvaux, the practical factor of the will is much more strongly emphasised. Bernard is unwearied in denouncing as heathenish that pure impulse after knowledge for its own sake which comports with all the virtues and vices, and yet, even for him, the last of the twelve stages of humility is that ecstasy of deification with which the individual disappears in the eternal essence, "as the drop of water in a cask of wine."

The psychology of knowledge, also, is built up with the Victorines upon Augustinian lines. Three eyes are given to man, — the eye of flesh to know the corporeal world, the eye of reason to know himself in his inner nature, the eye of contemplation to know the spiritual world and the deity. While, then, according to Hugo, *cogitatio*,

meditatio, and *contemplatio* are the three stages of intellectual activity, the degree to which he emphasises the co-operation of the imagination (*imaginatio*) in all kinds of knowledge is interesting and characteristic of his personality. Even contemplation is a *visio intellectualis*, a mental beholding which alone grasps the highest truth undistorted, while thought is not capable of this.

Old and new are thus variously mingled in the writings of the Victorines. Fantasies of mystic rapture force their way amid the most acute observations and the most delicate portrayals of the psychical functions. The method of self-observation doubtless falls here, too, into the danger of leading to *Schwärmerei*,[1] or ecstatic enthusiasm; but, on the other hand, it wins much fruit of its own, it breaks up the soil for the research of the future, and, above all, it marks off the field on which modern psychology is to grow.

3. This new science received support and enrichment likewise from quite another direction: a side-result of the controversy over universals — and that, too, not the worst result — came to its aid. When Nominalism and Conceptualism combated the doctrine that universals exist in themselves, and declared the species and genera to be subjective creations in the knowing mind, the duty fell on them of making intelligible the process by which these universal ideas arise in the human mind. They found themselves thus sent directly to the empirical study of the *development of ideas*, and supplemented the sublime poesy of the Mystics with results which were indeed sober and dry, but all the more valuable on that account. For, just because the matter in hand required an exhibition of the origin of purely subjective contents of thought, which were to be explained as the products of man's development in time, this investigation could become only a contribution to the psychology of inner experience.

The very thesis of extreme Nominalism afforded its opponents occasion to treat the relation of word to thought, and in the case of Abelard led to a searching investigation of the co-operating activity that belongs to language in connection with the development of thought. The question as to the meaning of signs and designations in the movement of ideas was by this means raised anew. A still deeper entrance into the heart of theoretical psychology was made by the investigation which is conducted as to the necessary connection between intellect and perception in the treatise *De Intellectibus*. It is here shown how sensation, as *confused idea* (*confusa conceptio*), enters into the perception (*imaginatio*) which grasps and holds it

[1] Cf. Kant, *Anthropologie*, § 4.

together with others, and remains preserved reproducible in this imagination; how, then, the understanding by successively running through this manifold material (discursive activity) elaborates it to concepts and judgments; and how, after all these conditions have been fulfilled, opinion, faith, and knowledge arise, in which ultimately the intellect knows its object in a single collective perception or intuition (intuitive activity).

In a similar way *John of Salisbury* set forth the process of psychical development: but in his case the tendency peculiar to the Augustinian conception of the soul asserts itself most strongly, — the tendency to regard the different forms of activity not as strata lying above one another or beside one another, but as ways of functioning in which the same living unity manifests itself. He sees already in the sensation, and in a higher degree in perception or imagination, an act of judgment; and as union of the newly entering sensations with those which are reproduced, imagination contains at the same time the emotional states (*passiones*) of fear and hope. Thus out of imagination as fundamental psychical state develops a twofold series of states of consciousness; in the theoretical series appear first, opinion, and by comparison of opinions, knowledge and rational conviction (*ratio*), both in connection with prudence (*prudentia*), which is an operation of the will; finally, by virtue of the striving after calm wisdom (*sapientia*), we have the contemplative knowledge of the intellect; — in the practical series are given the feelings of pleasure and pain with all their diversifications in the changing states of life.

Thus with John we have indicated the whole programme of the later associational psychology in which his countrymen were to become leaders. And he may be regarded as their prototype not only in his problems, but also in the mode of their treatment. He keeps at a distance from the speculations of dialectic that were so alien to the active world; he has the practical ends of knowledge in his mind, he desires to find his way in the world in which man is to live, and above all in man's actual inner life, and brings with him into philosophy a fineness and freedom of mind characteristic of the man of the world, such as aside from him we do not find at that time. He owes this in no small degree to the education of the taste and of sound cosmopolitan thought which classical studies afford; and in this, too, his countrymen have followed him, not to their injury. He is the precursor of the English Enlightenment as Abelard is of the French.[1]

[1] Reuter, *op. cit.*, II. 80, sets thus Roger Bacon and Abelard over against each other; yet precisely the decisive tendency of empirical psychology is present more strongly in the case of John.

4. We notice finally *Abelard's ethics* as a peculiar side-phenomenon in this process of making more rigid the contrast of outer and inner, and of transferring the scientific first principle to the inner nature.[1] Its very title, *Scito Te Ipsum*, announces it as a science based on inner experience, and its importance consists just in the fact that here for the first time ethics is again treated as a proper philosophical discipline, and freed from dogmatic metaphysical efforts.[2] This is true of this ethics although it, too, proceeds from the Christian consciousness of sin as its fundamental fact. But here it strives to go at once to the heart of the matter. Good and evil, it says, consist not in the outward act, but in the action's inner cause. Nor yet do they consist in the thoughts (*suggestio*), feelings, and desires (*delectatio*) which precede the decision of the will, but solely in this resolve or consent to the deed (*consensus*). For the inclination (*voluntas*), founded in the whole natural disposition and in part in the bodily constitution, which may lead toward good or evil, is not itself in the proper sense good or evil. Fault or error (*vitium*) — to this Abelard reduces inherited sin — becomes sin (*peccatum*) only through the *consensus*. But if this is present, the sin is fully and completely there with it, and the bodily executed action with its external consequences adds nothing ethically.

The essence of the moral is thus placed by Abelard solely in the resolve of the will (*animi intentio*). But what now is the norm according to which this resolve of the will is to be characterised as good or evil? Here, too, Abelard rejects with contempt all external and objective determination by a law; he finds the norm of judgment solely within the deciding individual, and it consists in the agreement or non-agreement with the *conscience* (*conscientia*). That action is good which is in accord with the agent's own conviction; that only is bad which contradicts this.

And what is conscience? Where Abelard teaches as a philosopher, as the rationalistic dialectician that he was, there conscience is for him (in accordance with ancient example, Cicero) the natural moral law, which, though known in varying degree, is common to all men, and which, as Abelard was convinced, was wakened to new clearness in the Christian religion, after it had become obscured through human sin and weakness (cf. above, § 23, 7). But

[1] Cf. on this Th. Ziegler in the *Strassburger Abhdl. z. Phil.* (Freiburg, 1884).

[2] It throws a surprising light upon the clearness of Abelard's thought when he incidentally separates the metaphysical conception of the good (perfection = reality) carefully from the moral conception of the good, with which alone ethics has to do. He shows in this that he had penetrated this complication of problems, one of the most intricate in history.

for the theologian this *lex naturalis* is identical with the will of God.[1] To follow the conscience means, therefore, to obey God; to act against the conscience is to despise God. But where the import of the natural moral law is in any wise doubtful, the only resort for the individual is to decide according to his conscience, that is, according to his knowledge of the divine command.

The *ethics of intention*[2] which was presented by the head of the dialecticians and Peripatetics proves itself to be an enhancement of the Augustinian principles of internalisation and of the individualism of the will, which forces its way out of the system of the great Church teacher and beyond its bounds, to fruitful operation in the future.

[1] In his theological metaphysics Abelard seems occasionally to have gone so far as to reduce the content of the moral law to the arbitrary choice of the divine will (*Commentary on the Epistle to the Romans*, II. 241).

[2] The important contrast here presented in various directions to Church theory and practice cannot be brought out here.

CHAPTER II. SECOND PERIOD.

(After about 1200.)

Karl Werner, *Der hl. Thomas von Aquino.* 3 vols., Regensburg, 1858 ff.
Karl Werner, *Die Scholastik des späteren Mittelalters.* 3 vols., Vienna, 1881 ff.

The felt need for real knowledge, which mastered Western science after the first enthusiasm for dialectic was past, was very soon to find a satisfaction of unsuspected extent. Contact with the *Oriental civilisation* which at first maintained itself victoriously against the shock of the *Crusades*, disclosed to the peoples of Europe new worlds of intellectual life. Arabian, and in its train Jewish, science[1] made their entry into Paris. They had preserved the tradition of Greek thought and knowledge more immediately and more completely than had the cloisters of the West. A stronger and richer stream of scientific material poured over Bagdad and Cordova than over Rome and York. But the former brought not much more that was new with it than did the latter. Rather, as regards thoughts which discover or establish principles, the Oriental philosophy of the Middle Ages is still poorer than the European. Only, in the breadth and quantity of tradition, in the compass of learned material and in the extent of information in matters of science, the East was far superior, and these treasures now passed over into the possession of the Christian peoples.

From the point of view of philosophy, however, the matter of chief importance was that Parisian science became acquainted not

[1] The author believes that he may and ought to decline to give a full exposition of the Arabian and Jewish philosophy of the Middle Ages — ought to, in so far as he is here in great part excluded from penetrating to the original sources, and would therefore find himself forced to reproduce others' expositions at second hand, — may, however, because that which passed over with fructifying influence into European science from this large literature — and it is only this element that could be treated in this presentation of the development of philosophy as a whole — is found to be, with very small exceptions, the spiritual possession of antiquity, of the Greek or the Hellenistic philosophy. On this account there will be given only a brief survey of the Arabian and Jewish philosophy in the Middle Ages, which will be found at the close of the introductory material of this chapter, pp. 316–318.

only with the entire logic of *Aristotle*, but also with all parts of his philosophy that furnished material knowledge. By this "new logic" fresh blood was infused into the already dying dialectic, and while the task of rationally expounding the view of the world held by faith was attacked anew and with a matured technique of thought, there was presented at the same time an almost immeasurable material for arrangement in the metaphysico-religious system.

Mediæval thought showed itself abundantly ready for the problem thus enhanced, and solved it under the after-working of the impression of that most brilliant period in the development of the papacy which Innocent III. had brought about. The Neo-Platonic-Arabian Aristotelianism, which at the first, with its naturalistic consequences, seemed only to strengthen the rationalistic courage of dialectic to victorious pride, was mastered with admirable swiftness and bent to the service of the system of the Church. This, indeed, was possible only in a form in which the intellectualistic elements of Augustinian thought and those allied to Neo-Platonism gained a decided preponderance in this now completely systematic development of a philosophy conformed to the doctrine of faith. In this way was completed an adjustment and arrangement of world-moving thoughts upon the largest and most imposing scale that history has seen, and that, too, without the creative activity of any properly new philosophical principle as its impulse toward the formation of a system. The intellectual founder of this system was *Albert of Bollstädt.* It owes its organic completion in all directions, its literary codification, and thus its historical designation, to *Thomas Aquinas*, and finds its poetical exposition in Dante's *Divine Comedy.*

But while Hellenistic science and Christian faith seemed to be brought into complete harmony in Thomism, the opposition between them broke forth at once all the more violently. Under the influence of Arabian doctrines, the *pantheism* involved in the logical consequence of Realism from being potential became actual in extended circles, and immediately after Thomas, his fellow-Dominican, Master *Eckhart*, developed scholastic intellectualism to the heterodoxy of an *idealistic Mysticism.*

Hence it is comprehensible that Thomism also encountered the resistance of a Platonic-Augustinian tendency, which indeed gladly adopted the increase in the knowledge of Nature (as had been the case before) and the perfection of the logical apparatus, but put aside the intellectualistic metaphysics and developed all the more energetically the opposite elements of Augustinianism.

This tendency reached its full strength in the acutest and deepest thinker of the Christian Middle Ages, *Duns Scotus*, who brought the

germs of the philosophy of the will, contained in Augustine's system, to their first important development, and so from the metaphysical side gave the impulse for a complete change in the direction of philosophical thought. With him religious and scientific interests, whose fusion had begun in the Hellenistic philosophy, begin to separate.

The *renewal of Nominalism*, in which the intellectual movement of the last century of the Middle Ages culminated in an extremely interesting combination, led to the same result with still more lasting force. Dialectic, which had anew obtained the mastery and was flaunting itself in various disputations, developed in its textbooks on logic the Aristotelian schematism. This was worked out especially on the grammatical side, and there developed to a theory which attached the doctrine of judgment and the syllogism to the view that regarded the concepts (*termini*) as subjective signs for really existing individual things. This *Terminism* became united in *William of Occam* with the naturalistic tendencies of the Arabian-Aristotelian theory of knowledge, and these combined combated Realism, which had been maintained alike in Thomism and Scotism. But Terminism also became united with the Augustinian doctrine of the will into a powerful individualism, with the beginnings of the empirical psychology which studied the history of development, to a kind of idealism of the inner experience, and with the natural investigation which was conquering wider and wider territory, to an empiricism that was to be fruitful in the future. Thus under the scholastic covering were sprouting the germs of new thought.

Here and there in this extremely diversified movement men still vainly appear with the confidence that they can create a rational system of religious metaphysics, and finally a man of the significance of *Nicolaus Cusanus* sought vainly to force all these elements of a new secular science back under the power of a half scholastic, half mystic intellectualism: it was just from his system that those elements exercised an influence upon the future, that was all the stronger because of his work.

The **reception of Aristotle** falls in the century 1150–1250 (for this topic see principally the work of A. Jourdain, cited p. 273). It began with the more valuable parts of the *Organon*, hitherto unknown (*vetus — nova logica*), and proceeded to the metaphysical, physical, and ethical books, always accompanied by the introduction of the Arabian explanatory writings. The Church slowly admitted the *new logic*, although dialectic was again set in fluctuation thereby; for it soon became convinced that the new method which was introduced with the aid of the doctrine of the syllogism, was advantageous for presenting its own teachings.

This **scholastic method** in the proper sense is as follows: a text used as the basis for discussion is broken up by division and explanation into a number of propositions; questions are attached and the possible answers brought together; finally the arguments to be adduced for establishing or refuting these answers are presented in the form of a chain of syllogistic reasoning, leading ultimately to a decision upon the subject.

This scheme was first employed by **Alexander of Hales** (died 1245) in his *Summa Universæ Theologiæ*, with a mastery which was far superior to the mode of treatment of the earlier Summists in wealth of contents, clearness of development, and definiteness of results, and was scarcely surpassed even later.

An analogous change in method was worked out with regard to the material in the encyclopædias of natural science by **Vincent of Beauvais** (Vincentius Bellovacensis, died about 1265), by his *Speculum Quadruplex*, and Johannes Fidanza, called **Bonaventura** (1221–1274), did the same work for the doctrines of Mysticism, especially those of the Victorines. Among Bonaventura's works the *Reductio Artium ad Theologiam* is especially characteristic. Cf. K. Werner, *Die Psychologie und Erkenntnisslehre des B.* (Vienna, 1876).

The Church proceeded in a much more hesitating manner in regard to Aristotle's *Metaphysics* and *Physics*, because these made their entrance in intimate connection with **Averroism**, and because this latter theory had developed to open *pantheism* the Neo-Platonic Mysticism which had never been entirely forgotten since Scotus Erigena. As the defenders of such a system appear **Amalrich** of Bena near Chartres, and **David of Dinant**, about 1200, concerning whose doctrines we are informed only by later writers, especially Albert and Thomas. With the widely extended sect of the Amalricans, which, after the Lateran council of 1215, was persecuted with fire and sword, the "*Eternal Gospel*" of Joachim Floris was also connected. Cf. on this J. N. Schneider (Dillingen, 1873).

The judgment of condemnation passed upon the Averroistic Pan-psychism (cf. § 27) applied at first to Aristotle also. It is the service of the two *mendicant orders*, the Dominicans and Franciscans, to have broken this connection, and to have brought over the power of the Church to the recognition of the Peripatetic system. By a long conflict, which frequently wavered this way and that, they succeeded in founding two chairs of the Aristotelian philosophy at the University of Paris, and finally in having them taken into the faculty (cf. Kaufmann, *Gesch. d. Univ.*, I. 275 ff.). After this victory in 1254, respect for Aristotle rose fast, until he became the highest philosophical authority. He was praised as the forerunner of Christ in matters of Nature as was John the Baptist in matters of grace, and from this time on Christian science (like Averroës) held him to be in such a sense the incarnation of scientific truth, that in the following literature he is often cited only as "Philosophus."

The doctrine of the **Dominicans**, which has remained until the present time the official doctrine of the Catholic Church, was created by Albert and Thomas.

Albert of Bollstädt (Albertus Magnus) was born 1193 at Lauingen in Swabia, studied in Padua and Bologna, taught in Cologne and Paris, became Bishop of Regensburg, and died in Cologne in 1280. His writings consist for the most part of paraphrases and commentaries upon Aristotle; aside from the *Summa* his Botany is particularly of independent value (*De Vegetabilibus, Libri VII.*; ed. by Meyer and Jessen, Berlin, 1867). Cf. J. Sighart, *Al. Mag. sein Leben und seine Wissenschaft* (Regensburg, 1857); v. Hertling, *Al. Mag. und die Wissenschaft seiner Zeit* (in *Hist.-pol. Blätter*, 1874); J. Bach, *Al. Mag.* (Vienna, 1881).

Thomas of Aquino, born 1225 or 27 in Roccasicca, Lower Italy, was educated at first in the cloister Monte Cassino, famous of old for study in natural science, then in Naples, Cologne, and Paris. After this he taught alternately at these universities and also at Rome and Bologna, and died, 1274, in a cloister near Terracina. Besides minor treatises, his works contain commentaries on Aristotle, on the *Liber de Causis* and the *Sentences* of Peter Lombard, and in addition to these, principally the *Summa Theologiæ* and the treatise *De veritate fidei Catholicæ contra gentiles* (*Summa contra gentiles*). The treatise *De Regimine Principum* belongs to him only in part. From the very copious literature concerning him, the following may be named: Ch. Jourdain, *La Philosophie de St. Th.* (Paris, 1858); Z. Gonzalez, *Studien über die Philos. des. hl. Th. v. A.*, translated from the Spanish by Nolte (Regensburg, 1885); R. Eucken, *Die Philos. d. Th. v. A. und die Cultus der Neuzeit* (Halle, 1886); A. Frohschammer, *Die Philosophie des Th. v. A.* (Leips. 1889).

The philosophical importance of **Dante** Alighieri has been best recognised among his editors by Philalethes in the commentary on his translation of the *Divina Commedia*. Besides his great world-poem, the treatise *De Monarchia* should not be forgotten in a philosophical consideration. Cf. A. F. Ozanam, *D. et la Philosophie Catholique au 13me Siècle* (Paris, 1845); G. Baur, *Boëthius und Dante* (Leips. 1873).

Interest in other Thomists, whose number is great, is only of literary-historical.

To the Dominican Order belonged also the father of **German Mysticism**, Master **Eckhart**, a younger contemporary of Thomas. Born in the middle of the thirteenth century, probably in Saxony, at about 1300 he was Professor of Philosophy in Paris, became then Provincial of his Order for Saxony, lived for a time in Cologne and Strassburg, and died during the painful discussions concerning the orthodoxy of his doctrine in 1329. The extant writings (collected by F. Pfeiffer, II. Leips. 1857) are principally sermons, tracts, and aphorisms. Cf. C. Ullman, *Reformatoren vor der Reformation*, Vol. II. (Hamburg, 1842); W. Preger, *Gesch. d. deutschen Mystik im Mittelalter* (Leips. 1875, 1881); also the different editions and articles by S. Denifle. On Eckhart in particular, J. Bach, *M. E. der Vater der deutschen Speculation* (Vienna, 1864); A. Lasson, *M. E. der Mystiker* (Berlin, 1868).

In its farther development German Mysticism branched into the heresies of the Beghards and of the "Friends of God" of Basle; in the case of the former it led to the most radical connection with the Averroistic pantheism. It took the form of popular preaching with John **Tauler** at Strassburg (1300–1361), and of poetic song with Heinrich **Suso** of Constance (1300–1365). Its theoretical doctrines maintained themselves, while the heterodoxy was diminished, in the "*German Theology*" (first edited by Luther, 1516).

The Augustinian Platonic opposition against the suspected Aristotelianism of the Arabians has as its main supporters: —

William of Auvergne, from Aurillac, teacher and Bishop in Paris, where he died in 1249, author of a work *De Universo*. He is treated by K. Werner, *Die Philosophie des W. v. A.* (Vienna, 1873).

Henry of Ghent (Henricus Gandavensis, Heinrich Gœthals of Muda near Ghent, 1217–1293), the valiant defender of the primacy of the will against Thomism. Besides a theological compendium, he wrote a *Summa Quæstionum Ordinarium*, and principally *Quodlibeta Theologica*. Cf. K. Werner, *H. v. G. als Repräsentant des christlichen Platonismus im 13 Jahrhundert* (Vienna, 1878).

Richard of Middletown (R. de Mediavia, died 1300) and William de la Marre, the author of a violent *Correctorium Fratris Thomæ*, may also be named here. In the following centuries an *Augustinian theology* proper maintained itself by the side of Thomism and Scotism. Ægydius of Colonna is regarded as its leader (Æg. Romanus, 1247–1316). Cf. K. Werner, *Schol. d. spät. M.-A.*, III.

The sharpest opposition to Thomism grew out of the Franciscan order. **Roger Bacon's** was a mind fruitfully stimulating in all directions, but not appearing in a fixed and definite form in any one of them. He was born in 1214, near Ilchester, educated in Oxford and Paris, several times persecuted on account of his occupations and theories, which were directed in the line of natural research, protected only for a time by Pope Clement IV., and died soon after 1292. His doctrines are embodied in the *Opus Majus* (ed. by Jebb, Lond. 1773), and in the form of extracts in his *Opus Minus* (ed. by Brewer, Lond. 1859). Cf. E. Charles, *R. B., sa vie, ses ouvrages, ses doctrines* (Paris, 1861), and K. Werner, in two articles on his psychology, theory of knowledge, and physics (Vienna, 1879).

The most important thinker of the Christian Middle Ages was **Johannes Duns Scotus**. His home (Ireland or Northumberland) and the year of his birth, which was about 1270, are not certainly known. At first a scholar and teacher in Oxford, he then won high reputation at Paris, where he was active after 1304, and in 1308 moved to Cologne, where he died soon after his arrival — all too early. The edition of his works prepared by his Order (12 vols., Lyons, 1639) contains, besides the genuine writings, much that is not genuine or that has been worked over, and especially transcripts of his disputations and

lectures. To the latter belongs the so-called *Opus Parisiense*, which forms a commentary upon the *Sentences* of the Lombard. The *Questiones Quodlibetales* have a similar origin. The *Opus Oxoniense*, the original commentary upon the Lombard, is his own writing. Besides this there are his commentaries upon Aristotelian writings and some smaller treatises. His doctrine is expounded in Werner and Stöckl. No exhaustive monograph, corresponding to his importance, exists.

Among his numerous adherents, Francis of Mayro, who died 1325, is the best known. The controversy between Thomists and Scotists was a very active one at the beginning of the fourteenth century, and brought many intermediate theories into the field; but soon both parties had to make common cause in defence against Terminism.

Among the logical school books of the later Scholasticism, the most influential was that of **Petrus Hispanus**, who died 1277 as Pope John XXI. His *Summulæ Logicales* were a translation of a Byzantine-Greek text-book, the Σύνοψις εἰς τὴν Ἀριστοτέλους λογικὴν ἐπιστήμην by Michæl Psellos (in the eleventh century). Imitating the processes in this latter treatise (γράμματα ἔγραψε γραφίδι τεχνικός), the well-known barbarous mnemonic designations for the modes of the syllogism were introduced in the Latin version (*Barbara, celarent*, etc.). Terminism, developed in the nominalistic direction from this rhetorical and grammatical logic, contrasted itself as *logica moderna* with the *logica antiqua* of the Realists, including both Scotists and Thomists under this latter title.

In the renewal of **Nominalism** we find William Durandus of St. Pourçain, who died 1332 as Bishop of Meaux, and Petrus Aureolus, who died at Paris, 1321, the former coming from Thomism, the latter from Scotism. Much more important is **William of Occam**, the Abelard of the second period. With a broad and keen vision for reality, and with a bold, unresting eagerness for innovation, he unites in himself all the elements with the help of which the new science forced its way out of Scholasticism. Born in a village in the County of Surrey, trained under Duns Scotus, he became Professor at Paris, then took an active part in the conflicts of his time between Church and State by joining with Philip the Fair and Lewis of Bavaria in combating the papacy, (*Disputatio inter clericum et militem super potestate ecclesiastica prælatis atque principibus terrarum commissa*, and the *Defensorium* against Pope John XXII.), and died 1347 at Munich. There is no complete edition of his works, but the most important are: *Summa Totius Logices, Expositio Aurea super Artem Veterem, Quodlibeta Septem, Centilogium Theologicum*, and a commentary on Peter Lombard. Cf. W. A. Schreiber, *Die politischen und religiösen Doctrinen unter Ludwig dem Baier* (Landshut, 1858). C. Prantl, *Der Universalienstreit im dreizehnten und vierzehnten Jahrhundert* (*Sitz.-Ber. der Münchener Akad.*, 1874). Occam, too, still waits his philosophically competent biographer.

Of the supporters of terministic Nominalism in the fourteenth century, Johannes Buridan, Rector of the University at Paris, and co-founder of that at Vienna, and Marsilius of Inghen, one of the first teachers at Heidelberg, are usually named. A union of mystical doctrines with the nominalistic rejection of metaphysics is found in Pierre d'Ailly (Petrus de Alliaco, 1350–1425), and in Johannes Gerson (Charlier, 1363–1429).

The attempt at a purely rational exposition of Church doctrine in the interest of apologetics and propagation was made by **Raymundus Lullus** of Catalonia (1235–1315), who is principally known by his curious discovery of the "Great Art," that is, a mechanical device which by combining the fundamental concepts was intended to present the system of all possible cognitions. An extract from this may be found in J. E. Erdmann, *History of Phil.*, I. § 206 [Eng. tr. ed. by Hough]. His efforts were repeated in the fifteenth century by **Raymund of Sabunde**, a Spanish physician, who taught in Toulouse and gained respect by his *Theologia Naturalis (sive Liber Creaturarum)*. On him cf. D. Matzke (Breslau, 1846); M. Huttler (Augsburg, 1851).

The philosophy of **Nicolaus Cusanus** (Nicolaus Chrypffs, born in Kues (Cusa) near Trier, 1401, died as Cardinal and Bishop of Brixen, 1464), offers an interesting comprehensive view of the intellectual condition of the departing Middle Ages. The main treatise bears the title *De Docta Ignorantia* (ed. in German together with his other most important writings by F. A. Scharpff, Freiburg i. B. 1862). Cf. R. Falckenberg, *Grundzüge der Philos. des N. v. C.* (Breslau, 1880).

Brief Survey of the Arabian and Jewish Philosophy of the Middle Ages.

This period is certainly more interesting from a literary and historical point of view than from that of philosophy, and as yet no competent presentation of the period as a whole has been made. Nor has complete clearness been attained as yet by investigation, but from the literature concerning it the following are to be emphasised: —

Mohammed al Schahrestani, *History of Religious and Philosophical Sects among the Arabs* (German by Haarbrücker, Halle, 1850 f.); A Schmölders, *Documenta Philosophiæ Arabum* (Bonn, 1836), and *Essai sur les Écoles Philosophiques chez les Ar.* (Paris, 1842); Fr. Dieterici, *Die Philosophie der Ar. im zehnten Jahrhundert* (8 Hefte, Leips. 1865–76). Cf. also Hammer-Purgstall, *Gesch. der arabischen Litteratur.*

S. Munk, *Mélanges de philosophie juive et arabe* (Paris, 1859), and the same author's articles on the individual philosophers in the *Dictionnaire des Sciences Philosophiques.* [W. Wallace, Art. *Arabian Phil.* in *Enc. Brit.*, Ueberweg, Erdmann.]

M. Eisler, *Vorlesungen über die jüdischen Philosophen des Mittelalters* (3 vols., Vienna, 1870–84); M. Joël, *Beiträge zur Geschichte der Philosophie* (Breslau, 1876). Cf. also Fürst's *Bibliotheca Judaica*, and histories of Judaism by Graetz and Geiger.

Close as the relations may be which the philosophy of the two civilised Semitic peoples sustained to their religious interests, **Arabian science** especially owes its peculiar character to the circumstance that its founders and supporters were, for the most part, not members of the clergy, as in the West, but *physicians* (cf. F. Wüstenfeld, *Gesch. der arab. Aerzte und Naturforscher*, Göttingen, 1840). Thus from the beginning the study of ancient medicine and natural science went on hand in hand with that of philosophy. Hippocrates and Galen were as much translated (in part through the medium of the Syrian) and read as were Plato, Aristotle, and the Neo-Platonists. Hence in Arabian metaphysics dialectic is always balanced by natural philosophy. But well as this was adapted to afford scientific thought a broader basis of knowledge of facts, we must not, on the other hand, overestimate the independent achievements of the Arabs in medicine and natural science. Here, too, mediæval science is essentially learned tradition. The knowledge which the Arabs were later able to deliver to the West had its origin, in the main, in the books of the Greeks. Nor did even experimental knowledge experience an essential extension through the Arabs' own work; only in some fields, as, for example, chemistry and mineralogy and in some parts of medicine, *e.g.* physiology, do they appear more independent. In their method, however, in their principles by which they apprehend the universe, and in their entire system of philosophical conceptions, they stand, so far as our information on the subject reaches, entirely under the combined influence of Aristotelianism and Neo-Platonism; and the same is true of the Jews. Nor can it be maintained that a national peculiarity becomes disclosed in their appropriation of this material. It is rather the case that this whole scientific culture was artificially grafted upon the Arabian civilisation, it can strike no true roots into it, and after a short period of bloom it withers away without vital force. In the history of science as a whole, its mission is only to give back in part to the development of the Western mind the continuity which the latter had itself temporarily lost.

From the nature of the case, the appropriation of ancient science in this case also was completed gradually and by working backward. Beginning with the Neo-Platonism which was still current in Syrian tradition, and which was received with sympathy on account of its religious colouring, the Arabian thinkers proceeded to ascend to the better sources; but the consequence remained that they saw Aristotle and Plato through the spectacles of Plotinus and Proclus. During the rule of the Abassidæ an active scientific life prevailed in Bagdad, stimulated especially by the Caliph Almamun at the beginning of the ninth century. The Neo-Platonists, the better commentators, almost the entire didactic writings of Aristotle, and the *Republic*, *Laws*, and *Timæus* of Plato, were known in translations.

The first distinctly emerging personalities, Alkendi, who died about 870, and Alfarabi, who died 950, are scarcely to be distinguished in their teachings from the Neo-Platonic elucidators of Aristotle. A greater importance belongs to **Avicenna** (Ibn Sina, 980–1037), whose "Canon" became the fundamental book of mediæval medicine in the West, as well as in the East, and who also exercised a powerful influence by his extremely numerous philosophical writings, especially his *Metaphysics* and *Logic*. His doctrine comes nearer again to pure Aristotelianism, and perhaps the nearest among all the Arabians.

But the extension of these philosophical views was regarded with jealous eyes by Mohammedan orthodoxy, and the scientific movement experienced so violent persecutions in the tenth century that it took refuge in the secret league of the "Pure Brothers." Avicenna himself was also persecuted. The above-named league embodied the extremely excellent compass of the knowledge of the time in a number of treatises (on this see above, Dieterici), which nevertheless, in contrast with Avicenna, seem to show a stronger leaning toward Neo-Platonism.

Of the scientific achievements of their opponents we know on the one hand the strange metaphysics of the orthodox Motekallemin, who, as against the Aristotelian and Neo-Platonic view of Nature as a living whole, developed an extreme exaggeration of the sole causality of God, and resorted to a distorted Atomism in the greatest metaphysical embarrassment; on the other hand, in the writings of Algazel (1059–1111, *Destructio Philosophorum*) there appears a sceptical and mystical analysis of philosophy.

These latter tendencies won the victory in the Orient the more readily, as the spiritual exaltation of Mohammedanism quickly declined in that quarter. The continuance of Arabian science is to be sought in Andalusia, where Mohammedan civilisation found its short after-bloom. Here, under freer conditions, philosophy developed to vigorous naturalism, which in turn bore a strongly Neo-Platonic stamp.

A characteristic exposition of the doctrine of knowledge in this philosophy is found in the *Conduct of the Solitary* by Avempace, who died 1138, and similar thoughts culminate with Abubacer (Ibn Tophail, died 1185) in an interesting comparison of natural with positive religion. The latter author's philosophical romance *The Living One, the Son of the Waking One*, which sets forth the intellectual development of a man upon a lonely island, excluded from all historical and social relations, was published in a Latin translation by Pocock as *Philosophus Autodidactus* (Oxford, 1671 and 1700, — not twenty years before the appearance of Defoe's *Robinson Crusoe!*) and in a German translation as *Der Naturmensch* by Eichhorn (Berlin, 1783).

But the most important and independent among Arabian thinkers was **Averroes**, who was born 1126 in Cordova, was for a time judge, and then physician in ordinary to the Caliph, was driven afterward by religious persecution to Morocco, and died in 1198. He treated in paraphrases and longer or shorter commentaries, which were printed in the older editions of Aristotle, almost all the didactic writings of Aristotle, who was esteemed by him as the highest teacher of truth. Of his own works (Venice, 1553; some exist now only in the Hebrew version) the refutation of Algazel, *Destructio Destructionis*, is most important. Two of his treatises on the relation of philosophy and theology have been published in German translation by M. J. Müller (Munich, 1875). Cf. E. Renan, *Averroès et l'Averroisme* (3d ed., Paris, 1869).

With the expulsion of the Arabians from Spain traces of their philosophical activity are lost.

Jewish philosophy of the Middle Ages is, in the main, an accompaniment of the Arabian, and dependent upon it. The only exception to this is the Cabbala, that fantastic secret doctrine whose fundamental outlines, which, to be sure, were later much elaborated, show the same peculiar amalgamation of Oriental mythology with ideas of Hellenistic science as does Christian Gnosticism, and go back to the same period and to the same agitated condition of thought attendant upon the mingling of religions. Cf. A. Franck, *Système de la Kabbale* (Paris, 1842; German by Jellinek, Leips. 1844); H. Joël, *Die Religionsphilosophie des Sohar* (Leips. 1849). On the other hand, the main works of Jewish philosophy were originally written in Arabic, and not translated into Hebrew until a relatively late time.

The book of Saadjah Fajjumi (died 942), *Concerning Religions and Philosophies*, which aims to furnish an apology for Jewish doctrine, is related to the earliest Arabian Aristotelianism, and still more closely to the free-thinking Mohammedan theologians, the so-called Mutazilin. In the Neo-Platonic line we meet Avicebron (Ibn Gebirol, a Spanish Jew of the eleventh century), of whose *Fons Vitæ*, Hebrew and Latin versions are extant. **Moses Maimonides** (1135–1204) is regarded as the most important Jewish philosopher of the Middle Ages. In his culture and doctrine he belongs to the phase of Arabian doctrine which has Averroës as its centre. His main treatise, *Guide to the Perplexed* (*Doctor Perplexorum*), has been published in Arabic and French with a commentary by Munk (3 vols., Paris, 1856–66) [Eng. tr. by Friedlander, Trübner, Lond.]. The attachment to Averroës is still closer in the case of Gersonides (Levi ben Gerson, 1288–1344).

The Jews, by means of their widely extended mercantile relations, were the chief contributors to the extension of Oriental philosophy in the West, by sale and translation; in the thirteenth and fourteenth centuries especially their schools in Southern France formed the medium for this wide-reaching activity.

To the Arabian and Jewish literature, which was taken up by Christian science about 1200, belongs finally a number of *pseudonymous* and *anonymous* writings, which arose in the latest periods of Neo-Platonism, and in part perhaps were of still later date. Among these the principal are the *Theology of Aristotle* (Arabic and German by Dieterici, Leips. 1882–83), and the *Liber de Causis* (*De essentia puræ bonitatis*), an extract from the στοιχείωσις θεολογική ascribed to Proclus, published in Arabic, Latin. and German by O. Bardenhewer (Freiburg i. B. 1882).

§ 25. The Realm of Nature and the Realm of Grace.

Among all the philosphers of the Middle Ages we find existing, with greater or less clearness, a lively feeling of the twofold tradition which forms the presupposition of their thought. In the earlier period all knowledge and thought had arranged itself, as it were, of its own accord within the system of religious metaphysics; and now there appeared by the side of this a powerful, finely articulated, coherent body of thought which the age, thirsting after real contents in its barren dialectic, was ready to take up eagerly. The manifold relations between these two systems which mutually laid hold upon one another and interpenetrated, determine the scientific character of the last centuries of the Middle Ages, and the general course of the development was, that these antagonistic systems, starting from an attitude of abrupt opposition, strove toward reconciliation and adjustment, only to diverge all the more violently after the goal seemed to have been reached. This course of things appeared as necessarily in the conception of the reciprocal relations of the different sciences, as in the view of the ultimate relations of things. In both lines the attempt at synthesis was followed by a separation that went all the deeper.

The religious thought of the West, whose highest problem had been to understand the working of divine grace, was confronted by Oriental philosophy in which the old Grecian philosophical tendency toward knowledge of Nature had at last attained metaphysical

supremacy: and here, too, again the process of appropriation began with the adoption of the last consequences, to ascend only by degrees back to the premises.

1. Hence the form in which Arabian science was first taken up was that of *Averroism*. In this, however, science had marked off its boundaries in the most definite manner as against positive religion. This had taken place not only in reaction against the attacks to which the philosophical movement in the East had been subjected, but still more in consequence of the great mental revolutions which the age of the *Crusades* experienced through the intimate contact of the three monotheistic religions. The more ardently these religions fought in the sphere of historical reality, the more the sharpness of their contrasting doctrines became blunted from the point of view of theory. Those who passed through this conflict of religions as thinking observers could not resist the impulse to seek the common element behind the differences, and to establish above the fields of battle the idea of a universal religion.[1] In order to attain this, every form of special historical revelation must be stripped off, and the path of universally valid scientific knowledge must be taken. So with the aid of Neo-Platonic memories, a return was made to the thought of a universal religion, founded upon science, and the ultimate content of this common conviction was formed by the moral law. As Abelard in his own way had already reached this result, so Roger Bacon later, under Arabian influences, designated morality as the content of the universal religion.

This scientific natural religion, however, had had stamped upon it more and more by the Arabs the exclusive character of an *esoteric* doctrine. The distinction originating with Philo, and current in the entire patristic thought, between a verbal-historical and a spiritually timeless sense[2] of religious documents (cf. § 18, 2) here became the doctrine that positive religion is an indispensable need for the mass of the people, while the man of science seeks the real truth back of religion, and seeks it only there, — a doctrine in which Averroës and Maimonides were at one, and which completely corresponded to the social relations of Arabian science. For Arabian science always moved within narrow and closed circles, and as a foreign growth

[1] The court of the highly cultured Hohenstaufen Frederick II. in Sicily appears as a chief seat of this mode of thought, and in general of the exchange of thought between East and West.

[2] Representing this opinion, the *Eternal Gospel* of Joachim of Floris was circulated among the Averroistic Amalricans. This completed for the entire compass of Christian dogma, the transformation of everything external into the internal, all the historical into the timelessly valid: the "pneumatic gospel" of Origen (cf. § 18, 2) was asserted to have here attained reality, the period of the "spirit" to have begun.

never gained true sympathy with the mass of the people: Averroës, nevertheless, expressly honours Aristotle as the founder of this highest, most universal religion of the human race.

Thus in line with this thought, Abubacer made his "*Man in a State of Nature*," who had attained in his isolation to the philosophical knowledge of God, come into contact again at last with historical humanity, and in so doing discover that what he had known clearly and in abstract thought, is here believed in its picturate wrappings, and that what holds for him as a self-evident demand of the reason is here extorted from the multitude by means of reward and punishment.

If now it is hereby admitted that *natural* and *revealed religion* have ultimately the same content, it still follows that they necessarily differ, at least in their expression of the common truth, — that the conceptions which form the expression of philosophical religion are not understood by believers, while the picturate ideas of believers are not regarded as the full truth by philosophers. If, then, by theology, we understand the exposition of the positive doctrine of religion, arranged and defended according to the formal laws of science, *i.e.* Aristotelian logic, — and this was the form which the relation of theology to religion had taken in the West as in the East, — it follows that something may be true theologically which is not true philosophically, and *vice versa*. Thus is explained that *doctrine of the twofold truth*,[1] theological and philosophical, which went through the entire later Middle Ages, although we cannot exactly fix the authorship of this formula.[2] It is the adequate expression of the mental state necessarily brought about by the opposition of the two authorities under which the Middle Ages stood, viz. Hellenistic science and religious tradition; and while at a later time it often served to protect scientific theories from the persecution of the Church, it was for the most part, even in these cases, the honest expression of the inner discord in which just the most important minds of the age found themselves.

2. The science of the Christian peoples accepted this antithesis, and while the doctrine of the twofold truth was expressly proclaimed by bold dialecticians such as Simon of Tournay, or John of Brescia, and was all the more rigidly condemned by the power of

[1] Cf. M. Maywald, *Die Lehre von der zweifachen Wahrheit* (Berlin, 1871).

[2] As little can it be fixed with certainty what the origin of that widely extended formula was, which designated the founders of the three great positive religions as the three "deceivers" of mankind. Unhistorical, as is every Enlightenment, the philosophical opposition of that day could explain to itself only by empirical interests the mythical which could not stand before comparative criticism.

the Church, the leading minds could not evade the fact that philosophy, as it had been developed under the influence of Aristotle and the Arabians, was, and must remain, in its inner nature, alien to precisely those doctrines of the Christian religion which were specific and distinctive. With a full consciousness of this opposition, *Albert* proceeded to his great task. He understood that the *distinction between natural and revealed religion*, which he found in existence, could no longer be put out of sight, that philosophy and theology could no longer be identified, but he hoped and laboured with all his strength that this distinction might not be allowed to become a contradiction. He abandoned the doctrine that the "mysteries" of theology, the doctrines of the Trinity and of the Incarnation, can be made rational, and, on the other hand, he corrected in favour of the Church doctrine the teaching of the "Philosopher" on such important points as the question concerning the eternity or temporal duration of the world. He sought to show that all which is known in philosophy by the "*natural light*" (*lumine naturali*) holds good also in theology, but that the human soul can know completely only that, the principles of which it carries within itself, and that, therefore, in such questions as those in which philosophical knowledge comes to no finally valid decision and must remain standing before the antinomy of different possibilities, revelation gives the decision, — a view in which Albert follows mainly the results of Maimonides. Faith is meritorious just because it cannot be proved or established by any natural insight. Revelation is above reason, but not contrary to reason.

This standpoint for harmonising natural and revealed theology is essentially that taken by *Thomas*, although he seeks to limit still more, if possible, the extent of that which is to be withdrawn from philosophical insight and given into the possession of faith. According to the fundamental thoughts of his system, moreover, he apprehends this relation as a relation of different stages of development, and sees accordingly, in philosophical knowledge, a possibility given in man's natural endowment, which is brought to full and entire realisation only by the grace active in revelation.

It is therefore important to notice that Scholasticism, just in this its highest point, was far from identifying philosophy and theology, or from making the task of the former, as has often been represented, an unresting comprehension of dogma. This conception belongs to the beginnings of mediæval science, *e.g.* to Anselm, and is found sporadically in the times when Scholasticism was entering upon its dissolution. So, for example, Raymundus Lullus projected

his "Great Art"[1] essentially in the opinion that this, by making possible a systematic explanation of all truths, will be adapted to convince all "unbelievers" of the truth of the Christian religion. So, too, later, Raymond of Sabunde aimed to prove with the help of Lull's Art that if God has revealed himself in a double manner, in the Bible (*liber scriptus*) and in Nature (*liber vivus*), the contents of these two revelations, of which the one lies at the basis of theology, the other at the basis of philosophy, must evidently be the same. But in the classical time of Scholasticism the distinction between natural and revealed theology was always kept in mind, and was drawn the more sharply, the more the Church had occasion to guard against the confusion of its doctrine with "natural theology."

3. Hence there were very faithful sons of the Church who broadened again the cleft between philosophy and theology, and ultimately made it so wide that it could not be bridged. At their head stands *Duns Scotus*, who taught that theology should be conceived and treated only as a practical discipline; philosophy, on the contrary, as pure theory. Hence for him and for the continuers of his doctrine, the relation between the two is no longer that of supplementation, but that of separation. Between the two opposing territories of revelation and of rational knowledge, natural theology shrivels into an extreme poverty of domain. The compass of the mysteries of theology that are inaccessible for natural knowledge increases more and more; with Duns Scotus the beginning of the created world in time and the immortality of the human soul belong to this sphere; and Occam even denies the cogency of the usual arguments with which rational theology was wont to prove the existence of God.

This criticism is rooted essentially in the purpose to assure to faith its just right, and in this purpose it is completely honest. In connection with the metaphysical dualism which had again become pronounced (see below, No. 5) the knowledge of the understanding, bound as it was to sense-perception, seemed incapable of searching

[1] This wrong-headed, and yet in many respects interesting and therefore frequently attempted, discovery, consisted in a system of concentric rings, each of which bore a group of concepts divided into circular compartments. By shifting these rings, all possible combinations between concepts were to be brought about, problems given, and their solutions stated. Thus there was a Figura A (Dei) which contained the whole theology, a Figura Animæ which contained psychology, etc. Mnemo-technic attempts, and such as aim at the discovery of a universal language, or of a system of symbols for expressing philosophical thoughts, have frequently been attached to this *ars combinatoria*. The introduction of the algebraic method of reckoning by letters is also connected with these efforts.

the mysteries of the supernatural world. Thus men like Gerson based their mystical doctrine precisely upon Nominalism. The difference between philosophy and theology is necessary; the contradiction between knowledge and faith is unavoidable. Revelation has its source in grace, and has the divine realm of grace for its content; rational knowledge is a natural process of reciprocal interaction between the knowing mind and the objects of perception. Therefore, though Nominalism escaped from the scholastic method with difficulty, and was late in reaching its goal, it necessarily ended in regarding Nature as the sole object of science. At all events, philosophy now set itself as *secular science*, over against theology as divine science.

So Duns Scotus and Occam employed language which externally is quite in harmony with the "twofold truth." That definition of the boundaries was intended to assert, that in matters of faith dialectic has nothing to say. But it could not fail to be the result, that in the case of others, this separation would lead to the opposite consequence and back to the original meaning of the claim of a double truth. It became a charter of liberty for the "secular philosophy." Dialectical investigation could be pursued even to the boldest propositions, and yet all offence might be avoided if one only added that the proposition was so *secundum rationem*, but that *secundum fidem* the opposite was of course true. This occurred so frequently that the Thomists and Lullists became zealous against it. In the case of many, to be sure, who availed themselves of this principle, we cannot doubt that this was their honest opinion; but it is just as sure that others, with full consciousness of their procedure, found in this only a convenient pretext, in order to present under the protection of this restriction the doctrines of a philosophy that in its inner spirit was at variance with faith. At all events, this applies to the school of the Averroists which flourished in Padua toward the end of the fifteenth century.

4. Parallel to this changeful process of transformation in the relation between theology and philosophy, and in closest connection with it, goes an analogous development of *metaphysical psychology*, and both have reference in like measure to the fundamental relation between the supersensuous and the sensuous worlds. Here, too, dualism is the starting-point, and afterwards again the end. This dualism had been developed to an especial degree of sharpness by the Victorines at the close of the first period. In this Mysticism the last bonds between body and soul were cut, and reconciliation was made impossible. The spiritual and material worlds fell apart as separate spheres of the universal reality.

Now, however, Aristotelianism fulfilled its historical mission of overcoming the two-worlds theory in Augustine, as formerly in Plato, and in the *Thomist psychology* the conception of *development*, and of the gradual building up of phenomena, was intended to bridge that separation. While Hugo of St. Victor had drawn the dividing line in the created world through the midst of man's nature, by emphasising the complete impossibility of any comparison between the two substances there brought together, the human soul was now to be understood as just that connecting link, through the medium of which the two worlds come into organic interaction in the one course of development of all things.

Thomas attains this result by an extraordinarily acute transformation of the Aristotelian doctrine of Forms and their relation to matter. The material and the immaterial worlds are characterised by the fact that, in the latter, pure Forms (*formæ separatæ;* called also subsistent Forms) are real or actual as active intelligences without any attachment to matter, while in the former, Forms realise themselves only in union with matter (inherent Forms). The human soul, as lowest of the pure intelligences, is a *forma separata* (on which rests its immortality) and, at the same time, as entelechy of the body, it is the highest of those Forms which realise themselves in matter. But these two sides of its nature are bound together in it to an absolute substantial unity, and this unity is the only Form which is at the same time subsistent and inherent.[1] In this way the series of individual beings proceeds from the lowest Forms of material existence, on past plant and animal life, *through the human soul*, with uninterrupted continuity over into the world of pure intelligences — the angels,[2] and finally to the absolute Form — the deity. The cleft between the two worlds is closed in Thomism by this central position of metaphysical psychology.

5. But it seemed to the following period that the cleft was closed only by being plastered over, as it were, and that the union of so heterogeneous attributes as the entelechy of the body and the subsistence of a pure intelligence was more of a load than the conception of individual substance was able to bear. Hence *Duns Scotus*, whose metaphysics likewise moves naturally within the Aristotelian terminology, introduced an (inherent) *forma corporeitatis* between the intelligent soul, which he too designates as the "essential Form" of the body, and the body itself; and thus the

[1] In this is concentrated in a conception the *anthropocentric* way of viewing the world, which even Thomism did not overcome.

[2] Thomas constructs his scale of forms in the material world according to Aristotle, in the spiritual world according to Dionysius the Areopagite.

Augustinian and Victorinian separation of the conscious essence from the physiological vital force was again re-established.

Occam not only made this distinction his own, but, forced to insert another gradation, analysed the conscious soul into an intellectual and a sensitive part, and ascribed real importance to this separation. It seems to him that the sensuous activities of consciousness can as little be united with the rational nature whose vocation it is to behold the immaterial world, as can the form and motion of the body. Thus for him the soul is split up into a number of individual faculties, to determine the relation of which occasions great difficulties, especially with regard to their spatial inter-relation.

6. The essential thing in this is that the world of consciousness and that of corporeal bodies become again completely separated; and this is shown especially in Occam's theory of knowledge, which proceeded from these presuppositions to an extremely significant innovation.

In their doctrine of the "*species intelligibiles*" the two "Realists," Thomas and Duns Scotus, had alike followed, though with some variations, the old Greek idea, that in the knowing process, by means of the co-operation of the soul and of the external object, a copy of the latter arises, which is then apprehended and beheld by the soul. Occam strikes out these *species intelligibiles* as a useless doubling[1] of the external reality, which according to this view, in so far as it is an object of knowledge, would be assumed as having still another existence (in psychical reality). But by this act *sensuous knowledge loses for him its character of being a copy* as compared with its object. An idea (*conceptus, intellectio rei*) is as such a state or an act of the soul (*passio — intentio animæ*), and forms in this a *sign* (*signum*) for the corresponding external thing. But this inner structure is something of a different nature from the outer reality of which it is the sign, and therefore it is no copy of it. We can speak of a "resemblance" only in so far as in this case the inner reality (*esse objective = content of consciousness*) and the outer reality (*esse formaliter* or *subjective* = objective reality in the present sense of the word "objective"[2]) necessarily relate to each other, and, so to speak, form corresponding points in the two heterogeneous spheres.

Thus the beginning of a psychological and epistemological *idealism*

[1] According to his methodical principle: *entia præter necessitatem non esse multiplicanda.*

[2] The terms "objective" and "subjective" in the Middle Ages have accordingly a meaning exactly the reverse of that which they have in present usage.

develops among the Terminists out of the old duality of mind and body: the world of consciousness is another world than the world of things. What is found in the former is not a copy, but only a sign for something without which corresponds to it. Things are other than our ideas (*ideæ*) of them.

7. Lastly, Augustine's dualism appeared in its complete baldness in his conception of *history*. The realm of God and that of the devil, the Church and the political state, here confronted each other in rigid antithesis. The historical conditions of which this doctrine was the reflex, had become changed completely since Augustine's day. But hitherto the Middle Ages had not only lacked historical conceptions which would have been adapted to correct this doctrine, but scientific thought had been employed in such a one-sidedly theological and dialectical manner, that ethical and social problems had remained farther outside the horizon of philosophers than had physical problems. And yet at the same time, history was seeing movements of such grand dimensions that science also must necessarily take a position with regard to it. If she was able to do this in the second period in a manner completely worthy of the greatness of the subject, she owed her strength for this again to the Aristotelian system, which gave the means into her hand of mastering in thought the great connected structures of political and historical life, of arranging in her metaphysics these forms of the series of development, and thus of putting into conceptions the mighty import of that which she was living through. Indeed, in this line in which the Arabian commentators had not gone before lies the most brilliant achievement of mediæval philosophy,[1] and since Albert's interest lay more on the side of physics, the chief credit here falls to *Thomas*.

Thomas regards the political state, not as did Augustine, as a consequence of the fall, but as a necessary member in the world's life. In his view, therefore, law or right also flows from the divine nature and must be so conceived; above all human institutions stands the *lex naturalis*, upon which rest morality and the life of society. In particular, however, as is proved by language, by the need of help which the individual feels, and by the impulse toward society, man is by his nature destined for life in a state. The end of the state is, according to Aristotle's teaching, to realise virtue, and from this end all the characteristics of the state are to be developed (in philosophical law — *Natural Right* or *Law*). But — and here the new thought begins — that civic virtue to which the state should educate its citizens does not exhaust man's destiny. In this he fulfils only his

[1] Cf. W. Dilthey, *Einleitung in die Geisteswissenschaften*, I. 418 f.

purpose as an earthly being; his higher destiny is the salvation which *grace* offers him in the community of the Church. But as the higher everywhere realises itself through the lower, and the lower exists for the sake of the higher, the political community is to be the preparation for that higher community of the State of God. Thus the state becomes subordinate to the Church as the means to the end, as the preparatory to the complete. The community of the earthly life is the school for that of the heavenly — PRÆAMBULA GRATIÆ.

By the side of the *teleology of Nature* which Greek philosophy had worked out, patristic thought had set the *teleology of history* (cf. § 21, 6); but the two had remained unconnected. The doctrine of the state set forth by Thomas subordinates the one to the other in a system of thought, and in so doing completes the most deeply and widely reaching union of the ancient and Christian conceptions of the world that has ever been attempted.

With this the capstone is fitted to the metaphysical structure of Thomism. By this transition from the community of Nature into that of grace, man fulfils the task which his position in the universe assigns him, but he fulfils it, not as an individual, but only in the race. The ancient thought of the state lives again in Christianity; but the state is no longer an end in itself, it is the best means for carrying out the divine world-plan. *Gratia naturam non tollit sed perficit.*

8. But even this highest synthesis did not long endure. As in political life, so also in theory, the relation of Church and state took on a form that was very much less harmonious. With *Dante* the relation of subordination is already exchanged for that of co-ordination. The poet shares with the metaphysician the thought that because man's destined end is to be attained only in the race, this makes a perfect unity in political organisation requisite. Both demand the *universal state*, the "*monarchia*" and see in the *Empire* the fulfilment of this postulate. But the great Ghibelline cannot think theocratically, as does the Dominican monk; and where the latter assigns to the *imperium* the place of subordination beneath the *sacerdotium*, the former sets the two over against each other as powers of like authority. God has destined man for earthly and for heavenly happiness *in like measure:* to the former he is conducted by the state, by the natural knowledge of philosophy; to the latter he is guided by the Church, by means of revelation. In this co-ordination the joy in the world, characteristic of the Renaissance, bursts forth as victoriously as does the feeling of strength which belongs to the secular state.

And along this line the development proceeded. When the graded scale of reality constructed by Thomas was severed in the midst of man's nature, the spiritual and political powers fell apart, as did the spiritual and corporeal worlds; and the theory afforded the convenient means of banishing the *sacerdotium* to the supra-mundane inner nature, and putting the *imperium* into sole control within the world of sense. This is precisely the point of view from which *Occam*, in his *Disputatio* with reference to the controversy between the papacy and the temporal power, took his position upon the side of the latter. Nor yet is it any longer possible, in accordance with his presuppositions, to base the theory of the state upon the realistic thought of the human race as a whole, bound together for the realisation of one end. The Nominalist sees as a substantial background in social and historical life, only the individuals who will, and he regards state and society as products of interests (*bonum commune*). In theory, as in life, *individualism* prevails.[1]

§ 26. The Primacy of the Will or of the Intellect.

W. Kahl, *Die Lehre vom Primat des Willens bei Augustinus, Duns Scotus und Descartes.*

In closest connection with all these general questions stands a special psychological problem, which was vigorously discussed throughout this whole period, and in reference to which the points of opposition between the parties of the time may be recognised upon a smaller scale, but all the more sharply focussed. It is the question whether among the powers of the soul the higher dignity belongs to the will or to the intellect (*utra potentia nobilior*). It takes so broad a space in the literature of this period that the attempt might have been made to look upon the psychological antithesis which unfolds in connection with it as the leading motive of the whole period. But the course of the development shows too clearly that the real impelling forces lay in religious metaphysics, and the rigidity of systematic conception which distinguishes the philosophical doctrines of this period explains sufficiently why it is that their position with reference to an individual problem may appear as typical for the different thinkers. It still remains characteristic that this problem is a question taken from the domain of the inner world.

[1] This doctrine of Occam's concerning secular power and law is followed out to the extreme consequence of the omnipotence of the state by Occam's friend, *Marsilius of Padua*, whose treatise, *Defensor Pacis* (1346), carries out in rigorous lines the attempt to establish the theory of the state upon the utilitarian and nominalistic basis.

In this question, also, the two main bodies of tradition, Augustinianism and Aristotelianism, were not at one; but their relation was here in nowise that of an outspoken opposition. For Augustinianism the question was in general awkwardly stated. For in this system the oneness of nature in the personality was so strongly emphasised, and the inter-relation of the different sides of its activity was so often made prominent, that a relation of rank in the proper sense was really out of the question. But on the other hand, especially in his doctrine of knowledge, Augustine had assigned to the will as the impelling power — even in the process of ideation — a position so central that it was not shaken in its importance for empirical facts, even though the Neo-Platonic contemplation of the deity was maintained as the final goal of development. On the contrary, the intellectualism of the Aristotelian system was quite undoubted, and if it still admitted any increase, it had received it from the Arabian philosophy, especially from Averroism. Thus antitheses presented themselves which were soon enough to break forth to open controversy.

Thomism in this point, also, followed Aristotle unconditionally, finding at its side in this case the nearly related German Mysticism, and as its opponents the Augustinians, Scotists, and Occamists, so that, as thus grouped, the opposition between the Dominicans and the Franciscans finds general expression.

1. The question as to the pre-eminence of the will or of the intellect develops at first as a purely psychological controversy, and demands a decision upon the point, whether in the course of the psychical life the dependence of the will's decisions upon ideas, or that of the movements of ideas upon the will, is the greater. It was therefore adapted to further the beginnings of a treatment of psychology that concerned itself especially with the history of mental development (cf. § 24), and it would have been able to do this in a higher degree than was actually the case if it had not always been transferred to the ground of dialectic or to the metaphysical domain. This latter transfer occurred principally in consequence of the fact that the conception of *freedom*, which always involves ethical and religious questions, was looked upon as the point in controversy. Both parties, indeed, desired to maintain or defend man's "freedom" in the interest of responsibility; but this was possible only as they gave different meanings to the word.

Now, in individual cases, Thomas admits an influence of the will, not only upon motion, but also upon affirmation or denial of ideas. In particular, he recognises absolutely such an influence in belief. But in general he regards the will, quite according to the ancient

model, as determined by knowledge of the good. The intellect not only apprehends in general the idea of the good, but also, in each individual case, discerns what is good, and thereby determines the will. The will necessarily strives for that which is known to be good; it is therefore dependent upon the intellect. The latter is the *supremus motor* of the psychical life; "rationality," so said *Eckhart* also, is the head of the soul, and even romantic love ("*Minne*") clings only to knowledge. Freedom (as ethical ideal) is hence, according to Thomas, that necessity which exists upon the basis of knowledge, and, on the other hand, (psychological) freedom of choice (*facultas electiva*) is nevertheless only possible by reason of the fact that the understanding presents to the will various possibilities as means toward its end, the will then deciding for that which is known to be best, — the view held by Albert also. This *intellectualistic determinism*, in connection with which Thomas himself always insisted that the decision of the will depends only upon purely internal knowing activities, was extended by his contemporary *Gottfried of Fontaine* to the point of making even the sensuous presentation (*phantasma*) the *causa efficiens* of the will's activity.

But the opponents made their attack just in connection with this conception of necessary determination. The rising of ideas, so *Henry of Ghent* had already taught, and after him *Duns Scotus*, and still later *Occam*, is a natural process, and the will becomes unavoidably entangled in this if it is to be completely dependent upon ideas. But with this, said Scotus, contingency (*i.e.* possibility of being otherwise or "power to the contrary") in the will's functions is irreconcilable: for the process of Nature is always determined in one way; where it prevails there is no choice. With contingency, however, responsibility also falls to the ground. Responsibility can therefore be preserved only if it is acknowledged that the intellect exercises no compelling power over the will. To be sure, the cooperation of the ideational faculty is indispensable in the case of every activity of the will: it presents the will its objects and the possibilities of its choice. But it does this only as the servant, and the decision remains with the master. The idea is never more than the occasioning cause (*causa per accidens*) of the individual volition; the doctrine of Thomas confuses practical consideration with pure intellect. If the latter gives the object, the decision is still solely a matter of the will; the will is the *movens per se;* to it belongs absolute self-determination.

Indeterminism, as Scotus and Occam teach it, sees therefore in the will the fundamental power of the soul, and maintains conversely, that as a matter of fact the will on its side determines the development of the intellectual activities. Following the procedure of Henry of Ghent,[1] according to whom the theoretical functions become more active according as they are more immaterial, Scotus attempted to prove the proposition just stated, in a highly interesting manner. The natural process, he says, produces as the first content of consciousness (*cogitatio prima*) a multitude of ideas which are more or less confused (*confusæ — indistinctæ*) and imperfect. Of these only those become distinct (*distincta*) and perfect on which the will, which in this process is determined by nothing further, fixes its attention. Scotus also teaches at the same time that the will strengthens in their *intensity* these ideas which it raises from the confused to the distinct condition, and that the ideas to which the will does not apply itself ultimately cease to exist, on account of their weakness.

In addition to these psychological arguments, we find appearing in the controversy appeals to the authority of Anselm and Aristotle on the one side, and to that of Augustine on the other, and further a series of other arguments. These are in part of a purely dialectical nature. Such is the case when Thomas claims that the *verum* toward which the intellect aims is higher in rank than the *bonum* toward which the will strives, and when Scotus doubts the authority for this gradation; and so again when Thomas expresses the opinion that the intellect apprehends the pure, single conception of the good, while the will is concerned only with the special empirical forms assumed by the good, and when Henry of Ghent and Scotus, exactly reversing this statement, develop the thought that the will is always directed only toward the good as such, while the understanding has to show in what the good consists in a particular case. With such variations the matter was later tossed to and fro a great deal, and Johannes *Buridan* is an example of those who stand undecided between determinism and indeterminism. For the former view speaks responsibility, for the latter the principle that every event is necessarily determined by its conditions.

Other arguments which become interwoven in the controversy trench upon the more general domains of the conceptions of the world and of life.

2. To this class belongs, first of all, the transfer of the question of the relative rank of will and intellect to *God*. The extreme intellectualism of the Arabians, had in Averroës, excluded the faculty of will from the Supreme Being, in accordance with the Aristolelian *motif*, that every act of will implies a want, a state of

[1] Whose view in this respect Richard of Middletown also completely adopted.

imperfection and dependence; on the contrary Avicebron, who exercised a strong influence upon Duns Scotus, had defended the religious principle that the world was created by the divine will, and in a similar line of thought *William of Auvergne* had maintained the originality of the will as existing side by side with the intellect in the essence of God and in his creative activity. These antitheses were now continued in the controversy between Thomism and Scotism.

Thomas, indeed, as a matter of course, recognises the reality of the divine will, but he regards it as the necessary consequence of the divine intellect, and as determined in its content by the latter. God creates only what in his wisdom he knows to be good; it is necessarily himself, *i.e.* the ideal content of his intellect, that forms the object of his will; he necessarily wills himself, and in this consists the freedom, determined only by himself, with which he wills individual things. Thus the divine will is bound to the divine wisdom, which is superior to it.

But just in this the opponents of Aquinas see a limitation of omnipotence which does not comport with the conception of the *ens realissimum*. A will seems to them sovereign, only if there is for it no kind of determination or restriction. God created the world, according to Scotus, solely from absolute arbitrary will; he might have created it, if he had so willed, in other forms, relations, and conditions; and beyond this his completely undetermined will, there are no causes. The will of God with its undetermined creative resolves is the original fact of all reality, and no further questions must be asked as to its grounds, — even as the decision made by the will of a finite being with its *liberum arbitrium indifferentiæ*, when placed before given possibilities, creates in every instance a new fact which cannot be understood as necessary.

3. The sharpest formulation of this antithesis comes to light in the fundamental metaphysical principles of *ethics*. On both sides the moral law is naturally regarded as God's command. But Thomas teaches that God commands the good because it is good, and is recognised as good by his wisdom; Scotus maintains that it is good only because God has willed and commanded it, and Occam adds to this that God might have fixed something else, might have fixed even the opposite as the content of the moral law. For Thomas, therefore, goodness is the necessary consequence and manifestation of the divine wisdom, and Eckhart also says that "beneath the garment of goodness" the essential nature of God is veiled; intellectualism teaches the *perseitas boni*, the *rationality of the good*. For intellectualism, morals is a philosophical discipline

whose principles are to be known by the "natural light." "Conscience" (*synteresis*[1]) is a knowledge of God *sub ratione boni*. With Scotus and Occam, on the contrary, the good cannot be an object of natural knowledge, for it might have been otherwise than it is; it is determined not by reason, but by groundless will. Nothing, so Pierre d'Ailly teaches with extreme consistency, is in itself, or *per se*, sin; it is only the divine command and prohibition which make anything such, — a doctrine whose range is understood when we reflect that, according to the view of these men, God's command becomes known to man only through the mouth of the Church.

It is also closely connected with this that theology, which for Thomas still remained a "speculative" science, became with his opponents, as has been already indicated above (§ 25, 3), a "practical" discipline. Albert had already made intimations of this sort, Richard of Middletown and Bonaventura had emphasised the fact that theology deals with the emotions; Roger Bacon had taught that while all other sciences are based on reason or experience, theology alone has for its foundation the authority of the divine will: Duns Scotus completed and fixed the separation between theology and philosophy by making it a necessary consequence of his metaphysics of the will.

4. The same contrast becomes disclosed with like distinctness in the doctrines of the final destiny of man, of his state in eternal blessedness. The ancient *θεωρία*, the contemplation of the divine majesty, free from will and from want, had in Augustine's teaching formed the ideal state of the pardoned and glorified man, and this ideal had been made to waver but little by the doctrines of the earlier Mystics. Now it found new support in the Aristotelian intellectualism, in accordance with which *Albert* thought that man, in so far as he is truly man, is intellect. The participation in the divine being which man attains by knowledge is the highest stage of life which he can reach. On this account Thomas, too, sets the dianoëtic virtues above the practical, on this account the *visio divinæ essentiæ*, the intuitive, eternal vision of God, which is removed beyond all that is temporal, is for him the goal of all human striving. From this vision follows *eo ipso* the love of God, just as every determinate

[1] This word (written also *sinderesis*, *scinderesis*) has, since Albert of Bollstädt, occasioned much etymological cudgelling of brains. Since, however, among the later physicians of antiquity (Sext. Emp.) *τήρησις* appears as a technical term for "observation," it may be that *συντήρησις*, which is attested in the fourth century, originally signified "self-observation" in analogy with the Neo-Platonic usage in *συναίσθησις* or *συνείδησις* (cf. p. 234), and thus took on the ethico-religious sense of "conscience" (*conscientia*).

state of the will is necessarily attached to the corresponding state of the intellect. Just this tendency of Thomism was given its most beautiful expression by Dante, the poet of the system. Beatrice is the poetic embodiment of this ideal, for all time.

Meanwhile a counter-current manifests its force on this point also. Hugo of St. Victor had characterised the supreme angel choir by love, and the second by wisdom; and while Bonaventura regarded contemplation as the highest stage in the imitation of Christ, he emphasised expressly the fact that this contemplation is identical with "love." Duns Scotus, however, taught with a decided polemical tendency that blessedness is a state of the will, and that, too, of the will directed toward God alone; he sees man's last glorification, not in contemplation, but in love, which is superior to contemplation, and he appeals to the word of the Apostle, "The greatest of these is love."

Hence as Thomas regarded the intellect, and Duns Scotus the will, as the decisive and determining element of man's nature, Thomas could hold fast to Augustine's doctrine of the *gratia irresistibilis*, according to which revelation determines irresistibly the intellect and with it the will of man, while Duns Scotus found himself forced to the "synergistic" view, that the reception of the operation of divine grace is to a certain extent conditioned by the free will of the individual. So the great successor of Augustine, with strict logical consistency, decided against the Augustinian doctrine of predestination.

5. On the other hand, the intellectualism of Thomas develops its extreme consequences in *German Mysticism*, whose founder, Eckhart, is entirely dependent upon the teacher of his Order in the conceptional outlines of his doctrine.[1] Eckhart goes far beyond his master only in the one respect that as a much more original personality he is unwearied in his effort to translate the deep and mighty feeling of his piety into knowledge, and thus urged on by his inner nature he breaks through the statutory restrictions before which Thomas had halted. Convinced that the view of the world given in the religious consciousness must be capable of being made also the content of the highest knowledge, he sublimates his pious faith to a speculative knowledge, and in contrast with the pure spirituality of this he looks upon the Church dogma as only the external, temporal symbol. But while this tendency is one that he shares with many

[1] Cf. S. Denifle in the *Archiv für Litterat.- u. Kult.-Gesch. d. M.-A.*, II. 417 ff. So far, therefore, as Eckhart was really to be the "Father of German speculation," this speculation had its source in Thomas Aquinas and his teacher Albert.

other systems, it is his peculiarity that he does not wish to have the inmost and truest truth kept as the privilege of an exclusive circle, but desires rather to communicate it to all people. He believes that the right understanding for this deepest essence of religious doctrine is to be found precisely in connection with simple piety,[1] and so he throws down from the pulpit among the people the finest conceptions constructed by science. With a mastery of language that marks the genius he coins Scholasticism into impressive preaching, and creates for his nation the beginnings of its philosophical modes of expression, — beginnings which were of determining influence for the future.

But in his teaching the combined mystical and intellectualistic elements of Thomism become intensified by the Neo-Platonic idealism, which had probably reached him through the medium of Scotus Erigena, to the last logical consequence. *Being and knowledge are one*, and all that takes place in the world is in its deepest essence a knowing process. The procedure of the world forth out of God is a process of knowledge, of self-revelation, — the return of things into God is a process of knowledge, of higher and higher intuition. The ideal existence of all that is real — so at a later time said Nicolaus Cusanus, who made this doctrine of Eckhart's his own — is truer than the corporeal existence which appears in space and time.

The original ground of all things, the deity, must therefore lie beyond Being and knowledge;[2] it is above reason, above Being; it has no determination or quality, it is "Nothing." But this "deity" (of negative theology) reveals itself in the triune God,[3] and the God who is and knows creates out of nothing the creatures whose Ideas he knows within himself; for this knowing is his creating. This process of self-revelation belongs to the essence of the deity; it is hence a timeless necessity, and no act of will in the proper sense of the word is required for God to produce the world. The deity, as productive or generative essence, as "un-natured Nature" [or Nature that has not yet taken on a nature], is real or actual only by knowing and unfolding itself in God and the world as produced

[1] German Mysticism is thus connected with the more general phenomenon, that the fast increasing externalisation which seized upon the life of the Church in the thirteenth and fourteenth centuries drove piety everywhere into paths that lay outside the Church.

[2] Evidently the same relation that subsisted in the system of Plotinus between the ἓν and the νοῦς, a relation in which thought and Being were held to coincide.

[3] The distinction between deity and God (*divinitas* and *deus*) was made dialectically by Gilbert de la Porrée in connection with the controversy over universals and its relations to the doctrine of the Trinity.

reality, as natured Nature.[1] God creates all — said Nicolaus Cusanus — that is to say, he is all. And on the other hand, according to Eckhart, all things have essence or substance only in so far as they are themselves God; whatever else appears in them as phenomena, their determination in space and time, their "here" and "now" ("*Hie*" *und* "*Nu*," *hic et nunc* with Thomas), is nothing.[2]

The human soul, also, is therefore in its inmost nature of the divine essence, and it is only as a phenomenon in time that it possesses the variety of "powers" or "faculties" with which it is active as a member of the *natura naturata*. That inmost essence Eckhart calls the "Spark,"[3] and in this he recognises the living point at which the world-process begins its return.

For to the "Becoming" corresponds the reverse process, the "Anti-becoming" ("*Entwerden*"), the disappearing. And this, too, is the act of knowledge by means of which the things which have been made external to the deity are taken back into the original Ground. By being known by man the world of sense finds again its true spiritual nature. Hence human cognition, with its ascent from sense perception to rational insight,[4] consists in the "elimination" ("*Abscheiden*") of plurality and multiplicity; the spiritual essence is freed from its enveloping husks. And this is man's highest task in the temporal life, since knowledge is the most valuable of man's powers. He should indeed be also active in this world, and thus bring his rational nature to assert itself and gain control, but above all outer action, above the righteousness of works which belongs to the sphere of sense, stands first the "inner work," cleanness of disposition, purity of heart, and above this in turn stands retirement or "decease" (*Abgeschiedenheit*) and "poverty" of soul, the complete withdrawal of the soul from the outer world into its inmost essence, into the deity. In the act of knowing it reaches that purposelessness of action, that action not constrained by an end, that freedom within itself, in which its beauty consists.

But even this is not perfect so long as the knowing process does not find its consummation. The goal of all life is the knowledge of

[1] On the terms *natura naturans* and *natura naturata*, which were probably brought into use by Averroism (cf. § 27, 1), cf. H. Siebeck, *Archiv f. Gesch. d. Phil.*, III. 370 ff.

[2] Accordingly without accepting the dialectical formulas, Eckhart treats the Thomistic doctrine of Ideas quite in the sense of the strict Realism of Scotus Erigena. He speaks slightingly of the Nominalists of his time as "little masters."

[3] Also the "Gemüthe" or Synteresis.

[4] The single stages of this process are developed by Eckhart according to the Thomistic-Augustinian scheme.

God, but knowing is Being; it is a community of life and of Being with that which is known. If the soul would know God, it must be God, it must cease to be itself. It must renounce not only sin and the world, but itself also. It must strip off all its acquired knowledge, and all present knowing of phenomena; as the deity is "Nothing," so it is apprehended only in this knowledge that is a not-knowing — *docta ignorantia*, it was later called by Nicolaus; and as that "Nothing" is the original ground of all reality, so this not-knowing is the highest, the most blessed contemplation. It is no longer an act of the individual, it is the act of God in man; God begets his own essence within the soul, and in his pure eternal nature the "Spark" has stripped off all its powers through which it works in time, and has effaced their distinction. This is the state of supra-rational knowing when man ends his life in God, — the state, of which Nicolaus of Cusa said, it is the eternal love (*charitas*), which is known by love (*amore*) and loved by knowledge.

§ 27. The Problem of Individuality.

The doctrine of German Mysticism, which had arisen from the deepest personal piety and from a genuine individual need felt in a life whose religion was purely internal, thus runs out into an ideal of exaltation, of self-denial, of renunciation of the world, in the presence of which everything that is particular, every individual reality, appears as sin or imperfection, as had been the case in the ancient Oriental view. In this thought the contradiction that was inherent in the depths of the Augustinian system (cf. p. 287) became fully developed and immediately palpable, and it thus becomes evident that the Neo-Platonic intellectualism, in whatever form it appeared from the time of Augustine to that of Master Eckhart, was *in itself alone* always necessarily inclined to contest the metaphysical self-subsistence of the individual, while the other party maintained this self-subsistence as a postulate of the doctrine of the will. Accordingly, when in connection with the increase of intellectualism the *universalistic* tendency increased also, the counter-current was necessarily evoked all the more powerfully, and the same antithesis in motives of thought which had led to the dialectic of the controversy over universals (cf. p. 289) now took on a more real and metaphysical form in the question as to the ground of existence in individual beings (*principium individuationis*).

1. The stimulus for this was furnished by the far-reaching consequences to which universalism and intellectualism had led among the Arabians. For the Arabians, in interpreting the Aristotelian

system, had proceeded in the direction which had been introduced in antiquity by Strato (cf. p. 179 f.), and which among the later commentators had been maintained chiefly by Alexander of Aphrodisias. This direction was that of naturalism, which would fain remove from the system of the Stagirite even the last traces of a metaphysical separation between the ideal and the sensuous. This effort had become concentrated upon two points : upon the relation of God to the world, and upon that of the reason to the other faculties. In both these lines the peculiar nature of the Arabian Peripatetic doctrine developed, and this took place by complicated transformations of the Aristotelian conceptions of Form and Matter.

In general, we find in this connection in the Andalusian philosophy a tendency to make matter metaphysically self-subsistent. It is conceived of, not as that which is merely abstractly possible, but as that which bears within itself as living germs the Forms peculiar to it, and brings them to realisation in its movement. At the same time *Averroës*, as regards particular cosmic processes, held fast to the Aristotelian principle that every movement of matter by which it realises out of itself a lower Form, must be called forth by a higher Form, and the graded series of Forms finds its termination above in God, as the highest and first mover. The transcendence of God could be united with this view, as the doctrine of *Avicebron* shows, only if matter were regarded as itself created by the divine will. But on the other hand, this same Jewish philosopher, proceeding from the same presuppositions, insisted that with the exception of the deity, no being could be thought of otherwise than as connected with matter, that accordingly even the spiritual Forms need for their reality a matter in which they inhere, and that finally the living community of the universe demands a single matter as basis for the entire realm of Forms. The more, however, in the system of *Averroës*, matter was regarded as eternally in motion within itself, and as actuated by unity of life, the less could the moving Form be separated from it *realiter*, and thus the same divine All-being appeared on the one hand as Form and moving force (*natura naturans*), and on the other hand as matter, as moved world (*natura naturata*).

This doctrine with regard to *matter*, that it is *one in nature, is informed within, and is eternally in motion of itself*, became extended with Averroism as an extremely naturalistic interpretation of the philosophy of Aristotle. It now became reinforced by those consequences of dialectical Realism which compelled the view that God, as the *ens generalissimum*, is the only substance, and that individual things are but the more or less transient Forms in which

this single substance becomes realised (cf. § 23). The *Amalricans* thus teach that God is the one single essence (*essentia*) of all things, and that creation is only an assuming of form on the part of this divine essence, a realising, completed in eternal movement, of all possibilities contained in this one single matter. *David* of Dinant[1] establishes this same *pantheism* with the help of Avicebron's conceptions, by teaching that as "hyle" (*i.e.* corporeal matter) is the substance of all bodies, so mind (*ratio — mens*) is the substance of all souls; that, however, since God, as the most universal of all essences, is the substance of all things whatever, God, matter, and mind are, in the last resort, identical, and the world is but their self-realisation in particular forms.

2. But the metaphysical self-subsistence of the *individual mind* was involved in doubt by yet another line of thought. Aristotle had made the νοῦς, as the everywhere identical rational activity, join the animal soul "from without," and had escaped the difficulties of this doctrine because the *problem of personality*, which emerged only with the Stoic conception of the ἡγεμονικόν, did not as yet lie within the horizon of his thought. But the commentators, Greek and Arabian, who developed his system did not shrink before the consequences that resulted from it for the metaphysical value of mental and spiritual individuality.

In the thought of *Alexander of Aphrodisias* we meet, under the name of the "passive intellect" (cf. p. 150), the capacity of the individual psyche to take up into itself, in accordance with its whole animal and empirical disposition, the operation of the active reason, and this *intellectus agens* (agreeably to the naturalistic conception of the whole system) is here identified with the divine mind, which is still thought only as "separate Form" (*intellectus separatus*). But with *Simplicius*, in accordance with the Neo-Platonic metaphysics, this *intellectus agens* which realises itself in man's rational knowledge has already become the lowest of the intelligences who rule the sublunary world.[2] This doctrine finds an original development in the thought of *Averroës*.[3] According to his view, the *intellectus passivus* is to be sought in the individual's *capacity* for knowledge, a capacity which, like the individual himself, arises and perishes as Form of the individual body; it has validity, therefore, only for the individual, and for that which concerns the particular. The *intellectus*

[1] Following the *Liber de Causis* and the pseudo-Boethian treatise *De Uno et Unitate*; cf. B. Hauréau in the *Mémoires de l'Acad. des Inscript.*, XXIX. (1877), and also A. Jundt, *Histoire du Panthéisme Populaire au M.-A.* (Paris, 1875).

[2] The so-called "Theology of Aristotle" identifies this νοῦς with the Λόγος. For particulars, see E. Renan, *Av. et l'Av.*, II. § 6 ff.

[3] Cf. principally his treatise *De Animæ Beatitudine.*

agens, on the contrary, as a Form existing apart from empirical individuals and independent of them, is the *eternal generic reason of the human race*, which neither arises nor perishes, and which contains the universal truths in a manner valid for all. It is the substance of the truly intellectual life, and the knowing *activity* of the individual is but a special manifestation of it. This (actual) knowing activity (as *intellectus acquisitus*) is indeed in its content, in its essence, eternal, since in so far it is just the active reason itself; on the contrary, as empirical function of an individual knowing process, it is as transitory as the individual soul itself. The completest incarnation of the active reason has, according to Averroës, been given in Aristotle.[1] Man's rational knowing is, then, an impersonal or supra-personal function: it is the individual's temporal participation in the eternal generic reason. This latter is the unitary essence which realises itself in the most valuable activities of personality.

Intimations of this *pan-psychism* occasionally appear in the train of Neo-Platonic Mysticism at an earlier period in Western literature; as an outspoken and extended doctrine it appears by the side of Averroism about 1200; the two are everywhere named in conjunction at the first when the erroneous doctrines of the Arabian Peripatetic thought are condemned, and it is one main effort of the Dominicans to protect Aristotle himself from being confused with this doctrine. Albert and Thomas both write a *De Unitate Intellectus* against the Averroists.

3. Pan-psychism encounters with Christian thinkers an opposition in which the determining factor is the feeling of the metaphysical value of *personality*, — the feeling which had been nourished by *Augustine*. This is the standpoint from which men like William of Auvergne and Henry of Ghent oppose Averroës. And this is also the real reason why the main systems of Scholasticism — in diametrical contrast with Eckhart's Mysticism — did not allow the Realism which was inherent in the intellectualistic bases of their metaphysics to come to complete development. *Thomism* was here in the more difficult case, for it maintained indeed, following Avicenna's formula (cf. p. 299), that universals, and therefore also the genus "soul," exist only "individualised," *i.e.* in the individual empirical examples as their universal essence (*quidditas*), but it ascribed to them, nevertheless, metaphysical priority in the divine mind. It was therefore obliged to explain how it comes

[1] And with this the unconditional recognition of the authority of the Stagirite is theoretically justified by Averroës.

about that this one essence as universal matter presents itself in such manifold forms. That is to say, it asked after the PRINCIPIUM INDIVIDUATIONIS, and found it in the consideration that matter in space and time is *quantitatively determined* (*materia signata*). In the capacity of matter to assume quantitative differences consists the possibility of individuation, *i.e.* the possibility that the same Form (*e.g.* humanity) is actual in different instances or examples as individual substances. Hence, according to Thomas, pure Forms (*separatæ sive subsistentes*) are individualised only through themselves; that is, there is but one example which corresponds to them. Every angel is a genus and an individual at the same time. The inherent Forms, on the contrary, to which the human soul also belongs in spite of its subsistence (cf. p. 324), are actual in many examples, in accordance with the quantitative differences of space and time which their matter presents.

This view was opposed by the *Franciscans*, whose religious and metaphysical psychology had developed in intimate relation with Augustine's teaching. In their thought, first the individual soul, and then, with a consistent extension in general metaphysics, individual beings in general, are regarded as self-subsisting realities. They rejected the distinction of separate and inherent Forms. Bonaventura, Henry of Ghent, and still more energetically Duns Scotus, maintained, following Avicebron, that even intellectual Forms have their own matter, and Scotus teaches that the "soul" is not individualised and substantialised only after, and by means of, its relation to a definite body, as Thomas had taught, but that it is already in itself individualised and substantialised. On this point *Scotism* shows a discord which had evidently not come to notice in the mind of its author. It emphasises on the one hand, in the strongest manner, the Reality of the universal, by maintaining the unity of matter (*materia primo-prima*) quite in the Arabian sense, and on the other hand it teaches that this universal is only actual by being realised by the series of Forms descending from the universal to the particular, and ultimately by means of the definite individual Form (*hœcceitas*). This individual Form is therefore for Duns Scotus an original fact; no farther question as to its ground is permissible. He designates individuality (both in the sense of individual substance and in that of individual occurrence) as the *contingent* (*contingens*); that is, as that which is not to be deduced from a universal ground, but is only to be verified as actual fact. For him, therefore, as for his predecessor Roger Bacon, the inquiry for the principle of individuation has no meaning: the individual is the "last" Form of all reality, by means of which alone

universal matter exists, and the question rather is, how, in presence of the fact that the individual being with its determined form is the only Reality, one can still speak of a Reality of universal "natures."[1]

From this noteworthy limitation of the doctrine of Scotus it becomes explicable that while some of its adherents, as for example Francis of Mayron, proceeded from it to extreme Realism, it suddenly changed with *Occam* into the *renewal of the nominalistic thesis*, that only the individual is real and that the universal is but a product of comparative thought.

4. The victorious development which Nominalism experienced in the second period of mediæval philosophy rests upon an extremely peculiar combination of very different motives of thought. In the depths of this stream of development is dominant the Augustinian *moment* of feeling, which seeks to see the proper metaphysical value secured to the individual personality; in the main philosophical current the anti-Platonic tendency of the Aristotelian theory of knowledge, now just becoming known, asserts itself, throwing its influence toward conceding the value of "first substance" to the empirical individual only; and on the surface plays a logico-grammatical schematism, which has its origin in the first operation of the Byzantine tradition of ancient thought.[2] All these influences become concentrated in the impassioned, impressive personality of William of *Occam*.

In their exposition of the doctrine of concepts and its application to the judgment and syllogism, the text-books of "modern" logic, as type of which that of Petrus Hispanus may serve, lay an important emphasis upon the theory of "*supposition*" in a manner which is not without its precedent in antiquity.[3] According to this theory a class-concept or term (*terminus*) may, in language, and, as was then supposed, in logic also, stand for the sum of its species, and a species-concept for the sum of all its individual examples (*homo-omnes homines*), so that in the operations of thought a term is employed as a *sign* for that which it means. Occam develops Nominalism in the forms of this *Terminism*[4] (cf. pp. 325 f). Individual

[1] This method for the solution of the problem of universals, peculiar to Duns Scotus, is usually called *Formalism*.

[2] In fact, we may see in the working of the text-book of Michael Psellos the first impetus of that accession of ancient material of culture which the West received by way of Byzantium, and which later in the Renaissance became definitely united with the two other lines of tradition that came, the one by way of Rome and York, the other by way of Bagdad and Cordova.

[3] The reader need only be reminded of the investigations of Philodemus on signs and designations (p. 162; cf. also p. 199).

[4] Cf. K. Prantl in the *Sitz.-Ber. der Münch. Acad.*, 1864, II. a 58 ff.

things, to which Occam, following Scotus, concedes the Reality of original Forms, are represented in thought by us *intuitively*, without the mediation of *species intelligibiles;* but these ideas or mental representations are only the "natural" signs for the things represented. They have only a necessary reference to them, and have real similarity with them as little as any sign is necessarily like the object designated. This relation is that of "first intention." But now as individual ideas stand for (*supponunt*) individual things, so, in thought, speech, and writing, the "undetermined" general ideas of abstract knowledge, or the spoken or written words which in turn express these general ideas, may stand for the individual idea. This "second intention," in which the general idea with the help of the word refers no longer directly to the thing itself, but primarily to the idea of the thing, is no longer natural, but arbitrary or according to one's liking (*ad placitum instituta*).[1] Upon this distinction Occam rests also that of *real* and *rational* science: the former relates immediately or intuitively to things, the latter relates abstractly to the immanent relations between ideas.

It is clear, according to this, that rational science also presupposes "real" science and is bound to the empirical material presented in the form of ideas by this real science, but it is also clear that even "real" knowledge apprehends only an inner world of ideas, which may indeed serve as "signs" of things, but are different from things themselves. The mind — so Albert had incidentally said, and Nicolaus Cusanus at a later time carried out the thought — knows only what it has within itself; its knowledge of the world, terministic Nominalism reasons, refers to the inner states into which its living connection with the real world puts it. As contrasted with the true essence of things, teaches *Nicolaus Cusanus*, who committed himself absolutely to this *idealistic Nominalism*, human thought possesses only *conjectures*, that is, only modes of representation which correspond to its own nature, and the knowledge of this relativity of all positive predicates, the knowledge of this non-knowledge, the *docta ignorantia*, is the only way to go beyond rational science and attain to the inexpressible, signless, immediate community of knowledge with true Being, the deity.

5. In spite of this far-reaching epistemological restriction, the real vital energy of Nominalism was directed toward the development of natural science; and if its results during the fourteenth and fifteenth centuries remained very limited, the essential reason for this

[1] The agreement of this with the contrast between *θέσις* and *φύσις*, which had been asserted also in the ancient philosophy of language (Plato's *Cratylus*), is obvious.

was that the scholastic method with its bookish discussion of authorities, which had now attained full perfection, controlled absolutely later as well as earlier the prosecution of science, and that the new ideas forced into this form could not unfold freely, — a phenomenon, moreover, which continues far into the philosophy of the Renaissance. For all that, Duns Scotus and Occam gave the chief impetus to the movement in which philosophy, taking its place beside the metaphysics whose interests had hitherto been essentially religious, made itself again a *secular science of concrete, actual fact*, and placed itself with more and more definite consciousness upon the basis of *empiricism*. When Duns Scotus designated the *hœcceitas* or original individual Form, as contingent, this meant that it was to be known, not by logical deduction, but only by actual verification as fact; and when Occam declared the individual being to be the alone truly Real, he was thereby pointing out to "real science" the way to the immediate apprehension of the actual world. But in this point the two Franciscans are under the influence of *Roger Bacon*, who with all his energy had called the science of his time from authorities to things, from opinions to sources, from dialectic to experience, from books to Nature. At his side in this movement stood *Albert*, who supported the same line of thought among the Dominicans, knew how to value the worth of original observation and experiment, and gave brilliant proof in his botanical studies of the independence of his own research. But strongly as Roger Bacon, following Arabian models, urged quantitative determinations in observation, and mathematical training, the time was not yet ripe for natural research. Attempts like those of Alexander Nekkam (about 1200), or those of Nicolaus d'Autricuria, at a later time (about 1350), passed away without effect.

The fruitful development of empiricism during this period was only in the line of *psychology*. Under the influence of the Arabs, especially of Avicenna and of the physiological optics of Alhacen, investigations concerning the psychical life took on a tendency directed more toward establishing and arranging the facts of experience. This had been begun even by Alexander of Hales, by his pupil, Johann of Rochelle, by Vincent of Beauvais, and especially by Albert; and in the system of Alfred the Englishman (Alfred de Sereshel, in the first half of the thirteenth century) we find purely physiological psychology with all its radical consequences. These stirrings of a physiological empiricism would, however, have been repressed by the metaphysical psychology of Thomism, if they had not found their support in the Augustinian influence, which held fast to the *experience which personality has of itself*, as its highest principle. In this attitude *Henry of Ghent*, especially, came forward in opposition to Thomism. He formulated sharply the standpoint of inner experience and gave it decisive value, particularly in the investigation of the states of feeling. Just in this point, in the empirical apprehension of the life of feeling, the theory of which became thus emancipated at the same time from that of the will and that of the intellect, he was opposed by *Roger Bacon*, who, with clear insight and without the admixture of metaphysical points of view, distinctly apprehended the difference in principle between outer and inner experience.

Thus the remarkable result ensued, that purely theoretical science developed in opposition to intellectualistic Thomism, and in connection with the Augustinian doctrine of the self-certainty of personality. This self-knowledge was regarded as the most certain fact of "real science," even as it appeared among the nominalistic Mystics such as Pierre d'Ailly. Hence "real science" in the departing Middle Ages allied itself rather to active human life than to Nature; and the beginnings of a "secular" science of the inter-relations of human society are found not only in the theories of Occam and Marsilius of Padua (cf. p. 328), not only in the rise of a richer, more living, and more "inward" writing of history, but also in an empirical consideration of the social relations, in which a *Nicolas d'Oresme*,[1] who died 1382, broke the path.

6. The divided frame of mind in which the departing Middle Ages found itself, between the original presuppositions of its thought and these beginnings of a new, experientially vigorous research, finds nowhere a more lively expression than in the philosophy of *Nicolaus Cusanus*, which is capable of so many interpretations. Seized in every fibre of his being by the fresh impulse of the time, he nevertheless could not give up the purpose of arranging his new thoughts in the system of the old conception of the world.

This attempt acquires a heightened interest from the conceptions which furnished the forms in which he undertook to arrange his thoughts. The leading motive is to show that the individual, even in his metaphysical separateness, is identical with the most universal, the divine essence. To this end Nicolaus employs for the first time, in a thoroughly systematic way, the related conceptions of *the infinite* and *the finite*. All antiquity had held the perfect to be that which is limited within itself and had regarded only indefinite possibility as infinite. In the Alexandrian philosophy,

[1] Cf. concerning him W. Roscher, *Zeitschr. f. Staatswissenschaft*, 1863, 305 ff.

on the contrary, the highest being was stripped of all finite attributes. In Plotinus the "One" as the all-forming power is provided with an unlimited intensity of Being on account of the infinity of matter in which it discloses itself; and also in Christian thought the power, as well as the will and the knowledge of God, had been thought more and more as boundless. Here the main additional motive was, that the will even in the individual is felt as a restless, never quiet striving, and that this *infinity of inner experience* was exalted to a metaphysical principle. But Nicolaus was the first to give the method of negative theology its positive expression by treating *infinity as the essential characteristic of God* in antithesis to the world. The identity of God with the world, required as well by the mystical view of the world as by the naturalistic, received, therefore, the formulation that in God the same absolute Being is contained infinitely, which in the world presents itself in finite forms.

In this was given the farther *antithesis of unity and plurality.* The infinite is the living and eternal unity of that which in the finite appears as extended plurality. But this plurality — and Cusanus lays special weight on this point — is also that of opposites. What in the finite world appears divided into different elements, and only by this means possible as one thing by the side of another in space, must become adjusted and harmonised in the infinitude of the divine nature. God is the unity of all opposites, the *coincidentia oppositorum.*[1] He is, therefore, the absolute reality in which all possibilities are *eo ipso* realised (*possest*, can-is), while each of the many finite entities is in itself only possible, and is real or actual only through him.[2]

Among the oppositions which are united in God, those between him and the world, — that is, those of the infinite and the finite, and of unity and plurality, — appear as the most important. In consequence of this union the infinite is at the same time finite; in each of his manifestations in phenomena the unitary *deus implicitus* is at the same time the *deus explicitus* poured forth into plurality (cf. p. 290). God is the greatest (*maximum*) and at the same time also

[1] Nicolaus also designates his own doctrine, in contrast with opposing systems, as a *coincidentia oppositorum*, since it aims to do justice to all motives of earlier philosophy. Cf. the passages in Falckenberg, *op. cit.*, pp. 60 ff.

[2] Thomas expressed the same thought as follows: God is the only necessary being, *i.e.* that which exists by virtue of its own nature (a thought which is to be regarded as an embodiment of Anselm's ontological argument, cf.; § 23, 2), while in the case of all creatures, essence (or *quidditas* — whatness) is really separate from existence in such a way that the former is in itself merely possible and that the latter is added to it as realisation. The relation of this doctrine to the fundamental Aristotelian conceptions, *actus* and *potentia*, is obvious.

the smallest (*minimum*). But, on the other hand, in consequence of this union it follows also that this smallest and finite is in its own manner participant in the infinite, and presents within itself, as does the whole, a harmonious unity of the many.

Accordingly, the universe is also infinite, not indeed in the same sense in which God is infinite, but in its own way; that is, it is unlimited in space and time (*interminatum*, or privitively infinite). But a certain infinity belongs likewise to each individual thing, in the sense that in the characteristics of its essence it carries within itself also the characteristics of all other individuals. All is in all: *omnia ubique.* In this way every individual contains within itself the universe, though in a limited form peculiar to this individual alone and differing from all others. *In omnibus partibus relucet totum.* Every individual thing is, if rightly and fully known, a *mirror of the universe*, — a thought which had already been expressed incidentally by the Arabian philosopher Alkendi.

Naturally this is particularly true in the case of man, and in his conception of man as a microcosm Nicolaus attaches himself ingeniously to the terministic doctrine. The particular manner in which other things are contained in man is characterised by the ideas which form in him signs for the outer world. Man mirrors the universe by his "conjectures," by the mode of mental representation peculiar to him (cf. above, p. 343).

Thus the finite also is given with and in the infinite, the individual with and in the universal. At the same time the infinite is necessary in itself; the finite, however (following Duns Scotus), is absolutely contingent, *i.e.* mere fact. There is no proportion between the infinite and the finite; even the endless series of the finite remains incommensurable with the truly infinite. The derivation of the world from God is incomprehensible, and from the knowledge of the finite no path leads to the infinite. That which is real as an individual is empirically known, its relations and the oppositions prevailing in it are apprehended and distinguished by the understanding, but the perception or intuition of the infinite unity, which, exalted above all these opposites, includes them all within itself, is possible only by stripping off all such finite knowledge, by the mystical exaltation of the *docta ignorantia.* Thus the elements which Cusanus desired to unite fall apart again, even in the very process of union. The attempt to complete the mediæval philosophy and make it perfect on all sides leads to its inner disintegration.

PART IV.

THE PHILOSOPHY OF THE RENAISSANCE.

J. E. Erdmann, *Versuch einer wissenschaftlichen Darstellung der Geschichte der neueren Philosophie.* 3 pts., in 6 vols. Riga and Leips. 1834–53.

H. Ulrici, *Geschichte und Kritik der Principien der neueren Philosophie.* 2 vols. Leips. 1845.

Kuno Fischer, *Geschichte der neueren Philosophie.* 3d ed., Munich, 1880 ff. [Eng. tr. of Vol. I., *Descartes and His School*, by J. P. Gordy, N.Y. 1877.]

Ed. Zeller, *Geschichte der deutschen Philosophie seit Leibniz.* 2d ed., Berlin, 1875.

W. Windelband, *Geschichte der neueren Philosophie.* 2 vols. Leips. 1878–80.

R. Falckenberg, *Geschichte der neueren Philosophie.* Leips. 1886. [Eng. tr. by A. C. Armstrong, N.Y. 1893.]

J. Schaller, *Geschichte der Naturphilosophie seit Bacon.* 2 vols. Leips. 1841–44.

J. Baumann, *Die Lehren von Raum, Zeit und Mathematik in der neueren Philosophie.* 2 vols. Berlin, 1868 f.

F. Vorländer, *Geschichte der philosophischen Moral-, Rechts-, und Staatslehre der Engländer und Franzosen.* Marburg, 1855.

F. Jodl, *Geschichte der Ethik in der neueren Philosophie.* 2 vols. Stuttgart, 1882–89.

B. Pünjer, *Geschichte der christlichen Religionsphilosophie seit der Reformation.* 2 vols. Braunschweig, 1880–83. [Eng. tr. of Vol. I., *History of the Christian Philosophy of Religion from the Reformation to Kant*, by W. Hastie, Edin. and N.Y. 1887.]

[B. F. Burt, *History of Modern Philosophy.* 2 vols. Chicago, 1892.]

THE antitheses which make their appearance in mediæval philosophy at the time of its close have a more general significance; they show in theoretical form the self-conscious strengthening of secular civilisation by the side of that of the Church. The undercurrent, which for a thousand years had accompanied the religious main movement of the intellectual life among the Western peoples, swelling here and there to a stronger potency, now actually forced its way to the surface, and in the centuries of transition its slowly wrested victory makes the essential characteristic for the beginning of modern times.

Thus gradually developing and constantly progressing, modern

science freed itself from mediæval views, and the intricate process in which it came into being went hand in hand with the multifold activity with which modern life in its entirety began. For modern life begins everywhere with the vigorous development of details; the tense (*lapidare*) unity into which mediæval life was concentrated, breaks asunder in the progress of time, and primitive vigour bursts the band of common tradition with which history had encircled the mind of the nations. Thus the new epoch announces itself by the awakening of natural life; the time of the world-empire is past in the intellectual realm also, and the wealth and variety of decentralisation takes the place of the unitary concentration in which the Middle Ages had worked. Rome and Paris cease to be the controlling centres of Western civilisation, Latin ceases to be the sole language of the educated world.

In the religious domain this process showed itself first in the fact that Rome lost its sole mastery over the Church life of Christianity. Wittenberg, Geneva, London, and other cities became new centres of religion. The inwardness of faith, which in Mysticism had already risen in revolt against the secularisation of the life of the Church, rose to victorious deliverance, to degenerate again at once into the organisation which was indispensable for it in the outer world. But the process of splitting into various sects, which set in in connection with this external organisation, wakened all the depths of religious feeling, and stirred for the following centuries the passion and fanaticism of confessional oppositions. Just by this means, however, the dominance at the summit of scientific life of a complete and definitive religious belief was broken. What had been begun in the age of the Crusades by the contact of religions was now completed by the controversy between Christian creeds.

It is not a matter of accident that the number of centres of scientific life in addition to Paris was also growing rapidly. While Oxford had already won an importance of its own as a seat of the Franciscan opposition, now we find first Vienna, Heidelberg, Prague, then the numerous academies of Italy, and finally the wealth of new universities of Protestant Germany, developing their independent vital forces. But at the same time, by the invention of the art of printing, literary life gained such an extension and such a widely ramifying movement that, following its inner impulse, it was able to free itself from its rigid connection with the schools, strip off the fetters of learned tradition, and expand unconstrained in the forms shaped out for it by individual personalities. So philosophy in the Renaissance loses its corporate character, and becomes in its best achievements the free deed of individuals; it

seeks its sources in the broad extent of the real world of its own time, and presents itself externally more and more in the garb of modern national languages.

In this way science became involved in a powerful fermentation. The two-thousand-year-old forms of the intellectual life seemed to have been outlived and to have become unusable. A passionate, and at the first, still unclear search for novelty filled all minds, and excited imagination gained the mastery of the movement. But, in connection with this, the whole multiplicity of interests of secular life asserted themselves in philosophy, — the powerful development of political life, the rich increase in outward civilisation, the extension of European civilisation over foreign parts of the world, and not least the world-joy of newly awakened art. And this fresh and living wealth of new content brought with it the result that philosophy became pre-eminently subject to no one of these interests, but rather took them all up into itself, and with the passing of time raised itself above them again to the free work of knowing, to the ideal of knowledge for its own sake.

The *new birth of the purely theoretical spirit* is the true meaning of the scientific "Renaissance," and in this consists also its *kinship of spirit with Greek thought*, which was of decisive importance for its development. The subordination to ends of practical, ethical, and religious life which had prevailed in the whole philosophy of the Hellenistic-Roman period and of the Middle Ages, decreased more and more at the beginning of the modern period, and knowledge of reality appeared again as the absolute end of scientific research. Just as at the beginnings of Greek thought, so now, this theoretical impulse turned its attention essentially to natural science. The modern mind, which had taken up into itself the achievements of later antiquity and of the Middle Ages, appears from the beginning as having attained a stronger self-consciousness, as internalised, and as having penetrated deeper into its own nature, in comparison with the ancient mind. But true as this is, its first independent intellectual activity was the return to a disinterested conception of Nature. The whole philosophy of the Renaissance pressed toward this end, and in this direction it achieved its greatest results.

Feeling such a relationship in its fundamental impulse, the modern spirit in its passionate search for the new seized at first upon the oldest. The knowledge of ancient philosophy brought out by the humanistic movement was eagerly taken up, and the systems of Greek philosophy were revived in violent opposition to the mediæval tradition. But from the point of view of the whole movement of

history this return to antiquity presents itself as but the instinctive preparation for the true work of the modern spirit,[1] which in this Castalian bath attained its youthful vigour. By living itself into the world of Greek ideas it gained the ability to master in thought its own rich outer life, and thus equipped, science turned from the subtility of the inner world with full vigour back to the investigation of Nature, to open there new and wider paths for itself.

The history of the philosophy of the Renaissance is therefore in the main the history of the process in which the natural science mode of regarding the world is gradually worked out from the humanistic renewal of Greek philosophy. It falls, therefore, appropriately into two periods, the *humanistic* period and the *natural science* period. As a boundary line between the two we may perhaps regard the year 1600. The first of these periods contains the supplanting of mediæval tradition by that of genuine Grecian thought, and while extremely rich in interest for the history of civilisation and in literary activity, these two centuries show from a philosophical point of view merely that shifting of earlier thoughts by which preparation is made for the new. The second period includes the beginnings of modern natural research which gradually conquered their independence, and following these the great metaphysical systems of the seventeenth century.

The two periods form a most intimately connected whole. For the inner impelling motive in the philosophical movement of Humanism is the same urgent demand for a radically new knowledge of the world, which ultimately found its fulfilment in the process in which natural science became established and worked out according to principles. But the manner in which this work took place, and the forms of thought in which it became complete, prove to be in all important points dependent upon the stimulus proceeding from the adoption of Greek philosophy. *Modern natural science is the daughter of Humanism.*

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[1] In this respect the course of development of science in the Renaissance ran exactly parallel to that of art. The line which leads from Giotto to Leonardo, Raphael, Michael Angelo, Titian, Dürer, and Rembrandt, passes gradually from the reanimation of classical forms to independent and immediate apprehension of Nature. And Goethe is likewise proof that for us moderns the way to Nature leads through Greece.

CHAPTER I.

THE HUMANISTIC PERIOD.

Jac. Burckhardt, *Die Cultur der Renaissance in Italien.* 4th ed., Leips. 1886.
[*The Civilisation of the Renaissance.* Tr. by S. G. C. Middlemon, Lond. 1878 and 1890.
Mor. Carrière, *Die philosophische Weltanschauung der Reformationszeit.* 2d ed., Leips. 1887.
A. Stöckl, *Geschichte der Philosophie des Mittelalters.* 3d vol., Mainz, 1866.
[J. A. Symonds, *The Renaissance in Italy.* 5 pts. in 7 vols., 1875–86.]

The continuity in the intellectual and spiritual development of European humanity manifests itself nowhere so remarkably as in the Renaissance. At no time perhaps has the want for something completely new, for a total and radical transformation, not only in the intellectual life, but also in the whole state of society, been felt so vigorously and expressed so variously and passionately as then, and no time has experienced so many, so adventurous, and so ambitious attempts at innovation as did this. And yet, if we look closely, and do not allow ourselves to be deceived, either by the grotesque self-consciousness or by the naïve grandiloquence which are the order of the day in this literature, it becomes evident that the whole multiform process goes on within the bounds of ancient and mediæval traditions, and strives in obscure longing toward a goal which is an object rather of premonition than of clear conception. It was not until the seventeenth century that the process of fermentation became complete, and this turbulent mixture clarified.

The essential ferment in this movement was the opposition between the inherited philosophy of the Middle Ages, which was already falling into dissolution, and the original works of Greek thinkers which began to be known in the fifteenth century. A new stream of culture flowed from Byzantium by the way of Florence and Rome, which once more strongly diverted the course of Western thought from its previous direction. In so far the humanistic Renaissance, the so-called re-birth of classical antiquity, appears as a continuation and completion of that powerful process of appropri-

ation presented by the Middle Ages (cf. pp. 264 ff., 310 f.); and if this process consisted in retracing in reverse order the ancient movement of thought, it now reached its end, inasmuch as essentially all of the original ancient Greek literature which is accessible to-day, now became known.

The becoming known of the Greek originals, and the spread of *humanistic culture*, called out a movement of opposition to Scholasticism, at first in Italy, then also in Germany, France, and England. As regards subject-matter, this opposition was directed against the mediæval interpretations of Greek metaphysics; as regards method, against authoritative deduction from conceptions taken as assumptions; as regards form, against the tasteless stiffness of monastic Latin: and with the wonderful restoration of ancient thought, with the fresh imaginative nature of a life-loving race, with the refinement and wit of an artistically cultivated time for its aids this opposition won a swift victory.

But this opposition was divided within itself. There were *Platonists*, who for the most part would better be called Neo-Platonists; there were *Aristotelians*, who, in turn, were again divided into different groups, vigorously combating one another, according to their attachment to one or another of the ancient interpreters. There, too, were the reawakened older doctrines of Greek cosmology, of the Ionians and *Pythagoreans;* the conception of Nature held by *Democritus* and *Epicurus* rose to new vigour, *Scepticism* and the mixed *popular and philosophical Eclecticism* lived again.

While this humanistic movement was either religiously indifferent or even engaged together with open "heathenism" in warfare against Christian dogma, an equally violent controversy between transmitted doctrines was in progress in the life of the Church. The *Catholic* Church intrenched itself against the assault of thought more and more firmly behind the bulwark of *Thomism*, under the leadership of the *Jesuits*. Among the *Protestants*, *Augustine* was the leading mind — a continuation of the antagonism observed in the Middle Ages. But when dogmas were thrown into philosophical form in the Protestant Church, the *Reformed* branch remained nearer to Augustine, while in the *Lutheran* Church, in consequence of the influence of Humanism, a tendency toward the original form of the Aristotelian system prevailed. In addition to these tendencies, however, German *Mysticism*, with all the widely ramified traditions which united in it (cf. § 26, 5), maintained itself in the religious need of the people, to become fruitful and efficient for the philosophy of the future, more vigorous in its life than the Church erudition that sought in vain to stifle it.

The new which was being prepared in these various conflicts was the consummation of that movement which had begun with Duns Scotus at the culmination of mediæval philosophy, viz. the separation of philosophy from theology. The more philosophy established itself by the side of theology as an independent secular science, the more its peculiar task was held to be the *knowledge of Nature*. In this result all lines of the philosophy of the Renaissance meet. Philosophy shall be natural science, — this is the watchword of the time.

The carrying out of this purpose, nevertheless, necessarily moved at first within the traditional modes of thought; these, however, had their common element in the *anthropocentric* character of their *Weltanschauung*, which had been the consequence of the development of philosophy as a theory and art of life. For this reason the natural philosophy of the Renaissance in all its lines takes for its starting-point, in constructing its problems, *man's position in the cosmos;* and the revolution in ideas which took place in this aspect, under the influence of the changed conditions of civilisation, became of decisive importance for shaping anew the whole theory of the world. At this point metaphysical imagination and fancy was most deeply stirred, and from this point of view it produced its cosmical poetry, prototypal for the future, in the doctrines of *Giordano Bruno* and *Jacob Boehme*.

The following treat in general the *revival of ancient philosophy:* L. Heeren, *Geschichte der Studien der classischen Litteratur* (Göttingen, 1797–1802); G. Vogt, *Die Wiederbelebung des classischen Alterthums* (Berlin, 1880 f.).

The main seat of **Platonism** was the *Academy of Florence*, which was founded by **Cosmo de' Medici**, and brilliantly maintained by his successors. The impulse for this had been given by Georgius Gemistus **Pletho** (1355–1450), the author of numerous commentaries and compendiums, and of a treatise in Greek on the difference between the Platonic and the Aristotelian doctrine. Cf. Fr. Schultze, *G. G. P.* (Jena, 1874). — **Bessarion** (born 1403 in Trebizond, died as Cardinal of the Roman church in Ravenna, 1472) was his influential pupil. Bessarion's main treatise, *Adversus Calumniatorem Platonis*, appeared at Rome, 1469. Complete Works in Migne's coll. (Paris, 1866). — The most important members of the Platonic circle were **Marsilio Ficino** of Florence (1433–1499), the translator of the works of Plato and Plotinus, and author of a *Theologia Platonica* (Florence, 1482), and at a later time, **Francesco Patrizzi** (1529–1597), who brought the natural philosophy of this movement to its completest expression in his *Nova de Universis Philosophia* (Ferrara, 1591).

A similar instance of Neo-Platonism alloyed with Neo-Pythagorean and ancient Pythagorean motives is afforded by **John Pico of Mirandola** (1463–94).

The study of **Aristotle** in the original sources was promoted in Italy by **Georgius of Trebizond** (1396–1484; *Comparatio Platonis et Aristotelis*, Venice, 1523) and **Theodorus Gaza** (died 1478), in Holland and Germany by **Rudolf Agricola** (1442–1485), and in France by **Jacques Lefèvre** (Faber Stapulensis, 1455–1537).

The Aristotelians of the Renaissance (aside from the churchly-scholastic line) divided into the two parties of the **Averroists** and the **Alexandrists**. The University of Padua, as the chief seat of Averroism, was also the place of the liveliest controversies between the two.

As representatives of **Averroism** we mention **Nicoletto Vernias** (died 1499), especially **Alexander Achillini** of Bologna (died 1518; works, Venice, 1545); further, **Augostino Nifo** (1473–1546; main treatise, *De Intellectu et Dæmonibus; Opuscula*, Paris, 1654), and the Neapolitan **Zimara** (died 1532).

To the **Alexandrists** belong **Ermolao Barbaro** of Venice (1454–1493; *Compendium Scientiæ Naturalis ex Aristotele*, Venice, 1547), and the most important Aristotelian of the Renaissance, **Pietro Pomponazzi** (born 1462 in Mantua, died 1524 in Bologna. His most important writings are *De Immortalitate Animæ* with the *Defensorium* against Niphus, *De fato libero arbitrio prædestinatione providentia dei libri quinque;* cf. L. Ferri, *La Psicologia di P. P.*, Rome, 1877), and his pupils, **Gasparo Contarini** (died 1542), **Simon Porta** (died 1555), and Julius Cæsar **Scaliger** (1484–1558).

Among the later Aristotelians, **Jacopo Zabarella** (1532–1589), **Andreas Cæsalpinus** (1519–1603), **Cesare Cremonini** (1552–1631) and others seem rather to have adjusted the above oppositions.

Of the renewals of other Greek philosophers, the following are especially to be mentioned: —

Jœst Lips (1547–1606), *Manuductio ad Stoicam Philosophiam* (Antwerp, 1604), and other writings; and **Caspar Schoppe**, *Elementa Stoicæ Philosophiæ Moralis* (Mainz, 1606).

Dav. **Sennert** (1572–1637), *Physica* (Wittenberg, 1618); Sebastian **Basso** (*Philosophia Naturalis adversus Aristotelem*, Geneva, 1621); and Johannes **Magnenus**, *Democritus Reviviscens* (Pavia, 1646).

Claude de Bérigard as renewer of the Ionic natural philosophy in his *Cerculi Pisani* (Udine, 1643 ff.).

Pierre **Gassendi** (1592–1655), *De Vita Moribus et Doctrina Epicuri* (Leyden, 1647) [works, Lyons, 1658], and lastly

Emanuel **Maignanus** (1601–1671), whose *Cursus Philosophicus* (Toulouse, 1652) defends Empedoclean doctrines.

The following wrote in the spirit of the ancient **Scepticism**: **Michel de Montaigne** (1533–1592; *Essais*, Bordeaux, 1580, new editions, Paris, 1865, and Bordeaux, 1870) [Eng. tr. by Cotton, ed. by Hazlitt, Lond. 1872; also by Florio, ed. by Morley, Lond. 1887], **François Sanchez** (1562–1632, a Portuguese who taught in Toulouse, author of the *Tractatus de multum nobili et prima universali scientia quod nihil scitur*, Lyons, 1581; cf. L. Gerkrath, *F. S.*, Vienna, 1860), **Pierre Charron** (1541–1603; *De la Sagesse*, Bordeaux, 1601); later François de la Motte le **Vayer** (1586–1672, *Cinq Dialogues*, Mons, 1673), Samuel **Sorbière** (1615–1670, translator of Sextus Empiricus), and Simon **Foucher** (1644–96, author of a history of the Academic Sceptics, Paris, 1690).

The sharpest polemic against Scholasticism proceeded from those Humanists who set against it the Roman **eclectic popular philosophy** of sound common sense in an attractive form, and as far as possible in *rhetorical* garb. Agricola is to be mentioned here also, with his treatise *De Inventione Dialectica* (1480). Before him was **Laurentius Valla** (1408–1457; *Dialecticæ Disputationes contra Aristoteleos*, Ven. 1499), **Ludovico Vives** (born in Valencia, 1492, died in Brügge, 1546; *De Disciplinis*, Brügge, 1531, works, Basel, 1555; cf. A. Lange in Schmidt's *Encyclopädie der Pädagogik*, Vol. IX.), **Marius Nizolius** (1498–1576; *De veris principiis et vera ratione philosophandi*, Parma, 1553), finally **Pierre de la Ramée** (Petrus Ramus, 1515–1572, *Institutiones Dialecticæ*, Paris, 1543; cf. Ch. Waddington, Paris, 1849 and 1855).

The tradition of **Thomistic Scholasticism** maintained itself most strongly at the *Spanish* universities. Among its supporters the most prominent was Francis **Suarez** of Granada (1548–1617; *Disputationes Metaphysicæ*, 1605, works, 26 vols., Paris, 1856–66; cf. K. Werner, *S. und die Scholastik der letzten Jahrhunderte*, Regensburg, 1861); the collective work of the Jesuits of Coimbra, the so-called *Collegium Conembricense*, is also to be mentioned.

Protestantism stood from the beginning in closer relation to the humanistic movement. In Germany especially the two went frequently hand in hand; cf. K. Hagen, *Deutschlands litterarische und religiöse Verhältnisse im Reformationszeitalter*, 3 vols., Frankfort, 1868.

At the Protestant universities Aristotelianism was introduced principally

by **Philip Melancthon**. In the edition of his works by Bretschneider and Bindseil the philosophical works form Vols. 13. and 16. Of chief importance among them are the text-books on logic (dialectic) and ethics. Cf. A. Richter, *M.'s Verdienste um den philosophischen Unterricht* (Leips. 1870); K. Hartfelder, *M. als Præceptor Germaniæ* (Berlin, 1889).

Luther himself stood much nearer the position of Augustinianism (cf. Ch. Weisse, *Die Christologie Luther's*, Leips. 1852). This was still more the case with **Calvin**, while **Zwingli** was friendlier inclined toward contemporaneous philosophy, especially the Italian Neo-Platonism. The scientific importance of all three great reformers lies, however, so exclusively in the theological field that they are to be mentioned here only as essential factors of the general intellectual movement in the sixteenth century.

Protestant Aristotelianism found its opponents in **Nicolaus Taurellus** (1547–1606, Professor in Basel and Altorf; *Philosophiæ Triumphus*, Basel, 1573; *Alpes Cæsæ*, Frankfort, 1597; cf. F. X. Schmidt-Schwarzenberg, *N. T., Der erste deutsche Philosoph*, Erlangen, 1864), further in **Socinianism** founded by **Lelio Sozzini** of Sienna (1525–1562) and his nephew **Fausto** (1539–1604; cf. A. Fock, *Der Socinianismus*, Kiel, 1847, and the article *S.* by Herzog in his *Theol. Enc.*, 2d ed., XIV. 377 ff), and especially in the popular movement of *Mysticism*. Among the representatives of this movement are prominent **Andreas Osiander** (1498–1552), **Caspar Schwenckfeld** (1490–1561), **Sebastian Franck** (1500–1545; cf. K. Hagen, *op. cit.*, III. chap. 5) and especially **Valentine Weigel** (1553–1588; *Libellus de Vita Beata*, 1606, *Der guldne Griff*, 1613, *Vom Ort der Welt*, 1613, *Dialogus de Christianismo*, 1614, Γνῶθι σαυτόν, 1615; cf. J. O. Opel, *V. W.*, Leips. 1864).

The tendency toward **natural philosophy** in attachment to Nic. Cusanus appears more strongly in Charles **Bouillé** (Bovillus, 1470–1553; *De Intellectu* and *De Sensibus; De Sapientia*. Cf. J. Dippel, *Versuch einer system. Darstellung der Philos. des C. B.*, Würzburg, 1862), and **Girolamo Cardano** (1501–1576; *De Vita Propria*, *De Varietate Rerum*, *De Subtilitate;* works, Lyons, 1663). Cf. on this and the following, Rixner und Siber, *Leben und Lehrmeinungen berühmter Physiker im 16. und 17. Jahrhundert*, 7 Hefte, Sulzbach, 1819 ff.).

The most brilliant among the Italian natural philosophers is **Giordano Bruno** of Nola, in Campania. Born in 1548, and reared in Naples, he met so much suspicion in the Dominican Order, into which he had entered, that he fled, and from that time on, led an unsettled life. He went by way of Rome and upper Italy to Genoa, Lyons, Toulouse, held lectures in Paris and Oxford, then in Wittenberg and Helmstädt, visited also Marburg, Prague, Frankfort, and Zurich, and finally, in Venice, met the fate of coming into the hands of the Inquisition by treachery. He was delivered to Rome, and there, after imprisonment for several years, was burned, 1600, on account of his steadfast refusal to retract. His Latin works (3 vols., Naples, 1880–91) concern partly the Lullian art (esp. *De Imaginum Signorum et Idearum Compositione*), and in part are didactic poems or metaphysical treatises (*De Monade Numero et Figura; De Triplici Minimo*): the Italian writings (ed. by A. Wagner, Leips. 1829, new ed. by P. de Lagarde, 2 vols., Göttingen, 1888) are partly satirical inventions (*Il Candelajo, La Cena delle Ceneri, Spaccio della Bestia Trionfante*, German by Kuhlenbeck, Leips. 1890, *Cabala del Cavallo Pegaseo*), and on the other hand, the most complete expositions of his doctrines: *Dialoghi della Causa Principio ed Uno*, German by Lasson (Berlin, 1872); *Degli Eroici Furori; Dell' Infinito, Universo e Dei Mondi*. Cf. Bartholmèss, *G. B.* (Paris, 1816 f.); Dom. Berti, *Vita di G. B.* (Turin, 1867), and *Documenti Intorno a G. B.* (Turin, 1880); Chr. Sigwart in *Kleine Schriften*, I. (Freiburg, 1889); H. Brunnhofer, *G. B.'s Weltanschauung und Verhängniss* (Leips. 1882). [*G. Bruno*, by I. Frith, Lond., Trübner; T. Whitaker in *Mind*, Vol. IX.].

Another tendency is represented by **Bernardino Telesio** (1508–1588; *De rerum natura juxta propria principia*, Rome, 1565 and Naples, 1586. On him see F. Florentino, Florence, 1872 and 1874; L. Ferri, Turin, 1873), and his more important successor, **Tommaso Campanella**. Born 1568, in Stilo of Calabria, he early became a Dominican, was rescued and brought to France after many persecutions and an imprisonment of several years. There he became intimate with the Cartesian circle, and died in Paris, 1639, before the completion of the full edition of his writings, which was to be called *Instauratio Scientiarum*. A new edition, with biographical introduction by d'Ancona has appeared (Turin, 1854). Of his very numerous writings may be mentioned: *Prodromus Philosophiæ Instaurandæ*, 1617; *Realis Philosophiæ Partes Quatuor* (with the appendix, *Civitas Solis*), 1623; *De Monarchia Hispanica*, 1625; *Philosophiæ Rationalis Partes Quinque*, 1638; *Universalis Philosophiæ seu metaphysicarum rerum juxta propria principia partes tres*, 1638. Cf. Baldachini, *Vita e Filosofia di T. C.* (Naples, 1840 and 1843); Dom. Berti, *Nuovi Documenti di T. C.* (Rome, 1881).

Theosophical-magical doctrines are found with **John Reuchlin** (1455–1522; *De Verbo Mirifico*, *De Arte Cabalistica*), **Agrippa of Nettesheim** (1487–1535; *De Occulta Philosophia; De Incertitudine et Vanitate Scientiarum*), **Francesco Zorzi** (1460–1540, *De Harmonia Mundi*, Paris, 1549).

A more important and independent thinker is Theophrastus Bombastus **Paracelsus** of Höhenheim (born 1493 at Einsiedeln, he passed an adventurous life, was Professor of Chemistry in Basel, and died in Salzburg, 1541). Among his works (ed. by Huser, Strassburg, 1616–18), the most important are the *Opus Paramirum*, *Die grosse Wundarznei*, and *Die Natura Rerum*. Cf. R. Eucken, *Beiträge zur Gesch. der neueren Philos.*, Heidelberg, 1886. Of his numerous pupils the most important are **Johann Baptist van Helmont** (1577–1644; German ed. of his works, 1683), and his son, Franz Mercurius, also **Robert Fludd** (1574–1637, *Philosophia Mosaica*, Guda, 1638), and others.

The most noteworthy deposit of these movements is formed by the doctrine of **Jacob Boehme**. He was born, 1575, near Görlitz, absorbed all kinds of thoughts in his wanderings, and quietly elaborated them. Settled as a shoemaker at Görlitz, he came forward, 1610, with his main treatise *Aurora*, which at a later time after he had been temporarily forced to keep silence, was followed by many others, among them especially *Vierzig Fragen von der Seele* (1620), *Mysterium Magnum* (1623), *Von der Gnadenwahl* (1623). He died 1624. Coll. works ed. by Schiebler, Leips. 1862. Cf. H. A. Fechner, *J. B., sein Leben und seine Schriften*, Görlitz, 1853; A. Peip, *J. B. der deutsche Philosoph*, Leips. 1860.

§ 28. The Struggle between the Traditions.

The immediate attachment to the Greek philosophy which became prevalent in the Renaissance, was not entirely without its precedent in the Middle Ages, and men like Bernard of Chartres and William of Conches (cf. p. 302) were prototypes of the union of an increasing interest for knowledge of Nature with the humanistic movement. It is noteworthy, and characteristic of the changing fortune of transmitted doctrines, that now, as then, the union between Humanism and natural philosophy attaches itself to Plato, and stands in opposition to Aristotle.

1. In fact, the revival of ancient literature showed itself at first in the form of a strengthening of *Platonism*. The humanistic movement had been flowing on since the days of Dante, Petrarch, and Boccaccio, and arose from the interest in Roman secular literature which was closely connected with the awakening of the Italian national consciousness; but this current could not become a victorious stream until it received the help of the impulse from without which proceeded from the removal of the Byzantine scholars to Italy. Among these the Aristotelians were of like number and importance with the Platonists, but the latter brought that which was

relatively less known, and therefore more impressive. In addition to this, Aristotle was regarded in the West as the philosopher who was in agreement with the Church doctrine, and thus the opposition, which longed for something new, hoped much more from Plato; and still further there was the æsthetic charm that comes from the writings of the great Athenian, and for which no time was more keenly susceptible than this. Thus Italy first became intoxicated with an enthusiasm for Plato that matched that of departing antiquity. As if to connect itself immediately with this latter period, the Academy was again to live in Florence, and under the protection of the Medicis a rich scientific activity actually developed here, in which a reverence was paid to the leaders like Gemistus Pletho and Bessarion which was not less than that once given to the Scholarchs of *Neo-Platonism.*

But the relationship with this latter system of thought went deeper; the Byzantine tradition, in which the Platonic doctrine was received, was the Neo-Platonic tradition. What at that time was taught in Florence as Platonism was in truth Neo-Platonism. Marsilio *Ficino* translated Plotinus as well as Plato, and his "Platonic Theology" was not much different from that of Proclus. So, too, the fantastic natural philosophy of Patrizzi is in its conceptional basis nothing but the Neo-Platonic system of emanation; but it is significant that in this case the dualistic elements of Neo-Platonism are entirely stripped off, and the monistic tendency brought out more purely and fully. On this account the Neo-Platonist of the Renaissance places in the foreground the *beauty of the universe;* on this account even the deity, the Unomnia (One-all) is for him a sublime world-unity which includes plurality harmoniously within itself; on this account he is able to glorify even the infinity of the universe in a way to fascinate the fancy.

2. The pantheistic tendency, which is so unmistakable in this, was enough to make this Platonism an object of suspicion to the Church, and thus to give its Peripatetic opponents a welcome instrument with which to combat it; and an instrument that was used not only by the scholastic Aristotelians, but also by the others. On the other hand, to be sure, the Platonists could reproach the new humanistic Aristotelianism for its naturalistic tendencies, and praise their own tendency toward the super-sensuous, as allied to Christianity. Thus the two great traditions of Greek philosophy fought their battle over again, while each charged the other with its unchristian character.[1] In this spirit Pletho, in his *νόμων συγ-*

[1] Quite the same relation is repeated in the case of the different groups of Aristotelians, each of which wished to be regarded orthodox, — even at the price of the "twofold truth." In this the Averroists, especially, were ready, and so it came about that one of them, Nifo, had himself entrusted by the Pope with the refutation of Pomponazzi's doctrine of immortality. The latter, indeed, also covered himself with the same shield.

γραφή, conducted his polemic against the Aristotelians, and incurred thereby condemnation from the Patriarch Gennadios in Constantinople; in this spirit George of Trebizond attacked the Academy, and in the same spirit, though milder, Bessarion answered him. Thus the animosity between the two schools, and the literary stir it produced in antiquity, were transferred to the Renaissance, and it was in vain that men like Leonicus Thomæus of Padua (died 1533) admonished the combatants to understand the deeper unity that subsists between the two heroes of philosophy.

3. Meanwhile there was absolutely no unity among the *Aristotelians* themselves. The Grecian interpreters of the Stagirite and their adherents looked down with as much contempt upon the Averroists as upon the Thomists. Both passed for them in like manner as barbarians; they themselves, however, were for the most part prepossessed in favour of that interpretation of the Master which was closely allied to Stratonism, and which was best represented among the commentators by *Alexander of Aphrodisias.* Here, too, one transmitted theory stood in opposition to the others. The conflict was especially severe in Padua, where the *Averroists* saw their fortress threatened by the successful activity of *Pomponatius* as a teacher. The main point of controversy was the problem of immortality. Neither party admitted a full, individual immortality, but Averroism believed that it possessed at least a compensation for this in the unity of the intellect, while the *Alexandrists* attached even the rational part of the soul to its animal conditions, and regarded it as perishable with them. Connected with this were the discussions on theodicy, providence, destiny and freedom of the will, miracles and signs, in which Pomponazzi frequently inclined strongly to the Stoic doctrine.

In the course of time this dependence upon commentators and their oppositions was also stripped off, and the way prepared for a pure, immediate apprehension of Aristotle. This succeeded best with Cæsalpinus, who avowed his complete allegiance to Aristotle. An equally correct understanding of the Peripatetic system was gained by the German Humanists from a philological standpoint, but following Melancthon's precedent they adopted this in their own doctrine only in so far as it agreed with Protestant dogma.

4. In all these cases the adoption of Greek philosophy led to an opposition to Scholasticism as regards the real content or matter of

the opposing systems. Another line of Humanism, which was more in sympathy with Roman literature, inclined to a predominantly *formal* opposition, of which John of Salisbury may be regarded as a mediæval forerunner. The taste of the Humanists rebelled against the barbarous outward form of mediæval literature. Accustomed to the polished refinement and transparent clearness of the ancient writers, they were not able to value rightly the kernel so full of character, which lay within the rough shell of the scholastic terminology. The minds of the Renaissance, with their essentially æsthetic disposition, had no longer any feeling for the abstract nature of that science of abstract conceptions. Thus they opened the battle in all directions, with the weapons of jest and of earnest; *instead of conceptions they demanded things;* instead of artificially constructed words, the language of the cultivated world; instead of subtle proofs and distinctions, a tasteful exposition that should speak to the imagination and heart of the living man.

Laurentius Valla was the first to make this cry resound. *Agricola* took it up in lively controversy, and Erasmus also joined in. The models of these men were Cicero and Quintilian, and when at their hand the method of philosophy was to be changed, the scholastic dialectic was dislodged and in its place were introduced the principles of rhetoric and grammar. The true dialectic is the science of discourse.[1] The "Aristotelian" logic therefore becomes the object of most violent polemic; the doctrine of the syllogism is to be simplified and driven from its commanding situation. The syllogism is incapable of yielding anything new; it is an unfruitful form of thought. This was later emphasised by Bruno, Bacon, and Descartes, as strongly as by these Humanists.

But the more closely the dominance of the syllogism was connected with dialectical "Realism," the more nominalistic and terministic motives connected themselves with the humanistic opposition. This shows itself in the cases of *Vives* and *Nizolius*. They are zealous against the reign of universal conceptions; in this, according to Vives, lies the true reason for the mediæval corruption of the sciences. Universals, Nizolius teaches,[2] are collective names which arise by "comprehension," not by abstraction; individual things with their qualities constitute reality. It concerns us to apprehend these, and the secondary activity of the understanding which compares, is to be carried out as simply and unartificially as possible. Hence all metaphysical assumptions, which have made so great a

[1] Petr. Ramus, *Dialect. Instit.*, at the beginning.
[2] Mar. Nizolius, *De Ver. Princ.*, I. 4–7; III. 7.

difficulty in previous dialectic, must be banished from logic. Empiricism can use only a *purely formal logic.*

The "natural" dialectic, however, was sought in rhetoric and grammar, for, *Ramus* held, it should teach us only to follow in our voluntary thinking the same laws which, according to the nature of reason, control also our involuntary thinking, and present themselves spontaneously in the correct expression of this involuntary process of thought. In all reflection, however, the essential thing is to discover the point of view that is determinative for the question, and then to apply this correctly to the subject. Accordingly Ramus, following a remark of Vives,[1] divides his new dialectic into the doctrines of *Inventio* and *Judicium*. The first part is a kind of general logic, which yet cannot avoid introducing again in the form of the "*loci*" the categories, such as Causality, Inherence, Genus, etc., and thus, enumerating them without system, falls into the naïve metaphysics of the ordinary idea of the world. The doctrine of *judgment* is developed by Ramus in three stages. The first is the simple decision of the question by subsuming the object under the discovered point of view; here the doctrine of the syllogism has its place, which is accordingly much smaller than formerly. In the second place the judgment is to unite cognitions that belong together to a systematic whole, by definition and division; its highest task, however, it fulfils only when it brings all knowledge into relation to God, and finds it grounded in him. Thus natural dialectic culminates in theosophy.[2]

Slight as was the depth and real originality of this rhetorical system, it yet excited great respect in a time that was eager for the new. In Germany, especially, Ramists and anti-Ramists engaged in vehement controversy. Among the friends of the system, *Johannes Sturm* is especially worthy of note, a typical pedagogue of Humanism, who set the task for education of bringing the scholar to the point where he knows things, and how to judge concerning them from a correct point of view, and to speak in cultivated manner.

5. A characteristic feature of this movement is its cool relation toward metaphysics; this very fact proves its derivation from the Roman popular philosophy. Cicero, to whom it especially attached itself, was particularly influential by virtue of his Academic Scepticism or Probabilism. Surfeit of abstract discussions alienated a considerable part of the Humanists from the great systems of

[1] Lud. Vives, *De Causis Corr. Art.* (first part of *De Disciplinis*), III. 5.
[2] Cf. E. Laas, *Die Pädagogik des J. St. kritisch und historisch beleuchtet* (Berlin, 1872).

antiquity also. The extension of religious unbelief or indifferentism was an additional motive to make *scepticism* appear in many circles as the right temper for the cultivated man. The charm of outer life, the glitter of refined civilisation, did the rest to bring about indifference toward philosophical subtleties.

This scepticism of the man of the world was brought to its complete expression by *Montaigne*. With the easy grace and fineness of expression of a great writer, he thus gave French literature a fundamental tone which has remained its essential character. But this movement also runs in the ancient track. Whatever of philosophical thought is found in the "Essays" arises from Pyrrhonism. Hereby a thread of tradition which had for a long time been let fall is again taken up. The relativity of theoretical opinions and ethical theories, the illusions of the senses, the cleft between subject and object, the constant change in which both are involved, the dependence of all the work of the intellect upon such doubtful data, — all these arguments of ancient Scepticism meet us here, not in systematic form, but incidentally in connection with the discussion of individual questions, and thus in a much more impressive manner.

Pyrrhonism was at the same time revived in a much more scholastic form by *Sanchez*, and yet in a lively manner, and not without hope that a sure insight might yet at some time be allowed to man. He concludes individual chapters, and the whole work, with "*Nescis? At ego nescio. Quid?*" To this great "Quid?" he has indeed given no answer, and guidance to a true knowledge was a debt that he did not discharge. But he left no doubt as to the direction in which he sought it. It was the same which Montaigne also pointed out: science must free itself from the word-lumber of the wisdom of the schools, and put its questions directly to things themselves. Thus Sanchez demands a new knowledge, and has, indeed, a dim foreboding of it, but where and how it is to be sought he is not prepared to say. In many passages it seems as though he would proceed to empirical investigation of Nature, but just here he cannot get beyond the sceptical doctrine of outer perception, and if he recognises the greater certainty of inner experience, this inner experience in turn loses its value because of its indefiniteness.

Charron comes forward with firmer step, since he keeps before him the practical end of wisdom. Like his two predecessors he doubts the possibility of certain theoretical knowledge; in this respect all three set up the authority of the Church and of faith: a metaphysics can be revealed only; the human power of knowledge is not sufficient for it. But, proceeds Charron, the human

knowing faculty is all the more sufficient for that *self-knowledge* which is requisite for the moral life. To this self-knowledge belongs, above all, the humility of the sceptic who has no confidence that he knows anything truly, and in this humility is rooted the freedom of spirit with which he everywhere withholds his theoretical judgment. On the other hand, the ethical command of righteousness and of the fulfilment of duty is known without a doubt in this self-knowledge.

This diversion toward the practical realm, as might be expected from the general tendency of the time, was not permanent. The later Sceptics turned the theoretical side of the Pyrrhonic tradition again to the front, and the effect which resulted from this tendency for the general tone of the time applied ultimately, for the most part, to the certainty of dogmatic convictions.

6. The *Church doctrine* could no longer master these masses of thought which now made their way so powerfully into the life of this period, as it had succeeded in doing with the Arabian-Aristotelian invasion: this new world of ideas was too manifold and too full of antitheses, and, on the other hand, the assimilative power of the Church dogma was too far exhausted. The Roman Church limited itself, therefore, to defending its spiritual and external power with all the means at its disposal, and was only concerned to fortify its own tradition and make it as sure as possible within itself. In this changed form the Jesuits now performed the same task that in the thirteenth century had fallen to the mendicant orders. With their help the definitive and complete form of Church dogma was fixed against all innovations at the Council of Trent (1563), and *Thomism* declared to be authoritative in essentials for philosophical doctrine. Thereafter there could be no more any question as to changes of principle, but only as to more skilful presentations and occasional insertions. In this way the Church excluded itself from the fresh movement of the time, and the philosophy dependent upon it fell into unavoidable stagnation for the next following centuries. Even the short after-bloom which Scholasticism experienced about 1600 in the universities of the Iberian peninsula bore no real fruit. *Suarez* was an important writer, clear, acute, accurate, and with a great capacity for a luminous disposition of his thoughts; he surpasses also, to a considerable degree, most of the older Scholastics in the form of his expression; but in the content of his doctrine he is bound by tradition, and a like constraint will be understood as a matter of course in the case of the collective work of the Jesuits of Coimbra.

Over against this form of religious tradition, another now made

its appearance in the *Protestant churches.* Here, too, the opposition claimed the older tradition, and put aside its mediæval modifications and developments. The Reformation desired to renew original Christianity as against Catholicism. It drew the circle of the canonical books narrower again; putting aside the Vulgate, it recognised only the Greek text as authoritative; it returned to the Nicene creed. The controversy over dogmas in the sixteenth century — theoretically considered — hinges upon the question, which tradition of Christianity shall be the binding one.

But the theological antithesis drew the philosophical antithesis after it, and here again a relation was repeated which had appeared at many points during the Middle Ages. In the doctrine of *Augustine*, the religious need found a deeper, richer satisfaction, and a more immediate expression than in the conceptions worked out by the Scholastics. Earnestness in the consciousness of sin, passionate longing for redemption, faith that was internal in its source and its nature, — all these were traits of Augustine's nature which repeated themselves in *Luther* and *Calvin*. But it is only in the doctrine of Calvin that the permanent influence of the great Church Father is shown; and yet just by this means an *antagonism between Thomism and Augustinianism* was once more created, which evinced itself as especially important in the French literature of the seventeenth century (cf. § 30 f.). For the Catholics under the guidance of Jesuitism, Thomas was the ruling authority; for the Reformed Churches, and for the freer tendencies in Catholicism itself, Augustine held the same position.

German Protestantism followed other courses. In the development of the Lutheran dogma, Luther's genius was aided by the co-operation of *Melancthon* and thus of *Humanism*. Little as the theoretico-æsthetical and religiously indifferent nature of the Humanists[1] might accord with the mighty power of Luther's soul with its profound faith, he was, nevertheless, obliged, when he would give his work scientific form, to accommodate himself to the necessity of borrowing from philosophy the conceptions with which to lay his foundations. Here, however, Melancthon's harmonising nature came in, and while Luther had passionately rejected scholastic Aristotelianism, his learned associate introduced *humanistic Aristotelianism* as the *philosophy of Protestantism*, here, too, opposing the older tradition to the remodelled tradition. This original Aristotelianism had to be corrected in many passages, to be sure, by

[1] On the relation of the Reformation and Humanism cf. Th. Ziegler, *Gesch. der Ethik*, II. 414 ff.

means of the Scriptures, and the combination of doctrines could not reach such an organic union as had been attained by the slow ripening of Thomism in the Middle Ages; but the Peripatetic system was in this instance treated rather as but a supplement to theology in the department of profane science, and for this end, Melancthon knew how to sift, arrange, and set forth the material in his text-books with so great skill that it became the basis for a doctrine which was in the main one in its nature, and as such was taught at the Protestant universities for two centuries.

7. But in Protestantism there were still other traditional forces active. Luther's work of liberation owed its origin and its success not least to *Mysticism*, — not indeed to that sublime, spiritualised form of viewing the world to which the genius of Master Eckhart had given expression, but to the movement of deepest piety which, as "practical Mysticism," had spread from the Rhine in the "League of the Friends of God," and in the "Brothers of the Common Life." For this Mysticism, the disposition, purity of heart, and the imitation of Christ were the sole content of religion; assent to dogmas, the external works of holiness, the whole worldly organisation of Church life, appeared to be matters of indifference and even hindrances: the believing soul demands only the freedom of its own religious life, — a demand that transcends all these outward works. This was the inner source of the Reformation. Luther himself had not only searched Augustine, he had also edited the "*German Theology*": and his word let loose the storm of this religious longing, with which, in the conflict against Rome, an impulse of national independence was also mingled.

But when the Protestant state Church became again consolidated in the fixed forms of a theoretical system of doctrine, and clung to this the more anxiously in proportion as it was obliged to struggle for its existence in the strife of Confessions, then the supra-confessional impulse of Mysticism became undeceived, as did also the national consciousness. The theological fixation of the thought of the Reformation appeared as its ruin, and as Luther had once waged his warfare against the "sophistry" of the Scholastics, so now a movement of Mysticism that was quietly stirring farther and wider among the people, directed itself against his own creation. In men like *Osiander* and *Schwenckfeld* he had to contend against parts of his own nature and its development. But in this movement it became evident that the doctrines of mediæval Mysticism had been quietly maintained and continued in legendary form amid all kinds of fantastic ideas and obscure imagery. The Mysticism which comes to light in the teachings of men like *Sebastian Franck*, or in the

secretly circulated tracts of *Valentine Weigel*, has its support in the idealism of Eckhart, which transformed all the outer into the inner, all the historical into the eternal, and saw in the process of Nature and history but the symbol of the spiritual and divine. This constituted, though frequently in strange form, the deeper ground of the battle which the Mystics of the sixteenth century waged in Germany against the "letter" of theology.

8. Look where we will in the intellectual movement of the fifteenth and sixteenth centuries, we see everywhere tradition arrayed against tradition, and every controversy is a battle between transmitted doctrines. The spirit of the Western peoples has now taken up into itself the entire material which the past offers for its culture, and in the feverish excitement into which it is finally put by direct contact with the highest achievements of ancient science, it struggles upward to the attainment of complete independence. It feels sufficiently hardened to execute work of its own, and overflowing with its wealth of thought, it seeks new tasks. One feels the impulsive blood of youth pulsate in its literature, as though something unheard of, something which had never before been, must now come into being. The men of the Renaissance announce to us nothing less than the approach of a total renovation of science and of the state of humanity. The warfare between the transmitted doctrines leads to a surfeit of the past; learned research into the old wisdom ends with throwing aside all book-rubbish, and full of the youthful joy of dawning, growing life, the mind goes forth into the cosmic life of Nature ever young.

The classical portrayal of this temper of the Renaissance is the first monologue in Goethe's *Faust*.

§ 29. Macrocosm and Microcosm.

By Scotism and Terminism the faith metaphysics of the Middle Ages had become disintegrated and split in twain: everything supersensuous had been given to dogma, and as the object of philosophy there remained the world of experience. But before thought had as yet had time to become clear as to the methods and special problems of this secular knowledge, Humanism, and with it above all, the Platonic *Weltanschauung*, burst in. No wonder that the solution of the problem, which was itself at first seen but dimly, was first sought in connection with this theory: and this doctrine must have been the more welcome, especially in its Neo-Platonic form, as it showed the world of the supersensuous presageful in the background, but made the particulars of the world of sense stand out

distinctly in purposefully defined outlines. The supersensuous itself, and all therein that was connected with man's religious life, might be cheerfully set off to theology; philosophy could dedicate itself to the task of being natural science, with all the calmer conscience in proportion as it followed the Neo-Platonic precedent of apprehending Nature as a product of spirit, and thus believed that in the conception of the deity it retained a point of unity for the diverging branches of science, the spiritual and the secular. Did theology teach how God reveals himself in the *Scripture*, it was now the business of philosophy to apprehend with admiration his revelation in *Nature*. On this account the beginnings of modern natural science were *theosophical* and thoroughly *Neo-Platonic*.

1. The characteristic fact, however, is that in this revival of Neo-Platonism, the last dualistic motives which had belonged to the same were also completely set aside. They disappeared together with the specifically religious interest which had supported them, and the theoretical element of recognising in Nature the creative divine power came forward pure and unmixed.[1] The fundamental tendency in the natural philosophy of the Renaissance was therefore the fanciful or imaginative conception of the *divine unity of the living All*, the admiration of the *macrocosm:* the fundamental thought of Plotinus of the *beauty of the universe* has been taken up by no other time so sympathetically as by this; and this beauty was now also regarded as a manifestation of the divine Idea. Such a view is expressed in almost entirely Neo-Platonic forms by Patrizzi, in a more original form and with strongly poetical quality by Giordano *Bruno*, and likewise by Jacob *Boehme*. With Bruno the symbol of the all-forming and all-animating primitive light is still dominant (cf. p. 245); with Boehme, on the contrary, we find that of the organism; the world is a tree which from root to flower and fruit is permeated by one life-giving sap, and which is formed and ordered from within outward by its own germinal activity.[2]

In this inheres naturally the inclination to complete monism and *pantheism*. Everything must have its cause, and the last cause can be but one, — God.[3] He is, according to Bruno, at the same time the formal, the efficient, and the final cause; according to Boehme he is at once the rational ground and efficient cause ("*Urgrund*" and "*Ursache*") of the world (*principium* and *causa* with Bruno).

[1] In a certain sense this might also be expressed by saying that thereby the Stoic elements of Neo-Platonism came with controlling force into the foreground.

[2] Cf. the remarkable agreement between Bruno, *Della Causa Pr. e. U.*, II. (Lag. I. 231 f.) and Boehme, *Aurora*, Vorrede.

[3] *Aurora*, Chap. III.

Hence the universe is also nothing but "the essential nature of God himself made creatural."[1] And yet the idea of the transcendence of God is here, too, connected with this view, as it had been in Neo-Platonism. Boehme holds that God should be thought not as a force devoid of reason and "science," but as the all-knowing, all-seeing, all-hearing, all-smelling, all-tasting" spirit: and Bruno adds another analogy; for him God is the artist who works unceasingly and shapes out his inner nature to rich life.

Harmony is accordingly, for Bruno also, the inmost nature of the world, and he who can apprehend it with the gaze of enthusiasm (as does the philosopher in the dialogues and poetic inventions *Degli Eroici Furori*), for him the apparent defects and imperfections of detail vanish in the beauty of the whole. He needs no special theodicy; the world is perfect because it is the life of God, even down to every detail, and he only complains who cannot raise himself to a view of the whole. The world-joy of the æsthetic Renaissance sings philosophical dithyrambs in Bruno's writings. A *universalistic optimism* that carries everything before it prevails in his poetic thought.

2. The conceptions which lie at the basis of this unfolding of the metaphysical fantasy in Bruno had their source in the main in *Nicolaus Cusanus*, whose teachings had been preserved by Charles Bouillé, though in his exposition they had to some degree lost their vivid freshness. Just this the Nolan knew how to restore. He not only raised the principle of the *coincidentia oppositorum* to the artistic reconciliation of contrasts, to the harmonious total action of opposing partial forces in the divine primitive essence, but above all he gave to the conceptions of the *infinite and the finite* a far wider reaching significance. As regards the deity and its relation to the world, the Neo-Platonic relations are essentially retained. God himself, as the unity exalted above all opposites, cannot be apprehended through any finite attribute or qualification, and therefore is unknowable in his own proper essence (negative theology); but at the same time he is still thought as the inexhaustible, *infinite* world-force, as the *natura naturans*, which in eternal change forms and "unfolds" itself purposefully and in conformity with law, into the *natura naturata*. This identification of the essence of God and the world is a general doctrine of the natural philosophy of the Renaissance; it is found likewise in Paracelsus, in Sebastian Franck, in Boehme, and finally also with the whole body of the "Platonists." That it could also assume an extremely naturalistic form, and could

[1] *Aurora*, Chap. II.

lead to the denial of all transcendence, is proved by the agitative and boastfully polemical doctrine of Vanini.[1]

For the *natura naturata*, on the other hand, for the "universe" — the sum-total of creatures — the characteristic of true "infinity" is not claimed, but rather that of *unlimitedness* in space and time. This conception gained an incomparably clearer form and more fixed significance by the *Copernican theory*. The spherical form of the earth and its revolution about its axis had been a familiar idea to Cusanus as well as to the old Pythagoreans, perhaps; indeed, through them; but only the victoriously proved hypothesis of the motion of the earth about the sun could furnish a rational basis for the completely new view of *man's position in the universe*, which is peculiar to modern science. The anthropocentric idea of the world which had ruled the Middle Ages became out of joint. Man, as well as the earth, must cease to be regarded as centre of the universe and centre of the world. Men like Patrizzi and Boehme also raised themselves above such "restriction" on the basis of the teaching of Copernicus, which for that reason was condemned by the dogmatic authorities of all confessions; but the fame of having thought out the Copernican system to its end, both in natural philosophy and in metaphysics, belongs to *Giordano Bruno*.

He developed from this system the theory that the universe forms a system of countless worlds, each of which moves about its central sun, leads its own proper life, grows from chaotic conditions to clear and definite formation, and again yields to the destiny of dissolution. The tradition of Democritus and Epicurus had perhaps a share in the formation of this conception of a plurality of worlds arising and perishing again; but it is the peculiar feature of Bruno's doctrine, that he regarded the plurality of solar systems not as a mechanical juxtaposition, but as an organic living whole, and regarded the process of the growth and decay of worlds as maintained by the pulse-beat of the one divine All-life.

3. While in this way universalism, with its bold flight into spatial and temporal boundlessness, threatened to claim the fantasy entirely for its own, there was an effective counterpoise in the Peripatetic-Stoic doctrine of the *analogy between macrocosm and microcosm*, which found in man's nature the sum, the "quintessence" of the cosmical powers. We see this doctrine reviving in the most varied

[1] Lucilio *Vanini* (born 1585 at Naples, burned 1692 at Toulouse), a dissolute adventurer, wrote *Amphitheatrum Æternæ Providentiæ* (Lyons, 1615) and *De admirandis naturæ reginæ deæque mortalium arcanis* (Paris, 1616).

[2] Nicolaus Copernicus, *De Revolutionibus Orbium Cœlestium* (Nuremberg, 1543).

forms during the Renaissance; it controls entirely the theory of knowledge at this period, and moreover the Neo-Platonic triple division is almost universally authoritative in connection with it, furnishing a scheme for a *metaphysical anthropology*. One can know only what one himself is, is the mode in which this was expressed by *Valentine Weigel:* man knows the all in so far as he is the all. This was a pervading principle of Eckhart's Mysticism. But this idealism now took on a definite form. As body, man belongs to the material world; indeed, he unites within himself, as *Paracelsus*, and following him *Weigel* and *Boehme* teach, the essence of all material things in finest and most compact form. Just on this account he is competent to understand the corporeal world. As intellectual being, however, he is of "sidereal" origin, and is therefore able to know the intellectual world in all its forms. Finally, as a divine "spark," as *spiraculum vitæ*, as a partial manifestation of the highest principle of life, he is also able to become conscious of the divine nature whose image he is.

A more abstract application of this same principle, according to which all knowledge of the world is rooted in *man's knowledge of himself*, is found in the thought of *Campanella*, involving not the Neo-Platonic separation of world-strata (although this too is present in Campanella), but the fundamental categories of all reality. Man —is the thought here too—knows in the proper sense only himself, and knows all else only from and through himself. All knowledge is perception (*sentire*), but we perceive, not the things, but only the states into which these set us. In this process, however, we learn by experience that inasmuch as we are, we can do something, we know something and will something, and further, that we find ourselves limited by corresponding functions of other beings. From this it follows that power, knowledge, and will are the "primalities" of all reality, and that if they belong to God in an unlimited degree, he is known as all-powerful, all-knowing, and all-good.

4. The doctrine that all knowledge of God and of the world is ultimately locked up in man's knowledge of himself, is nevertheless only an epistemological inference from the more general metaphysical principle according to which the divine nature was held to be fully and entirely contained in each of its finite manifestations. Giordano Bruno follows the Cusan also in holding that God is the smallest as well as the greatest, as truly the vital principle of the individual being as that of the universe. And accordingly every individual thing, and not merely man, becomes a "mirror" of the world-substance. Each without exception is according to its essential nature the deity itself, but each in its own way, which is

different from all the rest. This thought Bruno incorporated in his conception of the *monad*. He understood by this the individual substance (*Einzelwesen*), which, as continually "formed" matter, constitutes one of the partial manifestations of the world-force, in the interaction of which the world-life consists. It is living from the beginning, and is imperishable; it is corporeal as well as spiritual in its nature. Each monad is a form in which the Divine Being finds individual existence, a finite existence-form of the infinite essence. Since, now, there is nothing but God and the monads, the universe is *animated* even to the smallest nook and corner, and the infinite all-life individualises itself at every point to a special and peculiar nature. It results from this that each thing, in the movements of its life, follows in part the law of its special nature, and in part a more general law, just as a planet or heavenly body moves at the same time on its own axis and about its sun. Campanella, who took up this doctrine also in connection with the Copernican system, designated this striving toward the whole, this tendency toward the original source of all reality, as religion, and spoke in this sense of a "natural" religion, that is of religion as "natural impulse,"—one would now perhaps say centripetal impulse,—which he with logical consistency ascribed to all things in general, and which in man was held to assume the special form of "rational" religion; that is, of the striving to become one with God by love and knowledge.

This principle of the infinite variability of the divine ground of the world which presents itself in a special form in every particular thing, is found in a similar form also with Paracelsus. Here, as with Nicolaus Cusanus, it is taught that all substances are present in everything, that each thing therefore presents a microcosm, and yet that each has also its special principle of life and activity. This special mind or spirit of the individual is called by Paracelsus the Archeus; Jacob Boehme, to whom this doctrine passed over, calls it the Primus.

With Bruno the conception of the monad connects itself in a very interesting manner, though without further effect upon his physical views, with that of the *atom*, which was brought to him, as to the earlier period, by the Epicurean tradition through Lucretius. The "smallest"—in metaphysics the monad, in mathematics the point —is in physics the atom, the indivisible spherical element of the corporeal world. Memories of the Pythagorean and Platonic theory of the elements, and of the related atomic theory of Democritus, became thus alive in the midst of Neo-Platonism; they found also an independent revival with men like Basso, Sennert, and others,

and so led to the so-called *corpuscular theory*, according to which the corporeal world consists of inseparable atom-complexes, the corpuscles. In the atoms themselves, the theory assumed in connection with their mathematical form an original and unchangeable law of action, to which, it held, the mode of action of the corpuscles is also to be traced.[1]

5. Here the workings of *mathematics* assert themselves in the old Pythagorean form, or as modified by Democritus and Plato. The ultimate constituents of physical reality are determined by their geometrical form, and the qualitative determinations of experience must be traced back to this. The combination of elements presupposes numbers and their order as the principle of multiplicity.[2] Thus spatial forms and number-relations again make their appearance as the essential and original in the physical world, and thereby the Aristotelian-Stoic doctrine of the qualitatively determined forces, of the inner Forms of things, of the *qualitates occultæ*, was displaced. As this latter doctrine had formerly gained the victory over the principle of Pythagoras, Democritus, and Plato, so it must in turn yield to this: and herein lies one of the most important preparations for the origin of modern natural science.

The beginnings of this are found already with Nicolaus Cusanus; but now they receive an essential strengthening from the same source from which their presence in his thought is explained: namely, from the old literature, and in particular from the Neo-Pythagorean writings. Just for this reason, however, they still have the fantastic metaphysical garb of *number-mysticism* and *number-symbolism*. The book of Nature is written in numbers; the harmony of things is that of the number-system. All is arranged by God according to measure and number; all life is an unfolding of mathematical relations. But just as in antiquity, so here, this thought is unfolded at first as an arbitrary interpretation of conceptions, and a mysterious speculation. The procedure of the world forth from God, from the construction of the Trinity on, — as, for example, in the attempt of Bouillé, — is again to be conceived as the process of the transformation of unity into the number-system. Such fantasies were followed by men like Cardan and Pico. Reuchlin added further the mythological creations of the Jewish Cabbala.

6. Thus the principle which was destined for the most fruitful development made its entrance into the new world wrapped again in the old metaphysical fantasticalness, and fresh forces were

[1] Cf. K. Lasswitz, *Geschichte des Atomismus*, I. pp. 359 ff. (Hamburg and Leips. 1890).

[2] Cf. for this especially G. Bruno, *De Triplici Minimo*.

needed to strip off this covering, and free it for its right working. Meanwhile, however, it became mingled with quite other efforts, which likewise had their origin in the Neo-Platonic tradition. To the idea of a universal psychical life, to the fanciful spiritualisation of Nature, belonged also the impulse to interfere in the course of things with mysterious means, with conjurations and magic arts, and so to guide it according to the will of man. Here, too, a higher thought hovered before the fantastic impulse of the excited age, — the thought of mastering Nature by a knowledge of the forces working in it. But this thought was also received in the wrappings of ancient superstition. If, as was the case with the Neo-Platonists, the life of Nature was regarded as a dominance of spirits, as a mysteriously connected system of internal forces, it was a proper aim to make these subject by knowledge and will. Thus *magic* became a favourite subject of thought in the Renaissance, and science again concerned itself with the task of bringing system into superstition.

Astrology, with its influences of the stars upon human life, the interpretation of dreams and signs, necromancy, with its conjurations of spirits, the predictions of persons in the ecstatic state, — all these elements of the Stoic and Neo-Platonic divination were then in most luxuriant bloom. Pico and Reuchlin brought them into connection with the number-mysticism; Agrippa of Nettesheim adopted all the sceptical attacks against the possibility of rational science, in order to seek help in mystical illuminations and secret magic arts. Cardan proceeded with all seriousness to the task of determining the laws of these operations, and Campanella conceded them an unusually wide space in his idea of the world.

Physicians especially, whose vocation demanded an interference in the course of Nature and might seem permitted to expect special advantage in secret arts, showed an inclination toward these magic arts. From this point of view *Paracelsus* desired to reform medicine. He also proceeds from the sympathy of all things, from the idea of the universe as a spiritually connected system. He finds the essence of disease in the injuring of the individual vital principle, the Archeus, by foreign powers, and seeks the means wherewith to free and strengthen the Archeus. Since this latter process must come about by a corresponding composition of materials, all sorts of magical drinks, tinctures, and other secret remedies must be brewed, and thus the arts of *alchemy* were set in motion, which, in spite of all its fantastic performances, ultimately yielded a number of useful results for chemical knowledge in the course of its incredibly extended pursuits.

In this connection the fundamental metaphysical presupposition

of the unity of all vital force led of itself to the thought that there must be also a simple, most efficacious, universal remedy for the strengthening of every Archeus whatever, a panacea against all diseases and for the maintenance of all the vital forces; and connection with the macrocosmic efforts of magic nourished the hope that the possession of this secret would lend the highest magic power, and afford the most desirable treasures. All this was to be achieved by the "philosopher's stone"; it was to heal all diseases, transmute all substances into gold, conjure all spirits into the power of its possessor. And thus the purposes which it was thought would be satisfied in the ventures of alchemy, were ultimately very real and sober.

7. The introduction of this magical view of Nature into the subtle religious system of German Mysticism constitutes the peculiar feature of *Boehme's* philosophy. He, too, is seized by the thought that philosophy should be knowledge of Nature; but the deep earnestness of the religious need which lay at the basis of the German Reformation did not allow him to content himself with the separation of religious metaphysics and natural science, customary at his time, and he sought to work the two into one again. Similar efforts which tended to transcend the dogmatic, fixed form of Protestantism, and hoped to solve the problems of the new science with the aid of a Christian metaphysics, throve also by the side of the official Peripatetic system. *Taurellus* aimed to produce such a supra-confessional philosophy of Christianity, and with a true instinct for his purpose, adopted many elements of the Augustinian doctrine of the will, but was not able to work enough real material from the interests of his time into these thoughts, and so came ultimately rather to a complete separation of empirical research from all metaphysics. A similar process went on in the mystical movement, which grew with the popular opposition against the new orthodoxy all the more in proportion as the latter dried and hardened within itself. The mystical doctrines also remained suspended in vague generality until the teaching of Paracelsus was brought to them, at first by Weigel, and then completely by Boehme.

In Boehme's doctrine Neo-Platonism assumes again a completely religious colouring. Here, too, man is regarded as the microcosm from and by which the bodily, the "sidereal," and the divine worlds can be known, if one follows the right illumination and is not misled by learned theories. Self-knowledge, nevertheless, is religious knowledge, which finds the opposition of good and evil as a fundamental trait of human nature. The same opposition fills the whole world; it rules in heaven as on earth, and since God is the sole

cause of all, this opposition must be sought in him also. Boehme extends the *coincidentia oppositorum* to the extreme limit, and finds the ground of duality in the necessity of the self-revelation of the divine Primordial Ground. As light can be revealed only in connection with darkness, so God's goodness can be revealed only in connection with his anger. Thus Boehme portrays the process of the *eternal self-generation of God*, describing how from the dark ground of Being within him the urgent impulse ("*Drang*"), or will, which has only itself for its object, attains self-revelation in the divine wisdom, and how that which has thus become revealed forms itself into the world. While the theogonic development thus passes over immediately into the cosmogonic, the effort is everywhere shown in this latter development to carry the fundamental religious antithesis into the physical categories of the system of Paracelsus. Thus three kingdoms of the world and seven forms, or "*qualia*" ("*Qualen*"), are constructed, which ascend from the material forces of attraction and repulsion to those of light and warmth, and from there on to those of the sensible and intellectual functions. To this portrayal of the eternal nature of things is then attached the history of the earthly world, which begins with the fall of Lucifer and the process of rendering the spiritual essence perceptible to the senses, and ends with the overcoming of the proud infatuation ("*Vergafftsein*") for the creature, with the mystical devotion of man to the deity, and ultimately with the restoration of the spiritual nature. All this is presented by Boehme in prophetic discourse, full of deep conviction, with a unique mingling of profundity and dilettantism. It is the attempt of the Eckhartian Mysticism to become master of the modern interests of science, and the first still tentatively uncertain step toward raising natural science into an idealistic metaphysics. But because this is made from the standpoint of the deepest religious life, the intellectualistic features of the older Mysticism retreat, with Boehme, more into the background. While with Eckhart, the world-process both in its arising and in its passing was regarded as a knowing process, with Boehme it is rather a struggling of the will between good and evil.

8. In all these ways the result of the separation of philosophy from dogmatic theology always was that the knowledge of Nature that was sought took on the form of the older metaphysics. This procedure was inevitable so long as the desire for a knowledge of Nature could provide neither a material of facts which it had itself acquired, nor new conceptions to serve as forms for the elaboration of this material. As a prerequisite for this, it was necessary to see the inadequacy of metaphysical theories, and putting them aside,

to turn to *empiricism*. This service was rendered to the genesis of modern thought by the tendencies of *Nominalism* and *Terminism*, in part, also, by the rhetorical and grammatical opposition to the science of the schools, and also by the revival of ancient *Scepticism*.

The writings of Ludovico *Vives* must be regarded as a common starting-point for these various efforts; but they prove also that the importance of these endeavours is essentially negative in character. In place of the obscure words and arbitrary conceptions of metaphysics, a demand is made in nominalistic fashion for the immediate, intuitive apprehension of things themselves by experience: but the remarks as to the manner in which this should be scientifically set about are meagre and uncertain; he speaks of experiment, but without any very deep insight into its nature. Quite so lies the case at a later time with Sanchez. And if the artificial subtleties of the syllogistic method were attacked with great hue and cry, this line of thought had ultimately only the Ramistic fancies of "natural logic" to put in their stead.

Further, this empiricism, just by virtue of its origin from Terminism, could move only with a very uncertain step in the presence of external Nature. It could not deny the background of Occam's dualism. Sense-perception was held to be, not a copy of a thing, but an inner state of the subject corresponding to the presence of the thing. These scruples could be only strengthened by the theories of ancient Scepticism, for this added the doctrine of the deceptions of the senses and the consideration of the relativity and change of all perceptions. Hence this empiricism of the Humanists now also threw itself more upon inner perception, which was universally regarded as much surer than outer perception. Vives is most fortunate where he speaks the language of empirical psychology; men like Nizolius, Montaigne, and Sanchez shared this view, and Charron gave it practical significance. Strenuously as all these urge toward looking at things themselves, outer perception ultimately turns out comparatively empty.

How little certain of itself, and how little fruitful in principles this empiricism was at that time, is shown best of all by its two main representatives in Italy, — *Telesio* and Campanella. The former, one of the most stirring and influential opponents of Aristotelianism, is everywhere famous even in his own time (and also with Bruno and Bacon), as he who demanded most strongly that science should build only on the basis of facts perceived by the senses. He founded in Naples an academy which he called the Academia *Cosentina*, after the name of his home, and, in fact, contributed much toward the cultivation of the sense for empirical natural science.

But if we look to see how he treats Nature "*juxta propria principia*," we are met by genuinely physical theories which from few observations hastily leap over to most general metaphysical principles quite after the fashion of the ancient Ionics. The dry-warm and the moist-cold are set forth as the two opposing fundamental forces, out of whose conflict both the macrocosmic and the microcosmic life are to be explained. This same inner contradiction appears almost more prominent still in *Campanella*. He teaches the most pronounced sensualism. All knowledge is for him a "feeling" (*sentire*); even recollection, judgment, and inference are for him but modified forms of that feeling. But in his case also, sensualism tilts over into psychological idealism; he is far too good a Nominalist not to know that all perception is but a feeling of the states of the percipient himself. Thus he takes his starting-point in inner experience, and following the principle of the analogy of macrocosmus and microcosmus, builds upon a simple *aperçu* (cf. above) an extended ontology. Into this he then draws also the quite scholastic antithesis of Being and Non-being (*ens* and *non-ens*), which, following the Neo-Platonic example, is identified with that of the perfect and imperfect, and between the two he spreads the variegated metaphysical picture of a world-system arranged in successive strata.

So tenaciously do the long-wonted habits of metaphysical thought cling everywhere to the beginnings of the new research.

CHAPTER II.

THE NATURAL SCIENCE PERIOD.

Damiron, *Essai sur l'Histoire de la Philosophie au 17me Siècle.* Paris, 1846.
Kuno Fischer, *Francis Bacon und seine Nachfolger.* 2d ed., Leips. 1875.
Ch. de Rémusat, *Histoire de la Philosophie en Angleterre depuis Bacon jusqu'à Locke.* 2 vols., Paris, 1875.

Natural science acquired its decisive influence upon the development of modern philosophy by first gaining its own independence with the aid of a conscious use of a scientific method, and then from this position being able to determine the general movement of thought as regards both form and content. In so far the development of the method of natural science from Kepler and Galileo down to Newton is not indeed itself the evolution of modern philosophy, but is yet that series of events in reference to which this evolution constantly proceeds.

For this reason the positive beginnings of modern philosophy are in general to be sought, not so much in new conceptions with new content, as in *methodical reflection*, out of which, with the progress of time, there resulted of course new material and so new points of view for the treatment of both theoretical and practical problems. But at first the points of departure of modern thought were in all cases where permanently fruitful conceptions of the task and thereby conditioned procedure of the new science grew out of the humanistic opposition against Scholasticism, and out of the excited metaphysical fantasies of the transitional period.

In this consists from the outset an essential difference between modern and ancient philosophy. The former is as reflective in its beginning as the latter was naïve, and this is self-explaining, since the former must develop out of those traditions which the latter created. In this way it is characteristic of the greater number of the systems of modern philosophy to seek the path to the real or "material" problems by considering the science of method and the theory of knowledge; and in particular the *seventeenth century* with respect to its philosophy may be characterised as a *strife of methods.*

While, however, the movement of the humanistic period had in the main taken place in Italy and Germany, the cooler and more considerate temper of the two western civilised peoples now became prominent. Italy was made dumb by the counter-reformation, Germany was crippled by the ruinous war between the confessions. *England* and *France*, on the contrary, experienced in the seventeenth century the bloom of their intellectual civilisation, and between them the *Netherlands* became a flourishing seat of art and science.

In the development of the method of natural science the lines of *empiricism* and of *mathematical theory* converged: in philosophical generalisation the two came forward in an independent attitude. The programme of the *experience philosophy* was laid down by *Bacon*, but the method which formed its fundamental thought was not carried out by him in the fruitful manner which he had anticipated. Much more comprehensive was the form in which *Descartes* brought together the scientific movement of his time to establish rationalism anew, by filling the scholastic system of conceptions with the rich content of the Galilean research. From this resulted far-reaching metaphysical problems, which in the second half of the seventeenth century called forth an extraordinarily vigorous movement of philosophical thought, — a movement in which the new principles entered into manifold antithetical combinations with the principles of mediæval philosophy. Out of the *Cartesian school* rose *Occasionalism*, of which *Geulincx* and *Malebranche* are the chief representatives. But the complete issue of this development was found in the two great philosophical systems brought forward by *Spinoza* and *Leibniz.*

The influence which the powerful development of theoretical philosophy exercised also upon the treatment of *practical* problems shows itself principally in the field of the *philosophy of law* (*or right*). In this department *Hobbes*, who was in like measure a disciple of Bacon and of Descartes, and as such marks an important point in the line of development of methods and metaphysics above noted, takes the decisive position as the introducer of an ethical naturalism which is found in altered form even with his opponents, such as *Herbert of Cherbury* and *Cumberland.* In these antitheses the problems of the philosophy of the Enlightenment are in process of preparation.

The series of great natural scientists who exercised an immediate influence also upon philosophical questions was opened by Johann **Kepler** (1561–1630) of Weil, a town in Würtemberg, who died in Regensburg after a life spent in struggle with need and anxiety. Among his works (ed. by Frisch, Frankfurt, 1858–71, 8 vols.), the most important are *Mysterium Cosmographicum*, *Harmonice Mundi*, *Astronomia Nova seu Physica Cœlestis Tradita Commentariis de Motibus Stellæ Martis.* Cf. Chr. Sigwart, *Kleine Schriften*, I. 182 ff.; R. Eucken, *Philos. Monatsh.*, 1878, pp. 30 ff. — In immediate attachment to him stands **Galileo Galilei** (born 1564 at Pisa, died 1642 at Arcetri). His works were

published in 15 vols. (Florence, 1842–56) with a biographical supplementary volume by Arrago. Vols. 11–14 contain the *Fisico-Mathematica;* among which we notice *Il Saggiatore* (1623) and the dialogue on the Ptolemaic and the Copernican systems (1632). Cf. H. Martin, *Galileo, les droits de la science et la méthode des sciences physiques* (Paris, 1668); P. Natorp, *Gal. als Philosoph.* (*Philos. Monatsh.*, 1882, pp. 193 ff.). Isaac **Newton** (1642–1727) comes into consideration chiefly on account of his *Philosophiæ Naturalis Principia Mathematica* (1687; 2d ed. by Cotes, 1713; German by Wolfers, 1872) and his *Optics* (1704).—Of his contemporaries we notice the chemist, Robert **Boyle** (1626–1691; *Chemista Scepticus; Origo Formarum et Qualitatum; De Ipsa Natura*), and the Netherlander, Christian **Huyghens** (1629–1695; *De Causa Gravitatis; De Lumine*).

Cf. W. Whewell, *History of the Inductive Sciences* (Lond. 1837; German by Littrow, Leips. 1839 ff.); E. F. Apelt, *Die Epochen der Geschichte der Menschheit* (Jena, 1845); E. Dühring, *Kritische Geschichte der Principien der Mechanik* (Leips. 1872); A. Lange, *Gesch. des Materialismus*, 2d ed., Iserlohn, 1873 [Eng. tr. *History of Materialism* by E. C. Thomas, Lond., 4th ed., 1892]; K. Lasswitz, *Gesch. der Atomistik*, 2 vols. (Hamburg and Leips. 1890).

Francis **Bacon**, Baron of *Verulam*, Viscount of St. Albans, was born in 1561, studied in Cambridge, had a brilliant career under the reigns of Elizabeth and James I., until, as the result of political opposition, he was proceeded against, convicted of venality, and deposed from the position of Lord High Chancellor. He died 1626. The latest edition of his works is that by Spedding and Heath (Lond. 1857 ff.). Aside from the *Essays* (*Sermones Fideles*) the main writings are *De Dignitate et Augmentis Scientiarum* (1623; originally published under the title, *The Two Books of Francis Bacon on the Proficience and Advancementof Learning, Divine and Human*, 1605) and *Novum Organon Scientiarum* (1620; originally under the title, *Cogitata et Visa*, 1612).[1] Cf. Ch. de Rémusat, *Bacon, Sa vie, son temps, sa philosophie et son influence jusqu'à nos jours* (Paris, 1854); H. Heussler, *Fr. B. und seine geschichtliche Stellung* (Breslau, 1889); [*Bacon*, by J. Nichol, in Blackwood's series, Edin. 1888: Ed. of the *Novum Organum* by Fowler, Oxford, 1878].

René **Descartes** (Cartesius), born 1596, in Touraine, and educated in the Jesuit school at La Flèche, was originally destined for a soldier and took part in the campaigns of 1618–1621 in the service of various leaders, but then betook himself for the first time to Paris, and later, withdrew for many years, at different places in the Netherlands, into a scientific solitude, which he kept in the most diligent and careful manner. After controversies in which his doctrine had become involved at the universities in that country had rendered this place of residence disagreeable, he accepted, in 1649, an invitation of Queen Christine of Sweden to Stockholm, where he died the following year. His works have been collected in Latin in the Amsterdam editions (1650, etc.), and in French by V. Cousin (11 vols., Paris, 1824 ff.); the important writings have been translated into German by Kuno Fischer (Mannheim, 1863) [Eng. tr. of the *Method, Meditations* and *Selections from the Principles* by J. Veitch, Edin. and Lond., 1st ed., 1850–52, 10th ed., 1890; of the *Meditations* by Lowndes, Lond. 1878, also in *Jour. Spec. Phil.*, Vol. IV., 1870, by W. R. Walker; and of the *Rules for the Direction of the Mind*, with selections from the *Med.'s, The World, The Passions of the Soul*, etc., by H. A. P. Torrey, N.Y. 1892]. The main works are *Le Monde ou Traité de la Lumière* (posthumously printed, 1654); *Essays*, 1637, among them the *Discours de la Méthode* and the *Dioptrics; Meditationes de Prima Philosophia*, 1641, supplemented by the objections of various *savants* and Descartes' replies; *Principia Philosophiæ*. 1644; *Passions de l'Âme*, 1650. Cf. F. Bouillier, *Histoire de la Philosophie Cartésienne* (Paris, 1854); X. Schmid-

[1] It is well known that very recently much noise has been made over the discovery that Lord Bacon wrote Shakspere's works also, in his leisure hours. To fuse two great literary phenomena into one may have something alluring in it, but in any case a mistake has been made in the person. For it would be much more probable that Shakspere had incidentally composed the Baconian philosophy. [The Germans seem to take this "noise" much more seriously than Shakspere's countrymen.—Tr.]

schwarzenberg, *R. D. und seine Reform der Philosophie* (Nördlingen, 1859); G. Glogau in *Zeitschr. f. Philos.*, 1878, pp. 209 ff.; P. Natorp, *D.'s Erkenntnisstheorie* (Marburg, 1882). [*Descartes* by J. P. Mahaffy in Blackwood's series, Edin. and Phila., 1881; W. Wallace, Art. *Descartes* in *Enc. Brit.;* H. Sidgwick in *Mind*, Vol. VII.; Rhodes in *Jour. Spec. Phil.*, XVII.

Between these two leaders of modern philosophy stands Thomas **Hobbes**, born 1588, educated at Oxford, who was early drawn over to France by his studies, and frequently afterwards returned thither, was personally acquainted with Bacon, Gassendi, Campanella, and the Cartesian circle, and died 1679. Complete edition of his works, English and Latin by Molesworth, Lond. 1839 ff. His first treatise, *Elements of Law, Natural and Political* (1639), was published by his friends in 1650, in two parts, *Human Nature* and *De Corpore Politico*. He published previously *Elementa Philosophiæ de Cive*, 1642 and 1647, and further *Leviathan* or *The Matter, Form, and Authority of Government*, 1651. A comprehensive statement is given in the *Elementa Philosophiæ*, I., *De Corpore*, II., *De Homine*, 1668 (both previously in English in 1655 and 1658. Cf. F. Tönnies in *Vierteljahrschr. f. w. Philos.*, 1879 ff. [*Hobbes*, by G. C. Robertson in Blackwood's series, Edin. and Phil. 1886, also Art. *Hobbes*, in *Enc. Brit.* by same author.]

Of the **Cartesian School** (cf. Bouillier, *op. cit.*) are to be noted the *Jansenists* of Port-Royal, from whose circles came the *Logique ou l'art de penser* (1662), ed. by Anton **Arnauld** (1612–1694), and Pierre **Nicole** (1625–1695); also the Mystics, Blaise **Pascal** (1623–1662; *Pensées sur la Religion;* cf. the monographs by J. G. Dreydorff, Leips. 1870 and 1875), and Pierre **Poiret** (1646–1719; *De Eruditione Triplici, Solida Superficiaria et Falsa.*

The development to **Occasionalism** proceeds gradually in Louis **de la Forge** (*Traité de l'Esprit Humain.* 1666), **Clauberg** (1622–1665; *De Conjunctione Corporis et Animæ in Homine*), **Cordemoy** (*Le Discernement du Corps et de l'Ame*, 1666), but finds its complete development independently of these thinkers in Arnold **Geulincx** (1625–1669; a university teacher in Loewen and Leyden). His main works are the *Ethics* (1665; 2d ed. with notes, 1675); *Logic*, 1662, and *Methodus*, 1663. New ed. of his works by J. P. N. Land (1st vol., The Hague, 1891). Cf. E. Pfleiderer, *A. G. als Hauptvertreter der occ. Metaphysik und Ethik* (Tübingen, 1882); V. van der Hæghen, *G. Étude sur sa Vie, sa Philosophie et ses Ouvrages* (Lüttich, 1886).

From the **Oratorium** founded by Cardinal Berulle, a friend of Descartes, to which **Gibieuf** also belonged (*De Libertate Dei et Creaturæ*, Paris, 1630), went forth Nicole **Malebranche** (1638–1715). His main work, *De la Recherche de la Vérité*, appeared 1675, the *Entretiens sur la Métaphysique et sur la Religion* in 1688. Coll. works by J. Simon (Paris, 1871).

Baruch (Benedict de) **Spinoza**, born in 1632 at Amsterdam in the community of Portuguese Jews, and later expelled from this community on account of his opinions, lived in noble simplicity and solitude at various places in Holland, and died at The Hague 1677. He had published an exposition of the Cartesian philosophy with an independent metaphysical appendix (1663) and the *Tractatus Theologico-politicus* (anonymously in 1670). After his death appeared in his *Opera Posthuma* (1677), his main work, *Ethica More Geometrico Demonstrata*, the *Tractatus Politicus*, and the fragment *De Intellectus Emendatione*. His correspondence and his recently discovered youthful work, *Tractatus (brevis) de Deo et Homine ejusque Felicitate*, also come into consideration. On the latter cf. Chr. Sigwart (Tübingen, 1870). The best edition of his works is that by Van Vloten and Land (2 vols., Amsterdam, 1882 f.). Cf. T. Camerer, *Die Lehre Sp.'s* (Stuttgart, 1877). [*Spinoza*, by J. Caird, Edin. 1888; *Spinoza* by Martineau, Lond. 1883; also in *Types of Ethical Theory*, Oxford, 1886; F. Pollock, *Spinoza, His Life and Phil.*, Lond. 1880; Seth, Art. *Spinoza*, in *Enc. Brit.;* Arts. in *Jour. Spec. Phil.*, Vols. 11 and 16, by Morris and Dewey; Eng. tr. of prin. works by Elwes, Bohn Lib., 1884, of the *Ethics* by White, Lond. 1883, and of *Selections* by Fullerton, N.Y. 1892.]

Of philosophical writers in Germany who attached themselves to the train of the movement among the two civilised peoples of the West are to be mentioned Joachim **Jung** (1587–1657; *Logica Hamburgiensis*, 1638); cf. G. E. Guhrauer,

J. J. und sein Zeitalter (Stuttg. and Tüb. 1859); the Jena mathematician, Erhard Weigel, the teacher of Leibniz and Puffendorf; Walther von **Tschirnhausen** (1651–1708; *Medicina Mentis sive Artis Inveniendi Præcepta Generalia*, Amsterdam, 1687), and Samuel **Puffendorf** (1632–1694; under the pseudonym Severinus a Monzambano, *De Statu Rei publicæ Germanicæ*, 1667, German by H. Bresslau, Berlin, 1870; *De Jure Naturæ et Gentium*, London, 1672).

Leibniz belongs in this period, not only in point of time, but also as regards the origination and the motives of his metaphysics, while with other interests of his incredibly many-sided nature, he ranges on into the age of the Enlightenment; cf. on this, Part V. Here, therefore, we have to consider principally his methodological and metaphysical writings: *De Principio Individui*, 1663; *De Arte Combinatoria*, 1666; *Nova Methodus pro Maximis et Minimis*, 1684; *De Scientia Universali seu Calculo Philosophico*, 1684 (cf. A. Trendelenburg, *Hist. Beiträge zur Philos.*, III. 1 ff.); *De Primæ Philosophiæ Emendatione*, 1694; *Système Nouveau de la Nature*, 1695, with the three *Éclaircissements* connected with it, 1696; also the *Monadologie*, 1714, the *Principes de la Nature et de la Grace*, 1714, and a great part of his extended correspondence. Among the editions of his philosophical writings the excellent edition by J. E. Erdmann (Berlin, 1840) has now been surpassed by that of C. J. Gerhardt (7 vols., Berlin, 1875–91). — On the system as a whole cf. L. Feuerbach, *Darstellung, Entwicklung und Kritik der Leibnizischen Philos.* (Ansbach, 1837), A. Nourisson, *La Philos. de L.* (Paris, 1860); E. Wendt, *Die Entwicklung der L.'schen Monadenlehre bis 1695* (Berlin, 1886). [E. Dillmann, *Eine neue Darst. der L.'schen Monadenlehre*, Leips. 1891. See also the lit. on p. 444.]

On the historical and systematic *relation of the systems* to one another: H. C. W. Sigwart, *Ueber den Zusammenhang des Spinozismus mit der cartes. Philos.* (Tüb. 1816) and *Die Leibniz'sche Lehre von der prästabilirten Harmonie in ihrem Zusammenhang mit früheren Philosophemen* (ib. 1822); C. Schaarschmidt, *Descartes und Spinoza* (Bonn, 1850); A. Foucher de Careil, *Leibniz, Descartes et Spinoza* (Paris, 1863); E. Pfleiderer, *L. und Geulincx* (Tüb. 1884); E. Zeller, *Sitz.-Ber. d. Berliner Akad*, 1884, pp. 673 ff.; F. Tönnies, *Leibniz und Hobbes* in *Philos. Monatsh.*; 1887, pp. 357 ff.; L. Stein, *Leibniz und Spinoza* (Berlin, 1890). [E. Caird, Art *Cartesianism*, in *Enc. Brit.*, reprinted in Vol. 2 of his *Essays*, Lond. and N.Y. 1892; Saisset's *Modern Pantheism.*]

To the founders of the philosophy of law (cf. C. v. Kaltenborn, *Die Vorläufer des Hugo Grotius*, Leips. 1848; and R. v. Mohl, *Gesch. und Litteratur der Staatswissenschaften*, Erlangen, 1855–58) belong Nicolo **Macchiavelli** (1469–1527; *Il Principe, Discorsi sulla prima decade di Tito Livio*; [Works, tr. by C. E. Detmold, Boston, 1883.] **Thomas More** (1480–1535; *De Optimo Rei publicæ Statu sive de Nova Insula Utopia*, 1516); Jean **Bodin** (1530–1597); *Six Livres de la République*, 1577; an extract from the *Heptaplomeres* has been given by Guhrauer, Berlin, 1841); Albericus **Gentilis** (1551–1611; *De Jure Belli*, 1588); Johannes **Althus** (1557–1638; *Politica*, Gröningen, 1610, cf. O. Gierke, *Unters. z. deutsch. Staats- u. Rechtsgesch.*, Breslau, 1880); **Hugo de Groot** (1583–1645; *De Jure Belli et Pacis*, 1645; cf. H. Luden, *H. G.*, Berlin, 1806).

Of the **Protestants** who treat of the philosophy of law may be named, besides Melancthon, J. Oldendorf (*Elementaris Introductio*, 1539), Nic. Hemming (*De Lege Naturæ*, 1562), Ben Winkler (*Principia Juris*, 1615); of the **Catholics** besides Suarez, Rob. Bellarmin (1542–1621; *De Potestate Pontificis in Temporalibus*) and Mariana (1537–1624; *De Rege et Regis Institutione*).

Natural religion and natural morals in the seventeenth century found in England their main supporters in **Herbert of Cherbury** (1581–1648; *Tractatus de Veritate*, 1624; *De Religione Gentilium Errorumque apud eos Causis*, 1663; on him Ch. de Rémusat, Paris, 1873), and **Richard Cumberland** (*De Legibus Naturæ Disquisitio Philosophica*, Lond. 1672). Among the Platonists or **Neo-Platonists** of England at the same time are prominent Ralph **Cudworth** (1617–1688; *The Intellectual System of the Universe*, Lond. 1678, Latin, Jena, 1733) and Henry **More** (1614–1687; *Encheiridion Metaphysicum*. His correspondence with Descartes is printed in the latter's works, Vol. X., Cousin's ed.). [*Phil. of Cudworth*, by C. E. Lowrey, with bibliog., N.Y. 1884; Tulloch's *Rational Theol. and Christian Phil. in Eng. in 17th Cent.*]

§ 30. The Problem of Method.

All beginnings of modern philosophy have in common an impulsive opposition against "Scholasticism," and at the same time a naïve lack of understanding for the common attitude of dependence upon some one of its traditions, which they nevertheless all occupy. This fundamental oppositional character brings with it the consequence, that in all cases where it is not merely wants of the feelings, or fanciful views that are set over against the old doctrines, reflection on *new methods* of knowledge stands in the foreground. Out of the insight into the unfruitfulness of the "syllogism," which could merely set forth in proof or refutation that which was already known, or apply the same to a particular case, arises the demand for an *ars inveniendi*, a *method of investigation*, a sure way to the *discovery of the new.*

1. If now nothing was to be accomplished with the help of rhetoric, the nearest expedient was to attack the matter by the reverse method, proceeding from the particular, from the facts. This had been commended by Vives and Sanchez, and practised by Telesio and Campanella. But they had neither gained full confidence in experience nor known afterwards how to make any right beginning with their facts. In both lines *Bacon* believed that he could point out new paths for science, and in this spirit he set up his "New Organon" as over against the Aristotelian.

Every-day perception — he confesses, admitting the well-known sceptical arguments — offers, indeed, no sure basis for a true knowledge of Nature; in order to become an experience that can be used by science it must first be purified from all the erroneous additions which have grown together with it in our involuntary way of regarding things. These perversions or falsifications of pure experience Bacon calls *idols*, and presents his doctrine of these fallacious images in analogy with the doctrine of the fallacious conclusions in the old dialectic.[1] There are first the "idols of the tribe" (*idola tribus*), the illusions that are given in connection with human nature in general, following which we are always suspecting an order and an end in things, making ourselves the measure of the outer world, blindly retaining a mode of thought which has once been excited by impressions, and the like; then the "idols of the cave" (*idola specus*), by reason of which every individual by his natural disposition, and his situation in life, finds himself shut into his cave;[2]

[1] *Nov. Org.* I. 39 ff.

[2] Bacon's strongly rhetorical language, rich in imagery, aims by this term (cf. *De Augm.* V. ch. 4) to recall Plato's well-known parable of the Cave (*Rep.*

then the "idols of the market" (*idola fori*), the errors which are everywhere brought about by intercourse among men, especially by language, and by adherence to the word which we substitute for the idea; finally, the "idols of the theatre" (*idola theatri*), the illusory phantoms of theories which we credulously receive from human history and repeat without subjecting them to any judgment of our own. In this connection Bacon finds opportunity to direct a most violent polemic against the word-wisdom of Scholasticism, against the rule of authority, against the anthropomorphism of earlier philosophy, and to demand a personal examination of things themselves, an unprejudiced reception of reality. Nevertheless he does not get beyond this demand; for the statements as to how the *mera experientia* is to be gained and separated from the enveloping husks of the idols are extremely meagre, and while Bacon teaches that one must not limit himself to accidental perceptions, but must set about his observation methodically, and supplement it by *experiment*[1] which he thinks out and makes for himself, this also is but a general designation of the task, and a theoretical insight into the essential nature of experiment is still wanting.

Quite similar is the case with the method of *Induction*, which Bacon proclaimed as the only correct mode of elaborating facts. With its aid we are to proceed to general cognitions (axioms), in order that we may ultimately from these explain other phenomena. In this activity the human mind, among whose constitutional errors is over-hasty generalisation, is to be restrained as much as possible; it is to ascend quite gradually the scale of the more general, up to the most general. Healthy and valuable as these prescriptions are, we are the more surprised to find that with Bacon their more detailed carrying out is completed in conceptions and modes of view which are entirely scholastic.[2]

All knowledge of Nature has for its end to understand the causes of things. Causes, however, are — according to the old Aristotelian scheme — formal, material, efficient, or final. Of these only the "formal" causes come into consideration; for all that takes place has its grounds in the "*Forms*," in the "natures" of things. Hence when Bacon's Induction searches for the "Form" of phenomena, *e.g.* for the Form of heat, Form is here understood quite in the sense of Scotism as the abiding essence or nature of phenomena. The Form of that which is given in perception is composed out of

514), which is the more unfortunate as, in the Platonic passage, it is precisely the general limited nature of knowledge by the senses that is dealt with.

[1] *Nov. Org.* I. 82.

[2] Cf. the circumstantial exposition in the second book of the *Nov. Org.*

simpler "Forms" and their "differences," and these it is important to discover. To this end as many cases as possible in which the phenomenon in question appears, are brought together into a *tabula præsentiæ*, and in like manner, those in which the phenomenon is lacking are brought together into a *tabula absentiæ;* to these is added, in the third place, a *tabula graduum*, in which the varying intensity with which the phenomenon appears is compared with the varying intensity of other phenomena. The problem is then to be solved by a progressive process of exclusion (*exclusio*). The Form of heat, for example, is to be that which is everywhere present where heat is found, which is nowhere where heat is lacking, and which is present in greater degree where there is more heat, and in lesser degree where there is less heat.[1] What Bacon presents accordingly as Induction is certainly no simple enumeration, but an involved process of abstraction, which rests upon the metaphysical assumptions of the scholastic Formalism[2] (cf. § 27, 3); the presage of the new is still quite embedded in the old habits of thought.

2. It is accordingly comprehensible that Bacon was not the man to bring to the study of Nature itself methodical or material furtherance: but this derogates nothing from his philosophical importance,[3] which consists just in this, that he demanded the general application of a principle, to which he yet was unable to give any useful or fruitful form in the case of the most immediate object for its use: namely, the knowledge of the corporeal world. He had understood that the new science must turn from the endless discussion of conceptions back to things themselves, that it can build only upon direct perception, and that it must rise from this only cautiously and gradually to the more abstract,[4] and he had understood no less clearly that in the case of this Induction, the point at issue was nothing other than the discovery of the simple

[1] In which case it turns out that the Form of heat is motion, and, indeed, a motion which is expansive, and thus divided by inhibition and communicated to the smaller parts of the body [*motus expansivus, cohibitus et nitens per partes minores*].

[2] Cf. Chr. Sigwart, *Logik*, II. § 93, 3.

[3] Cf. Chr. Sigwart in the *Preuss. Jahrb.*, 1863, 93 ff.

[4] The *pedagogical* consequences of the Baconian doctrine as contrasted with Humanism, with which, in general, the movement of natural science came in conflict in this respect, were drawn principally by Amos *Comenius* (1592–1671). His *Didactica Magna* presents the course of instruction as a graded ascent from the concrete and perceptive to the more abstract; his *Orbis Pictus* aims to give for the school a perceptional basis for instruction about things; his *Janua Linguarum Reserrata*, finally, aims to have the learning of foreign languages arranged so as to be taught only as it is requisite as a means for acquiring knowledge about things. The pedagogical views of Rattich are similar (1571–1635).

elements of reality, from the "nature" of which, in their regular relation and connection, the whole compass of what we perceive is to be explained. Induction, he thought, will find the Forms by which Nature must be interpreted. But while in his cosmology he did not get far beyond an adherence to the traditional atomism, and even shut himself up against the great achievement of the Copernican theory, he demanded that his *empirical principle* should be applied also to *knowledge of man*. Not only the bodily existence in its normal and abnormal vital processes, but also the movement of ideas and of activities of the will, especially also the social and political system, — all these should be examined as to their moving forces ("Forms") by the method of natural science, and explained without prejudice. The *anthropological and social naturalism* which Bacon announces in the encyclopædic remarks of his work *De Augmentis Scientiarum*, contains examples of programmes[1] for many branches of knowledge, and proceeds everywhere from the fundamental purpose to understand man and all the activities of his life as a product of the same simple elements of reality which also lie at the basis of external Nature.

Still another element comes to light in this anthropological interest. To understand man is not, for Bacon, an end in itself, any more than it is such to understand Nature. His entire thought is rather subordinated to a practical end, and this he conceives in the grandest form. All human knowledge has ultimately for its sole task to procure for man dominion over the world by his knowledge of the world. *Knowledge is power*, and is the only lasting power. While therefore magic with fantastic arts sought to make itself master of the working forces of Nature, this blind endeavour became clarified with Bacon to the insight that man can owe his mastery over things only to a sober investigation of their true essence. For him, therefore, the *interpretatio naturæ* is only the means of *subjecting nature to the human mind*, and his great work for the "Renovation of the Sciences" — *Instauratio Magna*, "*Temporis Partus Maximus*" — bears also the title *De Regno Hominis*.

In this, Bacon expressed what was moving the heart of thousands at his time, under the impress of great events. With that series of discoveries beyond the seas, where through mistakes, adventures, and crimes, man had at last for the first time taken complete possession of his planet, with inventions such as those of the mariner's compass, of gunpowder, and of the art of printing,[2] a mighty

[1] If we could therefore regard as accomplished all that Bacon sets before him in prospect, we might find with him the entire natural science of to-day.

[2] Cf. O. Peschel, *Gesch. des Zeitalters der Entdeckungen*, 2d ed., Leips. 1879.

change had been introduced within a short time into the greater as well as the lesser life of man. A new epoch of civilisation seemed to be opened, and an exotic excitement seized upon men's fancy. Unheard-of things should succeed; nothing was to be impossible any longer. The telescope disclosed the mysteries of the heavens, and the powers of the earth began to obey the investigator. Science would be the guide of the human mind in its victorious journey through Nature. By her inventions, human life should be completely transformed. What hopes in this respect set free the fancy for its flights we see from Bacon's Utopian fragment of the *Nova Atlantis*, and also from Campanella's *Civitas Solis*. The English Chancellor, however, held that the task of the knowledge of Nature was ultimately to make of invention, which had hitherto been for the most part a matter of chance, a consciously exercised art. To be sure, he gave life to this thought only in the fantastic picture of Solomon's house, in his Utopia; he guarded himself from seriously carrying it out; but this meaning which he attributed to the *ars inveniendi* made him an opponent of purely theoretical and "contemplative" knowledge; just from this point of view did he combat Aristotle and the unfruitfulness of monastic science. In his hand philosophy was in danger of falling from the rule of a religious end under that of technical interests.

But the issue proved again that the golden fruits of knowledge ripen only where they are not sought. In his haste for utility Bacon missed his goal, and the intellectual creations which have enabled natural science to become the basis of our external civilisation proceeded from the superior thinkers, who, with pure disinterested thought, and without any eagerness to improve the world, desired to understand the order of Nature which they admired.

3. His tendency toward the practical end of invention blinded Bacon to the theoretical value of *mathematics*. This value had at first come to consciousness in the fantastic forms which praised the number-harmony of the universe in Neo-Platonic exuberance (cf. § 29, 5), imitating the Pythagorean methods. The great investigators of Nature set out from a like admiration for the beauty and order of the universe; but the new in their teachings consists in just this, that they no longer seek this mathematical significance of the cosmical order in symbolic number-speculations, but aim to understand and prove it *from facts*. Modern investigation of Nature was born as *empirical Pythagoreanism*. This problem had been seen already by Leonardo da Vinci[1] — to have been the first to solve it

[1] Cf. with regard to him as a philosopher, K. Prantl, *Sitz.-Ber. der Münchener Akad.*, 1885, 1 ff.

is the glory of *Kepler*. The psychological motive of his research was the philosophical conviction of the mathematical order of the universe, and he verified his conviction by discovering the laws of planetary motion by means of a grand induction.

In this procedure it became evident, on the one hand, that the true task of induction in natural science consists in finding out that *mathematical relation* which remains the same in the entire series of the phenomena determined by measurement, and, on the other hand, that the object, in connection with which this task can be performed by research, is none other than *motion*. The divine arithmetic and geometry which Kepler sought in the universe was found in the *laws of occurrence and change* (*Geschehens*). Proceeding from this principle, with a more distinct methodical consciousness, *Galileo* created *mechanics as the mathematical theory of motion*. It is extremely instructive to compare the thoughts which the latter presents in the *Saggiatore* with Bacon's interpretation of Nature. Both aim to analyse into their elements the phenomena given in perception, in order to explain phenomena from the combination of these elements. But where Bacon's Induction seeks the "Forms," Galileo's *method of resolution* (analysis) searches out the simplest processes of motion capable of mathematical determination; and while interpretation with the former consists in pointing out how the natures co-operate to form an empirical structure, the latter shows in his *method of composition* (synthesis) that the mathematical theory under the presupposition of the simple elements of motion leads to the same results which experience exhibits.[1] From this standpoint experiment also acquires quite another significance: it is not merely a shrewd question put to Nature, but is the intelligent and intentional interference by which simple forms of occurrence are isolated in order to subject them to measurement. Thus, all that Bacon had merely presaged receives with Galileo a definite significance usable for the investigation of Nature, by means of the mathematical principle and its application to motion; and in accordance with these principles of mechanics Newton was able by his hypothesis of gravitation to give the mathematical theory for the explanation of Kepler's laws.

With this, the victory of the principle of Democritus and Plato, that the sole object which true knowledge of Nature can deal with is what is capable of quantitative determination, was sealed in a completely new form; but this time the principle was applied not to the Being, but to the Becoming or change in Nature. Scientific

[1] This methodical standpoint Hobbes makes entirely his own (cf. *De Corp.*, ch. 6), and indeed in expressly rationalistic antithesis to the empiricism of Bacon.

insight reaches as far as the mathematical theory of motion extends. Exactly this standpoint of the Galilean physics is taken in theoretical philosophy by *Hobbes*.[1] Geometry is the only certain discipline; all knowledge of Nature is rooted in it. We can know only such objects as we can construct, so that we derive all further consequences from this our own operation. Hence knowledge of all things, in so far as it is accessible for us, consists in tracing back what is perceived to motion of bodies in space. Science has to reason from phenomena to causes, and from these latter in turn to their effects: but phenomena are, in their essence, motions; causes are the simple elements of motion, and effects are again motions. Thus arises the apparently materialistic proposition: philosophy is the doctrine of the motion of bodies! This is the extreme consequence of the separation of philosophy from theology, which began with the English Franciscans.

The essential result for philosophy in these methodical beginnings of natural research is, therefore, twofold: empiricism was corrected by mathematics, and the shapeless Pythagoreanism of the humanistic tradition was made by empiricism definite mathematical theory. These lines meet and are bound together in Galileo.

4. In mathematical theory, accordingly, was found that *rational* factor which Giordano Bruno had demanded in his treatment of the Copernican doctrine for a critical elaboration of sense perception.[2] Rational science is mathematics. Proceeding from this conviction, *Descartes* undertook his reform of philosophy. Educated in the Scholasticism of the Jesuits, he had attained the personal conviction[3] that satisfaction for an earnest craving for truth was to be found neither in metaphysical theories nor in the learned polymathy of the empirical disciplines, but in mathematics alone; and by following the pattern of mathematics, — himself, as is well known, a creative mathematician, — he thought to transform all the rest of human knowledge: his philosophy aims to be a universal mathematics. In the generalisation of the Galilean principle requisite for this purpose, some of the factors which made the principle fruitful for the special tasks of natural research fell away, so that Descartes' teaching is not usually counted as an advance in the history of physics; but the power of his influence upon the philosophical development, in which he was the ruling mind for the seventeenth century and beyond, was all the greater.

To those methodical thoughts which are common to Bacon and

[1] Cf. the beginning of *De Corpore*.
[2] G. Bruno, *Dell' Inf. Univ. e Mond.* 1 in. (L. 307 f.).
[3] Cf. the fine exposition in the *Discours de la Méthode*.

Galileo, Descartes added a postulate of the greatest importance: he demanded that the method of induction or resolution should lead to a *single principle of highest and absolute certainty*, from which afterwards, by the method of composition, the whole compass of experience must find its explanation. This demand was entirely original, and had its root in the felt need for a systematic, connected whole of all human knowledge; it rested ultimately upon his surfeit of the traditional reception of historically collected knowledge, and upon his longing for a new philosophical creation from one mould. Descartes will, then, by an inductive enumeration and a critical sifting of all ideas, press forward to a single, certain point, in order from this point to deduce all further truths. The first task of philosophy is *analytic*, the second *synthetic*.

The classical carrying out of this thought is presented in the *Meditations*. The philosopher portrays his struggle after truth in a dramatic dialogue with himself. Proceeding from the principle "de omnibus dubitandum," the whole circuit of ideas is reviewed on all sides, and in the process we meet the whole apparatus of sceptical arguments. We experience the change of opinions and the deceptions of the senses too often, says Descartes, to permit of our trusting them. In the face of the variety of impressions which the same object makes under different circumstances, it is not possible to decide which of these impressions, and, indeed, whether any one of them, contains the true essence of the thing; and the liveliness and sureness with which we can dream in our actual experience must excite in us the scruple which can never be completely set aside, as to whether we are not perhaps dreaming even when we believe that we are awake and perceiving. Meanwhile, at the basis of all the combinations which the imagination can produce lie the simple elementary acts of consciousness, and in connection with these we meet with truths of which we are undeniably obliged to say that we cannot help recognising them, as, for example, the simple propositions of arithmetic $2 \times 2 = 4$, and the like. But how if now we were so constituted that from our very nature we must necessarily err? how if some demon had created us, whose pleasure it was to give us a Reason that would necessarily deceive while it supposed itself to be teaching the truth? Against such a delusion we should be defenceless, and this thought must make us mistrustful even with reference to the most evident utterances of reason.

After fundamental doubt has been thus pressed even to the farthest extreme, it proves that the doubt breaks off its own point, that it itself presents a fact of completely unassailable certainty:

in order to doubt, in order to dream, in order to be deceived, I must be. Doubt itself proves that I, as a thinking *conscious being* (*res cogitans*), exist. The proposition *cogito sum* is true as often as I think or pronounce it. And, indeed, the certainty of Being is contained in none of my activities except that of consciousness. That I go to walk I can imagine in my dream:[1] that I am conscious cannot be merely my imagination, for imagination is itself a kind of consciousness.[2] The *certainty of the Being or existence of consciousness* is the one fundamental truth which Descartes finds by the analytic method.

Rescue from doubt consists therefore in the *Augustinian argument of the Reality of the conscious nature or essence* (cf. § 22, 1). But its application with Descartes[3] is not the same as with Augustine himself and with the great number of those on whom his doctrine was influential just in the transition period. For Augustine, the self-certainty of the soul was valued as the surest of all experiences, as the fundamental fact of inner perception by means of which the latter obtains for the theory of knowledge a preponderance over outer perception. Thus — not to recall again Charron's moralising interpretation — Campanella particularly had employed the Augustinian principle when, not unlike the great Church Father, he gave to the elements of this experience of self the meaning of metaphysical prime elements (cf. § 29, 3). In a completely analogous manner — not to speak of Locke[4] — *Tschirnhausen*, in a supposed adherence to Descartes, had later regarded self-knowledge as the *experientia evidentissima*,[5] which is therefore to serve as the *a posteriori* beginning of philosophy (cf. below, No. 7), so that from it all further knowledge can be constructed *a priori;* for in self-knowledge is contained the threefold truth, that we are effected by some things well and by others ill, that we understand some and not others, and that in the process of ideation we occupy a passive attitude with reference to

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[1] Descartes' reply to Gassendi's objection (V. 2); cf. *Princ. Phil.* I. 9.

[2] The ordinary translation of *cogitare, cogitatio* by "think" (*Denken*) is liable to occasion misunderstanding, since *Denken* in German [and the same is true of *think*, in English, at least in philosophical terminology] signifies a particular kind of theoretical consciousness. Descartes himself elucidates the meaning of *cogitare* (*Med.* III.; *Princ. Phil.* I. 9), by enumeration: he understands by it to doubt, affirm, deny, understand, will, abhor, imagine, feel a sensation, etc. For that which is common to all these functions we have in German scarcely any word but "Bewusstsein" [consciousness]. The same is also true with regard to Spinoza's use of the term; cf. his *Princ. Phil. Cart.* I., Prop. IV., Schol., and also *Eth.* II., Ax. III., and elsewhere.

[3] Who besides, at the outset, seems not to have known the historical origin of this argument. Cf. *Obj.* IV., and *Resp.*

[4] Cf. below, §§ 33 f.

[5] Tschirnhausen, *Med. Ment.* (1695), pp. 290–94.

the outer world, — three points of attachment for the three rational sciences, ethics, logic, and physics.

5. With *Descartes*, on the contrary, the proposition *cogito sum* has not so much the meaning of an experience, as rather that of the first fundamental rational *truth*. Nor is its evidence that of an inference,[1] but that of immediate *intuitive certainty*. The analytic method seeks here, as with Galileo, the *simple, self-intelligible elements*, out of which all else is to be explained; but while the physicist discovers the perceptional elementary form of motion, which is to make comprehensible all that takes place in the corporeal world, the metaphysician is hunting for the *elementary truths of consciousness*. In this consists the *rationalism* of Descartes.

This rationalism expresses itself in the fact that the superiority of self-consciousness is found in its complete *clearness* and *distinctness*, and in the fact that Descartes propounded as his principle for the synthetic method the maxim, *Everything must be true which is as clear and distinct as self-consciousness, i.e.* which presents itself before the mind's vision as surely and underivably as the mind's own existence. "Clear" is defined by Descartes[2] as that which is intuitively present and manifest to the mind, "distinct" as that which is entirely clear in itself and precisely determined. And these mental presentations — or ideas,[3] as he calls them after the manner of later Scholasticism — which are in this sense clear and distinct, whose evidence is not to be deduced from any others, but is grounded solely in themselves, he calls *innate ideas*.[4] With this expression he indeed incidentally connects also the psycho-genetic thought that these ideas are imprinted upon the human soul by God, but for the most part he desires to give only the epistemological significance of *immediate, rational evidence*.

These two meanings are peculiarly mingled in Descartes' *proofs for the existence of God*, which form an integrant constituent of his theory of knowledge, in so far as this "idea" is the first for which, in the synthetic procedure of his method a clearness and distinctness or intuitive evidence of the "natural light," equal to that of self-consciousness, is claimed. The new (so-called Cartesian) proof which he introduces in this connection,[5] has a multitude of scholastic

[1] *Resp. ad Obj.* II. [2] *Princ. Phil.* I. 45.
[3] [German *Idee*. I follow the ordinary English usage in spelling the word as used by Descartes without a capital.]
[4] Cf. E. Grimm, *D.'s Lehre von den angeborenen Ideen* (Jena, 1873), and also P. Natorp, *D.'s Erkenntnisstheorie* (Marburg, 1882). That *innatus* is better translated by *eingeboren* than by the usual *angeboren* has been remarked by R. Eucken, *Geschichte und Kritik der Grundbegriffe der Gegenwart*, p. 73.
[5] *Med.* III.

assumptions. He argues that the individual self-consciousness knows itself to be finite, and therefore imperfect (according to the old identification of determinations expressing value with ontological gradations), and that this knowledge can be derived only from the conception of an absolutely perfect being (*ens perfectissimum*). This latter conception which we find within us must have a cause which, nevertheless, is not to be found within our own selves, nor in any other finite things. For the principle of causality requires that at least as much Reality be contained in the cause as there is in the effect. This — in the scholastic sense — realistic principle is now applied, in analogy to Anselm's argument, to the relation of the idea in the mind (*esse in intellectu* or *esse objective*) to the Real (*esse in re* or *esse formaliter*), in order to give the inference that we should not have the idea of a most perfect being if the idea had not been produced in us by such a being himself. This anthropologico-metaphysical proof has then with Descartes the significance that by it that former sceptical hypothetical phantom of a deceiving demon is again destroyed. For since the perfection of God involves his veracity, and it is impossible that he should so have created us that we should necessarily err, *confidence in the lumen naturale*, that is, in the immediate evidence of rational knowledge, is *restored*, and thus definitively grounded. Thus modern rationalism is introduced by Descartes by the circuitous route of Scholasticism. For this proof gives the charter for acknowledging with complete certainty as true all propositions which manifest themselves in clear and distinct light before the reason. Here belong, firstly, all truths of mathematics, but here belongs also the *ontological* proof for the existence of God. For with the same necessity of thought — thus Descartes takes up Anselm's argument[1] — with which the geometrical propositions with regard to a triangle follow from the definition of the triangle, it follows from the mere definition of the most Real being that the attribute of existence belongs to him. The possibility of thinking God suffices to prove his existence.

In this way it follows from the criterion of clearness and distinctness, that of finite things also, and especially of bodies, so much can be known as is clearly and distinctly perceived. But this is for Descartes the *mathematical* element, and is limited to the *quantitative determinations*, while all the sensuous-qualitative elements in perception are regarded by the philosopher as unclear and confused. On this account metaphysics and the theory of knowledge terminate for him, too, in a *mathematical physics*. He designates[2] the sensuous appre-

[1] *Med.* V. [2] *Med.* VI.

hension of the qualitative, "imagination" (*imaginatio*). The apprehension of that which can be mathematically constructed he terms, on the other hand, "intellectual" knowledge (*intellectio*), and strongly as he knows how to prize the help which experience gives in the former, a really scientific insight rests, in his opinion, only upon the latter.

The distinction between distinct and confused presentations (which goes back to Duns Scotus and farther) serves Descartes also to solve the *problem of error*, which results for him out of his principle of the *veracitas dei*, because it does not seem possible to see how, in accordance with that principle, perfect deity could so arrange human nature as to allow it to err at all. Here Descartes helps himself[1] by a peculiarly limited *doctrine of freedom*, which might be consistent with either Thomistic determinism or Scotist indeterminism. It is assumed, that is, that only clear and distinct presentations exercise so cogent and compelling a power upon the mind that it cannot avoid recognising them, while with reference to the unclear and confused presentations it retains the boundless and groundless activity of the *liberum arbitrium indifferentiæ* (its farthest-reaching power, which in the Scotist fashion is set in analogy with the freedom of God). Thus error arises when affirmation and negation follow arbitrarily (without rational ground) in the case of unclear and indistinct material for judgment.[2] The demand which follows from this of withholding judgment in all cases where a sufficiently clear and distinct insight is not present recalls too distinctly the ancient ἐποχή ("suspense") to permit us to overlook the relationship of this theory of error, with the doctrines of the Sceptics and Stoics as to the συγκατάθεσις (cf. pp. 167, 208).[3] In fact, Descartes recognised distinctly the will-factor in judgment (agreeing here, too, with the epistemology of Augustine and Duns Scotus), and Spinoza followed him in this, so far as to designate affirmation or denial as a necessary characteristic of every idea, and thus to teach that man cannot think without at the same time willing.[4]

6. Descartes' mathematical reform of philosophy had a peculiar fate. Its metaphysical results began a rich and fruitful development; its tendency as regards method, however, soon became subjected to a misunderstanding which exactly reversed its meaning. The philosopher himself desired to see the analytical method employed in a great proportion of instances, even in the case of particular problems, and thought of the synthetic method as a progress in discovery from one intuitive truth to another. His disciples, however, confounded the creatively free intellectual activity, which Descartes had in mind, with that rigidly demonstrative system of exposition which they found in *Euclid's text-book of geometry*. The monistic tendency of the Cartesian methodology, the fact that it set up a highest principle from which all other certainty should follow, favoured this exchange, and out of the new method of investigation there came into being again an *ars demonstrandi*. The ideal of philosophy appeared to be the task of developing from its fundamental principle all its knowledge as a system of as rigidly logical consistency as that with which Euclid's text-book deduces geometry with all its propositions from axioms and definitions.

A request of this sort had been answered by Descartes with a tentative sketch, though with express reference to the doubtfulness of this transfer;[1] but the allurement to find the significance of *mathematics* for philosophical method in the circumstance, that it is the *ideal of demonstrative science*, seems only to have been strengthened thereby. At least, it was in this direction that the influence of the Cartesian philosophy proved strongest for the following period. In all the change of epistemological investigations until far into the eighteenth century this conception of mathematics was a firmly established axiom for all parties. Indeed, it became even a lever for scepticism and mysticism, under the direct influence of Descartes, in the case of men like *Pascal*. Since no other human science, so the latter argued, neither metaphysics nor the empirical disciplines, can attain mathematical evidence; man must be modest in his efforts after rational knowledge, and must the more follow the impulse of his heart toward presageful faith, and the feeling of tact which belongs to a noble conduct of life. The Mystic *Poiret* (influenced by Boehme), also, and the orthodox sceptic *Huet*,[2] turned away from Cartesianism because it could not pause in its programme of universal mathematics.

Positive beginnings toward a transformation of the Cartesian method into the *Euclidean line of proof* are found in the Port-Royal

[1] *Med.* IV.

[2] Error appears accordingly as an act of free will parallel to the act of sin, and thus as guilt; it is the guilt or fault of self-deception. This thought was carried out particularly by Malebranche (*Entret.* III. f.).

[3] This relationship extends consistently to Descartes' ethics also. From the clear and distinct knowledge of reason follows necessarily right willing and acting; from the obscure and confused impulses of the sensibility result practically sin and theoretically error, by abuse of freedom. The ethical ideal is the Socratic-Stoic ideal of the rule of reason over the sensibility.

[4] *Eth.* II., Prop. 49.

[1] *Resp. ad Obj.* II.

[2] Pierre Daniel *Huet* (1630–1721), the learned Bishop of Avranches, wrote *Censura Philosophiæ Cartesianæ* (1689), and *Traité de la Faiblesse de l'Esprit Humain* (1723). His Autobiography (1718) is also instructive on the point mentioned above. Cf. on him Ch. Bartholmèss (Paris, 1850).

logic and in the logical treatises of Geulincx; but in the system of *Spinoza* this methodical schematism stands before us complete and perfect as from one mould. He first gave an exposition of the Cartesian philosophy "*more geometrico*," by developing the content of the system step by step in propositions, after first setting up definitions and axioms. Each of these propositions was proved from the definitions, axioms, and preceding propositions; while corollaries and scholia giving freer elucidations were added to certain of the propositions. Into this same rigid, unwieldy form Spinoza pressed his own philosophy also in the *Ethics*, and believed that it was thus as surely demonstrated as the Euclidean system of geometry. This presupposed not only the flawless correctness of the demonstrative process, but also an unambiguous evidence and an unassailable validity of the definitions and axioms. A look at the beginning of the *Ethics* (and not only of the first, but also of the following books) suffices to convince one of the *naïveté* with which Spinoza brings forward the complicated and condensed constructions of scholastic thought as self-evident conceptions and principles, and thereby anticipates implicitly his whole metaphysical system.

This *geometrical method* has, however, in Spinoza's thought — and in this consists its psycho-genetic justification — at the same time its material as well as formal significance. The fundamental religious conviction that all things necessarily proceed from the unitary essence of God seemed to him to require a method of philosophical knowledge, which in the same manner should derive from the idea of God the ideas of all things. In the true philosophy the order of ideas ought to be the same as the real order of things.[1] But from this it follows of itself that the real process of the procedure of things forth from God must be thought after the analogy of the logical procedure of the consequent from its ground or reason, and thus the character of the method which Spinoza fixed upon for the problem of philosophy involved in advance the metaphysical character of its solution; cf. § 31.

7. Little as men dared, in the immediately following period, to make the content of the Spinozistic philosophy their own, its methodical form exercised, nevertheless, an impressive influence: and the more the geometrical method became settled in the philosophy of the schools, the more the *syllogistic procedure* entered again with it, since all knowledge was to be deduced from the highest truths by

[1] The view that true knowledge as genetic definition must repeat the process by which its object arises was carried out especially by *Tschirnhausen*, who did not shrink from the paradox that a complete definition of laughter must be able to produce laughter itself! (*Med. Ment.*, 67 f.)

regular inferences. Especially did the mathematically schooled Cartesians in Germany take up the geometrical method along this line: this was done by *Jung* and *Weigel*, and the academic impulse to the preparation of text-books found in this method a form with which it could have the utmost sympathy. In the eighteenth century Christian *Wolff* (cf. Part V.) pursued this line in the most comprehensive manner with his Latin text-books, and for the systematisation of a firmly established and clearly thought out material there could be in fact no better form. This was shown when *Pufendorf* undertook to deduce the entire system of Natural Right by the geometrical method, as a logical necessity from the single principle of the need of society.

When this view was in process of coming into existence *Leibniz* came into sympathy with it under the especial influence of Erhard Weigel, and was at the beginning one of its most consistent supporters. He not only made the jest of giving this unwonted garb to a political brochure,[1] but was seriously of the opinion that philosophical controversies would find their end for the first time when a philosophy could once make its appearance in as clear and certain a form as that of a mathematical calculation.[2]

Leibniz pursued this thought very energetically. The stimulus of Hobbes, who also — though with quite another purpose, cf. § 31, 2 — declared thinking to be a reckoning with the conceptional signs of things, may have been added; the Art of Lull and the pains which Giordano Bruno had taken with its improvement were well known to him. In Cartesian circles, also, the thought of transforming the mathematical method to a regular art of invention had been much discussed: besides Joachim Jung, the Altorf Professor *Joh. Christopher Sturm*,[3] had also exercised an influence upon Leibniz in this respect. Finally, the thought of expressing the fundamental metaphysical conceptions, and likewise the logical operations of their combination after the manner of the mathematical sign-language by definite characters, seemed to offer the possibility of writing a philosophical investigation in general formulæ, and by this means raising it beyond the capability of being expressed in a definite language — an effort toward a universally scientific language, a "*Lingua Adamica*," which likewise appeared at the time

[1] In the pseudonymous *Specimen demonstrationum politicarum pro rege Polonorum eligendo* (1669), he proved by "geometrical method" in sixty propositions and demonstrations that the Count Palatine of Neuburg must be chosen king of the Poles.

[2] *De Scientia Universali seu Calculo Philosophico* (1684).

[3] The author of a *Compendium Universalium seu Metaphysicæ Euclideæ*.

of Leibniz in numerous supporters.[1] So, too, Leibniz busied himself to an extraordinary degree with the thought of a *characteristica universalis*, and a method of philosophical calculus.[2]

The essential outcome of these strange endeavours was, that an attempt was necessarily made to establish those highest truths, from the logical combination of which all knowledge was to be deduced. So Leibniz, like Galileo and Descartes, must proceed to search out that which, as *immediately and intuitively certain*, forces itself upon the mind as *self-evident*, and by its combinations grounds all derived knowledge. In the course of these reflections Leibniz stumbled upon the discovery[3] (which Aristotle had made before him), that there are two completely different kinds of this intuitive knowledge: universal truths self-evident to reason, and facts of experience. The one class has timeless validity; the other, validity for a single instance: *vérités éternelles* and *vérités de fait*. Both have in common that they are intuitively certain, *i.e.* are certain in themselves and not by deduction from anything else; they are called, therefore, *primæ veritates*, or, also, *primæ possibilitates*, because in them the possibility of all that is derivative has its ground. For the "possibility" of a conception is known either by a "causal definition" which derives the same from the first possibilities, that is, *a priori;* or by the immediate experience of its actual existence, that is, *a posteriori*.

These two kinds of "primitive truths"—the rational and the empirical, as we see—Leibniz attached in a very interesting manner to the two Cartesian marks of intuitive self-evidence, *clearness* and *distinctness*. To this end he shifts to a slight extent the meaning of both expressions.[4] That idea is clear which is surely distinguished from all others and so is adequate for the recognition of its object; that idea is distinct which is clear even to its particular constituent parts and to the knowledge of their combination. According to this, the *a priori*, "geometrical" or "metaphysical" eternal truths are clear *and* distinct; while on the other hand the *a posteriori*, or the truths relating to facts, are clear, indeed, but not distinct. Hence the former are perfectly transparent, conjoined with the conviction of the *impossiblity of the opposite*, while in the case of the latter the opposite is thinkable. In the case of the former the intuitive certainty rests upon the *Principle of Contradiction;* in the case of the latter the possibility guaranteed by the actual fact needs still an explanation in accordance with the *Principle of Sufficient Reason*.

[1] Such attempts had been projected by J. J. Becker (1661), G. Dalgarn (1661), and especially by Athanasius Kircher (1663).
[2] Cf. A. Trendelenburg, *Historische Beiträge zu Philosophie*, Vols. II., III.
[3] *Meditationes de Cognitione Veritate et Ideis* (1684).
[4] Ib. at the beginning, Erd's. ed., p. 79.

At the beginning, Leibniz intended this distinction only with reference to the imperfection of the human understanding. In the case of rational truths we see into the impossibility of the opposite; with empirical truths this is not the case, and we must content ourselves with establishing their actuality:[1] but the latter also, in the *natura rerum* and for the divine understanding, are so grounded that the opposite is impossible, although it remains thinkable for us. If Leibniz compared this distinction with that of commensurable and incommensurable magnitudes, he meant at the beginning that incommensurability lies only in man's limited knowing capacity. But in the course of his development this antithesis became for him an absolute one; it gained metaphysical significance. Leibniz now distinguished *realiter* between an *unconditional necessity*, which involves the logical impossibility of the opposite, and a *conditional* necessity, which has "only" the character of a matter of fact. He divided the principles of things into those of which the opposite is unthinkable, and those of which the opposite is thinkable: he distinguished metaphysically, also, between *necessary* and *contingent truths*. This, however, cohered with metaphysical motives, which arose from an after-working of the Scotist theory of the contingency of the finite, and overthrew the geometrical method.

§ 31. Substance and Causality.

The real [as contrasted with formal] result of the new methods was in metaphysics, as in natural science, a transformation of the fundamental ideas of the nature of things, and of the mode of their connection in the processes of Nature: the conceptions of substance and causality acquired a new content. But this change could not proceed so radically in metaphysics as in natural science. In this latter more limited realm, after the Galilean principle had once been found, it was possible in a certain measure to begin *ab ovo* and produce a completely new theory: in the more general philosophical doctrines the power and authority of tradition were much too great to make it possible or permissible that it should be completely set aside.

This distinction asserted itself already in connection with the delicate *relation sustained to religious conceptions*. Natural science

[1] The Aristotelian distinction of διότι and ὅτι.

could isolate itself absolutely from theology, and maintain toward it an attitude of complete indifference: metaphysics, by its conception of the deity and by its theory of the mental or spiritual world, was brought again and again into hostile or friendly contact with the religious sphere of ideas. A Galileo declared that the investigations of physics, whatever their result might be, had not the least thing to do with the teaching of the Bible,[1] and a Newton was not prevented by his mathematical natural philosophy from burying himself with the most ardent piety in the mysteries of the Apocalypse. But the metaphysicians, however indifferent their thought as regards religion, and however strictly they might prosecute their science in the purely theoretical spirit, were still always obliged to consider that they had to do with objects concerning which the Church doctrine was fixed. This gave modern philosophy a somewhat delicate position: mediæval philosophy had brought to the objects of Church dogma an essentially religious interest of its own as well; modern philosophy regarded them, if at all, from the theoretical standpoint only. Hence those felt themselves most secure who, like Bacon and Hobbes, restricted philosophy also entirely to natural research, declined to enter upon a metaphysics proper, and were willing to let dogma speak the only words with regard to the deity and the super-sensible destiny of man. Bacon did this with large words behind which it is difficult to recognise his true disposition;[2] Hobbes rather let it be seen that his naturalistic opinion, like the Epicurean, saw in ideas as to the supernatural a superstition resting upon a defective knowledge of Nature, — a superstition which by the regulation of the state becomes the binding authority of religion.[3] Much more difficult, however, was the position of those philosophers who held fast to the metaphysical conception of the deity in their very explanation of Nature; Descartes' whole literary activity is filled with an anxious caution directed toward avoiding every offence to religion, while Leibniz could attempt to carry through in a much more positive manner the conformity of his metaphysics to religion; and on the other hand the example of Spinoza showed how dangerous it was if philosophy openly brought to the front the difference between its conception of God and the dogmatic conception.

1. The main difficulty of the case inhered in the circumstance that the new methodical principle of *mechanics* excluded all tracing of

[1] Cf. the letter to the Grand Duchess Christine, *Op.* II. 26 ff.
[2] *De Augm. Scient.* IX., where the supernatural and incomprehensible is set forth as the characteristic and serviceable quality of faith.
[3] *Leviathan*, I. 6; cf. the drastic expression, ib. IV. 32.

corporeal phenomena back to spiritual forces. Nature was despiritualised; science would see in it nothing but the movements of smallest bodies, of which one is the cause of the other. No room remained for the operation of supernatural powers. So first of all, at one stroke, magic, astronomy, and alchemy, in which the Neo-Platonic ghosts and spirits had held sway, became for science a standpoint of the past. Leonardo had already demanded that the phenomena of the external world should be explained by *natural causes* only; the great systems of the seventeenth century without exception recognise only such, and a Cartesian, Balthasar Bekker, wrote a book[1] to show that in accordance with the principles of modern science, all appearances of ghosts, conjurations, and magic arts must be reckoned as injurious errors, — a word of admonition which was very much in place in view of the luxuriant superstition of the Renaissance.

But with the spirits, *teleology*, also, was obliged to give place. The explanation of natural phenomena by their purposiveness always came ultimately in some way or other to the thought of a spiritual creation or ordering of things, and so was contradictory to the principle of mechanics. At this point the victory of the system of Democritus over the natural philosophy of Plato and Aristotle was most palpable; this, too, was emphasised most forcibly by the new philosophy. *Bacon* counted the teleological mode of regarding Nature as one of the idols, and, indeed, as one of the dangerous idols of the tribe, — the fundamental errors which become a source of illusion to man through his very nature: he taught that philosophy has to do only with formal or efficient causes, and expressed his restriction of philosophy to physics and his rejection of metaphysics precisely by saying that the explanation of Nature is physics if it concerns *causæ efficientes*, metaphysics if it concerns *causæ finales*.[2] In the case of Hobbes, who was the disciple of Bacon and Galileo, the same view is self-explaining. But *Descartes*, also, desires to see all final causes kept at a distance from the explanation of Nature — he declares it audacious to desire to know the purposes of God.[3] Much more open, and keenest by far, is the polemic of *Spinoza*[4] against the anthropomorphism of teleology. In view of his idea of God and God's relation to the world, it is absurd to speak of ends of the deity, and especially of such as have reference to men; where all follows with eternal necessity from the essential nature of the deity, there is no room for an activity according to ends. The English Neo-Platonists, such as Cudworth and

[1] Balthasar *Bekker* (1634–1698), *De Betoverte Wereld* (1690).
[2] *De Augm.* III. 4. [3] *Med.* IV.
[4] Cf. principally *Eth.* I. Append.

Henry More, combated this fundamental mechanico-antiteleological feature of the new metaphysics with all the eloquence of the old arguments, but without success. The teleological conviction was obliged to renounce definitively the claim of affording scientific explanation of particular phenomena, and only in the metaphysical conception of the whole did Leibniz (cf. below, No. 8), and similarly a part of the English students of Nature, find ultimately a satisfactory adjustment between the opposing principles.

With the exclusion of the spiritual from the explanation of Nature, still a third element of the old view of the world fell away, viz. the thought of the difference in kind and in value of the spheres of Nature, as it had been embodied most distinctly in the Neo-Platonic graded realm of things, following the ancient Pythagorean precedent. In this respect the fantastic natural philosophy of the Renaissance had already done a forcible work of preparation. The Stoic doctrine of the omnipresence of all substances at every point of the universe had been revived by Nicolaus Cusanus; but it was in connection with the victory of the Copernican system, as we see in Bruno, that the idea of the *homogeneity of all parts of the universe* first completely forced its way to recognition. The sublunary world could no longer be contrasted as the realm of imperfection, with the more spiritual spheres of the stellar heaven; matter and motion are alike in both. It was from this thought that Kepler and Galileo proceeded, and it became complete when Newton recognised the identity of force in the fall of the apple and the revolution of the stars. For modern science, the old distinction in essence and in value between heaven and earth exists no longer. The *universe is one in nature throughout.* This same view, moreover, presented itself in opposition to the Aristotelian and Thomistic development system of Matters and Forms. It did away with the whole army of lower and higher forces — the much combated *qualitates occultæ;* it recognised the mechanical principle of motion as the only ground of explanation for all phenomena, and therefore, removed also the *distinction in principle between the animate and the inanimate.* Though here Neo-Platonism had co-operated toward overcoming this antithesis by its view of the animation of the entire universe, the reverse task now arose for the Galilean mechanics, namely, that of *explaining mechanically the phenomena of life also.* The discovery of the mechanism of the circulation of the blood by Harvey[1] (1626) gave to this tendency a

[1] In which he had been anticipated by Michael Servetus (burned 1553 in Geneva by Calvin's instrumentality).

vigorous impulse; Descartes expressed it in principle in his statement that the bodies of animals are to be regarded scientifically as most complex automata, and their vital activities as mechanical processes. Hobbes and Spinoza carried out this thought more exactly; a zealous study of reflex motions began in the medical schools of France and the Netherlands, and the conception of the soul as vital force became completely disintegrated. Only the Platonists and the adherents of the vitalism of Paracelsus and Boehme, such as Van Helmont, held fast to this conception in the old manner.

2. This *mechanistic despiritualisation* of Nature corresponded completely to that *dualistic theory of the world,* which from epistemological motives had been in course of preparation in terministic Nominalism, — the theory of a *total difference between the inner and the outer world.* To the knowledge of their qualitative difference was now added that of their real and causal separateness. The world of bodies appeared not only quite different in kind from that of mind, but also as entirely sundered from it in its existence and in the course of its motions. The doctrine of the *intellectuality of the sense qualities,* revived in the philosophy of the Renaissance by the Humanists, had contributed an extraordinary amount toward sharpening the above antithesis. The doctrine that colours, tones, smells, tastes, and qualities of pressure, heat, and touch are not real qualities of things, but only signs of such in the mind, had passed over from the Sceptical and Epicurean literature into most of the doctrines of modern philosophy with a repetition of the ancient illustrations. Vives, Montaigne, Sanchez, and Campanella were at one in this; Galileo, Hobbes, and Descartes revived the teaching of Democritus, that to these qualitative differences of perception nothing but quantitive differences correspond in the *natura rerum,* and this in such a way that the former are the inner modes of mentally representing the latter. Descartes regarded sense qualities as obscure and confused ideas, while the conception of the quantitative determinations of the outer world, on account of its mathematical character, was for him the only clear and distinct idea of them.

According to Descartes, therefore, not only the sensuous feelings, but also the contents of sensation, belong not to the spatial, but to the psychical world only, and represent in this sphere the geometrical structures of which they are the signs. In our examination of an individual object we can,[1] to be sure, gain a knowledge of this

[1] Cf. *Med.* VI. which allows perhaps the plainest view of the very narrow relation which Descartes' physical research had to experience.

true mathematical essence of bodies only by the aid of perceptions, and in these perceptions the true mathematical essence is always alloyed with the qualitative elements of the "imagination." But just in this consists the task of physical research, to dissolve out this real essence of bodies from the subjective modes of our mental representation by means of reflection upon the clear and distinct elements of perception. John *Locke*, who later adopted and made popular this view of Descartes, designated[1] those qualities which belong to bodies in themselves as *primary*, and called those *secondary*, on the other hand, which belong to a body only by virtue of its action upon our senses.[2] Descartes allowed as primary qualities only shape, size, position, and motion, so that for him the physical body coincided with the mathematical (cf. below, No. 4). In order to maintain a distinction between the two, Henry More,[3] on the contrary, demanded that impenetrability, regarded as the property of filling space, should also be reckoned to the essential nature of bodies, and Locke,[4] in accordance with this view, took up "solidity" into the class of primary qualities.

With *Hobbes*[5] these thoughts become modified more in accordance with the terministic conception. He regards space (as *phantasma rei existentis*) and time (as *phantasma motus*) as also modes of mental representation, and it is just because we can therefore construct these ourselves that mathematical theory has the advantage of being the sole rational science. But instead of drawing phenomenalistic conclusions from this premise, he argues that philosophy can treat only of bodies, and must leave everything spiritual to revelation. Scientific thought consequently consists, for him, only in the immanent combination of *signs*. These are partly involuntary in perceptions, partly arbitrary in words (similarly Occam, cf. § 27, 4). It is only by means of the latter that general conceptions and propositions become possible. Our thinking is hence a *reckoning* with verbal signs. It has its truth in itself and stands as something completely heterogeneous by the side of the outer world to which it relates.

3. All these suggestions become compressed in the system of Descartes to form the doctrine of the *dualism of substances*. The analytic method was intended to discover the simple elements of reality which were self-explanatory and not susceptible of farther

[1] *Essay, Human Understanding*, II. 8, § 23 f.
[2] As *tertiary* qualities, Locke added further the "powers" for the operation of one body upon others.
[3] Desc. *Œuv.* (C.), X. pp. 181 ff.
[4] *Essay*, II. 4.
[5] *Human Nature*, chs. 2–5; *Leviathan*, chs. 4 ff.

deduction. Descartes discovered that all that can be experienced is a species either of spatial or of conscious Being or existence. *Spatiality*, or the quality of filling space, and *consciousness* ("extension" and "thought" according to the usual translation of *extensio* and *cogitatio*) are the ultimate, simple, original *attributes* of reality. All that is is either spatial or conscious. For these two prime predicates are related disjunctively. What is spatial is not conscious; what is conscious is not spatial. The self-certainty of mind is only that of the personality as a conscious being. Bodies are real in so far as they have in themselves the quantitative determinations of spatial existence and change, of extension and motion, All things are either bodies or minds; substances are either spatial or conscious: *res extensæ and res cogitantes.*

The world falls thus into two completely different and completely separated realms: that of bodies and that of minds. But in the background of this dualism there stands in the thought of Descartes the conception of the *deity* as the *ens perfectissimum* or *perfect substance*. Bodies and minds are *finite things;* God is *infinite Being.*[1] The *Meditations* leave no doubt as to the fact that Descartes accepted the conception of God quite in accordance with the interpretation of *scholastic Realism*. The mind in its own Being, which it recognises as a limited and imperfect one, apprehends with the same intuitive certainty the Reality of the perfect, infinite Being also (cf. above, § 30, 5). To the ontological argument is added the relation of God and the world in the form brought forward by Nicolaus Cusanus, namely, that of the antithesis of the infinite and the finite. But the above-mentioned relationship with the Realism of the Middle Ages appears most distinctly in the development of metaphysics that succeeded Descartes: for the *pantheistic consequences* of this presupposition, which had been carefully held back in the scholastic period, were now spoken out with complete clearness and sureness. And if we find in the doctrines of Descartes' successors a strong similarity with those which in the Middle Ages could lead but a more or less repressed existence, this is intelligible even without the assumption of a direct historical dependence, merely by the pragmatic connection and the logical necessity of the conclusions.

4. The common metaphysical name of "substance," applied to God in the infinite sense, and to minds and bodies in a finite sense, could not permanently cover the problems which were hidden be-

[1] So likewise Malebranche said (*Rech.* III. 2, 9 a. E.) that God could properly be called only *Celui qui est*, he is *l'être sans restriction, tout être infini est universel.*

neath it. The conception of substance had come into a state of flux, and needed further re-shaping. It had almost lost touch with the idea of "thing," the category of inherence; for just the combination of a multiplicity of determinations into the idea of a unitary concrete entity, which is essential to this category, was completely lacking in Descartes' conception of finite substances, since these were held to be characterised by *one* fundamental quality, spatiality or consciousness. All else that was found in substances must therefore be regarded as a modification of its fundamental quality, of its *attribute*. All qualities and states of bodies are *modes* of their spatiality or extension: all qualities and states of mind are *modes* of consciousness (*modi cogitandi*).

It is involved in this that all particular substances belonging to either class, all bodies on the one hand and all minds on the other, are alike in their essence, their constitutive attribute. But from this it is only a step farther to the idea in which this likeness is thought as metaphysical identity. All bodies are spatial, all minds are conscious; individual bodies are distinguished from one another only by different modes of spatiality (form, size, situation, motion); individual minds are distinguished from one another only by different modes of consciousness (ideas, judgments, activities of will). Individual bodies are modes of spatiality, individual minds are modes of consciousness. In this way the attribute obtains metaphysical preponderance over individual substances, which now appear as its modifications; the *res extensæ* become *modi extensionis;* the *res cogitantes, modi cogitationis.*

Descartes himself drew this conclusion only in the domain of natural philosophy, to which in general he restricted the carrying out of his metaphysical doctrine in its principles. Here, however, the general conception of modification took on, of itself, a definite significance, and one capable of apprehension by perception or imagination, viz. that of limitation (*determinatio*). Bodies are *parts of space,* limitations of the universal space-filling quality or extension.[1] Hence for Descartes the conception of body coincides with that of a limited spatial magnitude. A body is, as regards its true essence, a portion of space. The elements of the corporeal world are the "*corpuscles,*"[2]

[1] Cf. *Princ. Phil.* II. 9 f., where, at the same time, it appears quite clearly that this relation of the individual body to universal space is made equivalent to that of individual and species.

[2] For the corpuscular theory, Descartes found many suggestions in Bacon, Hobbes, Basso, Sennert, and others. The variety in the development of this theory, which rests upon the dialectic between the mathematical and the physical momenta, has more interest for natural science than for philosophy. An excellent exposition is found in Lasswitz, *Geschichte der Atomistik.*

i.e. the firm spatial particles which *realiter* are no longer divisible: as mathematical structures, however, they are infinitely divisible; that is, there are no atoms. From these presuppositions follow, likewise, for Descartes, the impossibility of empty space, and the infinitude of the corporeal world.

For the mental world the analogous claim was pronounced by *Malebranche.* In connection with the epistemological motives (cf. below, No. 8) which made it seem to him that no knowledge of things is possible except in God, he came[1] to the conception of the *raison universelle,* which, as being alike in all individual minds, cannot belong to the modes of the finite mind, but is rather that of which finite minds are themselves modifications, and can, just on this account, be none other than an attribute of God. God is in so far the "place of minds" or spirits, just as space is the place of bodies. Here, also, as the expression proves, the relation which obtains in conceptions between the universal and the particular underlies the thought, and following the analogy of the Cartesian conception of space and body this relation is thought in perceptional or picturate terms as *participation.*[2] All human insight is a participation in the infinite Reason, all ideas of finite things are but determinations of the idea of God, all desires directed toward the particular object are but participations in that love toward God as the ground of its essence and life, which necessarily dwells in the finite mind. To be sure, Malebranche came into a very critical situation by thus making the finite mind disappear completely in the universal divine mind, as its modification. For how, in accordance with this, should he explain the self-subsistence and self-activity which it seemed were quite notoriously present in those inclinations and volitions of man which opposed God? In this difficulty nothing availed but the word "freedom," in using which Malebranche was indeed obliged to confess that freedom was an impenetrable mystery.[3]

5. In this course of thought pursued by Malebranche appears clearly the inevitable logical consistency with which the attributes, which were regarded by Descartes as the common essence belonging to either of the two classes of finite substances, could ultimately be thought only as the *attributes of the infinite substance or deity.* But precisely in this point consists the fundamental motive of *Spinozism,* which developed along this line out of Cartesianism directly and at the outset, and at the same time developed to the farthest

[1] *Rech. de la Vér.* III. 2, 6; *Entret.* I. 10.

[2] Recall the Platonic *μέθεξις*!

[3] Cf. above, p. 394, note 2.

consequence. Spinozism likewise holds as firmly to the qualitative as to the causal dualism of spatiality and consciousness. The spatial and the spiritual worlds are entirely heterogeneous and absolutely independent of each other. But the whole endless series of bodies, with their divisions, forms, and motions, are only the modes of extension, just as the endless series of minds with their ideas and volitions are only the modes of consciousness. Hence these finite "things" are no longer entitled to the name of "substance." That only can be called substance, whose attributes are extension and consciousness themselves, viz. the infinite existence or Being, the *deity*. But its essence, in turn, cannot be exhausted in these two attributes which are accessible to human experience; the *ens realissimum* involves within itself the actuality of the *infinite number of all possible attributes*.

The ultimate ground of this position also lies in the scholastic-realistic conception of the most real being. Spinoza's definition of *substance* or *the deity*, as the essence (*essentia*) which involves its own existence, is only the condensed expression of the ontological proof for the existence of God: the "*aseïtas*" is preserved in the term "*causa sui*"; substance as that "*quod in se est et per se concipitur*" is again but another transcription of the same thought. Proceeding from these definitions, the proof for the oneness and infinitude of substance [1] followed as a matter of course.

That, however, we have here to do with an entirely realistic course of thought becomes clearly manifest from Spinoza's doctrine of the nature of substance itself and of its relation to the attributes. For the Spinozistic system says absolutely nothing of substance or of the deity farther than the formal determinations contained in the conception of the *ens realissimum*, of absolute Being. Every predicate expressing any content is, on the contrary, expressly denied: and in particular Spinoza is especially careful to refuse [2] to the divine essence the modifications of consciousness, such as intellectual cognition [*intellectus, Erkenntniss*] and will. Just as little of course does he recognise the modifications of extension as being predicates of the divine essence, though he had no polemical inducement to express this especially. God himself is therefore neither mind nor body; of him it can only be said, that he is. It is evident that the old *principle of negative theology* is here present with a changed form of expression. Knowledge of all finite things and states leads to two highest universal conceptions: space-filling quality or extension, and consciousness. To both of these a higher metaphysical

[1] *Eth.* I. Props. 1–14.

[2] Ib. I. 31.

dignity is ascribed than to finite things; they are the attributes, and the things are their modes. But if the process of abstraction now rises from these two determinations, the last which contain any content, to the most general, to the *ens generalissimum*, then all definite content falls away from the conception of this being, and only the empty Form of substance is left. For Spinoza, also, the deity is all and thus — nothing. His doctrine of God lies quite along the path of Mysticism.[1]

But if God is thus the general essence of finite things, he does not exist otherwise than in them and with them. This applies first of all to the attributes. God is not distinct from them, and they are not distinct from him, just as the dimensions of space are not distinct from space itself. Hence Spinoza can say also that God consists of countless attributes, or *Deus* SIVE *omnia ejus attributa*.[2] And the same relation is afterwards repeated between the attributes and the modes. Every attribute, because it expresses the infinite essence of God in a definite manner, is again infinite in its own way; but it does not exist otherwise than with and in its countless modifications. God then exists only in things as their universal essence, and they only in him as the modes of his reality. In this sense Spinoza adopts from Nicolaus Cusanus and Giordano Bruno the expressions *natura naturans* and *natura naturata*. God is Nature: as the universal world-essence, he is the *natura naturans;* as sum-total of the individual things in which this essence exists modified, he is the *natura naturata*. If in this connection the *natura naturans* is called occasionally also the efficient cause of things, this creative force must not be thought as something distinct from its workings; this cause exists nowhere but in its workings. This is Spinoza's complete and unreserved *pantheism*.

Finally this relation is repeated yet again in the distinction which Spinoza establishes between the infinite and the finite modes.[3] If each of the countless finite things is a mode of God, the infinite connection or coherence which exists between them must also be regarded as a mode, and, indeed, as an *infinite mode*. Spinoza affirms three of these.[4] The deity as the universal world-thing appears in individual things, which are finite modes; to them corresponds as

[1] To this corresponds also his *theory of cognition* with its three stages, which sets "*intuition*," as the immediate apprehension of the eternal logical resulting of all things from God, as knowledge *sub specie æternitatis*, above perception and the activity of the intellect.

[2] Which, however, is in nowise to be interpreted as if the attributes were self-subsistent prime realities and "God" only the collective name for them (as K. Thomas supposed, *Sp. als Metaphysiker*, Königsberg, 1840). Such a crassly nominalistic cap-stone would press the whole system out of joint.

[3] *Eth.* I. 23 and 30 ff.

[4] *Ep.* 64 (*Op.* II. 219).

infinite mode the universe. In the attribute of extension the finite modes are the particular space-forms; the infinite mode is infinite space, or matter[1] itself in its motion and rest. For the attribute of consciousness, the *intellectus infinitus*[2] stands beside the particular functions of ideation and will. Here Spinoza reminds us immediately of the realistic pantheism of David of Dinant (cf. § 27, 1). His metaphysics is the last word of mediæval Realism.[3]

6. With these motives relating to the problem of the qualitative difference of substances modern philosophy struggled out of its dualistic presuppositions to a monistic adjustment; but at the same time, still more powerful motives became mingled in the process, — motives which grew out of the real and causal separation of the spatial and the conscious worlds. At first, indeed, it was the principles of mechanics themselves which demanded the attempt to isolate completely the course of events in each of the two spheres of finite substances.

This succeeded in the corporeal world in a relatively simple manner. In this domain, the *idea of cause had acquired a completely new significance* through Galileo. According to the scholastic conception (which even in Descartes' *Meditations*, in a decisive passage, was still presented with axiomatic validity) causes were *substances* or things, while effects, on the other hand, were either their activities or were other substances and things which were held to come about only by such activities: this was the Platonic-Aristotelian conception of the *αἰτία*. Galileo, on the contrary, went back to the idea of the older Greek thinkers (cf. § 5), who applied the causal relation only to the *states* — that meant now to the *motions* of substances — not to the Being of the substances themselves. Causes are motions, and effects are motions. The relation of *impact* and *counter-impact*, of the *passing over of motion from one corpuscle to another*,[4] is the original *fundamental form of the causal relation*, the form which is clear to perception or imagination (*anschaulich*), is intelligible in

[1] This identification holds good with Spinoza as well as with Descartes.

[2] This *intellectus infinitus* appears again in the ethical part of the Spinozistic system as *amor intellectualis quo deus se ipsum amat*. In both cases Malebranche's "*raison universelle*" amounts to the same thing.

[3] Geulincx also, in a manner similar to that of Spinoza and Malebranche, regards finite bodies and minds as only "limitations," "*præcisiones*" of the universal infinite body and the divine mind. Cf. *Met.* p. 56. If we think away limitation from ourselves, he says, ib. 237 ff., there is left — God.

[4] Hence for Descartes the mechanical principle excluded possibility of action at a distance, just as it excluded empty space. This forced him to the artificial hypotheses of the *vortex theory*, by which he aimed to give a physical ground for the Copernican view of the world (popular exposition by Fontenelle, *Entretiens sur la Pluralité des Mondes*, 1686). The grounds on which this doctrine was displaced by the Newtonian theory of gravitation are no longer philosophical, but purely physical in their nature.

itself, and explains all others. And the question as to the nature of this fundamental relation was answered by the *principle of mathematical equality*, which, in turn, passed over into that of *metaphysical identity*. So much motion in the cause, so much in the effect also. Descartes formulated this as the *law of the conservation of motion* in Nature. The sum of motion in Nature remains always the same: what a body loses in motion it gives to another. As regards the amount of motion, there is in Nature nothing new, especially no impulse from the spiritual world.[1] Even for the kingdom of organisms this principle was carried through, at least as a postulate, though as yet with very weak grounds. Animals, also, are machines whose motions are evoked and determined by the mechanism of the nervous system. Descartes thought of this mechanism more precisely (and with him Hobbes and Spinoza) as a motion of finest (gaseous) substances, the so-called *spiritus animales*,[2] and sought the point of transition from the sensory to the motor nervous system in man, in a part of the brain which has no correlative, *i.e.* is a single and not a paired organ, the pineal gland or *conarium*.

The other part of the task proved much more difficult: namely, that of understanding the mental life without any relation to the corporeal world. Easy and clear to perception as was the action of one body upon another, it did not yield a mode of representing an incorporeal connection between different minds, that could be used scientifically. Spinoza, for example, expressed the general metaphysical postulate very energetically, when he promised in entering upon the third book of the Ethics, that he would treat the actions and desires of man as if lines, surfaces, and bodies were the subject of discussion; for the important thing is neither to asperse them nor to deride them, but to understand them. But the solution of this problem was limited in advance to investigating the causal connection between the *activities of consciousness in the individual mind*: dualism demanded a psychology free from all physiological constituents. It is all the more characteristic of the predominance of the spirit of natural science in the seventeenth century, that it attained this psychology demanded by the theory, only in the most limited degree. And even the beginnings toward this are ruled by the endeavour to apply the methodical principle of mechanics, which

[1] Hence Hobbes excluded from physics the Aristotelian and Thomistic conception of the unmoved mover, while Descartes, who in this point also proceeded more metaphysically, made motion to have been communicated to matter at the beginning by God.

[2] An inheritance from the physiological psychology of the Greeks, in particular from that of the Peripatetics.

was celebrating its triumphs in the theory of outer experience, to the comprehension of the inner world also.

For just as the investigation of Nature from Galileo to Newton directed its energies toward finding out the simple fundamental form of corporeal motion, to which all complex structures of outer experience could be reduced, so Descartes desired to establish the fundamental forms of psychical motion, out of which the multiplicity of inner experiences would become explicable. In the theoretical domain this seemed attained by establishing the immediately evident truths (the innate ideas); in the practical field there grew out of this demand the new problem of a *statics and a mechanics of the movements of feeling* (*Gemüthsbewegungen*). In this spirit Descartes and Spinoza produced their natural history of the *emotions* (*Affecte*) and *passions*,[1] the latter author by combining the thoughts of the former with those of Hobbes. Thus *Descartes* derives the whole host of particular passions, as species and sub-species, from the six fundamental forms of wonder (*admiratio*,) love, and hate, desire (*désir*), pleasure and pain [or joy and sadness, *Lust und Unlust*] (*lætitia — tristitia*); thus *Spinoza* develops his system of the emotions out of desire, pleasure, and pain (*appetitus, lætitia, tristitia*) by pointing out the ideational processes in connection with which these emotions have become transferred from their original object, the self-preservation of the individual, to other "ideas."

A peculiar side-attitude is taken in this regard by the two English thinkers. For *Bacon* and *Hobbes*, a mechanical conception of the mental is the more natural in proportion as they endeavour to draw the mental more closely into the circle of the physical. Both, that is, regard the empirical psychical life, and therefore, also, the sphere of consciousness which in Descartes' system was to have nothing to do with the corporeal world, as something which essentially belongs thereto; on the other hand, there is set over against the whole world of perception rather a something spiritual [spiritual in the religious sense, *Geistliches*] than a something mental or intellectual [*Geistiges*]. Ideas and volitions as they are known by experience are held to be at bottom activities of the body also, and if besides these we speak yet of an immortal soul (*spiraculum*), of a spiritual world and of the divine mind or spirit, this should fall to the province of theology. But according to this view the natural science theory cannot be characterised much otherwise than as an

[1] Descartes, *Les Passions de l'Âme;* Spinoza, *Eth.* III., and *Tract. Brev.* II. 5 ff. Cf. below, No. 7.

anthropological materialism; for it aims to understand the entire series of empirical psychical activities as a mechanical process connected with the bodily functions. This problem was propounded by Bacon; Hobbes attempted to solve it, and in doing so became the father of the so-called *associational psychology.* With the same outspoken *sensualism* as *Campanella*, of whose deductions his own frequently remind us, — especially with regard to the mechanism of ideas, — he seeks to show that *sense-impressions* give the only elements of consciousness, and that by their combination and transformation memory and thought also come about. In the practical domain the impulse toward self-preservation and the feelings of pleasure and pain which arise in connection with impressions are then characterised analogously as the elements out of which all other feelings and activities of will arise. Hobbes, too, projected thus a "natural history" of the emotions and passions, and this was not without influence upon that of Spinoza, whose theory of the emotions is always looking squintingly towards the other attribute [*i.e.* extension].

From these presuppositions of method the *denial of the freedom of the will* in the sense of indeterminism followed with inexorable consistency for *Hobbes* and for *Spinoza.* Both attempted — and Spinoza did it in the baldest form that can be conceived — to exhibit the strict necessity which prevails even in the course of the process of motivation: they are types of *determinism.* For Spinoza, therefore, there is no freedom in the *psychological* sense. Freedom can mean only, on the one hand, metaphysically, the absolute Being of the deity determined by nothing but itself, and, on the other hand, ethically, the ideal of the overcoming of the passions through reason.

7. In this it became already evident that in the presence of the facts of psychology, that absolute separation between the corporeal and the mental world which metaphysics demanded was not to be maintained. But Descartes himself met quite the same experience. The nature of the mind itself might, indeed, explain the clear and distinct ideas and the forms of the rational will which resulted from these, but it could not explain the obscure and confused ideas, and the emotions and passions connected with them. These present themselves rather as a *disturbance of the mind*[1] (*perturbationes animi*), and since this perturbation which gives occasion for the

[1] This is the interest, not only ethical, but also theoretical, which induced Descartes to treat states psychologically so different as emotions and passions, from the same point of view and in one line. Cf. for the following *Passions de l'Âme*, I., and *Meds.* V. and VI.

abuse of freedom (cf. above, § 30, 5) cannot be due to God, its origin must be sought ultimately in an *influence exercised by the body*. In the disturbances of the feeling there is, therefore, for Descartes an indubitable fact, which cannot be explained from the fundamental metaphysical principles of his system. Here, therefore, the philosopher sees himself forced to recognise an *exceptional relation*, and he adjusts this for himself in a way that had been foreshadowed by the anthropology of the *Victorines* (cf. § 24, 2). The nature (*natura*) of man, he teaches, consists in the *inner union of two heterogeneous substances*, a mind and a body, and this marvellous (*i.e.* metaphysically incomprehensible) union has been so arranged by God's will that in this single case the conscious and the spatial substances act upon each other. Animals remain, for Descartes, bodies; their "sensations" are only nervous movements, out of which stimulations of the motor system arise in accordance with the reflex mechanism. In the human body, however, the mental substance is present at the same time, and in consequence of this co-existence the storm of the animal spirits in the pineal gland excites a disturbance in the mental substance also, which manifests itself in the latter as an unclear and indistinct idea, *i.e.* as sense-perception, as emotion, or as passion.[1]

With the disciples, the systematic impulse was greater than with the master. They found in this *influxus physicus* between mind and body the vulnerable point in the Cartesian philosophy, and exerted themselves to set aside the exception which the philosopher had been obliged to assert in the anthropological facts. This, however, did not go on without effecting a new, and in a certain sense regressive, alteration in the conception of *causality*, in that the metaphysical *moment* once more gained preponderance over the mechanical. The immanent causal processes of the spatial and of the conscious worlds were regarded as intelligible in themselves; but the transcendent causal process from one of these worlds into the other formed a problem. No difficulty was found in the idea that one motion transformed itself into another or that one function of

[1] On this Descartes then builds his Ethics. In such perturbations the mind occupies a passive attitude, and it is its task to free itself from these in clear and distinct knowledge. *Spinoza* carried out this intellectualistic morals in an extremely grand and impressive manner (*Eth.* IV. and V.). The antithesis of an active and passive attitude of the finite mind is indeed gained from the standpoint of his metaphysics only artificially (*Eth.* III., Def. 2): but he carried through with compelling consistency the thought, that the overcoming of the passions follows from a knowledge of them, from the insight into the necessary divine system of all things; he taught that human nature must perfect itself in the blessedness of the *active emotions* which consist only in the activity of the pure impulse toward knowledge (*Eth.* V. 15 ff.), and thus set up an ideal of life which reaches the height of the Greek *θεωρία*.

consciousness—for example, a thought—should pass over into another: but it seemed impossible to understand how sensation should come out of motion, or motion out of will. Physical and logical causality seemed to offer no difficulty; so much the greater was that presented by *psycho-physical causality*. In the case of the latter the consciousness dawned that the relation of *equality or identity* between cause and effect, by means of which mechanical and logical dependence seemed intelligible, does not exist. Hence an inquiry must here be made for the principle by which the two elements of the causal relation, cause and effect, which do not in themselves belong together, are connected with each other.[1] Where this principle was to be sought could not be a matter of doubt for the disciples of Descartes: God, who produced the union of the two substances in man's nature, has also so arranged them that the functions of the one substance are followed by the corresponding functions of the other. But on this account these functions in their causal relation to one another are not properly, and in their own nature, efficient causes, but only *occasions* in connection with which the consequences determined *by divine contrivance* appear in the other substance,—not *causæ efficientes*, but *causæ occasionales*. The true "cause" for the causal connection between stimuli and sensations, and between purposes and bodily movements, is *God*.

Such considerations are multiplied in the whole development of the Cartesian school. Clauberg brings them into use for the theory of perceptions, Cordemoy for that of purposive motion; their full development is attained in the "Ethics" of *Geulincx*. Yet in the latter author doubt is not entirely excluded as to whether God's causality in this connection is regarded as a special intervention in each individual case, or as a general and permanent arrangement. In some passages, indeed, the former is the case,[2] but the spirit of the doctrine, taken as a whole, doubtless involves the latter. Geulincx expresses himself most clearly in the illustration of the clocks:[3] as two clocks which have been made alike by the same artificer continue to move in perfect harmony, "*absque ulla causalitate qua alterum hoc in altero causat, sed propter meram dependentiam, qua utrumque ab eadem arte et simili industria constitutum est*," so the

[1] That the fundamental difficulty in *all* causal relations was in this actually stumbled upon, first became clear at a later time through Hume. Cf. § 34.

[2] For example, in the analogy of the child in the cradle, *Eth.* 123. It seems, besides, that the first edition of the *Ethics* (1665), in fact, introduced more the *deus ex machina*, while the annotations added in the second edition (1675) present throughout the profounder view.

[3] *Eth.*, p. 124, note 19.

corresponding functions of mind and body follow each other in accordance with the world-order once determined by God.[1]

8. This *anthropological* rationale of *Occasionalism* fits from the beginning into a more general metaphysical course of thought. The Cartesian system already contained the premises for the inference that in the case of all that takes place in finite substances, the efficient principle derives, not from these substances themselves, but from the deity. Thinking in minds takes place by means of the inborn ideas which God has given them; to the corporeal world he has communicated a *quantum* of motion which changes only in its distribution among the individual corpuscles, but in the case of the individual body it is, so to speak, only temporarily concealed. Minds can create new ideas as little as bodies can create new motion; the sole cause is God.

The Cartesians had all the more occasion to emphasise the *sole causality of God*, as their doctrine encountered violent contradiction in the orthodoxy of both Confessions, and became involved in the theological controversies of the time. Friend and foe had quickly recognised the relationship of Cartesianism with the doctrine of Augustine;[2] and while on this account the Jansenists and the Fathers of the Oratory, who lived in the Augustinian-Scotist atmosphere, were friendly to the new philosophy, the orthodox Peripatetics, and especially the Jesuits, made war upon it all the more violently. Thus the *old opposition* between *Augustianism and Thomism* came out in the controversy over Cartesianism. The consequence was that the Cartesians brought into the foreground as far as possible those elements in which their doctrine was allied to the Augustinian. So *Louis de la Forge*[3] attempted to prove the complete identity of Cartesianism with the doctrine of the Church Father, and emphasised especially the fact that according to both thinkers the sole ground of all that takes place in bodies as well as minds is God. Just this was later designated by *Malebranche*[4] as the sure mark of a Christian philosophy, while the most dangerous

[1] If, therefore, Leibniz, when he later claimed for his "pre-established harmony" (*Éclairc.* 2 and 3) this same analogy in frequent use at that time, characterised the Cartesian conception by an immediate dependence of the two clocks upon one another, and the Occasionalistic by a constantly renewed regulation of the clocks on the part of the clock-maker, this was applicable at most to some passages in the first edition of the *Ethics* of Geulincx.

[2] Kinship and opposition apply also to still other points. Descartes and the priests of the Oratory (Gibieuf, Malebranche) are at one against Thomism in the Augustinian and Scotist doctrine of the boundless freedom of the deity; they maintain again that the good is good because God so willed it, not *per se* (cf. § 26, 2, 3), etc.

[3] *Trait. de l'Espr. Hum.*, Préf.

[4] *Recherche*, VI. 2, 3.

error of heathen philosophy consists in the assumption of metaphysical self-subsistence and capacity for spontaneous action on the part of finite things.

With *Geulincx*, likewise, all finite things are deprived of the causal *moment* or element of substantiality. In this he proceeds from the principle[1] that one can himself do that only of which he knows how it is done. From this it follows in the anthropological field, that the mind cannot be the cause of the bodily movements — no one knows how he sets to work even but to raise his arm; it follows farther in the cosmological field, that bodies which have no ideas whatever cannot operate at all, and finally, for the theory of knowledge, that the cause of perceptions is to be sought not in the finite mind — for this does not know how it comes to perceive — nor in bodies; therefore it is to be sought only in God. He produces in us a world of ideas which in its wealth of qualities is much richer and more beautiful than the actual corporeal world itself.[2]

The epistemological *motif* finds finally with *Malebranche*[3] a still more profound apprehension. Cartesian dualism makes a direct knowledge of the body by mind absolutely impossible: such a knowledge is excluded not only because no *influxus physicus* is possible between the two, but also because, in view of the total heterogeneity of the two substances, it is not possible to see how even an idea of the one is thinkable in the other. In this respect, also, mediation is possible only through the deity, and Malebranche takes refuge in the Neo-Platonic world of Ideas in God. Man does not know bodies; he knows their Ideas in God. This *intelligible corporeal world in God* is, on the one hand, the archetype of the actual corporeal world created by God, and on the other hand, the archetype of those ideas which God has communicated to us of this actual corporeal world. Our knowledge is like the actual bodies, just as two magnitudes which are equal to a third are equal also to each other. In this sense Malebranche understood that philosophy teaches that we *behold all things in God.*

9. Quite different was the solution which *Spinoza* gave to the Occasionalistic problems. The explanation of any mode of the one attribute by a mode of the other was excluded by the conception of

[1] *Eth.*, p. 113; *Met.*, p. 26.

[2] The remnant of self-activity in finite beings that remains in the system of Geulincx consists in the immanent mental activity of man. Cf. *Eth.* 121 f. The "autology," or *inspectio sui*, is, therefore, not only the epistemological starting-point of the system, but also its ethical conclusion. Man has nothing to do in the outer world. *Ubi nihil vales, ibi nihil velis.* The highest virtue is a modest contentment, submission to God's will — humility.

[3] *Rech.* III. 2.

the attribute as he had defined it (see above, No. 5); it held of the attribute as of substance,[1] *in se est et per se concipitur*. Accordingly there could be no question of the dependence of the spatial upon consciousness, or *vice versa;* the appearance of such a dependence which presents itself in the anthropological facts needed, therefore, another explanation, and as a matter of course this was to be sought by the aid of his conception of God. If, however, the doctrine that God is the sole cause of all that takes place is for this reason found also with Spinoza, his agreement with the Occasionalists exists only in the motive and the word, but not in the meaning or spirit of the doctrine. For according to Geulincx and Malebranche, God is the creator; according to Spinoza, he is the universal essence or nature of things; according to the former, God creates the world by his will; according to the latter, the world *follows necessarily* from the nature of God [or is the *necessary consequence* of the nature of God]. In spite of the likeness in the word *causa*, therefore, the causal relation is really thought here in a sense entirely different from that which it has there. With Spinoza it means not, "God creates the world," but, "he is the world."

Spinoza always expresses his conception of real dependence, of causality, by the word "follow" (*sequi, consequi*) and by the addition, "as from the definition of a triangle the equality of the sum of its angles to two right angles follows." The dependence of the world upon God is, therefore, thought as a *mathematical consequence*.[2] This conception of the causal relation has thus completely stripped off the empirical mark of "producing" or "creating" which played so important a part with the Occasionalists, and replaces the perceptional idea of active operation with the *logico-mathematical relation of ground and consequent* [*or reason and consequent; Grund und Folge*]. Spinozism is a consistent identification of the relation of cause and effect with that of ground and consequent. The causality of the deity is, therefore, not in time, but is *eternal*, that is, timeless; and true knowledge is a consideration of things *sub quadam æternitatis specie*. This conception of the relation of dependence resulted of itself from the conception of the deity as the universal essence or nature: from this nature all its modifications follow *timelessly*, just as all propositions of geometry follow from the nature of space. The geometrical method knows no other causality than that of the "eternal consequence"; for rationalism, only that form of dependence which is peculiar to thought itself, namely, the logical proced-

[1] *Eth.* I., Prop. 10.

[2] Cf. Schopenhauer, *Ueber die vierfache Wurzel des Satzes vom zureichenden Grunde*, ch. 6. [*Fourfold Root*, etc., Bohn Lib.]

ure of the consequent from its antecedent reason, passes as in itself intelligible, and on this account as the schema also for events or cosmic processes:[1] real dependence also should be conceived neither mechanically nor teleologically, but only logico-mathematically.

But now, as in geometry, all follows indeed from the nature of space, and yet each particular relation is fixed by other particular determinations, so, too, in the Spinozistic metaphysics the necessary procedure of things forth from God consists in the determination of every individual finite entity by other finite things. The sum of finite things and the modes of each attribute form a chain of strict determination, a chain without beginning and without end. The necessity of the divine nature rules in all; but no mode is nearer to the deity, or farther from the deity, than is any other. In this the thought of Nicolaus Cusanus of the incommensurability of the finite with the infinite asserts itself — no series of stages of emanation leads from God down to the world: everything finite is determined again by the finite, but in all God is the sole ground of their essence or nature.

If this is the case, the unity of essence must appear also in the relation of the attributes, however strictly these may be separated qualitatively and causally. It is still the same divine essence which exists here in the form of extension, and there in the form of consciousness. The two attributes are then necessarily so related to each other that to every mode of the one a definite mode of the other corresponds. This *correspondence* or *parallelism* of the attributes solves the enigma of the connection of the two worlds: ideas are determined only by ideas, and motions only by motions; but it is the like cosmic content of the divine essence which forms the connection of the one class, and also that of the other; the same content is in the attribute of consciousness as in the attribute of extension. This relation is presented by Spinoza in accordance with the scholastic conceptions of the *esse in intellectu* and the *esse in re*. The same that exists in the attribute of consciousness as object (*objective*), as the content of our ideas, exists in the attribute of extension as something actual, independent of any idea or mental representation (*formaliter*).[2]

[1] Spinoza's pantheism has therefore the closest resemblance to the scholastic mystical *Realism* of Scotus Erigena (cf. § 23, 1), only that in the latter's system it is still more the case that the logical relation of the general to the particular forms the only schema; from this resulted, in his case, the emanistic character which is lacking in Spinoza.

[2] But neither of these two modes of existence is more original than the other, or forms a prototype for the other: both express equally the nature of God (*exprimere*). Hence an idealistic interpretation of Spinoza is as incorrect as a materialistic, although both might be developed out of his system.

Spinoza's conception, then, is this: every finite thing as a mode of the divine essence, *e.g.* man, exists in like measure in both attributes, as mind and as body: and each of its particular functions belongs also in like measure to both attributes, as idea and as motion. As idea, it is determined by the connection of ideas, as motion by that of motions; but in both, the content is the same by virtue of the correspondence of the attributes. *The human mind is the idea (Idee) of the human body,* both as a whole and in detail.[1]

10. The conclusion of this movement of thought which had passed through so many divarifications was reached in the metaphysical system of *Leibniz,*—a system which is equalled by none in the entire history of philosophy in all-sidedness of motives and in power of adjustment and combination. It owes this importance not only to the extensive learning and the harmonising mind of its author, but especially to the circumstance that he was at home in the ideas of ancient and mediæval philosophy with as deep and fine an understanding of their significance as he had for the conceptions formed by the modern study of Nature.[2] Only the inventor of the differential calculus, who had as much understanding for Plato and Aristotle as for Descartes and Spinoza, who knew and appreciated Thomas and Duns Scotus as well as Bacon and Hobbes,—only he could become the creator of the "pre-established harmony."

The reconciliation of the mechanical and the teleological views of the world, and with this the *uniting of the scientific and the religious interests* of his time, was the leading motive in the thought of Leibniz. He wished to see the mechanical explanation of Nature, the formulation of which in its scientific conceptions he himself essentially furthered, carried through to its full extent, and at the same time he cast about for thoughts by the aid of which the purposeful living character of the universe might nevertheless remain comprehensible. The attempt must therefore be made—an attempt for which there were already intimations in the doctrine of Descartes—to see whether the whole mechanical course of events could not be ultimately traced back to efficient causes, whose purposeful nature should afford an import and meaning to their working taken as a whole. The whole philosophical development of Leibniz has the aim to substitute for the corpuscles, "entelechies," and to win back for the indifferent God of the geometrical method the rights of the Platonic *αἰτία.* The ultimate goal of his philosophy is to understand the mechanism of the cosmic processes as the *means* and *phenomenal form* by which the living content or import of the world realises itself. For this reason he could no longer think "cause" as only "Being," could no longer think God merely as *ens perfectissimum,* could no longer think "substance" as characterised merely by an attribute of unchangeable existence, and could no longer think its states merely as modifications, determinations, or specifications of such a fundamental quality: cosmic processes or change became again for him *active working* (*Wirken*); substances took on the meaning of *forces,*[1] and the philosophical conception of God also had, for its essential characteristic, creative force. This was Leibniz' fundamental thought, that this creative force evinces itself in the mechanical system of motions.

Leibniz attained this *dynamical* standpoint first in his theory of motion, and in a way which of itself required that the same standpoint should be carried over into metaphysics.[2] The mechanical problem of inertia and the process begun by Galileo of resolving motion into infinitely small impulses, which together formed the starting-point for the authoritative investigations in natural science by Huyghens and Newton, led Leibniz to the principle of the infinitesimal calculus, to his conception of the "*vis viva,*" and especially, to the insight that the essential nature of bodies, in which the ground of motion is to be sought, consists not in extension, nor yet in their mass (impenetrability), but in their capacity to do work,—in force. But if *substance* is *force,* it is *super-spatial* and *immaterial.* On this account Leibniz finds himself compelled to think even corporeal substance as immaterial force. Bodies are, in their essential nature, force; their spatial form, their property of filling space and their motion are effects of this force. The substance of bodies is *meta*physical.[3] In connection with Leibniz' doctrine of knowledge this purports that rational, clear, and distinct cognition apprehends bodies as force, while sensuous, obscure, and confused cognition apprehends them as spatial structures. Hence, for Leibniz, space is neither identical with bodies (as in Descartes), nor the presupposition for them (as with Newton), but a force-product of substances, a *phœnomenon bene fundatum,* an order of co-existence,—

[1] The difficulties which arose in this connection from self-consciousness, and those also from the postulate of the countless attributes, Spinoza did not solve: cf. the correspondence with Tschirnhausen, *Op.* II. 219 f.

[2] Cf. *Syst. Nouv.* 10.

[1] La substance est un être capable d'action. *Princ. de la Nat. et de la Grâce,* 1. Cf. *Syst. Nouv.* 2 f., "Force primitive."

[2] *Syst. Nouv.* 3.

[3] With this the co-ordination of the two attributes, *extensio* and *cogitatio,* was again abolished; the world of consciousness is the truly actual, the world of extension is phenomenon. Leibniz sets the intelligible world of substances over against the phenomena of the senses or material world in a completely Platonic fashion (*Nouv. Ess.* IV. 3). Cf. § 33 f.

not an absolute reality, but an *ens mentale*.[1] And the same holds true, *mutatis mutandis*, of time. From this it follows further, that the laws of mechanics which refer to these spatial manifestations of bodies are not rational, not "geometrical" truths, but truths which relate to matters of fact, and are contingent. They could be thought otherwise [*i.e.* the opposite is not inconceivable]. Their ground is not logical necessity, but — purposiveness or appropriateness. They are *lois de convenance;* and have their roots in the *choix de la sagesse*.[2] God chose them because the purpose of the world would be best fulfilled in the form determined by them. If bodies are machines, they are such in the sense that machines are purposively constructed works.[3]

11. Thus again in Leibniz, but in a maturer form than in Neo-Platonism, *life* becomes the principle for explaining Nature; his doctrine is *vitalism*. But life is variety, and at the same time unity. The mechanical theory led Leibniz to the conception of infinitely many individual forces, metaphysical points,[4] as likewise to the idea of their continuous connection. He had originally leaned toward the atomic theory of Democritus and the nominalistic metaphysics; the Occasionalist movement, and above all, the system of Spinoza, made him familiar with the thought of the All-unity; and he found the solution, as Nicolaus Cusanus and Giordano Bruno had found it before, in the principle of the *identity of the part with the whole*. Each force is the world-force, the cosmic force, but in a peculiar phase; every substance is the world-substance, but in particular form. Hence Leibniz gives to the conception of *substance* just this meaning: it is *unity in plurality*.[5] This means that every substance in every state "represents" the multitude of other substances, and to the nature of "representing" belongs always the unifying of a manifold.[6]

With these thoughts are united, in the system of Leibniz, the

[1] Cf. chiefly the correspondence with des Bosses.
[2] *Princ.* 11.
[3] Ib. 3.
[4] *Syst. Nouv.* 11.
[5] *Monad.* 13–16.
[6] Leibniz is here served a very good turn (cf. *op. cit.*) by the ambiguity in the word "*représentation*" (which applies also to the German "*vorstellen*" [and to the English "representation"]), in accordance with which the word means, on the one hand, to supply the place of or serve as a symbol of, and on the other hand, the function of consciousness. That every substance "represents" the rest means, therefore, on the one hand, that all is contained in all (Leibniz cites the ancient σύμπνοια πάντα and also the *omnia ubique* of the Renaissance), and on the other hand, that each substance "perceives" all the rest. The deeper sense and justification of this ambiguity lies in the fact that we cannot form any clear and distinct idea whatever of the unifying of a manifold, except after the pattern of that kind of connection which we experience within ourselves in the function of consciousness ("synthesis" in Kant's phraseology).

postulates which had been current in the metaphysical movement since Descartes; namely, that of the isolation of substances with reference to one another, and that of the correspondence of their functions having its origin in the common world-ground. Both *motifs* are most perfectly brought out in the *Monadology*. Leibniz calls his force-substance *monad*, — an expression which might have come to him along various lines of Renaissance tradition. Each monad is with reference to the rest a perfectly independent being, which can neither experience nor exercise influence. The monads "have no windows," and this "windowlessness" is to a certain extent the expression of their "metaphysical impenetrability."[1] But this quality of being completely closed to outward influence receives first of all a positive expression from Leibniz in his declaration that the monad is a *purely internal principle:*[2] substance is hence a force of *immanent activity:* the monad is *not physical, but psychical* in its nature. Its states are representations (*Vorstellungen*), and the principle of its activity is desire (*appétition*), the "tendency" to pass over from one representation to another.[3]

Each monad is nevertheless, on the other hand, a "mirror of the world"; it contains the whole universe as a representation within itself; in this consists the living unity of all things. But each is also an *individual*, distinct from all others. For there are no two substances in the world alike.[4] If now the monads are not distinguished by the content which they represent, — for this is the same with all,[5] — their difference can be sought only in their mode of representing this content, and Leibniz declares that the difference between the monads consists only in the *different degree of clearness and distinctness* with which they "represent" the universe. Descartes' epistemological criterion thus becomes a metaphysical predicate by reason of the fact that Leibniz, like Duns Scotus (cf. p. 331), conceives of the antithesis of distinct and confused as an antithesis in the force of representation or in *intensity*. Hence the monad is regarded as active in so far as it represents clearly and distinctly, as passive in so far as it represents obscurely and confusedly:[6] hence, also, its impulse (*appétition*) is directed toward passing from obscure

[1] *Monad.* 7. Cf. *Syst. Nouv.* 14, 17.
[2] *Monad.* 11.
[3] Ib. 15–19.
[4] Leibniz expressed this as the *principium identitatis indiscernibilium* (*Monad.* 9).
[5] Here, to be sure, Leibniz overlooked the fact that no real content is reached in this system of mutual representation of substances. The monad *a* represents the monads *b*, *c*, *d*, . . . *x*. But what is the monad *b*? It is in turn the representation of the monads *a*, *c*, *d*, . . . *x*. The same is true for *c*, and so on *in infinitum*.
[6] *Monad.* 49.

to clear representations, and the "clearing up" of its own content is the goal of its life. To this above-mentioned intensity of the representations Leibniz applies the mechanical principle of infinitely small impulses: he calls these infinitely small constituent parts of the representative life of the monads *petites perceptions*,[1] and needs this hypothesis to explain the fact, that according to his doctrine the monad evidently has very many more representations than it is conscious of (cf. below, § 33). In the language of to-day the *petites perceptions* would be *unconscious mental states* (*Vorstellungen*).

Of such differences in degree of clearness and distinctness there are infinitely many, and in accordance with the law of continuity — *natura non facit saltum* — the monads form an uninterrupted graded series, a *great system of development*, which rises from the "simple" monads to souls and minds.[2] The lowest monads, which represent only obscurely and confusedly, *i.e.* unconsciously, are therefore only passive; they form *matter*. The highest monad, which represents the universe with perfect clearness and distinctness, — just for this reason there is but one such, — and is accordingly pure activity, is called the *central monad* — God. Inasmuch as each of these monads lives out its own nature, they all harmonise completely with each other at every moment[3] by virtue of the sameness of their content, and from this arises the appearance of the action of one substance upon others. This relation is the *harmonie préétablie des substances* — a doctrine in which the principle of *correspondence*, introduced by Geulincx and Spinoza for the relation of the two attributes, appears extended to the totality of all substances. Here as there, however, the principle as carried out involves the uninterrupted determination in the activity of all substances, the strict necessity of all that takes place, and excludes all chance and all freedom in the sense of uncaused action. Leibniz also rescues the conception of freedom for finite substances only in the ethical meaning of a control of reason over the senses and passions.[4]

The pre-established harmony — this relationship of substances in their Being and life — needs, however, a *unity* as the ground of its explanations, and this can be sought only in the central monad. God, who created the finite substances, gave to each its own content

[1] Ib. 21.

[2] *Princ.* 4. In this connection the "soul" is conceived of as the central monad of an organism, in that it represents most distinctly the monads constituting this, and accordingly only with a lesser degree of distinctness the rest of the universe. *Monad.* 61 ff.

[3] *Syst. Nouv.* 14.

[4] *Eo magis est libertas quo magis agitur ex ratione*, etc. Leibniz, *De Libert.* (*Op.*, Erd. ed., 669).

in a particular grade of representative intensity, and thereby so arranged all the monads that they should harmonise throughout. And in this necessary process in which their life unfolds, they realise the end of the creative Universal Spirit in the whole mechanical determination of the series of their representations. This relation of mechanism to teleology makes its way finally, also, into the epistemological principles of Leibniz. The deity and the other monads sustain the same relation to each other as the infinite and finite substances sustain in the system of Descartes. But for the rationalistic conception of things, only the infinite is a necessity of thought, while the finite, on the contrary, is something "contingent," in the sense that it might also be thought otherwise, that the opposite contains no contradiction (cf. above, § 30, 7). Thus the antithesis of eternal and necessary truths takes on metaphysical significance: only *God's Being* is an *eternal truth;* he exists, according to the principle of contradiction, with logical or *absolute necessity.* Finite things, however, are *contingent;* they exist only in accordance with the principle of sufficient reason, by virtue of their determination by another; the world and all that belongs to it has only conditioned, *hypothetical necessity.* This *contingency of the world,* Leibniz, in agreement with Duns Scotus,[1] traces back to the *will of God.* The world might have been otherwise; that it is as it is, it owes to the choice which God made between the many *possibilities.*[2]

Thus in Leibniz all threads of the old and the new metaphysics run together. With the aid of the conceptions formed in the school of mechanics he formulated the presages of the philosophy of the Renaissance into a systematic structure, where the ideas of Greece found their home in the midst of the knowledge acquired by modern investigation.

§ 32. Natural Right.

The Philosophy of Right of the Renaissance was also dependent, on the one hand, upon the stimulus of Humanism, and on the other, upon the needs of modern life. The former element is shown not only in the dependence upon ancient literature, but also in the revival of the ancient conception of the state, and in the attachment to its traditions; the latter make their appearance as a theoretical generalisation of those interests, in connection with which the

[1] The relations of Leibniz to the greatest of the Scholastics are to be recognized not only in this point, but also in many others; though as yet they have unfortunately not found the consideration or treatment that they deserve.

[2] Cf., however, in addition, below, § 35.

secular states during this period took on the form of autonomous life.

1. All these motives show themselves first in *Macchiavelli*. In his admiration of Rome, the Italian *national feeling* speaks immediately, and it was from the study of ancient history that he gained his theory of the *modern state*, at least as regards its negative side. He demanded the complete independence of the state from the Church, and carried Dante's Ghibelline doctrine of the state to its farthest consequence. He combats the temporal sovereignty of the Papacy as the permanent obstacle to an Italian national state, and so that separation between the spiritual and the secular, which is common to all the beginnings of modern thought, is completed for the practical field in his system, as it had been before with Occam and Marsilius of Padua (cf. p. 328). The consequence of this, however, as with the Nominalists just mentioned, was that the state was conceived not teleologically, but in purely *naturalistic* fashion as a product of needs and interests. From this fact is explained the singleness of aim and regardlessness with which Macchiavelli carried out his theory of the acquisition and preservation of princely power, and with which he treated politics solely from the point of view of the warfare of interests.

The relation of church and state, moreover, excited an especial interest in the sixteenth and seventeenth centuries, because it played a part that was always important and often decisive in the conflicts and shiftings of confessional oppositions. Here an interesting exchange of conceptions came about. The Protestant view of the world, which in accordance with its first principle changed the mediæval distinction in value between the spiritual and the secular, and removed the ban of the "profane" from the secular spheres of life, saw in the state also a divine order; and the *Reformation Philosophy of Right*, under the lead of *Melancthon*, limited the right of the state more by the right of the invisible, than by the claims of the visible Church; indeed, the divine mission of the magistrates afforded a valuable support for the Protestant State-church. Much less could the *Catholic Church* feel itself under obligation to the modern state; and although it thereby departed from Thomism, it allowed itself to be pleased by such theories as those of Bellarmin and Mariana, in which the state was conceived of as a work of human composition or as a compact. For with this theory the state lost its higher authority, and to a certain extent its metaphysical root; it appeared capable of abolition; the human will which had created it might dissolve it again, and even its supreme head was deprived of his absolute inviolability. While the Protestants regarded the state as an immediate divine order, for the Catholics, as being a human arrangement, it needed the sanction of the Church and ought not to be regarded as valid where this was lacking; but it should retain this sanction only when it placed itself at the service of the Church. So Campanella taught that the Spanish Empire (*monarchia*) had as its task to place the treasures of foreign parts of the world at the disposal of the Church for her contest with the heretics.

2. But in time these oppositions in the philosophy of rights yielded to *confessional indifferentism*, which had attained the mastery in theoretical science also, and since the state was regarded as essentially an order of earthly things, the relation of man to God fell outside its sphere of action. Philosophy demanded for the citizen the right which she claimed for herself, the right of a free, individual attitude toward the religious authorities of the time, and became thereby the champion of *toleration*. The state has not to trouble itself about the religious opinion of individuals, the right of the citizen is independent of his adherence to this or that confession: this demand was the necessary result of the confessional controversies of the sixteenth and seventeenth centuries, which had heaved and tossed so passionately to and fro. In this view unbelieving indifference, and positive conviction which had to defend itself against political authority of the opposite creed, came to an agreement.

In this spirit Macchiavelli had already written against the sole authority of the Roman Church; but it was by Thomas *More* that the principle of toleration was first proclaimed in its completeness. The inhabitants of his happy island belong to the most varied Confessions, which all live peacefully side by side without any political importance being attributed to the variety of their religious views. They have even united upon a common worship, which each party interprets in its own sense, and supplements by special forms of worship. So, too, Jean *Bodin*, in his *Heptaplomeres*, makes highly educated typical representatives, not only of the Christian confessions, but also of Judaism, Mohammedanism, and Heathendom, find a form of worshipping God, which is equally satisfactory to all. Finally, in a more abstract manner, Hugo *Grotius* completely separated divine and human right in the sharp distinctness with which he presented the principles of the philosophical science of rights, basing divine right upon revelation and human right upon reason; demanding at the same time, however, an equally sharp and thoroughgoing separation of the spheres of life to which they apply.

But the classical "Doomsday Book" for the toleration movement was *Spinoza's Theologico-political Tractate*, which went to the root of the much-treated matter. Utilising many thoughts and examples from the older Jewish literature influenced by Averroism, this work demonstrated that religion, and especially the religious documents, have neither the province nor the design of teaching theoretical truths, and that the essence of religion consists not in the recognition of particular dogmas, but in the disposition and the will and action determined by it. From this it follows incontestably that the state has still less ground or right to trouble itself about the assent of its citizens to particular dogmas, and that it should rather by virtue of its real authority restrain every attempt toward a constraining of the conscience, which may proceed from any of the ecclesiastically organised forms of religious life. The mystically profound religious nature of Spinoza alienated him from the dogmatic government of the churches and from belief in the literal statements of their historical documents. He asserted the principle that religious books, like all other phenomena of literature, must be historically explained as to their theoretical import, that is, must be understood from the point of view of the intellectual condition of their authors, and that this *historical criticism* takes away from those former theoretical views their binding and normative significance for a later time.

3. With the political and churchly political interests became associated the *social*. No one gave them a more eloquent expression than Thomas *More*. After a thrilling portrayal of the misery of the masses the first book of the *Utopia* comes to the conclusion that society would do better if instead of the Draconian justice with which she punishes the violation of her laws, she should stop the sources of crime. The author maintains that the greater part of the guilt for the wrong-doing of the individual is due to the perverted arrangement of the whole. This latter consists in the *inequality of property* brought about by the use of money, for this inequality gives occasion to all the aberrations of passion, of envy, and of hatred. The ideal picture of the perfect state of society upon the island of Utopia, which More sketches in contrast to the present condition, is in its main features an imitation of the ideal state of Plato. This humanistic revival is, however, distinguished from its prototype in a manner characteristic for modern socialism, by its *abolition of class-distinctions*, which seemed necessary to the ancient thinker in consequence of his reflection upon the actually given difference in the intellectual and moral status of individuals. In an abstraction that was a prototype for the succeeding development More proceeded

from the thought of the equality of all citizens before the *law*, and changed into an equality of *claim* or *title* for all citizens those forms of community which Plato had demanded of the ruling classes as a renunciation of the natural impulses toward an individual sphere of interests. With Plato the preferred classes were to renounce all private property in order to devote themselves entirely to the general weal: with More the abolition of private property is demanded as the surest means for doing away with crime, and is based upon the equality of title which all have to the common possession. But at the same time the English Chancellor still holds fast to the ideal model of the ancient philosopher, in so far as to treat this entire equality in the division of material interests, as the indispensable basis for making it possible to all citizens to enjoy in like measure the ideal goods of society, science, and art. A normal working day of six hours for all members of society will be enough, he thinks, to satisfy all external needs of the community: the remaining time should remain free for every one for nobler employment. With these characteristics the programme for all the higher forms of modern socialism grows in the thought of More out of the Platonic project.

But the spirit of the Renaissance was animated by much more worldly interests. Stimulated by the magic of discoveries, dazzled by the glitter of inventions, it set itself the task of transforming by its new insights the whole outer condition of human society as related to the natural conditions of life, and saw before itself an *ideal of comfort* for human life, which should develop from a complete and systematic use of the knowledge and control of Nature made possible by science. All social injuries will be healed by raising human society, by means of the scientific advancement of external civilisation, beyond all the cares and all the need which now vex it. A few inventions like the compass, the art of printing, and gunpowder, says Bacon, have sufficed to give human life new motion, greater dimensions, mightier development. What transformations stand before us when invention once becomes an intelligently exercised art! The social problem is thus transferred to an *improvement of the material condition of society*.

In Bacon's *New Atlantis*[1] a happy island-people in carefully guarded seclusion is brought before us, which by skilful regulations receives information of the progress in civilisation made by all other peoples, and at the same time, by the systematic prosecution of research, discovery, and invention, raises to the highest

[1] The title of this Utopia and much else in it is a reminiscence of Plato's fragment, *Critias* (113 f.).

point the control of Nature for the practical interests of human life. All kinds of possible and impossible inventions are related in fantastic prophecy,[1] and the whole activity of the "House of Solomon" is directed toward improving the material state of society, while the portrayal of the political relations is only superficial and unimportant.

In Campanella's *State of the Sun*, on the other hand, in which the after-effects of More's *Utopia* are very noticeable, we come to a complete project of the *socialistic future state*, which is even pedantically ordered down to all of its minor relations. This state does not shrink in any direction from the most extreme violence to the freedom of the individual's life. From the mathematically delineated plan of the imperial city to the division of hours for daily work and enjoyment, the determination of professions, the pairing of the men and women, the astrologically predetermined hour for sexual unions, — all takes place here from an arrangement by the state for the welfare of the whole, and an extended, carefully worked out system of bureaucracy (in which there is an admixture of metaphysical motives)[2] is built up upon the graded knowledge of the citizens. The more any one knows, the more power he ought to have in the state, in order to rule and improve by his knowledge the course of Nature. The points of view in this improvement look essentially toward external civilisation in Campanella's system also. With him, indeed, four hours of daily labour should suffice on the average to assure the good cheer of society, and upon this prosperity all should have a like claim.

4. In spite of all that is fantastic and whimsical,[3] the thought nevertheless asserts itself in Campanella's *State of the Sun*, still more than in More's *Utopia*, that the state should be an artificial product of human insight for the removal of social injuries. Neither writer desired to set up a mere creation of fancy, any more than did Plato; they believe in the possibility of realising "the best political constitution" by rational reflection upon an order of social relations

[1] In addition to the microscope and the telescope, the microphone and telephone are not wanting; there are giant explosive materials, flying-machines, all sorts of engines with air and water power, and even "some kinds" of perpetual motion! But the author lays special value upon the fact that by better culture of plants and animals, by unsuspected chemical discoveries, by baths and air-cures, diseases are to be banished and life prolonged; experiments on animals are also introduced in the interest of medicine.

[2] Beneath the supreme ruler, — Sol or Metaphysicus, — who must embody all knowledge within himself, stand first of all three princes, whose spheres of activity correspond to the three "primalities" of Being, Power, Wisdom and Love (cf. § 29, 3), etc.

[3] Fantastic is especially the strong element of astrological and magical superstition; whimsical, his monkish rude treatment of the sexual relations.

that shall be in accordance with Nature. In this, to be sure, they encountered much opposition. *Cardanus* combated Utopias on principle, and in their stead commended to science the task of comprehending the necessity with which the actual states of history develop in their special definite nature, out of the character, the relations of life, and the experiences of peoples; he would have them regarded as natural products like organisms, and would apply to their conditions the medical categories of health and disease. In a larger way, and free from the Pythagorean astrology in which the mathematician Cardanus indulged, but with a strongly constructive fancy, the practical statesman *Bodin* attempted to understand the manifold character of historical reality as manifested in political life.

But the tendency of the time was much more toward seeking a right founded in Nature for all times and relations alike, and to be recognised by reason alone: although a man like *Albericus Gentilis* desired to reduce the principles of private right to physical laws by analogies of childlike crudeness. A firmer and more fruitful ground was gained when *human nature*, instead of general "Nature," was taken as a starting-point. This was done by Hugo *Grotius*. Like Thomas Aquinas, he found the fundamental principle of natural right in the *social need*, and found the method for its development in logical deduction. That which reason recognises as agreeing with man's social nature and following therefrom — in this consists the *jus naturale*[1] — that cannot be changed by any historical mutation. The thought of such an absolute right, which exists only by its foundation in reason, and which exists independently of the political power and rather as the ultimate ground of this power, was brought home to Grotius by the analogy of international law with which his investigation was primarily concerned. On the other hand, however, by virtue of this material principle, private right became the authoritative presupposition for political right also. The satisfaction of individual interests, protection of life and property, appeared as the essential end to be subserved by the ordering of rights. Formally and methodically, on the contrary, this philosophical system of rights was entirely deductive; it aimed only to draw the logical consequences of the principle of society. In like manner *Hobbes* also regarded the *corpus politicum* as a machine capable of being deduced from the conception of its end by pure intellectual activity, and the philosophical doctrine of rights as a perfect demonstrable science. At the same time this field seemed

[1] *De Jure Bell. et Pac.* I. 1, 10.

adapted in a pre-eminent degree to the application of the geometrical method, and *Puffendorf* introduced the whole apparatus of this method by combining Grotius and Hobbes, and developing the whole system synthetically from the thought that the individual's instinct toward self-preservation could be rationally and successfully fulfilled only by satisfying his social need. In this form natural right persisted as the ideal of a "geometrical" science until far on into the eighteenth century (Thomasius, Wolff, indeed, even to Fichte and Schelling), and survived the general decline of the Cartesian principle.

5. Looking now at the contents rather than at the form, we find that the ultimate ground of public life and of social coherence was placed in the *interests of individuals:* the mechanics of the state found in the character of the impulses of the individual man that self-intelligible and simple element,[1] out of which the complex structures of life viewed as a subject of law and rights (*Rechtslebens*) might be explained in accordance with the Galilean principle. With this the doctrine of the state also went back to the Epicurean theory of social atomism[2] (cf. pp. 174 f.), and the synthetic principle by which the origin of the state was to be understood was the *contract*. From Occam and Marsilius down to Rousseau, Kant, and Fichte, this contract theory was dominant in political philosophy. Grotius and Hobbes devoted themselves to carrying it out in the most careful manner. To the political contract by which the individuals unite themselves to a community of interests, is attached the contract of sovereignty or subjection, by means of which the individuals hand over their rights and authority to the magistracy. This proved to be a general frame in which the most varied political theories fitted. While Grotius, and likewise Spinoza, found the interests of the citizens to be best guaranteed by an aristocratic republican constitution, *Hobbes* could deduce from the same presupposition his theory of a *purely secular absolutism*, according to which the political power should be inviolably united in one personality, the universal will in the individual will of the sovereign.

In closest connection with the contract theory appears the development of the conception of *sovereignty*. The source of all power, according to this theory, is the popular will, from which the political contract and the contract of submission have proceeded; the proper bearer of the sovereignty is the people. Meanwhile the con-

[1] The term "*conatus*" applies in this sense to both domains, the physical and the psychical, with Hobbes and Spinoza.

[2] As in the theoretical domain, so also in the practical, the principle of Democritus and Epicurus obtains with great efforts a late victory.

tract and the transfer of right and power completed thereby, are regarded by some writers as irrevocable, and by others as capable of recall. So Bodin, in spite of his doctrine of popular sovereignty, maintains the unlimited character and unconditional authority of the royal power, the inviolability of the ruler and the unjustifiability of all opposition against him; with *Hobbes* the sovereignty of the people is still more completely absorbed into that of the monarch, whose will here stands quite in the sense of the *l'état c'est moi* as the sole source of rights in the positive political life. In opposition to this view, and decidedly more consistent in view of their presupposition, the "*monarchomachischen* [opposed to an absolute monarchy] theories," whose chief representative besides Buchanan (1506–1582) and Languet (1518–1581) was Althus of Lower Saxony, maintained that the governmental contract becomes liable to dissolution as soon as the sovereign ceases to rule rightly, *i.e.* in the interest and according to the will of the people. If the contract is broken on one side, it is no longer binding for the other party; in this situation the sovereignty returns again to its original bearers. If man has made the state with a purpose and under reflection, then he abolishes it again when it becomes evident that it has failed to fulfil its purpose. Thus the Renaissance is already providing in advance the *theory of revolution.*[1]

All these theories, however, received their especial colouring from motives growing out of the particular relations of *church and state*, — a colouring which depended upon the question whether the unrestricted power of the ruler was felt as dangerous or as beneficial in consequence of his relation to the Confessions. The most radical standpoint in real politics was taken by *Hobbes* by virtue of his religious indifferentism: religion is a private opinion, and only that opinion which the sovereign professes has political standing or value. No other religion or Confession can be tolerated in public life. Hobbes gave the philosophical theory for the historical *cujus regio illius religio*. And *Spinoza* attached himself to him in this. He stood for freedom of thought and against all compulsion of conscience, but for him religion was only a matter of knowledge and disposition; for the public manifestation of religious feeling in the church and in public worship, it was in the interest of order and peace that only the form fixed by the magistracy should obtain. In a more positive sense the *Protestant Philosophy of Right* declared for

[1] These principles were defended with special application to the English conditions of the seventeenth century, and to the right of the "Revolution" of that time by the poet John *Milton* (*Defensio pro Populo Anglicano*, 1651), and by Algernon *Sidney* (*Discourses of Government*, 1683).

the sovereignty in church and state of the kingdom existing by the grace of God; while in this school, also, as for example in the case of Althus, the sovereignty of the people was defended as over against a magistracy holding another creed. The same motive was decisive where the *Jesuits* maintained that the magistracy might be removed and that the assassination of the prince was excusable (cf. above).

6. In the case of *Hobbes* the rationale of the contract theory rested on more general motives. If the social and political life was to be comprehended from the point of view of "human nature," the English philosopher found the fundamental, all-determining characteristic of human nature in the *impulse toward self-preservation* or *egoism*, the simple, self-evident principle for explaining the entire volitional life. Here his materialistic metaphysics and sensualistic psychology (cf. § 31) made it appear that this instinct toward self-preservation, in its original essence, was directed only toward the preservation and furtherance of the sensuous existence of the individual. All other objects of the will could serve only as means to bring about that supreme end. Agreeably to this principle, also, there was no other norm of judgment for man as a natural being than that of furtherance or hindrance, of profit or of harm: the distinction of good and evil, of right and wrong, is not possible upon the standpoint of the individual, but only upon the *social* standpoint, where the common interest instead of the individual's interest forms the standard. So *egoism became the principle of all practical philosophy;* for if the individual's instinct toward self-preservation was to be restricted and corrected by the command of the state, yet this state itself was regarded as the most ingenious and perfect of all the contrivances which egoism had hit upon to attain and secure its satisfaction. The *state of nature*, in which the egoism of each stands originally opposed to the egoism of every other, is a *war of all against all:* to escape this the state was founded as a contract for the mutual warrant of self-preservation. The social need is not original: it only results necessarily as the most efficient and certain means for the satisfaction of egoism.

Spinoza adopted this doctrine, but gave it a more ideal significance by introducing it into his metaphysics. "*Suum esse conservare*" is for him also the quintessence and fundamental motive or all willing. But since every finite mode belongs equally to both attributes, its impulse toward self-preservation is directed as well toward its conscious activity, *i.e.* its *knowledge*, as toward its maintenance in the corporeal world, *i.e.* its *power*. This individual striving, interpreted along the lines of the Baconian identity of

knowledge and power, forms for Spinoza the ground of explanation for the empirical life of the state, in accordance with the principle that each one's right extends as far as his power. In this process of explanation Spinoza moves mainly in the lines of Hobbes, and deviates from him only, as noticed above, in his view as to the best form of constitution. This same complication of conceptions, however, presents itself to Spinoza as affording also a starting-point for his mystico-religious ethics. For since the true "*esse*" of every finite thing is the deity, the only perfect satisfaction of the impulse toward self-preservation is to be found in "love to God." That Malebranche, who spoke so vehemently of the "atheistical Jew," taught the same in slightly different words — "*mit ein bischen anderen Worten*" — has already been mentioned (§ 31, 4).

7. Hobbes' theory of egoism — the "selfish system," as it was later termed for the most part — found vigorous opposition among his countrymen.[1] The reduction of all activities of the will, without any exception, to the impulse toward self-preservation excited both ethical revolt and the theoretical contradiction of psychological experience. The warfare against Hobbes was undertaken primarily by the *Neo-Platonist school of Cambridge*, whose chief literary representatives were Ralph *Cudworth* and Henry *More*. In this controversy the antithesis of φύσις and θέσις developed after the ancient prototype. For Hobbes, right and moral order arose from social institution; for his opponents they were original and immediately certain demands of Nature. Both parties opposed the *lex naturalis* to the theological dogmatic grounding of practical philosophy: but for Hobbes natural law was the demonstrable consequence of intelligent egoism; for the "Platonists" it was an immediate certainty, innate in the human mind.

Cumberland proceeded against Hobbes in the same line. He would have man's social nature regarded as being as original as his egoism: the "benevolent" *altruistic* inclinations, whose actual existence is not to be doubted, are objects of direct self-perception which have an original independence of their own; the social need is not the refined product of a shrewd self-seeking, but — as Hugo Grotius had conceived of it — a primary, constitutive characteristic of human nature. While egoism is directed toward one's own private weal, the altruistic motives are directed toward the universal weal, without which private weal is not possible. This connection between the welfare of the individual and that of the

[1] Cf. J. Tulloch *Rational Theology and Christian Philosophy in England in the 17th Cent.* (Lond. 1872).

public, which in Hobbes appeared as due to the shrewd insight of man, is regarded by Cumberland as a provision of God, whose commandment is hence considered to be the authoritative principle for obeying those demands which express themselves in the benevolent inclinations.

To the side of this *natural morality of reason*, which was thus defended against orthodoxy on the one hand and sensualism on the other, came the *natural religion of reason*, which had been set up by *Herbert of Cherbury* in opposition to these same two positions. Religion also shall be based neither upon historical revelation nor upon human institution; it belongs to the inborn possession of the human mind. The *consensus gentium* — so argues Herbert in the manner of the ancient Stoics — proves that belief in the deity is a necessary constituent of the human world of ideas, a *demand of reason*; but on this account that only which corresponds to those demands of the reason can stand as true content of religion, as contrasted with the dogmas of religions.

Thus the questions of practical philosophy which appear in English literature in the very lively discussion excited by Hobbes, gradually became transferred to the *psychological* realm. What is the origin of right, morals, and religion in the human mind? — so runs the problem. With this, however, the movements of the philosophy of the Enlightenment are introduced.

PART V.

THE PHILOSOPHY OF THE ENLIGHTENMENT.

In addition to the literature cited on p. 348, cf.

Leslie Stephen, *History of English Thought in the 18th Cent.* Lond. 1876.

J. Mackintosh, *On the Progress of Ethical Philosophy during the 17th and 18th Centuries.* Edin. 1872.

Ph. Damiron, *Mémoires pour servir à l'Histoire de la Philosophie au 18me Siècle.* 3 vols., Paris 1858–64.

E. Zeller, *Geschichte der deutschen Philosophie seit Leibniz.* München, 1873. Also H. Hettner, *Litteraturgeschichte des 18. Jahr.* 3 parts.

THE natural rhythm of intellectual life brought with it the result that in the modern as in the Greek philosophy a first cosmologico-metaphysical period was followed by a period of an essentially anthropological character, and that thus once more the newly awakened, purely theoretical efforts of philosophy must yield to a practical conception of philosophy as "*world-wisdom.*" In fact, all features of the *Greek sophistic* movement are found again with ripened fulness of thought, with broadened variety, with deepened content, and, therefore, also, with added energy in their antitheses in the *Philosophy of the Enlightenment*, which coincides approximately in time with the *eighteenth century*. In the place of Athens now appears the whole breadth of the intellectual movement among European civilised peoples, and scientific tradition counts now as many thousands of years as it then counted centuries; but the tendency as a whole and the objects of thought, the points of view and the results of the philosophising, show an instructive similarity and kinship in these two periods so widely separated in time and so different in the civilisations which formed their background. There prevails in both the same turning of thought toward the subject's inner nature, the same turning away from metaphysical subtlety with doubt and disgust, the same preference for an empirical genetic consideration of the human psychical life, the same inquiry as to the possibility and the limits of scientific knowledge,

and the same passionate interest in the discussion of the problems of life and society. No less characteristic, lastly, for both periods is the penetration of philosophy into the broad circles of general culture and the fusion of the scientific with the literary movement.

But the basis for the Enlightenment of the eighteenth century was given in the general features of a *secular view of life*, as they had been worked out during the Renaissance by the fresh movements in art, religion, politics, and natural research. While these had found their metaphysical formulation in the seventeenth century, the question now came again into the foreground, how man should conceive, in the setting of the new *Weltanschauung*, his own nature and his own position: and in the presence of the value set upon this question, the interest in the various metaphysical conceptions in which the new *Weltanschauung* had been embodied, retreated more and more decidedly into the background. Men contented themselves with the general outlines of metaphysical theories, in order to employ themselves the more thoroughly with the questions of human life; and all the doctrines of the Enlightenment which offer such a vehement polemic against speculation are, in truth, working from the beginning with a *metaphysics of the "sound common sense"* which at last raised its voice so high, and which ultimately only assumed as self-evident truth that which had fallen to it from the achievements of the labour of preceding centuries.

The beginnings of the philosophy of the Enlightenment are to be sought in *England*, where, in connection with the well-ordered conditions which followed the close of the period of the revolution, a powerful upward movement of literary life claimed philosophy also in the interests of general culture. From England this literature was transplanted to *France*. Here, however, the opposition of the ideals which it brought with it to the social and political status, worked in such a way that not only was the presentation of the thoughts more excited and vehement from the outset, but the thoughts themselves also take on a sharper point, and turn their negative energy more powerfully against the existing conditions in Church and state. At first from France, and then from the direct influence of England,[1] also, *Germany* received the ideas of the Enlightenment, for which it had already received an independent preparation in a more theoretical manner: and here these ideas found their last deepening, and a purification and ennobling as well,

[1] Cf. G. Zart, *Der Einfluss der englischen Philosophen auf die deutsche Philos. des 18. Jahrh.* (Berlin, 1881).

as they come to an end in the German *poetry* with which the *Renaissance of classical Humanism* was completed.

John *Locke* became the leader of the *English* Enlightenment by finding a popular form of empirico-psychological exposition for the general outlines of the Cartesian conception of the world. While the metaphysical tendency of the system brought forth an idealistic after-shoot in *Berkeley*, the anthropologico-genetic mode of consideration extended quickly and victoriously to all problems of philosophy. Here the opposition between the *sensualistic associational psychology* and the nativistic theories of various origin continued to have a decisive influence upon the course of development. It controlled the vigorous movement in *moral philosophy*, and the development of *deism* and *natural religion*, which was connected with it; and it found its sharpest formulation in the epistemological field, where the most consistent and deepest of English thinkers, David *Hume*, developed empiricism to *positivism*, and thereby called forth the opposition of the *Scottish* school.

The pioneer of the *French* Enlightenment was Pierre *Bayle*, whose *Dictionnaire* turned the views of the cultivated world completely in the direction of religious scepticism; and it was along this line chiefly that the English literature was then taken up in Paris. *Voltaire* was the great writer, who not only gave this movement its most eloquent expression, but also presented the positive elements of the Enlightenment in the most emphatic manner. But the development pressed with much greater weight toward the negative side. In the common thinking of the *Encyclopædists* became completed step by step the change from empiricism to sensualism, from naturalism to materialism, from deism to atheism, from enthusiastic to egoistic morals. In opposition to such an *Enlightenment of the intellect*, whose lines all converge in the positivism of *Condillac*, there appeared in *Rousseau* a *feeling-philosophy* of elemental power, leading to the intellectual shaping of the *Revolution*.

Germany was won for the Enlightenment movement by the Leibnizian philosophy and the great success which Wolff achieved, in his activity as a teacher, in developing and transforming it, but here, in consequence of the lack of a unifying public interest, the tendency toward *individual culture* was predominant. For the ends of this individual culture, the ideas of the "philosophical century" were elaborated in psychological and epistemological as well as in the moral, political, and religious fields with great multiplicity, but without any new creation of principles until fresh life and higher points of view were brought by the *poetical movement* and the great personalities of its bearers, Lessing and Herder, to the dry intelli-

gence with which a boastful *popular philosophy* had extended itself, especially in connection with the Berlin Academy.[1] This circumstance kept the German philosophy of the eighteenth century from losing itself in theoretico-sceptical self-disintegration like the English, or from being shattered in practical politics like the French: by contact with a great literature teeming with ideas a new great epoch of philosophy was here prepared.

John **Locke**, born 1632, at Wrington near Bristol, was educated at Oxford, and became involved in the changeful fortunes of the statesman Lord Shaftesbury. He returned home from exile in Holland with William of Orange in 1688, filled several high political offices under the new government which he also often publicly defended, and died while living in the country at leisure, in 1704. His philosophical work bears the title *An Essay concerning Human Understanding* (1690); besides this are to be mentioned *Some Thoughts on Education* (1693), *The Reasonableness of Christianity* (1695), and, among his posthumous works, *Of the Conduct of the Understanding*. Cf. Fox Bourne, *The Life of J. L.* (Lond. and N.Y. 1876); Th. Fowler, *J. L.* (Lond. 1880); [*Locke*, by A. C. Fraser, Blackwood series, Edin. and Phila. 1890, and article *Locke* in *Enc. Brit.*; T. H. Green in his *Int. to Hume*; J. Dewey, *Leibniz's New Essays*, Chicago, 1888; Edition of his works by Low, 1771, also ed. Lond. 1853; Philosophical works in Bohn Lib.].

George **Berkeley** was born in Killerin, Ireland, in 1685, took part as a clergyman in missionary and colonisation attempts in America, became Bishop of Cloyne 1734, and died 1753. His *Theory of Vision* (1709) was a preparation for his *Treatise on the Principles of Human Knowledge* (1710). This main work was later followed by the *Three Dialogues between Hylas and Philonous*, and by *Alciphron or the Minute Philosopher*. Edition of his works by Fraser, 4 vols., Lond. 1871; the same writer has also given a good exposition of his thought as a whole (Blackwood series, Edin. and Lond. 1881). Cf. Collyns Simon, *Universal Immaterialism*, Lond. 1862.

The **Associational Psychology** found its chief supporters in Peter **Brown** (died 1735 Bishop of Cork; *The Procedure, Extent, and Limits of Human Understanding*, 1719), David **Hartley** (1704–1757; *De Motus Sensus et Idearum Generatione*, 1746; *Observations on Man, his Frame, his Duty, and his Expectations*, 1749), Edward **Search**, pseudonym for Abraham **Tucker** (1705–1774; *Light of Nature*, 7 vols., Lond. 1768–1777), Joseph **Priestley** (1733–1804; *Hartley's Theory of the Human Mind on the Principle of the Association of Ideas*, 1775; *Disquisitions relating to Matter and Spirit*, 1777), John Horne **Tooke** (1736–1812; Ἐπεὰ πτερόεντα *or The Diversions of Parley*, 1798; cf. Stephen, *Memoirs of J. H. T.*, Lond. 1813), Erasmus **Darwin** (1731–1802; *Zoonomia or the Laws of Organic Life*, 1794–1796), finally, Thomas **Brown** (1778–1820; *Inquiry into the Relation of Cause and Effect*, 1804; posthumously, the *Lectures on the Philosophy of the Human Mind*, 1820, delivered in Edinburg). Cf. Br. Schoenlank, *Hartley u. Priestley als Begründer des Associationismus* (Halle, 1882); L. Ferri, *Sulla Dottrina Psichologica dell' Associazione, Saggio Storico e Critico* (Rome, 1878) [Fr. tr. Paris, 1883. Cf. also *Hartley and James Mill* by G. S. Bower, Lond. 1881. For bibliography for the writers mentioned in this and the following paragraphs consult Porter's appendix to Eng. tr. Ueberweg's *Hist. Phil.*].

Of the opponents to this movement who Platonise in the older manner, Richard **Price** (1723–1791) became known especially by his controversy with Priestley: —

Priestley, *The Doctrine of Philosophical Necessity* (1777); Price, *Letters on Materialism and Philosophical Necessity*; Priestley, *Free Discussions of the Doctrines of Materialism* (1778).

[1] Cf. Ch. Bartholmèss, *Histoire Philosophique de l'Académie de Prusse*, Paris, 1859.

Among the **English moral philosophers**, **Shaftesbury** (Anthony Ashley Cooper, 1671–1713) takes a most important place. His writings were collected under the title, *Characteristics of Men, Manners, Opinions and Times* (1711). Cf. G. v. Gizycki, *Die Philosophie Sh.'s* (Leips. and Heidelberg, 1876). — After him various groups diverge. The intellectualistic tendency is represented by Samuel **Clarke** (1675–1729; *A Demonstration of the Being and Attributes of God*, 1705; *Philosophical Inquiry concerning Human Liberty*, 1715; cf. his correspondence with Leibniz) and William **Wollaston** (1659–1724; *The Religion of Nature Delineated*, 1722). — The morality based on feeling was represented by Francis **Hutcheson** (1694–1747; *Inquiry into the Original of our Ideas of Beauty and Virtue*, 1725; *A System of Moral Philosophy*, 1755; cf. Th. Fowler, *Shaftesbury and Hutcheson*, Lond. 1882); Henry **Home**, pseud. for Lord Kames (1696–1782; *Essays on the Principles of Morality and Natural Religion*, 1751; *Elements of Criticism*, 1762); Edmund **Burke** (1730–1797; *Philosophical Inquiry into the Origin of our Ideas of the Sublime and Beautiful*, 1756); Adam **Ferguson** (1724–1816; *Institutions of Moral Philosophy*, 1769), and in a certain sense also, Adam **Smith** (1723–1790; *Theory of Moral Sentiments*, 1759); the principle of authority was defended by Joseph **Butler** (1692–1752; *Sermons upon Human Nature*, 1726) [*Butler*, in Blackwood series by W. L. Collins, 1881], and William **Paley** (1743–1805; *Principles of Moral and Political Philosophy*, 1785). The ethics of the associonational psychology was developed chiefly by Jeremy **Bentham** (1748–1832; *Introduction to the Principles of Morals and Legislation*, 1789; *Traité de Législation Civile et Pénale*, brought together by E. Dumont, 1801; *Deontology*, ed. by J. Bowring, 1834; works in 11 vols., Edin. 1843). — In a peculiar isolated position appears Bernhard de **Mandeville** (1670–1733; *The Fable of the Bees, or Private Vices made Public Benefits*, 1706, later with illustrative dialogues, 1728; *Inquiry into the Origin of Moral Virtue*, 1732; *Free Thoughts on Religion, Church, Government*, 1720).

The literature of **Deism** coincides, for the most part, with the above-named literature of moral philosophy; but in addition to those named the following writers are also prominent: John **Toland** (1670–1722; *Christianity not Mysterious*, 1696; *Letters to Serena*, 1704; *Adeisidæmon*, 1709; *Pantheisticon*, 1710); Anthony **Collins** (1676–1729; *A Discourse of Free Thinking*, 1713); Matthew **Tindal** (1656–1733; *Christianity as Old as the Creation*, 1730); Thomas **Chubb** (1679–1747; *A Discourse concerning Reason with Regard to Religion*, 1730); Thomas **Morgan** (died 1743; *The Moral Philosopher*, 3 parts, 1737 ff.); finally, Lord **Bolingbroke** (1672–1751); works ed. by Mollet in 5 vols., 1753 f.; cf. F. v. Raumer, *Abhandl. der Berl. Akad.* 1840). — Cf. V. Lechler, *Geschichte des englischen Deismus* (Stuttgart and Tüb. 1841).

England's greatest philosopher is David **Hume**, born, 1711, in Edinburg, and educated there. After he had spent some time as merchant, he lived for several years in France, occupied in study, and composed his work of genius, the *Treatise on Human Nature* (printed 1739 f.). The failure of this book induced him to work it over and publish it under the title *Inquiry concerning Human Understanding*, as a second volume of his more successful *Essays, Moral, Political and Literary* (1748), and to add *An Inquiry concerning the Principles of Morals* (1751), and also *The Natural History of Religion* (1755). As librarian of the Advocates' Library in Edinburg he found opportunity to write his *History of England*. After a stay in Paris, where he received great honour and came into connection with Rousseau among others, he was for some time Under-Secretary of State in the Foreign Office, but finally returned to Edinburg, where he died, 1776. The *Dialogues concerning Natural Religion* and some smaller treatises appeared posthumously. Ed. of his works by Green and Grose in 4 vols. (Lond. 1875). His autobiography was published by his friend, Adam Smith (1777). Cf. J. H. Burton, *Life and Correspondence of D. H.* (Edin. 1846–50); E. Feuerlein in the *Zeitschr.* "*Der Gedanke*" (Berlin, 1863 f.); E. Pfleiderer, *Empirismus und Skepsis in D. H.'s Philosophie* (Berlin, 1874); T. Huxley, *D. H.* (Lond. 1879); Fr. Jodl, *Leben u. Philosophie D. H.'s* (Halle, 1872); A. Meinong, *Hume-Studien* (Vienna, 1877, 1882); G. v. Gizycki, *Die Ethik D. H.'s* (Breslau, 1878). [W. Knight, Blackwood series, 1886; esp. Int. by T. H. Green in his ed. of the works. The Selby-Bigge ed. of the *Treatise*, Lond. and N.Y., is convenient.]

The **Scottish** School was founded by Thomas **Reid** (1710–1796, Professor at Glasgow; *Inquiry into the Human Mind on the Principles of Common Sense*, 1764; *Essays on the Intellectual Powers of Man*, 1785; *Essays on the Active Powers of Man*, 1788, complete ed. by W. Hamilton, Edin. 1827). [Selections ed. by E. H. Sneath, N.Y. 1892, contains bibliog. Cf. A. Seth, *Scottish Philosophy*, Edin. and Lond. 1885, and art. *Reid* in *Enc. Brit.*] Besides James **Oswald** (died 1793, *Appeal to Common Sense in Behalf of Religion*, 1766) and James **Beattie** (died 1805, *Essay on the Nature and Immutability of Truth*, 1770), the school had its chief academical and literary representative in Dugald **Stewart** (1753–1828, Professor in Edinburg; *Elements of the Philosophy of the Human Mind*, 3 parts, 1792–1827; ed. of his works by W. Hamilton, 10 vols., Edin. 1854 ff.).

Pierre **Bayle**, the type of sceptical polyhistory, born 1647 at Carlat, led a life disquieted by twice changing his Confession, was finally a professor in Sédan and Rotterdam, and died 1706. His influential life work is embodied in his *Dictionnaire Historique et Critique* (1695 and 1697). Cf. L. Feuerbach, *P. Bayle nach seinen für die Geschichte der Philosophie und Menschheit interessantesten Momenten*, Ansbach, 1833.

Of the works of **Voltaire** (François Arouet le Jeune, 1694–1778; the main events of his literary life are his flight to London, his stay with the Marquise du Châtelet in Cirey, his visit with Frederick the Great in Potsdam, and his rest in old age at the country seat Ferney, near Geneva), the following are principally to be considered here: *Lettres sur les Anglais* (1784), *Métaphysique de Newton* (1740), *Éléments de la Philosophie de Newton mis à la Portée de tout le Monde* (1741), *Examen important de Mylord Bolingbroke* (1736), *Candide ou sur l'Optimisme* (1757), *Dictionnaire Philosophique* (1764), *Le Philosophe Ignorant* (1767), *Réponse au Système de la Nature* (1777), the poem *Les Systèmes*, etc. Cf. E. Bersot, *La Philosophie de V.* (Paris, 1848); D. F. Strauss, *V.* (Leips. 1870); J. Morley, *V.* (Lond. and N.Y. 1872).

More sceptical in metaphysical aspects appear natural scientists and mathematicians such as **Maupertuis** (1698–1759; active in connection with the Berlin Academy; *Essai de Philosophie Morale*, 1750; *Essai de Cosmologie*, 1751; controversial writings between him and the Wolffian, S. König, collected Leips. 1758), or **d'Alembert** (*Mélanges de Littérature, d'Histoire et de Philosophie*, 1752); others proceed more naturalistically, such as **Buffon** (1708–1788; *Histoire Naturelle Générale et Particulière*, 1749 ff.) and Jean Battiste **Robinet** (1735–1820; *De la Nature*, 1761; *Considérations Philosophiques de la Gradation Naturelle des Formes d'Etre* 1767).

Sensualism appears in connection with materialism in Julien Offrai de **Lamettrie** (1709–1751; *Histoire Naturelle de l'Âme*, 1745; *L'Homme Machine*, 1748; *L'Art de Jouir*, 1751; *Œuvres*, Berlin, 1751; on him F. A. Lange, *Gesch. des Mater.*, I. 326 ff. [Eng. tr. *Hist. of Mater.*, Vol. II. 49 ff.]; Nérée Quépat, Paris, 1873); it appears solely as psychological theory with Charles **Bonnet** (1720–1793; *Essai de Psychologie*, 1755; *Essai Analytique sur les Facultés de l'Âme*, 1759; *Considérations sur les Corps Organisés*, 1762; *Contemplation de la Nature*, 1764; *Palingénesies Philosophiques*, 1769), and with a positivistic pointing in Etienne Bonnot de **Condillac** (1715–1780; *Essai sur l'Origine de la Connaissance Humaine*, 1746; *Traité des Systèmes*, 1749; *Traité des Sensations*, 1754; *Logique*, 1780; *Langue des Calculs* in the complete edition, Paris, 1798; cf. F. Réthoré, *C. ou l'Empirisme et le Rationalisme*, Paris, 1864). The last representatives of these theories are, on the one hand, Pierre Jean George **Cabanis** (1757–1808; *Les Rapports du Physique et du Moral de l'Homme*, 1802; *Œuvres*, Paris, 1821–25), on the other side, Antoine Louis Claude **Destutt de Tracy** (1754–1836; *Éléments d'Idéologie*, in 4 parts, 1801–15, together 1826). — Cf. Fr. Picavet, *Les Idéologues* (Paris, 1891).

The literary concentration of the Enlightenment movement in France was the **Encyclopædia** (*Encyclopédie ou Dictionnaire Raisonné des Sciences, des Arts et des Métiers*, 28 vols., 1752–1772, supplement and index, 7 vols., extending to 1780). Besides d'Alembert, who wrote the introduction, the editor and intellectual head of the circle from which it proceeded was Denis **Diderot** (1713–1784; *Pensées Philosophiques*, 1746; *Pensées sur l'Interprétation de la Nature*, 1754; of the posthumous publications the *Promenade d'un Sceptique*, the *Entretien d'Alembert et de Diderot*, and the *Rêve d'Alembert* are to be emphasised; worthy of mention also is the *Essai de Peinture; Œuvres Complètes*, Paris, 1875, 20 vols.; cf. K. Rosenkranz, *D., sein Leben und seine Werke*, Leips. 1866; J. Morley, *D. and the Encyclopædists*, Lond. 1878). Further collaborators upon the Encyclopædia (aside from Voltaire and Rousseau, who became separated from the work at an early date) were **Turgot** (article *Existence*), Daubenton, Jaucourt, Duclos, Grimm, Holbach, etc. From the same circle ("*Les Philosophes*") proceeded later the **Système de la Nature** (pseud. author, Mirabeau, 1770), which is in the main to be attributed to Dietrich von **Holbach** (1723–1789, from the Palatinate; *Le bon Sens ou Idées Naturelles opposées aux Idées Surnaturelles*, 1772; *Éléments de la Morale Universelle*, 1776, etc.). [On the *Système de la Nature* cf. Lange, *Hist. of Mat.*, II. 92 ff.] With him co-operated **Grimm** (1723–1807; *Correspondance Littéraire*, 1812), the mathematician Lagrange, the Abbé Galiani, Naigeon, and others; the concluding chapter, "Abrégé du Code de la Nature." is perhaps from Diderot's pen; **Helvétius** wrote a very popular exposition, "Vrai Sens du Système de la Nature," 1771. The same writer (Claude Adrien Helvétius, 1715–1771) gave the sharpest expression to the morals of the sensualistic associational psychology in his much read book, *De l'Esprit* (1758; cf. also his posthumous work, *De l'Homme de ses Facultés et de son Éducation*, 1772).

The theory of English constitutionalism was adopted in France by **Montesquieu** (1689–1755; *Lettres Persanes*, 1721; *De l'Esprit des Lois*, 1748). Social problems were treated on the one side by the so-called **Physiocrats** such as **Quesnay** (*Tableaux Économiques*, 1758); **Turgot** (*Reflexions sur la Formation et la Distribution des Richesses*, 1774, opposed by Galiani, *Dialogues sur le Commerce des Blés*) and others, on the other side by the **Communists** such as **Morelly** (*Code de la Nature*, 1755), and **Mably**, the brother of Condillac (*De la Législation ou Principes des Lois*, 1776.

The most notable figure of the French Enlightenment was Jean Jacques **Rousseau** (born, 1712, in Geneva, died, 1778, in Ermenonville after an adventurous life, which toward the end was troubled by melancholy and hallucinations of persecution). His main writings — aside from the autobiographical *Confessions* [tr., Lond. 1876] — are *Discours sur les Sciences et les Arts* (1750), *Discours sur l'Origine et les Fondemens de l'Inégalité parmi les Hommes* (1773), *La Nouvelle Héloise* (1761), *Émile ou sur l'Éducation* (1762) [abr. tr., Boston, 1885], *Du Contrat Social* (1762). Cf. F. Brockerhoff, *R., sein Leben und seine Werke* (Leips. 1863 and 1874); E. Feuerlein in "*Der Gedanke*" (Berlin, 1866); L. Moreau, *J. J. R. et le Siècle Philosophique* (Paris, 1870); J. Morley, *J. J. R.* (Lond. 1873); R. Fester, *R. und die deutsche Geschichtsphilosophie* (Stuttgart, 1890); [E. Caird, *R.* in *Essays*, Vol. I.].

The philosophical **theory of the Revolution** was developed chiefly by Charles François de **St.-Lambert** (1716–1803; *Principes des Mœurs chez toutes les Nations ou Catéchisme Universel*, 1798), Const. Fr. Chassebœuf Comte de **Volney** (1757–1820; *Les Ruines*, 1791; *La Loi Naturelle ou Principes Physiques de la Morale, déduits de l'Organisation de l'Homme et de l'Univers ou Catéchisme du Citoyen Français*, 1793), Marie Jean Ant. Nic. de **Condorcet** (1743–1794; *Esquisse d'un Tableau Historique du Progrès de l'Esprit Humain*, 1795), Dominique **Garat** (1749–1833; cf. *Conte Rendu des Séances des Écoles Normales*, II. 1–40). Cf. L. Ferraz, *La Philosophie de la Révolution* (Paris, 1890).

Gottfried Wilhelm **Leibniz**, the many-sided founder of **German** philosophy, was born, 1646, in Leipsic, studied there and at Jena, received his degree in Altorf, and was then, through his acquaintance with Boyneburg, drawn into the diplomatic service of the Elector of Mayence. In this service, pursuing political and scientific plans of his own, he travelled as a member of an embassy to Paris and London, with an incidental visit to Spinoza in The Hague, and then entered the service of the court of Hanover and Brunswick as librarian and court historian. In all these positions he was active in his public and diplomatic capacity in the interests of the German national spirit and of peace between the Confessions. Later he lived at the court of the first Prussian Queen Sophie Charlotte, a Hanoverian princess, in Charlottenberg and Berlin, where the Academy was founded under his direction; afterwards he lived for some time in Vienna, to

consult archives. Here he gave the stimulus for the foundation of an academy, a project which was later carried out, and the St. Petersburg Academy was also due to his influence. He died, 1716, at Hanover. The manifold nature of his activity, and the way in which his life was split up, is shown also in the fact that his scientific views are, for the most part, deposited only in fragmentary essays, and in an incredibly extensive correspondence. The best edition of his philosophical writings is the most recent by C. J. Gerhardt, 7 vols. (Berlin, 1875–90). The metaphysical treatises have been cited above (p. 382). For his influence upon the philosophy of the Enlightenment, the following come chiefly into consideration, aside from the correspondence with Bayle and Clarke: *Essais de Théodicée sur la Bonté de Dieu, la Liberté de l'Homme et l'Origine du Mal* (Amsterdam, 1710), and the *Nouveaux Essais sur l'Entendement Humain*, first published in 1765, by Raspe. Cf. G. E. Guhrauer, *G. W. Frhr. v. L.* (Breslau, 1842); E. Pfleiderer, *L. als Patriot, Staatsmann und Bildungsträger* (Leips. 1870); art. *L.* in *Ersch und Gruber's Enc.*, by W. Windelband; L. Feuerbach, *Darstellung, Entwicklung und Kritik der L.'schen Phil.* (Ansbach, 1844); E. Nourisson, *La Philosophie de L.* (Paris, 1860); L. Grote, *L. und seine Zeit* (Hanover, 1869); O. Caspari, *L.'s Philosophie* (Leips. 1870); J. T. Merz, *L.* (Lond. 1884); [J. Dewey, *Leibniz's New Essays*, Chicago, 1888; art. *Leibniz* in *Enc. Brit.*, by Sorley; Eng. tr. of *Imp. Phil. Works*, by G. M. Duncan, New Haven, 1890; of the *New Essays*, by A. G. Langley, Lond. and N.Y. 1893].

Among the most influential "Enlighteners" in Germany was Leibniz's contemporary and fellow-countryman, Christian **Thomasius** (1655–1728; *Einleitung zur Vernunftlehre, Ausführung der Vernunftlehre*, both in 1691; *Einl. zur Sittenlehre*, 1692; *Ausführung d. Sittenlehre*, 1696; *Fundamenta Juris Naturæ et Gentium ex Sensu Communi Deducta*, 1705; cf. A. Luden, *C. Th.*, Berlin, 1805).

The centre of scientific life in Germany during the eighteenth century was formed by the teaching and school of Christian **Wolff**. He was born, 1679, in Breslau, studied at Jena, was Privat-docent at Leipsic, and taught in Halle until he was driven away in 1723 at the instigation of his orthodox opponents; he then became Professor at Marburg. In 1740 Frederick the Great called him back to Halle with great honour, and he was active there until his death in 1754. He treated the entire compass of philosophy in Latin and German text-books; the latter all bear the title *Vernünftige Gedanken* ["Rational Thoughts," treating psychology, metaphysics, physics, physiology, botany, astronomy, ethics, politics, etc.]; in detail: *von den Kräften des menschlichen Verstandes*, 1712; *von Gott, der Welt und der Seele des Menschen, auch allen Dingen überhaupt*, 1719; *von der Menschen Thun und Lassen*, 1720; *vom gesellschaftlichen Leben der Menschen*, 1721; *von den Wirkungen der Natur*, 1723; *von den Absichten der natürlichen Dinge*, 1724; *von den Theilen der Menschen, Thiere und Pflanzen*, 1725. The Latin works, *Philosophia Rationalis sive Logica*, 1718; *Philosophia Prima sive Ontologia*, 1728; *Cosmologia*, 1731; *Psychologia Empirica*, 1732; *Rationalis*, 1734; *Theologia Naturalis*, 1736; *Philosophia Practica Universalis*, 1738; *Jus Naturæ*, 1740 ff.; *Jus Gentium*, 1749; *Philosophia Moralis*, posthumously pub., 1756. — Cf. K. G. Ludovici, *Ausführlicher Entwurf einer vollständigen Historie der Wolff'schen Philosophie* (Leips. 1736 ff.). Also W. L. G. v. Eberstein, *Versuch einer Geschichte der Logik und Metaphysik bei den Deutschen von Leibniz an* (Halle, 1799).

Among the **Wolffians** may be named, perhaps, G. B. **Bilfinger** (1693–1750, *Dilucidationes Philosophicæ de Deo, Anima Humana, Mundo*, etc., 1725); M. **Knutzen** (died 1751; *Systema Causarum Efficientium*, 1746; cf. B. Erdmann, *M. Kn. und seine Zeit*, Leips. 1876); J. Chr. **Gottsched** (1700–1766; *Erste Gründe der gesammten Weltweissheit*, 1734); Alex. **Baumgarten** (1714–1762; *Metaphysica*, 1739; *Æsthetica*, 1750–58).

As representatives of the geometrical method appear M. G. **Hansch** (1683–1752; *Ars Inveniendi*, 1727) and G. **Ploucquet** (1716–1790; cf. A. F. Böck, *Sammlung von Schriften, welche dem logischen Calcül des Hernn P. betreffen*, Frankfort and Leips. 1766); as opponents of the same, Pierre **Crousaz** (1663–1748; *Logik*, 1712 and 1724; *Lehre vom Schönen*, 1712), Andreas **Rüdiger** (1671–1731; *De Sensu Veri et Falsi*, 1709; *Philosophia Synthetica*, 1707) and Chr. A. **Crusius** (1712–1775; *Entwurf der nothwendigen Vernunftwahrheiten*, 1745; *Weg zur Gewissheit und Zuverlässigkeit der menschlichen Erkenntniss*, 1747.) An eclectic intermediate position is taken by J. Fr. **Budde** (1667–1729; *Institutiones Philosophiæ Eclecticæ*, 1705) and by the historians of philosophy, J. J. **Brucker** and D. **Tiedmann**, and also by Joh. **Lossius** (*Die physichen Ursachen des Wahren*, 1775) and A. **Platner** (1744–1818; *Philosophische Aphorismen*, 1776 and 1782).

Of more independent importance are J. H. **Lambert** (born, 1728, at Mülhausen, died, 1777, in Berlin; *Kosmologische Briefe*, 1761; *Neues Organon*, 1764; *Architektonik*, 1771) and Nic. **Tetens** (1736–1805; *Philosophische Versuche über die Menschliche Natur und ihre Entwicklung*, 1776 f.; cf. Fr. Harms, *Ueber die Psychologie des N. T.*, Berlin, 1887). Both stand in literary connection with **Kant** (cf. Part VI. ch. 1), whose pre-critical writings belong likewise in this setting; these are principally *Allgemeine Naturgeschichte und Theorie des Himmels*, 1755; *Principiorum Primorum Cognitionis Metaphysicæ Nova Dilucidatio*, 1755; *Monadologia Physica*, 1756; *Die falsche Spitzfindigkeit der vier syllogistischen Figuren*, 1762; *Der einzig mögliche Beweisgrund zu einer Demonstration des Daseins Gottes*, 1763; *Versuch. den Begriff der negativen Grössen in die Weltweisheit einzuführen*, 1763; *Ueber die Deutlichkeit der Grundsätze der natürlichen Theologie und Moral*, 1764; *Beobachtungen über das Gefuhl des Schönen und Erhabenen*, 1764; *Träume eines Geistersehers, erläutert durch Träume der Metaphysik*, 1766; *De Mundi Sensibilis atque Intelligibilis Forma et Principiis*, 1770. Cf. R. Zimmerman, *Lambert der Vorgänger Kant's*, 1879. [On Lambert and Tetens, cf. A. Riehl, *Der philosophische Kriticismus*, Leips. 1876. For the pre-critical writings of Kant, E. Caird, *The Critical Philosophy of Immanuel Kant*, Glasgow, Lond., and N.Y. 1889, Fischer's *Kant;* Cohen, *Die systematischen Begriffe in Kant's vorkritischen Schriften*, and the works cited in first par., p. 536.]

Deism found a vigorous and instructive support in Germany among numerous Wolffians, though nothing new in principle was added. Characteristic of this was the translation of the Bible by Lorens **Schmidt**. The standpoint of historical criticism of the biblical writings was maintained by Salomon **Semler** (1725–1791). The sharpest consequences of the deistic criticism were drawn by Samuel **Reimarus** (1699–1768; *Abhandlungen von den vornehmsten Wahrheiten der natürlichen Religion*, 1754; *Betrachtung über die Triebe der Thiere*, 1760, especially his *Schutzschrift für die vernünftigen Verehrer Gottes*, 1767 [not pub.], from which Lessing edited the "Wolfenbüttler Fragmente," and, in more recent time, Dav. Fr. Strauss edited an extract, Leips. 1862). Joh. Chr. Edelmann was a Spinozistic free-thinker (1698–1767). Cf. K. Mönckeberg, *Reimarus und Edelmann* (Hamburg, 1867).

The movement of the so-called **Pietism**, allied to Mysticism, which was begun by **Spener** (1635–1705), and carried forward with organising energy by Aug. Herm. **Francke** (1663–1727), had only an indirect influence upon philosophy during this period; at a still farther distance stand the more isolated members of mystic sects such as Gottfried Arnold (1666–1714) and Conrad Dippel (1673–1734).

Empirical psychology was represented among the Germans in the eighteenth century by numerous names, comprehensive collections, text-books, and special investigations. There are Casimir von Creuz (1724–1770), Joh. Gottl. Krüger (*Versuch einer experimentalen Seelenlehre*, 1756), J. J. Heutsch (*Versuch über die Folge der Veränderung der Seele*, 1726), J. Fr. Weiss (*De Natura Animi et Potissimum Cordis Humani*, 1761), Fr. v. Irwing (*Erfahrungen und Untersuchungen über den Menschen*, 1777 ff.) *et al.* The "*Magazin zur Erfahrungsseelenlehre*," edited by **Moritz** (1785–1793), formed a place for collecting contributions to this favourite science. Further literature in K. Fortlage, *System der Psychologie*, I. 42 f.

A theory of art upon the basis of empirical psychology is found in Baumgarten's pupil, G. Fr. Meier (1718–1777), and especially in Joh. Georg **Sulzer** (1720–1779; *Theorie der angenehmen Empfindungen*, 1762; *Vermischte Schriften*, 1773 ff.; *Allgemeine Theorie der schönen Künste*, 1771–1774, a lexicon of æsthetics).

Of the **Popular Philosophers** may be mentioned Moses **Mendelssohn** (1729–1786; *Briefe über die Empfindungen*, 1755; *Ueber die Evidenz in den Metaphysischen Wissenschaften*, 1764; *Phædon*, 1767; *Morgenstunden*, 1785; *Werke*, ed. by Brasch, Leips. 1881), the book-dealer Fr. **Nicolai** (1733–1811), who published successively the *Bibliothek der schönen Wissenschaften*, the

Briefe die neueste deutsche Literatur betreffend, the *Allgemeine deutsche Bibliothek*, and the *Neue Allgemeine deutsche Bibliothek*; further J. Aug. **Eberhard** (1738–1809), Joh. Bernh. **Basedow** (1723–1790), Thomas **Abbt** (1738–1766), Joh. Jac. **Engel** (1741–1802; editor of the *Philosoph für die Welt*), J. J. H. **Feder** (1740–1821), Chr. **Meiners** (1747–1810), Chr. **Garve** (1742–1798).

A highly interesting position personally is occupied by **Frederick the Great**, the Philosopher of Sanssouci. On him, cf. Ed. Zeller, *Fr. d. Gr. als. Philosoph* (Berlin, 1886).

Of **Lessing's** writings those of chief importance for the history of philosophy are the *Hamburger Dramaturgie*, the *Erziehung des menschen Geschlechts*, the *Wolfenbüttler Fragmente*, and the theological controversial writings. Cf. Rob. Zimmerman, *Leibniz und Lessing* (*Studien und Kritiken*, I. 126 ff.); E. Zirngiebl, *Der Jacobi-Mendelssohn'sche Streit über Lessing's Spinozismus* (Munich, 1861); C. Hebler, *Lessing-Studien* (Bern, 1862); W. Dilthey (*Preuss. Jahrb.* 1879). [Eng. tr. of the *Ham. Dram.* and *Education of Human Race* in Bohn Lib.; of *Laoccoon*, by Phillimore, Lond. 1875; cf. Sime, *Lessing*, Lond. 1873, 1879.]

Among **Herder's** writings belong in this period, *Ueber den Ursprung der Sprache*, 1772; *Auch eine Philosophie der Geschichte der Menschheit*, 1774; *Vom Erkennen und Empfinden der menschlichen Seele*, 1778; *Ideen zur Philosophie der Geschichte der Menschheit*, 1784 ff. [Eng. tr., Lond. 1800]; *Gott, Gespräche über Spinoza's System*, 1787; *Briefe zur Beförderung der Humanität*, 1793 ff. (on his later philosophical literary activity, cf. below, Part VI. ch. 2). Cf. R. Haym, *H. nach seinem Leben und seinen Werken* (Berlin, 1877–85); E. Melzer, *H. als Geschichtsphilosoph* (Neisse, 1872); M. Kronenberg, *H.'s Philosophie* (Heidl. 1889) [art. *Herder* in *Enc. Brit.* by J. Sully]. Cf. also J. Witte, *Die Philosophie unserer Dichterheroen* (Bonn, 1880).

CHAPTER I.

THE THEORETICAL QUESTIONS.

"THE proper study of mankind is man." This word of Pope's is characteristic of the whole philosophy of the Enlightenment, not only in the practical sense that this philosophy finds the ultimate end of all scientific investigation to be always man's "happiness," but also, in the theoretical point of view, in so far as this philosophy, as a whole, aims to base all knowledge upon the observation of the actual processes of the psychical life. After Locke had set up the principle,[1] that prior to all metaphysical considerations and controversies the general question must be decided of how far human insight reaches, and that this in turn is possible only by exact exhibition of the sources from which knowledge derives, and of the course of development by which it is brought about, — from that time *epistemology*, the theory of knowledge, was brought into the front rank of philosophical interests, and at the same time *empirical psychology* was recognised as the authoritative and decisive court of last resort for epistemology. The legitimate reach of human ideas should be judged by the way in which they arise. Thus experiential psychology with all the tacit assumptions which are customary in it becomes at once the basis of the whole philosophical view of the world, and the favourite science of the age, and is at the same time the instrument of mediation between science and general literature. As in this latter field, the predominant characteristic among both Englishmen and Germans was that of depicting minds and reflecting or viewing one's self in the literary looking-glass, so philosophy should draw only the image of man and of the activities of his consciousness. Societies for the "observation of man" were founded, all sorts of dilettante accounts of remarkable experiences were garnered in large "magazines," and the government of the French Republic in its official system of instruction,[2] replaced "philosophy" by the sounding title, "Analyse de l'entendement humain."

[1] Introduction to the *Essay*. Cf. M. Drobisch, *Locke, Der Vorläufer Kant's* (*Zeitschr. f. exacte Philosophie*, 1861).

[2] Cf. the highly amusing *Séances des Écoles Normal*, first year.

While accordingly among the theoretical questions of the Enlightenment philosophy, those as to the origin, development, and knowing power of human ideas stood uppermost, these were from the beginning placed beneath the presupposition of popular metaphysics, viz. that of *naïve realism*. There, "without," is a world of things, of bodies or of who knows what else, — and here is a mind which is to know them. How do the ideas, which reproduce within the mind that world of things, get into it? This way of stating the problem of knowledge, which is like that of the ancient Greeks, controls the theoretical philosophy of the eighteenth century completely, and attains in it both most perfect formulation and decisive disintegration. Just in this respect the *Cartesian metaphysics with its dualism of conscious and corporeal substances* takes a controlling position through the entire age of the Enlightenment, and the popular empirical mode of expression in which it was presented by *Locke*, made this author the leader of the new movement. The methodical and metaphysical considerations which had reached a great development, and one full of character in Descartes' important disciples, were now translated into the language of empirical psychology, and so arranged for the comprehension of the ordinary mind.

In connection with this, however, the *terminism* which was inherent in all modern philosophy, and which had been fostered especially in England (Hobbes), forced its way victoriously to the surface; the qualitative separation of the content and forms of consciousness from the "outer world," to which alone they were nevertheless held to relate, was carried farther and deeper, step by step, until it at last reached its extreme consequence in *Hume's* positivism. To the scientific dissolution which metaphysics thus experienced, corresponded in turn a popularly practical and pretentiously modest turning away from all speculation of more than ordinary refinement, or an all the more express profession of adherence to the truths of sound common sense.

Whatever metaphysical interest remained vigorous in the Enlightenment literature attached itself to the religious consciousness and to those endeavours which hoped to attain out of the strife of religious Confessions to a universal and rational conviction. In the *deism* which extended over Europe from the English *free-thinking* movement, the positive views of the world and of life of the Enlightenment period became concentrated, and while these convictions at the outset developed out of the connection with the natural science metaphysics of the preceding century, and in consequence of this devoted an especially lively interest to the problems of *teleology*, they became shifted with time more and more from the

metaphysical to the moral, from the theoretical to the practical domain.

§ 33. Innate Ideas.

With regard to the question as to the origin of ideas the philosophy of the Enlightenment found already in the field the sharply pronounced antithesis of *Sensualism* and *Rationalism*.

1. The first of these had been defended by Hobbes on the theoretical as also upon the practical domain, inasmuch as he held man, in so far as he is an object of scientific knowledge, to be an entirely sensuous being, bound to the sensations and impulses of the body. All ideas, in his view, have their origin in the activity of the senses, and the mechanism of association was held to explain the arising of all other psychical structures from these beginnings. Such doctrines seemed to bring in question the super-sensuous dignity of man, and that not only in the eyes of the orthodox opponents of Hobbes; the same motive determined the Neo-Platonists also to lively opposition. Cudworth especially had distinguished himself in this respect; in his combating of atheism[1] he had Hobbes in mind as one of his main opponents, and in opposition to the doctrine that all human ideas arise from the operation of the outer world upon the mind, he appeals especially to mathematical conceptions. The corporeal phenomena never completely correspond to these; the most we can say is that they resemble them.[2] In treating the conception of God, on the other hand, he lays claim to the argument of the *consensus gentium*, and carries it out[3] in most extensive manner to show that this idea is innate. In like manner, Herbert of Cherbury had already grounded all the main doctrines of natural religion and morals by the aid of the Stoic and Ciceronian doctrine of the *communes notitiæ*.

The doctrine of innate ideas was conceived in a somewhat different sense by Descartes[4] and his disciples. Here the psychological question as to the origin of ideas was less in mind, although this question, too, at a decisive passage in the *Meditations* (*Med.* III.) received the answer that the innateness of the idea of God was to be conceived of as a sign which the creator had imprinted upon his creature; but on the whole the whole great metaphysician had laid more weight upon the point that the criterion of innateness consists in *immediate evidence* or certainty. Hence he had finally extended the designation (almost stripped of the psychological meaning be-

[1] In the *Systema Intellectuale*, especially at the close, V. 5, 28 ff.
[2] Ib. V. 1, 108 ff. (p. 905 ff. Mosh.).
[3] The whole fourth chapter is devoted to this task.
[4] Cf. E. Grimm, *Descartes' Lehre von den angeborenen Ideen*, Jena, 1873.

longing to it at the outset) of the Latin *ideæ innatæ* to all that *lumine naturali clare et distincte percipitur*. Direct assent had been adduced by Herbert of Cherbury also as the characteristic mark of innate ideas.[1]

2. *Locke's* polemical attitude toward the maintenance of innate ideas has, indeed, an epistemological purpose, but is really determined only by the *psycho-genetic* point of view. He asks primarily only whether the soul at its birth brings complete knowledge into the world with it, and finds this question deserving of a negative answer.[2] In consequence of this the development of the thesis "No innate principles in the mind" in the first book of Locke's Essay is directed less against Descartes than against the English Neo-Platonists.[3] It combats first of all the *consensus gentium*, by an appeal to the experience of the nursery and of ethnology; it finds that neither theoretical nor practical principles are universally known or acknowledged. Nor does it except from this demonstration (with an express turn against Herbert) even the idea of God, since this is not only very different among different men, but is even entirely lacking with some. Nor does Locke allow the evasion suggested by Henry More,[4] that innate ideas might be contained in the soul not actually, but implicitly: this could only mean, according to Locke, that the soul is capable of forming and approving them, — a mark which would then hold for all ideas. The immediate assent, finally, which was held to characterise that which is innate, does not apply in the case of the most general abstract truths, just where it is wanted; and where this immediate assent is found it rests upon the fact that the meaning of the words and of their connection has been already apprehended at an earlier time.[5]

Thus the soul is again stripped of all its original possessions: at birth it is like an unwritten sheet (cf. p. 203), — white paper void of all characters.[6] In order to prove this positively, Locke then pledges himself to show that all our "ideas" arise from experience. Here he distinguishes simple and complex ideas in the assumption that the latter arise out of the former: for the simple ideas, however, he announces two different sources: *sensation* and *reflection*, *outer* and *inner perception*. Under sensation he understands the ideas of the corporeal world, brought about by the medium of the bodily senses; under reflection, on the other hand, the knowledge of the activities of the soul itself called out by the above process. Psycho-genetically, therefore, these two kinds of perception are so related that sensation is the occasion and the presupposition for reflection, — as regards their matter or content the relation is, that all content of ideas arises from sensation, while reflection, on the contrary, contains the consciousness of the functions performed in connection with this content.

[1] *De Veritate* (1656), p. 76.

[2] In which, moreover, Descartes completely agreed with him, for it was Descartes' opinion also that it was not to be assumed that the mind of the child pursues metaphysics in its mother's womb. *Op.* (C.) VIII. 269.

[3] Cf. (and also for the following) G. Geil, *Die Abhängigkeit Locke's von Descartes* (Strassburg, 1887).

[4] H. More, *Antidot. adv. Ath.* I. 3 and 7, and Locke, I. 2, 22. Cf. Geil, *op. cit.*, p. 49.

[5] Locke, I. 2, 23 f.

[6] Ib. II. 1, 2.

[7] The term "idea" had lost its Platonic sense already in later Scholasticism and taken on the more general meaning of any mental modification whatever (*Vorstellung*).

3. To these functions, however, belonged also all those by means of which the combination of the elements of consciousness into complex ideas takes place, *i.e.* all processes of thought. And here Locke left the relation of the intellectual activities to their original sensuous contents in a popular indefiniteness which gave occasion to the most various re-shapings of his teaching soon after. For, on the one hand, those activities appear as the "*faculties*" of the mind, which in reflection becomes conscious of these its own modes of functioning (as for example, the capacity of having ideas itself,[1] "perception," is treated as the most original fact of reflection, to understand which every one is sent to his own experience); on the other hand, the mind, even in these relating activities, such as recollecting, distinguishing, comparing, connecting, etc., is regarded throughout as passive and bound to the content of the sensation. Hence it was possible for the most various views to develop out of Locke's doctrine, according to the *varying degree of self-activity* which was ascribed to the mind in its process of connecting its ideas.

Of particular interest in this connection, by reason of the problems of epistemology and metaphysics derived from the Middle Ages, was the development of the *abstract ideas* out of the data of sensation. Like the greater part of English philosophers, Locke was an adherent of *Nominalism*, which professed to see in general concepts nothing but internal, intellectual structures. In explaining these general ideas, however, Locke made more account of the co-operation of "signs," and in particular of *language*. Signs or words, when attached more or less arbitrarily to particular parts of ideas, make it possible to lay special stress upon these parts and bring them out from their original complexes, and thereby render possible the farther functions by which such isolated and fixed contents of

[1] *Essay*, II. 9, 1 f.

consciousness are put into logical relations to one another.[1] Hence for Locke, as formerly for the Epicureans, and then for the Terminists, logic was coincident with the science of signs, *semiotics*.[2] By this means room was gained for a demonstrative science of conceptions and for all abstract operations of the knowing mind, quite in the spirit of Occam, in spite of the sensualistic basis upon which all content of ideas was held to rest. None of these determinations were philosophically new, nor has their exposition in Locke any originality or independent power of thought: it is, however, smooth and simple, of agreeable transparency and easy to understand; it despises all scholastic form and learned terminology, glides skilfully over and away from all deeper problems, and thus made its author one of the most extensively read and influential writers in the history of philosophy.

4. Strongly as Locke had emphasised the independent existence of inner experience by the side of the outer (as followed from his metaphysical attachment to Descartes, on which see below, § 34, 1), he yet made the dependence of reflection upon sensation, as regards origin and content, so strong that it proved the decisive factor in the development of his doctrine. This transformation to complete sensualism proceeded along different paths.

In the epistemological and metaphysical development of Nominalism this transformation led with Locke's English successors to extreme consequences. Berkeley[3] not only declared the doctrine of the Reality of abstract conceptions to be the most extraordinary of all errors in metaphysics, but also — like the extreme Nominalists of the Middle Ages — denied the existence of abstract ideas within the mind itself. The illusory appearance of such ideas arises from the use of words as general terms; but in truth, even in connection with such a word, we always think merely the sensuous idea, or the group of sensuous ideas, which at the beginning gave rise to that term. Every attempt to think the abstract alone shatters upon the sensuous idea, which always remains as the sole content of intellectual activity. For even the remembered ideas and partial ideas which can be separated out, have no other content than the original sense-

[1] The development of these logical relations between the ideational contents which have been singled out and fixed by means of the verbal signs, appears with Locke, under the name of the *lumen naturale*. Descartes had understood by this as well intuitive as also demonstrative knowledge, and had set all this natural knowing activity over against revelation; Locke, who treats the intuitive with terministic reserve (cf. § 34, 1), restricts the signification of the "light of nature" to the logical operations and to the consciousness of the principles which obtain in these, according to the nature of the thinking faculty.

[2] *Essay*, IV. 21, 4.

[3] *Princ. of Human Knowledge*, 5 ff.

impressions, because an idea can never copy anything else than another idea. Abstract ideas, therefore, are a fiction of the schools; in the actual activity of thought none but sensuous particular ideas exist, and some of these can stand for or represent others similar to them, on account of being designated by the same term.

David *Hume* adopted this doctrine in its full extent, and on the ground of this substituted for Locke's distinction of outer and inner perception another antithesis with altered terminology, viz. that of the original and the copied. A content of consciousness is either original or the copy of an original, — either an "*impression*" or an "*idea*." All ideas, therefore, are copies of impressions, and there is no idea that has come into existence otherwise than by being a copy of an impression, or that has any other content than that which it has received from its corresponding impression. It appeared, therefore, to be the task of philosophy to seek out the original for even the apparently most abstract conceptions in some impression, and thereby to estimate the value for knowledge which the abstract conception has. To be sure, Hume understood by impressions by no means merely the elements of outer experience; he meant also those of inner experience. It was, therefore, according to Locke's mode of expression, the simple ideas of sensation and reflection which he declared to be impressions, and the wide vision of a great thinker prevented him from falling into a short-sighted sensualism.

5. A development of another sort, which yet led to a related goal, took place in connection with the aid of *physiological psychology*. Locke had only thought of sensation as dependent upon the activity of the bodily senses, but had regarded the elaboration of sensation in the functions underlying reflection as a work of the mind; and though he avoided the question as to immaterial substance, he had throughout treated the intellectual activities in the narrower sense as something incorporeal and independent of the body. That this should be otherwise regarded, that thinkers should begin to consider the physical organism as the bearer or agent not only of the simple ideas, but also of their combination, was easily possible in view of the indecisive ambiguity of the Lockian doctrines, but was still more called out by one-sided conclusions drawn from *Cartesian* and *Spinozistic theories*.

Descartes, namely, had treated the whole psychical life of the animal as a mechanical process of the nervous system, while he had ascribed the human psychical life to the immaterial substance, the *res cogitans*. The more evident the completely sensuous nature of human ideation now seemed in consequence of Locke's investigation,

the nearer lay the question whether it was possible to maintain the position, that the same processes which in the animal seemed capable of being understood as nervous processes, should be traced back in the case of man to the activity of an immaterial psychical substance. — From another side, Spinoza's parallelism of the attributes worked in the same direction (cf. above, § 31, 9). According to this view a process in the bodily life *corresponds* to every process of the psychical life, without either process being the cause of the other, or one process being the original and the other the derived. (Such, at least, was the thought of the philosopher himself.) This had now been conceived of at first by its opponents as materialism, as if Spinoza meant that the fundamental process was the bodily, and the psychical process only its accompanying phenomenon. But among its adherents also, both physicians and natural scientists, such as the influential *Boerhave* of Leyden, a mode of thought inclining strongly toward materialism soon substituted itself for the master's doctrine. This took place in connection with the experiences of experimental physiology which, following Descartes' stimulus, employed itself largely with a study of reflex movements.

It is interesting that the consequences of these combinations of thought appeared in literary form first in Germany. Here as early as 1697 a physician named *Pancratius Wolff* taught in his *Cogitationes Medico-legales* that thoughts are mechanical activities of the human body, especially of the brain, and in the year 1713 appeared the anonymous *Correspondence concerning the Nature of the Soul* (*Briefwechsel vom Wesen der Seele*),[1] in which, screened by pious refutations, the doctrines of Bacon, Descartes, and Hobbes are carried out to an anthropological materialism. A distinction of degree only is recognised between the psychical life of the animal and that of man; ideas and activities of the will are without exception regarded as functions of excited nerve-fibres, and practice and education are given as the means by which the higher position of man is reached and maintained.

In England the procedure was more cautious. In a way similar to that in which Locke had carried out the Baconian programme, men now studied primarily the internal mechanism of the psychical activities, and the development of the higher out of the elementary states according to purely psychological laws: such was the work of Peter Brown in the epistemological field, and that of others upon the domain of the activities of the will. In the same manner proceeded

[1] Of which Lange gives an account, *Gesch. des Mat.*, I. 319 ff. (2d ed. [Eng. tr., *History of Materialism*, II. 37 ff.]).

David *Hartley* also, who brought into common use the expression *association*[1] (which had already been used before this) for the combinations and relations which arise between the elements. He wished to conceive these relations, which he analysed with all the care of a natural scientist, solely as psychical processes, and held fast to their complete incomparableness with material processes, even with the most delicate forms of corporeal motion. But he was also a physician, and the connection of the mental life with the states of the body was so clear to him that he made the *constant correspondence* of the two and the mutual relationship of the psychical functions and the nervous excitations, which, at that time, were termed "*vibrations*,"[2] the main subject-matter of his psychology of association. In this work he held fast to the qualitative difference between the two parallel series of phenomena and left the metaphysical question, as to the substance lying at their basis, undecided: but with reference to *causality* he fell insensibly into materialism, in that he conceived of the mechanism of the nervous states as ultimately the primary event, and that of the psychical activities as only the phenomenon accompanying this event. To simple nervous excitations correspond simple sensations or desires; to complex, complex. This scientific theory, to be sure, involved him in serious contradictions with his pious faith, and the "Observations" show how earnestly and fruitlessly he struggled between the two. Quite the same is true of *Priestley*, who even made the farther concession to materialism of letting fall the heterogeneity between the psychical and bodily processes, and desiring to replace psychology completely by nerve physiology. On this account he also abandoned entirely the standpoint of inner experience defended by the Scots, but at the same time desired to unite with his system the warmly supported conviction of a teleological deism.

Anthropological materialism was worked out in its baldest form by the Frenchman, *Lamettrie*. Convinced by medical observations upon himself and others of the complete dependence of the mind upon the body, he studied the mechanism of life in animals and men, following Boerhave's suggestions, and Descartes' conception of the former seemed to him completely applicable to the latter also. The distinction between the two, which is only one of degree, permits for human psychical activities also no other explanation than that they are mechanical functions of the brain. On this account it is

[1] In the later, especially the Scottish literature, and in particular with Thomas *Brown*, the expression "association" is often replaced by *suggestion*.

[2] Instead of this term Erasmus Darwin introduced the expression, "motions of the sensorium."

an encroachment of metaphysics to ascribe to the "mind" a substantiality of its own in addition to that of matter. The conception of matter as that of a body which is in itself dead and needs mind or spirit as its moving principle, is an arbitrary and false abstraction: experience shows that matter moves itself and lives. It is just Descartes' mechanics which has proved this, says Lamettrie, and therefore the inevitable consequence of this mechanics is materialism. And that all psychical life is only one of the functions of the body, is evident from the fact that not a single content is found in the mental life which is not due to the excitation of some one of the senses. If we think of a man as the Church Father Arnobius proposed, — so writes Lamettrie,[1] to establish his sensualism which had developed from Locke, — who from his birth on had been excluded from all connection with his kind, and restricted to the experience of a few senses, we should find in him no other ideational contents than those brought to him through just these senses.

6. Less important in principle, but all the more widely extended in the literary world, were the other re-shapings which Locke's doctrine experienced in France. *Voltaire*, who domesticated it among his countrymen by his *Lettres sur les Anglais*, gave it a completely sensualistic stamp, and even showed himself — though with sceptical reserve — not disinclined to entrust to the Creator the power of providing the I, which is a corporeal body, with the capacity of thinking also. This sceptical sensualism became the fundamental note of the French Enlightenment.[2] *Condillac*, who at the beginning had only expounded Locke's doctrine and defended it against other systems, professed his adherence to this sceptical sensualism in his influential *Traité des Sensations*. Whatever the mind may be, the content of its conscious activities is derived solely from sense-perception. Condillac develops the theory of associational psychology in connection with the fiction of a statue, which, equipped only with capacity of sensation, receives one after another the excitations of the different senses which are added to it, and by this means gradually unfolds an intellectual life like that of man. Here the fundamental idea is that the mere co-existence of different sensations in the same consciousness brings with it *of itself the sensation of their relation to each other and to the*

[1] At the close of the *Histoire Naturelle de l'Âme*. Cf. also above, p. 225, note 1.

[2] The same mode of thought asserts itself also in the beginnings of æsthetic criticism in the form of the principle that the essence of all art consists in the "imitation of beautiful Nature." The type of this conception was *E. Batteux* (1713–1780) with his treatise, *Les Beaux Arts réduits à un même Principe* (1746).

object or the self. In accordance with this principle the process is depicted by which all the manifold psychical activities become unfolded out of perception: in the theoretical series, by virtue of the differences in intensity and in repetition of sensations, there grow successively attention, recognising recollection, distinction, comparison, judgment, inference, imagination, and expectation of the future; and finally with the help of signs, especially those of language, arise abstraction and the grasping of general principles. But in addition to sensation, perception has also the feeling-element of pleasure and pain, and out of this, in connection with the movement of ideas, develop desire, love and hate, hope, fear,[1] and — as the result of all such changes of the practical consciousness — finally, the moral will. So knowledge and morality grow upon the soil of the sensibility.

This systematic construction had great success. The systematic impulse, which was repressed in the metaphysical field (cf. § 34, 7), threw itself with all the greater energy upon this "*analysis of the human mind*" as a substitute; and as Condillac himself had already woven many acute observations into his exposition of the development process, so a whole throng of adherents found opportunity to take part in the completion of this structure by slight changes and shiftings of the phases, by innovations in nomenclature and by more or less valuable deductions. The Government of the Revolution recognised as philosophy only this study of the empirical development of intelligence, and Destutt de *Tracy* gave it later the name "*Ideology*."[2] So it came about that at the beginning of our century philosophers were in France usually called ideologists.

7. With reference to the nature of the mind in which these transformations of sensation (*sentir*) were held to take place, a great part of the ideologists remained by Condillac's positivistic reserve; others went on from Voltaire's problematical to Lamettrie's assertive materialism, — at first, in Hartley's fashion emphasising the thoroughgoing dependence of combinations of ideas upon nervous processes, then with express maintenance of the materiality of the psychical activities. This development is most clearly to be seen in the case of *Diderot*. He set out from the position of Shaftesbury and Locke, but the sensualistic literature became more potent from step to step

[1] In the development of the practical series of conscious acts, the influence of Descartes' and Spinoza's theory of the emotions and passions asserted itself with Condillac and his disciples, as also in part among the English associational psychologists.

[2] It is not impossible that this nomenclature in case of de Tracy was intended to be the counterpart to Fichte's "Wissenschaftslehre," — Science of Knowledge (cf. below, Part VI. ch. 2).

in the Editor of the Encyclopædia; he followed up the hypotheses of hylozoism[1] (cf. below, § 34, 9), and finally took part in the composition of the *Système de la Nature*. This work set forth the human psychical activities within the framework of its metaphysics as the fine invisible motions of the nerves, and treated their genetic process just as Lamettrie had done. Among the later ideologists *Cabanis* is prominent in this respect by the newness of his physiological point of view; he takes account of the progress of natural science in so far as to seek the conditions of the nerves, to which man's psychical states (*le moral*) must be referred, no longer merely in mechanical motions, but in *chemical* changes. Ideation is the secretion of the brain, just as other secretions are produced by other organs.

In opposition to this, another line of ideology held fast to Locke's principle that all content of ideas may indeed be due to the senses, but that in the functions directed toward combining such content the peculiar character of the mind's nature shows itself. The leader of this line of thought was *Bonnet*. He, too, in a manner similar to that of Condillac, adopts the mode of consideration commended by Lamettrie, adverting to Arnobius, but he is much too well-schooled as an investigator of Nature to fail to see that sensation can never be resolved into elements of motion, that its relation to physical states is synthetic, but not analytic. Hence he sees in the mechanism of the nervous system only the *causa occasionalis* for the spontaneous *reaction of the mind*, and the substantiality of the mind seems to him to be proved by the *unity of consciousness*. He connects with this theory all sorts of fantastic hypotheses.[2] Religious ideas speak in his assumption of the immaterial mind-substance, but sensualism admits an activity of this substance only in connection with the body; for this reason, in order to explain immortality and the uninterrupted activity of the mind, Bonnet helps himself by the hypothesis of an æthereal body which is joined essentially with the soul and takes on a coarser material external organism, according to its dwelling-place in each particular case.

This union of sensualism with the maintenance of self-subsistent substantiality and capacity of reaction on the part of the mind passed over to Bonnet's countryman, *Rousseau*, who combated with its aid the psychological theories of the Encyclopædists. He found that this characteristic quality of the mind, the unity of its function, evinces itself in *feeling* (*sentiment*), and opposed this original natu-

[1] The decisive transition-writing is *d'Alembert's Dream*.
[2] In the *Palingénésies Philosophiques*.

ralness of its essence to the cold and indifferent mechanism of ideas, which would debase the mind to an unconditional dependence upon the outer world. The *feeling of individuality* rebelled with him against a doctrine according to which there is nothing in man's consciousness but the play, as if upon an indifferent stage, of a mass of foreign contents accidentally coming together, which unite and then separate again. He wished to bring out the thought that it is not the case that the mental life merely takes place within us, but that it is rather true that we are ourselves present as actively determining personalities. This conviction dictated Rousseau's opposition to the intellectualistic Enlightenment, which in the sensualism of Condillac and of the Encyclopædists wished to regard man's inner life as only a mechanical product of sensational elements excited from without: to psychological atomism Rousseau opposes the principle of the Monadology.

In the same manner, and perhaps not without influence from Rousseau in his arguments, *St. Martin* raised his voice against the prevailing system of Condillac; he even came out of his mystical retreat to protest in the sessions of the *Ecoles Normales*[1] against the superficiality of sensualism. The ideologists, he says, talk a great deal about human nature; but instead of observing it they devote their energies to put it together (*composer*).

8. The *Scottish philosophers* are the psychological opponents of sensualism in all its forms. The common ground on which this contrast developed is that of psychology regarded as philosophy. For *Reid*, also, and his disciples seek the task of philosophy in the investigation of man and his mental capacities; indeed, they fixed still more energetically and one-sidedly than the various schools of their opponents the methodical point of view that all philosophy must be empirical psychology. But this view of the human physical activity and its development is diametrically opposed to that of the sensualists. The latter hold the simple, the former the complex, the latter the individual ideas, the former the judgments, the latter the sensuous, the former the internal, the latter the particular, the former the general, to be the original content of the mind's activity. Reid acknowledges that Berkeley's idealism and Hume's scepticism are as correct consequences from Locke's principle as is Hartley's materialism; but just the absurdity of these consequences refutes the principle.

In opposition to this, Reid will now apply the Baconian method of induction to the facts of inner perception in order to attain by an

[1] *Séances des Éc. Norm.*, III. 61 ff.

analysis of these to the *original truths*, which are given from the beginning in connection with the nature of the human mind, and which assert themselves in the development of its activities as determining *principles*. Thus, putting aside all help of physiology, the fundamental science psychology shall be perfected as a kind of natural science of inner observation. In the solution of this task, Reid himself, and after him especially Dugald *Stewart*, develop a considerable breadth and comprehensiveness of vision in the apprehension of the inner processes and a great acuteness in the analysis of their essential content: a multitude of valuable observations on the genetic processes of the mental life is contained in their extensive investigations. And yet these investigations lack in fruitfulness of ideas as well as in energetically comprehensive cogency. For they everywhere confuse the demonstration of that which can be discovered as universally valid content in the psychical functions, with the assumption that this is also genetically the original and determining: and since this philosophy has no other principle than that of psychological fact, it regards without criticism all that can in this manner be demonstrated to be actual content of mental activity, as *self-evident truth*. The sum-total of these principles is designated as *common sense*, and as such is held to form the supreme rule for all philosophical knowledge.

9. In the philosophy of the German Enlightenment all these tendencies mingle with the after-workings of the Cartesian and Leibnizian rationalism. The twofold tendency in the method of this latter system had taken on a fixed systematic form through the agency of Christian *Wolff*. According to him, all subjects should be regarded both from the point of view of the eternal truths and from that of the contingent truths: for every province of reality there is a knowledge through conceptions and another through facts, an *a priori* science proceeding from the intellect and an *a posteriori* science arising from perception. These two sciences were to combine in the result in such a way that, for example, empirical psychology must show the actual existence in fact of all those activities which, in rational psychology, were deduced from the metaphysical conception of the soul, and from the "faculties" resulting from this conception. On the other hand, following Leibniz's precedent, the distinction in value of the two modes of knowledge was so far retained as to regard only the intellectual knowledge as clear and distinct insight, while empirical (or, as they said at that time, historical) knowledge was regarded as a more or less obscure and confused idea of things.

Psychologically, the two kinds of knowledge were divided, in

accordance with the Cartesian model, into the *ideæ innatæ* and the *ideæ adventitiæ*. Yet Wolff himself, agreeably to the metaphysical direction of his thought, laid less weight upon the genetic element. But the opposite was the case with his adherents and opponents, who were already standing under the influence of the French and English theories. The general course of the development was that the importance which Leibniz and Wolff had conceded to empiricism was increased more and more by the penetration of the Lockian principles. The psychological method gained the preponderance over the metaphysico-ontological step by step, and within the psychological method increasing concessions were made to sensualism, of such a nature that ultimately not only earnest men of science like Rüdiger and Lossius, but especially a great part of the "popular philosophers" supported completely the doctrine that all human ideas arise from sense-perception. The motley and irregular series of stages in which this process completed itself has only a literary-historical interest,[1] because no new arguments came to light in connection with it.

Only one of these men used the psychologico-epistemological dualism which prevailed in the German philosophy of the Enlightenment, to make an original and fruitful turn. Heinrich *Lambert*, who stood at the summit of the natural science of his time, had grown into intelligent sympathy with the mathematico-logical method as completely as he had into an insight into the worth of experience: and in the phenomenology of his *New Organon*, in attempting to fix the limits for the psychological significance of these two elements of knowledge, he disposed the mixture of the *a priori* and *a posteriori* constituents requisite for knowing reality, in a way that led to the *distinction of form and content in ideas*. The content-elements of thought, he taught, can be given only by perception: but their mode of connection, the form of relation which is thought between them, is not given from without, but is a proper activity of the mind. This distinction could be read out of Locke's ambiguous exposition:[2] but no one had conceived it so sharply and precisely from this point of view as Lambert. And this point of view was of great importance for the genetic consideration of the ideas of the human mind. It followed from it, that it was neither possible to derive the content from the mere form, nor the form of knowledge from the content. The first refuted the logical rational-

[1] Cf. W. Windelband, *Gesch. d. neueren Philosophie*, I. §§ 53–55.

[2] Cf. the demonstration in G. Hartenstein, *Locke's Lehre von der menschlichen Erkenntniss in Vergleichung mit Leibniz' Kritik derselben* (Leips. 1861, *Abhandl. d. sächs. Ges. d. Wissensch.*).

ism with which Wolff would spin all ontology and metaphysics out from the most general principles of logic, and ultimately from the one principle of contradiction; the other took the basis away from sensualism, which thought that with the contents of perception the knowledge also of their relations was immediately given. Out of this grew for the "improvement of metaphysics" the task of dissolving out these relating forms from the total mass of experience, and of making clear their relation to content. But Lambert sought in vain for a single unifying principle for this purpose,[1] and his "*Architektonik*" finally contented itself with making a collection of them not based on any internal principle.

10. While all these theories as to the origin of human ideas were flying about in the literary market, the reconciling word upon the problem of innate ideas had been long spoken, but was waiting in a manuscript in the Hanoverian library for the powerful effect which its publication was to produce. *Leibniz*, in his *Nouveaux Essais*, had provided the Lockian ideology with a critical commentary in detail, and had embodied within it the deepest thoughts of his philosophy and the finest conclusions of his Monadology.

Among the arguments with which Locke combated the doctrine that ideas were innate, had been that with which he maintained that there could be nothing in the mind of which the mind knew nothing. This principle had also been pronounced by him[2] in the form that the soul thinks not always. By this principle the Cartesian definition of the soul as a *res cogitans* was brought into question: for the essential characteristic of a substance cannot be denied it at any moment. In this sense the question had been often discussed between the schools. Leibniz, however, was pointed by his Monadology to a peculiar intermediate position. Since, in his view, the soul, like every monad, is a "representing" power, it must have perceptions at every moment: but since all monads, even those which constitute matter, are souls, these perceptions cannot possibly all be clear and distinct. The solution of the problem lies, therefore, again in the conception of *unconscious representations* or *petites perceptions* (cf. above, § 31). The soul (as every monad) always has ideas or representations, but not always conscious, not always clear and distinct ideas; its life consists in the development of the unconscious to conscious, of the obscure and confused to clear and distinct ideas or representations.

In this aspect Leibniz now introduced an extremely significant

[1] This is best seen in his interesting correspondence with Kant, printed in the works of the latter.
[2] *Essay* II. 1, 10 f.

conception into psychology and epistemology. He distinguished between the states in which the soul merely *has* ideas, and those in which it is *conscious* of them. The former he designated as perception, the latter as *apperception*.[1] He understood, therefore, by apperception the process by which unconscious, obscure, and confused representations are raised into clear and distinct consciousness, and thereby recognised by the soul as its own and *appropriated by self-consciousness*. The genetic process of the psychical life consists in the *changing of unconscious into conscious representations* or ideas, in taking up perceptions into the clearness and distinctness of self-consciousness. In the light of the Monadology Leibniz's methodological view of the empirical or contingent truths (cf. § 30, 7) took on a peculiar colouring. The fact that the monads have no windows makes it impossible to conceive of perception metaphysically as a working of things upon the soul:[2] the ideas of sense, or sense-presentations, must rather be thought as activities which the soul, by virtue of the pre-established harmony, develops in an obscure and confused manner (as *petites perceptions*), and the transformation which takes place in them can be regarded only as a process of making them distinct and of clearing them up, — as a taking up into self-consciousness, as *apperception*.

Sensibility and *understanding*, the distinction between which with Leibniz coincides with that of different degrees of clearness and distinctness, have, therefore, in his view, the same content, only that the former has in obscure and confused representation what the latter possesses as clear and distinct. Nothing comes into the soul from without; that which it consciously represents has been already unconsciously contained within it: and on the other hand, the soul cannot bring forth anything in its conscious ideas which has not been within it from the beginning. Hence Leibniz must decide that in a certain sense, that is, unconsciously, all ideas are innate; and that in another sense, that is, consciously, no idea is innate in the human soul. He designates this relation, which had been previously sketched in the principles of the Monadology, by the name *virtual innateness of ideas*.

This thought, which is at once treated as the controlling point of view at the opening of the *New Essays*, is carried out especially with reference to the universal or eternal truths. This was indeed the burning question: here the one party (the Neo-Platonists, and in part the Cartesians) maintained that these were innate "actu-

[1] *Princ. de la Nat. et de la Grâce*, 4, where the relationship with the Lockian reflection comes out strongly; *Nouv. Ess.* II. 9, 4.
[2] *N. E.* IV. 4, 5.

ally," as fully formed (*fertige*) truths; the others (Hobbes, and in part Locke) would explain them from the co-operation of sensational elements. Leibniz, however, carries out the thought that such principles are contained already in perception, as *petites perceptions*, that is, as the *involuntary forms of relating thought*, but that after this unconscious employment of them they are apperceived, that is, raised to clear and distinct consciousness and so recognised in connection with experience. The form of the soul's activity which is afterwards brought to clearness and distinctness of intellectual apprehension as a universal principle, an eternal truth, inheres already in the sensuous representation, though unclear and confused. Hence while Locke had appropriated for his own use the scholastic principle *nihil est in intellectu quod non fuerit in sensu*, Leibniz adds thereto *nisi intellectus ipse*.[1]

11. When the *Nouveaux Essais* were printed in 1765, they excited great attention. Lessing was translating them. That the life of the soul transcends all that is clear and distinctly conscious, and is rooted in obscurely presaged depths, was an insight of the highest value for the literature which was just struggling out of the intellectual dryness of the Enlightenment, and out of insipid correctness to an unfolding full of genius, — and an insight all the more valuable as coming from the same thinker that Germany honoured as the father and hero of its Enlightenment. In this direction Leibniz worked especially upon *Herder:* we see it not only in his æsthetic views,[2] but still more in his prize essay "On the Knowing and Feeling of the Human Soul."

Under the preponderance of the methodological point of view, the Leibnizo-Wolffian school had strained the opposition between rational and empirical knowledge as far as possible, and had treated understanding and sensibility as two separate faculties. The Berlin Academy had wished to see the mutual relation of these two separated powers, and the share which each has in human knowledge, investigated: Herder played the true Leibniz — as the latter had developed himself in the *Nouveaux Essais* — against the prevailing system of the schools when he emphasised in his treatise the living unity of man's psychical life, and showed that sensibility and understanding are not two different sources of knowledge, but only the different stages of one and the same living activity with which the monad comprehends the universe within itself. All the ideas with which the soul raises itself in its development, step by step, from the consciousness of its immediate environment to the knowledge of

[1] *Nouv. Ess.* II. 1, 2. [2] Cf. principally the fourth *Kritische Wäldchen.*

the harmony of the universe, are innate within the soul as internal powers. This deeper unity of sensibility and understanding, Herder called *feeling;* and in this also in his inquiry as to the "Origin of Language," he found the function which embraces all senses like a unity, and by means of which the psycho-physical mechanism of producing and hearing sounds (*Tönens* and *Hörens*) is raised to become the expression of thought.

12. More important still was another effect of the work of Leibniz. It was no less a thinker than *Kant* who undertook to build up the doctrine of the *Nouveaux Essais* into a system of epistemology (cf. § 34, 12). The Königsberg philosopher was stimulated by that work to one of the most important turns in his development, and completed it in his *Inaugural Dissertation.*[1] He had already grown out of the Wolffian school-metaphysics and had been long employed with the examination of the empirical theories, and yet could not satisfy himself with them.[2] On the contrary, he was proceeding in the direction of establishing metaphysics upon a new basis, and was following Lambert's attempts to make a beginning at the work in connection with the distinction of form and content in knowledge. Now Leibniz showed with reference to the "eternal truths" that they inhered already as involuntary relating forms within sense experience itself, to be raised and brought to clear and distinct consciousness by the reflection of the understanding. This principle of virtual innateness is the nerve of Kant's *Inaugural Dissertation:* the metaphysical truths lie in the soul as laws of its activity,[3] to enter into active function on occasion of experience, and then to become object and content of the knowledge of the understanding.

Kant now applies this point of view in a new and fruitful manner to sensuous knowledge. From methodical reasons he opposed this to intellectual knowledge much more sharply even than the Wolffians: but on this account the question for him was, whether there are perhaps in the world of the senses just such original form-relations as had been pointed out in the intellectual world by Leibniz and recognised by Kant himself (cf. § 8, and the whole Sectio IV. of the treatise *De mundi sensibilis et intelligibilis forma et principiis*): and thus he discovered the "pure Forms of the sensibility" — *space and time.* They are not innate in the ordinary sense, but acquired, yet not abstracted from the data of sensibility, but *ab ipsa mentis*

[1] The dependence of this essay upon the *Nouveaux Essais* has been shown by W. Windelband, *Vierteljahrschr. f. wissensch. Philos.*, I., 1876, pp. 234 ff.
[2] This is best proved by the essay which apparently stands farthest removed from metaphysics, *The Dreams of a Ghost Seer.* Cf. also Part VI. ch. 1.
[3] *De Mundi Sens. et Int.*, § 6: *dantur per ipsam naturam intellectus.* Cf. § 8, also the corollary to § 3.

actione secundum perpetuas leges sensa sua coordinate [from the very action of the mind co-ordinating its sensations according to perpetual laws], and like the intellectual Forms they are recognised by attending to the mind's activity on occasion of experience, — the business of mathematics.

Another formulation was given to the principle of virtual innateness by *Tetens*. He wrote his essays on human nature and its development under the impression received from Kant's *Inaugural Dissertation*. He, too, declares that the "acts of thought" are the first original relation-thoughts (*Verhältnissgedanken*): we learn them by applying them when we think; and thus they prove themselves to be the *natural laws of thought*. The universal principles which lie at the basis of all philosophical knowledge are, accordingly, "subjective necessities" in which the essential nature of the thinking soul itself comes to consciousness.

§ 34. Knowledge of the Outer World.

The background of all these theories is their epistemological purpose. This, however, assumes from the beginning a somewhat narrower place under the presupposition of the naïve realism which became attached to the Cartesian metaphysics. The principle of the *cogito ergo sum* made the self-knowledge of the mind's nature appear as the original certainty, as that which was self-evident and immediately free from doubt; but the greater the difference in kind which was conceived to exist between the world of consciousness and that of space and bodies, the greater the difficulties that presented themselves with reference to the possibility of knowing this latter world. This fact was taught at once by the metaphysical development immediately after Descartes (cf. § 31), and the same was now repeated in the most various forms in connection with the translation of these same thoughts into the language of empirical psychology and sensualism.

There is thus in the epistemology of modern philosophy from its beginning a *superiority attributed to inner experience*, by virtue of which *knowledge of the outer world becomes problematical*. In this an after-working of the *Terminism*, with which the Middle Ages had ended, asserts itself throughout the whole extent of modern thought as a determining mode of view: the heterogeneity of the outer and inner worlds gives the mind a proud feeling of a substantial quality peculiar to itself as contrasted with things, but at the same time a certain degree of uncertainty and doubtfulness in orienting itself in this world which is to it strange and foreign. In this way

the very statement of the fundamental problem in the philosophy of the Enlightenment shows itself to be an echo of that deepening of the mind within itself, that placing consciousness upon an independent basis over against the outer world, with which the ancient philosophy ended its course. In this was rooted the power of the Augustinian spirit over modern philosophy.

1. The preponderance of the inner experience asserts itself very strongly also with *Locke*, although in principle he placed sensation and reflection upon an equality psychologically, and in his genetic theory even made the latter dependent upon the former. But in assigning the epistemological values this relation is at once reversed in the spirit of the Cartesian principles. For the dualism of finite substances which the great French metaphysician had propounded is quietly introduced by Locke in conjunction with the dualism of the sources of experience: sensation is designed to furnish knowledge of the corporeal outer world, reflection to give knowledge of the activities of the mind itself: and in this consideration it is naturally found that the latter is much more suited to its task than the former. Our knowledge of our own states is *intuitive* and the most certain of all; and with a knowledge of our states we are at the same time perfectly and undoubtedly sure of our own existence also. Locke presents this doctrine of the certainty of knowledge of self with an almost verbal adherence to Descartes.[1] With reference to our knowledge of the corporeal world, on the other hand, his attitude is much more reserved. Such a knowledge is possible only through sensation; and although it still deserves the name knowledge, it yet lacks complete certainty and adequacy. Primarily, it is only the presence of the idea in the mind that is intuitively certain; that a thing corresponds to the idea is not intuitively certain, and demonstration can at most teach that there is a thing there, but can predicate nothing concerning this thing.

To be sure, Locke is not at all in agreement with himself on this point. In connection with his theory of the ideas of sensation, he adopts the doctrine of the intellectual nature of the sense qualities quite in the form worked out by Descartes (cf. § 31, 2), designates them happily by the distinction of primary and secondary qualities, adds, as tertiary qualities, such powers as express the relation of one body to another, declares primary qualities to be those which really belong to bodies in themselves, and reckons, also, impenetrability in this class, in addition to those assigned to it by Descartes. As compared with the doctrine of Hobbes, this is in its essence a

[1] *Essay* IV. 9, 3.

decided relapse into the mode of thought of Democritus and Epicurus, as is shown, also, in the fact that Locke follows the theory of images in tracing stimulations to the affection of the nerves by minute particles streaming out from objects.[1] On the whole, therefore, the fundamental Cartesian basis of mathematical knowledge of Nature is here reaffirmed and even more widely extended.

But Locke's decision in connection with his analysis of the idea of substance has an entirely different purport. Like Occam, he distinguishes from intuitive knowledge and knowledge given by sensation, demonstrative knowledge: this has to do, not with the relation of ideas to the outer world, but with the relation of ideas to one another. In its value as knowledge it stands after the intuitive, but superior to the sensitive.[2] *Demonstrative thinking* is then conceived of entirely *terministically*, something as in the case of Hobbes, as a reckoning with concept signs. The necessity attaching to the demonstration holds only within the world of ideas; it concerns, as one class, general or abstract ideas to which no proper reality corresponds in *natura rerum*. If ideas are once present, judgments may be formed concerning the relations which exist between them, quite apart from any reference to the things themselves; and it is with such judgments alone that demonstrative knowledge has to do. Such "complex" ideas are *thought-things*, which, after they have been fixed by definition, can enter into the union with others determined in each case by the respective contents, without thereby acquiring any relation to the outside world. Among these modes of union, that which is expressed by the *idea of substance* (the category of inherence) is conspicuous in an especial manner. For all other contents and relations can be thought only as belonging to some substance. This relation, therefore, has Reality, — the idea of substance is, according to Locke's expression, ectypal, — but only in the sense that we are forced to assume a real substrate for the modes given in particular ideas, without being able to make any assertion as to what this substrate itself is. Substance is the supporter, itself unknown, of known qualities, which we have occasion to assume belong together.

This view that substances are unknowable does not, indeed, hinder Locke from taking in hand at another passage,[3] in an entirely Cartesian fashion, a division of all substances into "cogitative and incogitative." On the other hand, he applies the view to his treatment of the *cogito ergo sum*. This principle he carries over entirely from the metaphysical realm into that of empirical psychology. Self-certainty is for him that of the "internal sense"; intuition in this case refers only to our states and activities, not to our essence; it shows us, indeed, immediately and without doubt, *that* we are, but not *what* we are. The question as to the substance of the soul (and accordingly the question also as to its relation to the body) is as incapable of an answer as the question as to the "what" of any substance whatever.

[1] *Essay*, II. 8, 7 ff. Cf. also B. Rüttenauer, *Zur Vorgeschichte des Idealismus und Kriticismus* (Freiburg, 1882), and Geil, *op. cit.*, pp. 66 ff.
[2] Ib. IV. 2.
[3] Ib. II. 23, 29; IV. 10, 9.

Nevertheless, Locke holds it to be possible to gain a *demonstrative certainty of the existence of God*. For this purpose he adopts the first of the Cartesian proofs (cf. § 30, 5) in a somewhat modified form, and adds the ordinary cosmological argument. An infinite, eternal, and perfect being must be thought, an ultimate cause of finite substances of which man intuitively knows himself to be one.

So manifold and full of contradictions are the *motifs* which cross in Locke's doctrine of knowledge. The exposition, apparently so easy and transparent, to which he diluted Cartesianism, glides over and away from the eddies which come up out of the dark depths of its historical presuppositions. But as the ambiguous, indeterminate nature of his psychology unfolded itself in the antithesis in the following developments, so, too, this epistemological metaphysics offered points of departure for the most varied transformations.

2. The very first of these shows an audacious energy of one-sidedness in contrast with the indecisiveness of Locke. *Berkeley* brought the ascendency of inner experience to complete dominance by putting an end to the wavering position which Locke had taken upon the question as to the knowledge of bodies. This he did with the aid of his extreme Nominalism and with a return to the doctrines of Hobbes. *He demolished the conception of corporeal substance.* According to the distinction of primary and secondary qualities, it was held that a part of that complex of ideas which perception presents us as a body should be separated out, and another part retained as alone real; but this distinction, as Hobbes had already taught (cf. § 31, 2), is in the nature of the case erroneous. The "mathematical" qualities of bodies are as truly ideas within us as the sense qualities, and Berkeley had demonstrated exactly this point with analogous arguments in his *Theory of Vision*. He attacks the warrant of the distinction of Descartes (and of Democritus). But while, according to this view, all qualities of bodies without exception are ideas in us, Locke has retained as their real supporter a superfluous unknowable "substance"; in a similar way others speak of matter as the substrate of sensible qualities.

But in all these cases, says Berkeley, it is demanded of us to regard an abstraction as the only actual reality. Abstract ideas, however, do not exist, — they do not exist even in the mind, to say nothing of existing in *natura rerum*. Locke was then quite right in saying that no one could know this "substance": no one can even think it; it is a fiction of the schools. For the naïve consciousness, for "common sense," whose cause Berkeley professes to maintain against the artificial subtlety of philosophers, bodies are just exactly what is perceived, no more and no less; it is only the philosophers who seek for something else behind what is perceived, — something mysterious, abstract, of which they themselves cannot say what it is. For the unperverted mind, body is what one sees, touches, tastes, smells, and hears: its *esse* is *percipi*.

Body is then nothing but a *complex of ideas*. If we abstract from a cherry all the qualities which can be perceived through any of the senses, what is left? Nothing. The *idealism* which sees in a body nothing farther than a bundle of ideas is the view of the common man; it should be that of philosophers also. Bodies possess no other reality than that of *being perceived*. It is false to suppose that there is in addition to this a substance inherent within them, which "appears" in their qualities. They are nothing but the sum of these qualities.

In reply to the question that lies close at hand, in what the difference consists between the "real" or actual body and that which is only imagined or dreamed of, if all bodies are only perceived, Berkeley answers, with a *spiritualistic metaphysics*. The ideas which constitute the existence of the outer world are activities of spirits. Of the two Cartesian worlds only one has substantial existence; only the *res cogitantes* are real substances, the *res extensæ* are their ideas. But to finite spirits the ideas are *given*, and the origin of all ideas is to be sought only in the infinite Spirit, in *God*. The reality of bodies consists, therefore, in this, that their ideas are communicated by God to finite spirits, and the order of succession in which God habitually does this we call *laws of Nature*. Hence Bishop Berkeley finds no metaphysical difficulty in supposing that God under certain circumstances departs from the usual order for some especial end, and in this case man speaks of miracles. On the other hand, a body is unreal which is presented only in the individual mind according to the mechanism of memory or imagination, and without being at the same time communicated to the mind by God. And finally, since the actual corporeal world is thus changed into a system of ideas willed by God, the purposiveness which its arrangement and the order of its changes exhibit gives rise to no further problem.

The parallelism between this inference from Locke and that which Malebranche had drawn from Descartes is unmistakable; and Malebranche and Berkeley are also at one in holding that God alone is the active force in the world, and that no individual thing is efficiently operative (cf. § 31, 8). It is extremely interesting to see how the extreme Realism of the Frenchman and the extreme Nominalism of the Englishman amount to the same thing. The grounds on which the views are based could not be more different: the result is the same. For what still separated the two could be easily removed out of the way. This was proved by a contemporary and countryman of Berkeley's, Arthur *Collier* (1680–1732) in his interesting treatise *Clavis Universalis*.[1] Malebranche,[2] indeed, as a Cartesian, had not directly demurred to the reality of the corporeal world, but had held that we could understand the knowledge of this world by man, only on the hypothesis that the ideas of bodies in God are the common original, in accordance with which God produces, on the one hand, the actual bodies, and, on the other, the ideas of these bodies in finite minds. Collier showed now that in this theory the reality of the corporeal world played a completely superfluous rôle: since no actual relation between the corporeal world and human ideas is assumed, the value of human ideas for knowledge remains quite the same if we posit only an ideal corporeal world in God, and regard this as the real object of human knowledge.

The idealism, which proceeded in this way from the *cogito ergo sum* along several paths, was attended by still another paradox as a by-product, which is occasionally mentioned in the literature of the eighteenth century without any definite name or form. Each individual mind has certain, intuitive knowledge only of itself and of its states, nor does it know anything of other minds except through ideas, which refer primarily to bodies and by an argument from analogy are interpreted to indicate minds. If, however, the whole corporeal world is only an idea in the mind, every individual is ultimately certain only of his own existence; the reality of all else, all other minds not excluded, is problematical and cannot be demonstrated. This doctrine was at that time designated as *Egoism*, now it is usually called *Solipsism*. It is a metaphysical

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[1] The alternative title of the book reads, *A New Inquiry after Truth, being a Demonstration of the Non-Existence or Impossibility of an External World* (Lond. 1123). It was edited together with Berkeley's treatise in the German "*Collection of the Principal Writings which deny the Reality of their own Body (!!) and of the whole Corporeal World*," by Eschenbach (Rostock, 1756).

[2] Whose doctrine had become known in England by the agency especially of John *Norris* (*Essai d'un Theorie du Monde Idéal*, Lond. 1704).

sport which must be left to the taste of the individual; for the solipsist refutes himself by beginning to prove his doctrine to others.

Thus, following in the train of the *Meditations*, in which Descartes recognised self-consciousness as the rescuing rock in the sea of doubt, the result was finally reached which Kant later characterised as a scandal to philosophy; namely, that a proof was demanded for the reality of the outer world, and none adequate could be found. The French materialists declared that Berkeley's doctrine was an insane delusion, but was irrefutable.

3. The transformation of Locke's doctrine by Berkeley leads farther in a direct line to *Hume's* theory of knowledge. To the nominalistic denial of abstract ideas the penetrative and profound Scot attached his distinction of all intellectual functions into impressions, and ideas which are copies of impressions; and coincident with his distinction is that of intuitive and demonstrative knowledge. Each kind of knowledge has its own kind of certainty. Intuitive knowledge consists simply in the affirmation of actually present impressions. What impressions I have, I can declare with absolute certainty. I can make no mistake in this, in so far as I keep within the bounds of simply stating that I have a perception possessing this or that simple or complex content, without adding any conceptions which would put any interpretation upon this content.

As among the most important of these impressions which have immediate intuitive certainty Hume reckons the relations in space and time of the contents of sensation, — the fixing of the co-existence or succession of elementary impressions. The spatial order in which the contents of perception present themselves is undoubtedly given immediately with the contents themselves, and we likewise possess a sure impression as to whether the different contents are perceived at the same time or in succession. *Contiguity* in space and time is therefore intuitively given together with the impressions, and of these *facts* the human mind possesses a knowledge which is perfectly certain and in nowise to be questioned. Only, in characterising Hume's doctrine, it must not be forgotten that this absolutely certain matter-of-fact quality, which belongs to impressions, is solely that of their presence as mental states. In this meaning and restriction intuitive knowledge embraces not only the facts of inner experience, but also those of outer experience, but at the price of recognising that the latter are properly only species of the former, — a knowledge, that is, of mental states.

Contiguity in space and time is, however, but the most elementary

form of association between perceptions; besides this Hume reckons two other laws, those of resemblance (or contrast, respectively) and causality. As regards the former of these two forms of relation, we have a clear and distinct impression of the likeness or unlikeness of sensations, and of the different degrees of these; it consists in the knowledge of the degree of resemblance in our own (sensitive) action, and belongs therefore to the impressions of the inner sense, which Locke called reflection. On this is based, consequently, a demonstrative knowledge of complete certainty; it concerns the forms of that comparison between magnitudes which we perform upon the given contents of our ideas, and is nothing but an analysis of the regularity with which this takes place. This demonstrative science is mathematics; it develops the laws of equality and proportion with reference to numbers and space, and Hume is inclined to concede a still higher epistemological value to arithmetic than to geometry.[1]

4. But *mathematics is also the sole demonstrative science;* and is that just because it relates to nothing else than the possible relations between contents of ideas, and asserts nothing whatever as to any relation of these to a real world. In this way the terministic principle of Hobbes (cf. § 30, 3) is in complete control with Hume, but the latter proceeds still more consistently with his limitation of this theory to pure mathematics. For Hume declares that no assertion respecting the external world is capable of demonstration; all our knowledge is limited to the ascertaining and verifying of impressions, and to the relations of these mental states to each other.

Hence it seems to Hume an unauthorised trenching of thought beyond its own territory, when the resemblance between ideas is interpreted as meaning metaphysical identity; this is the case in every employment of the conception of *substance.* Whence is this conception? It is not perceived, it is not found as a content either in particular sensations or in their relations; substance is the unknown, indescribable support of the known contents of ideas. Whence this idea for which no impression is to be found in the whole circuit of sensations as its necessary original? Its origin is to be sought in reflection. It is the copy of a frequently repeated conjunction of ideas. By the repeated being together of impressions, by the *custom* of the like ideational process there arises by virtue of the law of *association of ideas* the necessity of the idea of their co-existence, and the *feeling* of this associative necessity of the

[1] *Treat.* I. 2, 1; I. 3, 1.

ideational process is thought as a real belonging together of the elements of association, *i.e.* as substance.

The thought-form of inherence is thus psychologically explained, and at the same time epistemologically rejected; nothing corresponds to it further than the feeling of a likeness in the ideational conjunction; and since we can never know anything of existence except by immediate sense-perception, the Reality of the idea of substance is incapable of proof. It is clear that Hume thus makes Berkeley's doctrine his own, so far as it concerns corporeal things. But Berkeley had but half done his work upon the idea of substance. He found that bodies are only complexes of sensations; that their being is identical with their being perceived; that there is no sense or meaning in hypostatising their belonging together, as an unknown substance: but he let the psychical substances, spirits, the *res cogitantes*, stand; he regarded them as the supports or agents in which all these ideational activities inhere. Hume's argument applies to this latter class also. What Berkeley showed of the cherry is true also of the "self." Inner perception, also (such was the form which it had actually taken on already with Locke; cf. above, No. 1), shows only activities, states, qualities. Take these away, and nothing remains of Descartes' *res cogitans* either: only the "custom" of constant conjunction of ideas in imagination is at the basis of the conception of a "mind"; the self is only a "bundle of perceptions."[1]

The same consideration holds also, *mutatis mutandis*, for *causality*, that form under which the necessary connection between contents of ideas is usually thought: but this is neither intuitively nor demonstratively certain. The relation of cause and effect is not perceived; all that we can perceive by the senses is the relation in time, according to which one regularly follows the other. If, now, thought interprets this sequence into a consequence, this *post hoc* into a *propter hoc*,[2] this too has no basis in the content of the ideas causally related to each other. From a "cause" it is not possible to deduce logically its "effect"; the idea of an effect does not contain within it that of its cause. It is not possible to understand the causal relation analytically.[3] Its explanation is, according to

[1] *Treat.* I., Part IV. The objectionable consequences which resulted from this for religious metaphysics perhaps occasioned Hume, when working over his *Treatise* into the *Essays*, to let drop this which cut most deeply of all his investigations.

[2] In this respect Hume had a forerunner in his countryman Joseph *Glanvil* (1636–1680), who combated the mechanical natural philosophy from the standpoint of orthodox scepticism in his *Scepsis Scientifica*, 1665.

[3] The same thought lay already at the basis of the Occasionalistic metaphysics (cf. § 31, 7); for the essential reason for its taking refuge in mediation by the will of God was the *logical incomprehensibility* of the causal relation.

Hume, to be gained by means of association of ideas. Through the repetition of the same succession of ideas, and the custom of finding them follow each other, an inner necessity or compulsion arises of imagining and expecting the second after the first; and the feeling of this inner necessity with which one idea calls up another is interpreted as a real objective necessity, as if the object corresponding to the first idea forced that corresponding to the other to a real existence in *natura rerum*. The impression in this case [of which the idea of cause and effect is a copy] is the necessary relation between the ideational *activities* [activities of the "imagination"], and from this arises, in the idea of causality, the idea of a necessary relation between the ideational *contents* [*i.e.* that A causes B; whereas the case really is that the *idea* of A causes the *idea* of B, *i.e.* recalls it by the law of association].

[In view of the extreme condensation of the above statement, a fuller outline of Hume's discussion of causality may be useful. As found in the *Treatise* it is briefly as follows: All knowledge as to matters of fact ("probability"), if it goes beyond the bare present sensation, depends on causation. This contains three essential elements, — contiguity, succession, and necessary connection. We can explain the first two (*i.e.* can find the impression from which they come), but no impression of the sensation can be found for the third and most important. To aid in the search for its origin we examine the principle both in its general form and in its particular application, asking (1), why we say that whatever begins to exist must have a cause, and (2), why we conclude that a particular cause must necessarily have a particular effect.

(1) Examination of the first gives the negative result that the principle is not intuitively or demonstratively certain (the opposite is not inconceivable), *hence it is not derived purely a priori*, *i.e.* by analysing relations between ideas; therefore it must be from experience. — (2) *But how from experience?* Taking for convenience the second question stated above, the particular instead of the general, it is evident (*a*) that the *senses* cannot tell that a particular effect will follow a given cause; they are limited to the present. Nor (*b*) can such knowledge as to future events be gained by *reasoning* on experience, as this would involve knowing that instances of which we have had no experience must resemble those of which we had experience (would assume the uniformity of Nature). (*c*) Therefore the principle apparently must come from the only remaining faculty, *imagination*. This seems at first impossible, in view of the strong *belief* which attaches to these ideas (*e.g.* that fire will burn), in contradistinction from ordinary ideas of fancy. The question as thus shifted now becomes: (3) *How explain the fact that we believe* that a particular effect will follow a given cause? The only difference between the ideas of the senses and memory (in which we believe) and those of fancy (in which we do not) is that of the feeling joined with them. The ideas of memory are more strong and

The same was also recognised by Kant in his "*Attempt to introduce the Conception of Negative Quantities into Philosophy*" (cf. the general remark at the close) in a manner essentially in agreement with Hume. And finally, *Thomas Brown* (*On Cause and Effect*), who also is not disinclined to Occasionalism (cf. *op. cit.*, pp. 108 ff.), in a very interesting way deduces psychologically, and at the same time rejects epistemologically (ib. 184 ff.), the demand for an "explaining" or "understanding" of the actual succession of facts in time. Perception shows causes and effects roughly. The explanation of the process consists, then, in its analysis into particular, simple and elementary causal relations. By this means the illusion arises as if these latter must be yet again made analytically comprehensible.

lively. Hence the problem is, What makes the idea (*e.g.* that fire will burn) so "lively" that I believe in it? and the solution is, that as I find this belief arising not from a single instance, but only from the *constant conjunction* of the two impressions, the liveliness must be due to *custom*, *i.e.* to the habitual association of the ideas. "All probable reasoning is nothing but a species of sensation."

This same doctrine explains the origin of the idea of necessary connection. For this does not arise from one instance, but from several. Repetition discovers nothing new, nor does it produce anything new in the objects, but it does produce something in the *mind*, *i.e.* a determination to pass from one object to its usual attendant. The idea of necessity must arise from some impression. There is no external impression that can give rise to it, hence it must be an impression of reflection, and the only one available is that propensity which custom produces to pass from an object to the idea of its usual attendant. *Necessity is something that exists in the mind*, not in objects. This is confirmed by comparative psychology (animals infer from experience through custom), by the theory of probabilities, and (in the *Inquiry*) by the freedom of the will, since belief may be reached in all these without necessarily holding to any objective necessary connection. — *Tr.*]

In this way, Hume's theory of knowledge disintegrates the two fundamental conceptions about which the metaphysical movement of the seventeenth century had revolved. Substance and causality are relations between ideas, and cannot be proved or substantiated either by experience or by logical thought: they rest upon the fictitious substitution of impressions derived from reflection, for those of sensation. But with this, the ground is completely taken from under the feet of the ordinary metaphysics, and in its place appears only epistemology. The metaphysics of things gives place to a *metaphysics of knowledge.*

6. Hume's contemporaries characterised this result of his investigations — especially out of regard for its consequences with respect to religious metaphysics (cf. § 35, 6) — as *Scepticism:* yet it is essentially different from those doctrines to which this name historically belongs. The settling of facts by sense-experience is, for Hume, intuitive certainty; mathematical relations pass for demonstrative certainty: but, as for all alleged assertions by means of conceptions ["by abstract reasoning"] with reference to a reality other than that belonging to ideas ["concerning matter of fact and existence"], Hume cries, "Into the fire with it!" There is no knowledge of what things are and how they work: we can say only what we perceive by sensation, what arrangement in space and time and what relations of resemblance we experience between them. This doctrine is absolutely consistent and *honest empiricism:* it demands that if the only source of knowledge is perception, nothing further shall be mingled with this than what it actually contains. With this, all theory, all examination of cause, all doctrine of the "true Being" behind "phenomena" is excluded.[1] If we characterise

[1] Berkeley is, therefore, correctly understood only from the point of view of Hume: his idealism is half positivism. He lays especial weight upon the point that behind the ideas of bodies we are not still to seek for something abstract, something existent in itself. If this principle be extended to minds, we have Hume's doctrine; for with the fall of Berkeley's spiritualistic metaphysics, the order of phenomena willed by God, to which he had reduced causality, falls also.

this standpoint as *Positivism*, in accordance with the terminology of our century, we may say that its systematic basis was established by Hume.

But England's deepest thinker gave to this radical theory of knowledge a characteristic supplement. The associations of ideas which lie at the basis of the conceptions of substance and causality are, indeed, attended by neither intuitive nor demonstrative certainty; instead of this, however, they are accompanied by a *conviction which has its roots in feeling*, a natural *belief*, which, unperverted by any theoretical reflections, asserts itself victoriously in man's practical procedures, and is completely adequate for the attainable ends of life and for the knowledge relating to these. On this rests the *experience* of daily life. To question this never came into Hume's mind: he only wishes to prevent this from playing the rôle of *an experimental science*, for which it is inadequate. With the entire earnestness of philosophical depth he unites an open vision for the needs of practical life.

7. For the reception of this positivism the intellectual temper was less favourable in England than in *France*. Here the renunciation of any attempt at a metaphysics of things lay already prepared in the fundamental sceptical tendency which had made its appearance so repeatedly from the Cartesian philosophy; and the prevalence of this temper had been especially furthered by *Bayle*, whose criticism was, indeed, in principle directed chiefly against the rational grounding of religious truths; but at the same time applied to all knowledge reaching beyond the sensuous, and therefore to all metaphysics. Besides this, there was in the French literature a freer tendency that belongs to men of the world, which had likewise been furthered by Bayle, and at the same time by the influence of Englishmen, — a tendency which would strip off the fetters of the system of the schools, and demanded the immediate reality of life instead of abstract conceptions. Thus *Bacon's* doctrine, with its limitation of science to physical and anthropological experience, became more efficacious in France than in his own home. The "point de système" meets us here at every step; no one any longer wishes to know anything of the "causes premières," and this Baconian platform with all its encyclopædic and programmatic extension was laid down by *d'Alembert* as the philosophical basis of the *Encyclopœdia*.[1]

[1] In the *Discours Préliminaire.*

In Germany the Wolffian system was opposed with the "*point de système*" by men like Crousaz and Maupertuis on grounds of taste, and, in fact, the pedantry of this text-book philosophy offered many points of attack. In contrast with this the German *Popular Philosophy* prided itself upon its absence of system; as developed by Mendelssohn it would refrain from all subtleties as to that which cannot be experienced, and employ itself the more with that which is useful for men. And, lastly, we find a fine example of harmony with this temper in *Kant's Dreams of a Ghost-Seer*, where he lashes the architects of various artificial worlds of thought with sharp irony, and pours out copious scorn upon metaphysical endeavour with a gallows-humour which touches his own inclination in a most sensitive point. Among the German poets Wieland is in this same spirit the witty anti-metaphysician.

8. A very peculiar turn was taken by positivism, finally, in the later doctrine of *Condillac*. In him converge the lines of the French and the English Enlightenment, and he finds a positivistic synthesis of sensualism and rationalism, which may be regarded as the most perfect expression of modern terminism. His *Logic*[1] and his posthumous *Langue des Calculs* developed this doctrine. It is built up essentially upon a theory of "*signs*" (*signes*).[2] Human ideas are all of them sensations, or transformations of such, and for these no especial powers of the soul are needed.[3] All knowledge consists in the consciousness of the relations of ideas, and the fundamental relation is that of equality. The business of thinking is only to bring out the relations of equality between ideas.[4] This is done by analysing the complexes of ideas into their constituent elements and then putting them together again: *décomposition des phénomènes* and *composition des idées*. The isolation of the constituent elements which is requisite for this can, however, be effected only with the aid of signs or language. All language is a method for the analysis of phenomena, and every such method is a "language." The different kinds of signs give different "dialects" of the human language: as such Condillac distinguishes five,—the fingers (gestures), sound-language, numbers, letters, and the signs of the infinitesimal calculus. Logic, as the universal grammar of all these

[1] A text-book for "Polish professors."

[2] After the *Langue des Calculs* became known, the Institute of Paris and the Berlin Academy gave out, almost at the same time, the theory of signs as the subject for their prizes. At both places a great number of elaborations were presented, mostly of very inferior value.

[3] This Condillac maintains against Locke, and indeed already in his *Traité des Sensations*, and his school do the same against the Scots.

[4] In these determinations lie suggestions from Hobbes as well as from Hume.

languages, determines, therefore, mathematics also, and indeed the higher as well as the elementary, as special cases.

All science thus contains only *transformations*. The thing to be done is always to make out that the unknown, which one is seeking, is really something already known; that is, to find the *equation* which shall put the unknown x equal to a composition of ideas: it is just for this end that the structures of perception must be previously decomposed. It is evident that this is but a new generalising mode of expression for Galileo's doctrine of the method of resolution and composition; but it rises here upon a purely sensualistic basis; it denies the constructive element which Hobbes had so sharply emphasised and makes of thinking a reckoning with only given quantities. In doing this it rejects all thought of a relation of these data to metaphysical reality, and sees in scientific knowledge only a structure built up of equations between contents of ideas in accordance with the principle *le même est le même*. The human world of ideas is completely isolated within itself, and truth consists only in the equations that can be expressed within this world by "signs."

9. Indifferent as this *Ideology* professed to be metaphysically, its sensualistic basis, nevertheless, involved a materialistic metaphysics. Even though nothing was to be said as to the reality corresponding to sensations, there still remained in the background the popular idea that sensations are produced by bodies. On this account the cautious restraint that belonged to these positivistic consequences of sensualism needed only to be neglected to convert the anthropological materialism, which had developed in the psychological theories, into a metaphysical and dogmatic materialism. And so Lamettrie spoke out with coquettish recklessness what many others did not dare to confess to themselves, to say nothing of confessing or defending it openly.

But other lines of thought in natural science, independently of Ideology, were also driving toward materialism. *Lamettrie* had very rightly seen that the principle of the mechanical explanation of Nature would ultimately tolerate nothing in addition to matter moved by its own forces: long before *Laplace* gave the well-known answer that he did not need the "hypothesis of the deity" French natural philosophy had attained this standpoint. That the world of gravitation lives in itself was Newton's opinion also; but he believed that the first impulse for its motions must be sought in an action of God. *Kant* went a step farther when he cried in his *Natural History of the Heavens*, "Give me matter, and I will build you a world." He pledged himself to explain the whole universe

of the fixed stars after the analogy of the planetary system,[1] and traced the origination of the individual heavenly bodies out of a fiery-fluid primitive condition solely to the opposed working of the two fundamental forces of matter, attraction and repulsion. But Kant was convinced that the explanation which is sufficient for solar systems shatters when applied to the blade of grass and the caterpillar; the *organism* seems to him to be a miracle (*Wunder*) in the world of mechanics.

The French philosophy of Nature sought to overcome this obstacle also, and to put the problem of organisation out of the world. Among the countless atom-complexes, it taught, there are also those which possess the capacity of preserving and propagating themselves. *Buffon*, who pronounced and carried through with full energy this frequently expressed thought, gave to such atom-complexes the name *organic molecules*, and by assuming this conception all organic life might be regarded in principle as an activity of such molecules, which develops according to mechanical laws, in contact with the external world.[2] This had been already done by Spinoza, of whose theory of Nature Buffon frequently reminds us; the latter, also, speaks of God and "Nature" as synonyms. This *naturalism* found in mechanics, accordingly, the common principle for all corporeal occurrence. But if now ideology taught that ideas and their transformations should be regarded as functions of organisms, if it no longer was regarded as impossible, but more and more seemed probable, that the thing which thinks is the same that is extended and moves, if Hartley and Priestley in England and Lamettrie in France showed that a change in consciousness is a function of the nervous system, — it was but a step from this to teach that ideas with all their transformations form only a special case of the mechanical activity of matter, only a particular kind of its forms of motion. While Voltaire had expressed the opinion that motion and sensation might perhaps be attributes of the same unknown substance, this *hylozoism* changed suddenly into decided *materialism* as soon as the dependence of the psychical upon the physical was given the new interpretation of a likeness in kind between the two, and it is often only by soft and fine shades of expression that the one is

[1] The suggestion for this brilliant astro-physical hypothesis, to which Lambert also came very near in his *Kosmologischen Briefen*, and which was developed later in a similar manner by Laplace, was due perhaps to a remark by Buffon. Cf. O. Liebmann, *Zur Analysis der Wirklichkeit*, 2d ed., p. 376.

[2] This principle of Buffon was further developed later by *Lamarck* (*Philosophie Zoologique*, Paris, 1809), who attempted to explain the transformation of organisms from the lower to the higher forms by a mechanical influence of the outer world, by adaptation to the environment.

converted into the other. This transition is presented in the writings of *Robinet*. He gives a metaphysical flight to the philosophy of Nature. Finding support in the development system of the Leibnizian Monadology, he regards the graded scale of things as an infinite multiplicity of forms of existence, in which the two factors of corporeality and psychical function are mixed in all the different relations possible, so that the more the nature of a particular thing unfolds in the one direction, the less is its activity in the other. This holds true, also, according to Robinet, in the case of the vital movements of individual creatures; the force which they use mentally is lost physically, and conversely. Regarded as a whole, however, the psychical life appears as a special form which the fundamental material activity of things is able to assume, to be later translated back again into its original form. Robinet thus regards ideas and activities of the will as mechanical transformations of the nervous activity which can be changed back again into that. Nothing takes place psychically which was not predisposed in the physical form; and the body, accordingly, receives in psychical impulses only the reaction of its own motion.

In the *Système de la Nature* materialism appears at last undisguised as a purely dogmatic metaphysics. It introduces itself with the Epicurean motive of wishing to free man from fear of the supersensuous. It shall be shown that the supersensuous is only the invisible form of activity of the sensuous. No one has ever been able to think out anything of a supersensuous character that was not a faded after-image of the material. He who talks of idea and will, of soul and God, thinks of nervous activity, of his body and the world over again in an abstract form. For the rest, this "Bible of Materialism" presents no new doctrines or arguments in its painfully instructive and systematically tedious exposition: yet a certain weight in its conception taken as a whole, a greatness of stroke in drawing the lines of its *Weltanschauung*, a harsh earnestness of presentation, is not to be mistaken. This is no longer a piquant play of thoughts, but a heavy armed attack upon all belief in the immaterial world.

10. In spite of psycho-genetic opposition, the problem of knowledge as conceived by the supporters of "innate ideas" was not all too unlike the view which obtained with the sensualists. The dualistic presupposition assumed by both classes made it difficult for the latter to understand the conformity which the ideas called out in the mind by bodies bear to the bodies themselves. But it seemed almost more difficult still to understand that the mind should cognise a world independent of it, by means of the development of the

thought-forms which are grounded in its own nature. And yet exactly this is an assumption so deeply rooted in human thought, that it passes for the most part as self-evident and a matter of course, not only for the naïve consciousness, but also for philosophical reflection. It was the mission of the Terminism, whose after-workings were active in modern philosophy, to shake this fundamental dogmatic conviction, and push forward for consideration the question as to the ground of that conformity between necessity of thought, on the one hand, and reality on the other. Even Descartes had found it necessary to support the knowing power of the *lumen naturale* by the *veracitas dei*, and thereby had shown the only way which the metaphysical solution of the problem could take.

To be sure, where that philosophical impulse was lacking which directs its θαυμάζειν — its wonder — upon just that which is apparently self-evident and a matter of course, the difficulty just mentioned weighed less heavily. This was the case with *Wolff*, in spite of all his power of logical clearness and systematic care, and with the *Scots*, in spite of all their fineness of psychological analysis. The former proceeds to deduce, *more geometrico*, an extensive ontology, and a metaphysics with its parts relating to God, to the world, and to the soul, all from the most general formal laws of logic, — from the principle of contradiction and that of sufficient reason (and this second principle is even to be reduced to the first). Wolff, indeed, stands so completely within the bounds of this logical schematism that the question never seems to occur to him at all, whether his whole undertaking — namely, that of spinning "a science of all that is possible, in so far as it is possible" out of logical propositions — is authorised in the nature of the case. This problem was concealed for him the more as he confirmed every rational science by an empirical science [*e.g.* Rational by Empirical Psychology, etc.], — an agreement, indeed, which was possible only because his *a priori* construction of metaphysical disciplines borrowed from experience step by step, though the loan was unnoticed. Nevertheless, this system, which was blessed with so many disciples, had the great didactic value of setting up and naturalising strictness in thought, clearness of conceptions, and thoroughness in proof, as the supreme rules for science, and the pedantry which unavoidably stole in with these found a sufficient counterpoise in other intellectual forces.

The *Scottish* philosophy contented itself with seeking out the principles of sound common sense. Every sensation is the sign — Reid too, thinks as terministically as this — of the presence of an object; thinking guarantees the reality of the subject; whatever

actually comes into being must have a cause, etc. Such principles are absolutely certain; to deny them or even to doubt them is absurd. This is especially true, also, of the principle that what the understanding recognises clearly and distinctly is necessarily so. In this is formulated the general principle of a philosophical attitude which is called *dogmatism* (after Kant), unconditional confidence in the agreement of thought with reality. The above examples of the particular principles show how eclectically this common sense sought to gather its fundamental truths from the different systems of philosophy. In this respect the "gesunde Menschenverstand" [sound common sense] of the German popular philosophers was entirely in accord with it. Mendelssohn, like Reid, was of the opinion that all extremes in philosophy were errors, and that the truth lay in the mean position: every radical view has a germ of truth which has been forced artificially to a one-sided and diseased development. A sound, healthy thinking (Nicolai, especially, lays weight on this predicate) does justice to all the different motives and so finds as its philosophy — the opinion of the average man.

11. In the mind of *Leibniz* the problem was solved by the hypothesis of the pre-established harmony. The monad knows the world because it is the world: the content which it represents is from the beginning the universe, and the law of the monad's activity is the law of the world. On account of its "having no windows" it has no experience at all in the proper sense: nevertheless the possibility of knowing the world is so established in its very essence that all its states must be regarded as just such a knowledge. There is, accordingly, no difference between intellect and sensibility, either as regards the objects to which they refer, or as regards the way in which consciousness relates itself to these objects: the only difference is that sensibility cognises the indistinct phenomenal form, while intellect cognises the true essence of things. From a scientific point of view, therefore, knowledge by the senses was treated partly as the imperfect, preliminary stage, partly as the indistinct anti-type for the intellect's insight: the "historical" sciences were regarded either as preparations for the philosophical, or as lower appendages.

From this relation a peculiar consequence resulted. The sensuous mode of representation, too, has a certain peculiar perfection of its own, which differs from the clearness and distinctness of intellectual knowledge in apprehending the phenomenal form of its object without any consciousness of grounds or reasons: and in this perfection, characteristic of sensuous knowledge, Leibniz[1] had set the *feeling of*

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the beautiful. When, now, one of Wolff's disciples, *Alexander Baumgarten,* in whom the architectonic impulse toward systematisation was developed to a particularly high degree, wished to place by the side of logic as the science of the perfect use of the intellect, a corresponding science of the perfection of sensation, an *œsthetics,* this discipline took on the form of a *science of the beautiful.*[1] Thus æsthetics,[2] as a branch of philosophical knowledge, grew up, not out of interest in its subject-matter, but with a decided depreciation of it; and as a "step-sister" [lit. *posthumous: nachgeborene Schwester*] of logic she was treated by the latter with very little understanding for her own peculiar nature, and with a cool intellectual pedantry. Moreover, this last-named rationalist, who followed Leibniz in regarding the actual world as the best, and therefore, as the most beautiful among all possible worlds, could set up no other principle for the theory of art than the sensualistic one of imitating Nature, and developed this principle essentially into a tedious poetics. But in spite of this, it remains Baumgarten's great service to have treated the beautiful again, and for the first time in modern philosophy, in a systematic way from the general conceptions of philosophy, and by so doing to have founded a discipline that was destined to play so important a part in the further development of philosophy, especially in that of Germany.

12. The Leibnizo-Wolffian conception of the relation between sense and understanding, and especially the *geometrical method* introduced for rational knowledge, encountered numerous opponents in the German philosophy of the eighteenth century, whose opposition proceeded not only from the incitements of English and French sensualism and empiricism, but from independent investigations as to the methodical and epistemological *relation between mathematics and philosophy.*

In this latter line *Rüdiger,* and, stimulated by him, *Crusius,* contended most successfully against the Wolffian doctrine. In opposition to Wolff's definition of philosophy as the science of the possible, Rüdiger asserted that its task is to know the *actual.* Mathematics, and, therefore, also a philosophy which imitates the methods of mathematics, have to do only with the possible, with the contradictionless agreement of ideas with one another; a true philosophy needs the real relation of its conceptions to the actual, and such a

[1] Cf. H. Lotze, *Gesch. der Aesthetik in Deutschland* (Munich, 1868).

[2] The name "æsthetics" was then adopted at a later time by Kant, after some resistance at first, for the designation of the philosophical doctrine of the beautiful and of art, and from him passed over to Schiller, and through the latter's writings into general use.

relation is to be gained only by perception. *Crusius* made this point of view his own; and although he thought in a less sensualistic manner than his predecessor, he yet criticised in a quite similar manner from that point of view the effort of the geometrical method to know reality by employing only logical forms. He rejected the ontological proof for the existence of God, since out of conceptions alone existence can never be inferred; existence (as Kant expressed it) cannot be dug out of ideas. In the same line, also, was the exact distinguishing between the real relation of causes and effects and the logical relation of ground and consequent, which Crusius urged in his treatment of the principle of ground or reason. For his own part he used this difference between real and ideal grounds to oppose the Leibnizo-Wolffian determinism, and especially to set up the Scotist conception of the unrestricted free will of the Creator, in opposition to the Thomist conception of the relation between the divine will and the divine intellect, which the rationalists maintained. The turning away from natural religion, which lay in all these inferences, made the stricter Protestant orthodoxy favourably disposed toward the doctrine of Crusius.

The investigation as to the fundamental difference in method between philosophy and mathematics, that cut deepest and was most important in results, was that undertaken by *Kant,* whose writings very early refer to Crusius. But in his prize treatise *On the Clearness of the Principles of Natural Theology and Morals* he brings a decisive statement. The two sciences are related as opposite in every respect. Philosophy is an analytic science of *conceptions,* mathematics a synthetic science of *magnitudes:* the former *receives* its conceptions, the latter *constructs* its magnitudes; the former *seeks* definitions, the latter *sets out from* definitions; the former needs experience, the latter does not; the former rests upon the activity of the *understanding,* the latter upon that of the *sensibility.* Philosophy, therefore, in order to know the real, must proceed *zetetically:* it must not try to imitate the constructive method of mathematics.

With this fundamental insight into the sensuous character of the cognitive foundations of mathematics, Kant exploded the system of the geometrical method. For, according to his view, sensibility and understanding can no longer be distinguished as lower and higher grades of clearness and distinctness in knowledge. Mathematics proves that sensuous knowledge can be very clear and distinct, and many a system of metaphysics proves that intellectual knowledge may be very obscure and confused. The old distinction must therefore be exchanged for another, and Kant attempts a substitute by

defining sensibility as the faculty of *receptivity*, understanding as that of *spontaneity*. He does this in his *Inaugural Dissertation*, and upon this builds a new system of epistemology,[1] leaning upon the psychological principle of virtual innateness (cf. § 23, 12).

The main outlines of the system are the following: the Forms of the sensibility are space and time; those of the understanding are the most general conceptions. Out of reflection upon the one class arises mathematics; upon the other class, metaphysics; — both *a priori* sciences of unconditional certainty. But Forms of (receptive) sensibility give only the necessary knowledge of the *appearance* of things in the human mind (*mundus sensibilis phænomenon*); the Forms of the understanding, on the contrary, give adequate knowledge of the true essential nature of things (*mundus intelligibilis noumenon*). That these Forms of the understanding are able to do this is due to the fact, that the understanding, as well as things themselves, has its origin in the divine mind; that we, therefore, by means of it, see things to a certain extent "in God."[2]

§ 35. Natural Religion.

The epistemological motives which ruled the eighteenth century were not in general favourable to metaphysics: if, in spite of this, they brought their sceptical and positivistic tendency to complete expression in but few instances, this was due to the religious interest which expected from philosophy a decision as to its problems. The religious unrest and wars from which Germany, France, and England had suffered, and the quarreling over dogmas which had been connected with them, had been followed already in the seventeenth century by a feeling of surfeit and disgust for the distinctions in creeds: the "wretched century of strife," as Herder called it, longed for peace. In England the temper of the *Latitudinarians* extended itself, and on the continent *efforts toward union* were taken up again and again in spite of frequent failure. Bossuet and Spinola on one side, and *Leibniz* on the other, worked long in this direction: the latter projected a *systema theologicum*, which should contain the fundamental doctrines of Christianity common to all three Confessions, and when the negotiations with the Catholics no longer

[1] The system of the *Inaugural Dissertation* is only one stage in Kant's development; he gave it up again forthwith; hence it belongs in his pre-critical time and in this period.

[2] This doctrine, presented with an appeal to Malebranche (Sectio IV.), is accordingly just the system of the pre-established harmony between knowledge and reality which Kant later rejected so energetically (Letter to M. Herz, Feb. 21, 1772).

offered any hope, he attempted, at least, to employ his relations to the courts of Hanover and Berlin to bring about a union between the Lutherans and the Reformed body, — this, too, indeed without any immediate result.

Locke, on the other hand, in his three *Letters concerning Toleration*, brought together the thoughts of the *toleration movement* into the theory of the "free church in the free state," — into the demand that the modern state, raised above all Church tutelage, should tolerate and protect every religious belief as personal opinion, and every religious society as a free association, in so far as it does not threaten to disturb political order.

But the more the union was thwarted by the resistance of theologians, the more nourishment came to the life of the *Mystic sects*, whose supra-confessional tendencies were in harmony with the efforts toward union, and which spread in the eighteenth century with a multitude of interesting manifestations. The *Pietism* founded by Spener and Francke kept nearest to the Church life, and was therefore most successful. This, nevertheless, allows a certain indifference toward dogmatic faith to appear, but in compensation lays all the more weight upon the increase of personal piety and upon the purity and religious colouring of conduct.

1. In connection with all these movements stands the tendency of the Enlightenment philosophy toward *establishing the universal, "true" Christianity by means of philosophy*. True Christianity is in this sense identified with the *religion of reason*, or *natural religion*, and is to be dissolved out from the different forms of positive, historical Christianity. At first, such a universal Christianity was still allowed the character of a revealed religion, but the complete agreement of this revelation with reason was maintained. This was the position taken by Locke and Leibniz, and also by the latter's disciple, Wolff. They conceive the relation between natural and revealed religion quite in accordance with the example of Albert and Thomas (cf. p. 321): revelation is above reason, but in harmony with reason; it is the necessary supplement to natural knowledge. That is revealed which the reason cannot find out of itself, but can understand as in harmony with itself after the revelation has taken place.

Proceeding from this idea, the *Socinians* had already taken a step further. They, too, recognised very vigorously the necessity of revelation; but they emphasised, on the other hand, that nothing can be revealed that does not prove accessible to rational knowledge. Hence only what is rational in the religious documents is to be regarded as revealed truth; *i.e.* reason decides what shall be held to

be revelation. From this standpoint the Socinians separated the Trinity and the Incarnation from the content of revelation, and in general transferred revelation from the realm of theoretical truths to an entirely different field. They comprehend religion under the characteristic of *law*, and this constitutes their peculiar position. What God reveals to man is not a metaphysics, but a *law*. This he did in Moses, and so in Christ he gave a new law. But if religion objectively is law-giving, subjectively it is fulfilling the law, — not an acceptance of theoretical doctrines, nor even merely a moral disposition, but subjection to the law revealed by God and a keeping of all its prescriptions. This alone has been made by God the condition of eternal blessedness — a juridical conception of religion, which, with its resort to the principle of the boundless authority of what is determined by divine power, seems to contain strongly Scotist elements.

2. If, however, the criterion of revelation is ultimately to lie solely in the rationality of the same, the completely consistent result of this theory is, that historical revelation should be set aside as superfluous, and natural religion alone retained. This was done by the English *Deists;* and *Toland* is their leader in so far as he first undertook to strip Christianity, *i.e.* the universal religion of reason, of all mysteries, and reduce it, as regards the knowledge which it contains, to the truths of the "natural light," *i.e.* to a philosophical theory of the world. But the content which the Enlightenment philosophy sought to give to this, its religion of Nature, had two sources, — theoretical and practical reason. As regards the first, Deism contains a metaphysics based upon natural philosophy; in the second aspect it involves a theory of the world from the point of view of moral philosophy. In this way the natural religion of the Enlightenment was involved in the movement of theoretical, and also in that of practical problems: these its two elements stood in close connection, but found each a particular development, so that they could diverge and become mutually isolated. The relation between these two constituents was as determining in its influence for the history of natural religion as was the common relation which they sustained to the positive religions.

The complete union of the two elements is found in the most important thinker of this movement, *Shaftesbury*. The centre of his doctrine and of his own nature is formed by what he himself called *enthusiasm*, — enthusiasm for all that is true, good, and beautiful, the elevation of the soul above itself to more universal values, the living out of the whole peculiar power of the individual by the

devotion to something higher. Nor is religion anything else: a life of increased and enhanced personality, a knowing one's self to be one with the great connected all of reality. But this noble passion, like every other, grows from admiration and strong emotion to love. The source of religion is, therefore, objectively as well as subjectively, the harmony and beauty and perfection of the universe; the unavoidable impression received from this perfection awakens enthusiasm. With a warm heart Shaftsbury portrays the order of things, the purposiveness of their inter-play, the beauty of their formation, the harmony of their life, and shows that there is nothing in itself evil — nothing which entirely misses its mark. Whatever appears an evil in one system of individuals, proves itself in another, or in a higher connection, to be still a good, as a necessary member in the purposeful structure of the whole. All imperfection of the particular vanishes in the perfection of the universe; every discord is lost in the harmony of the world.

This *universal optimism*, whose theodicy is in its conceptions completely Neo-Platonic in character, knows therefore but one proof for the existence of God, the *physico-theological*. Nature bears everywhere the marks of the artist, who has unfolded the loveliness of his own nature in the charm of phenomena with the highest intelligence and sensitiveness. Beauty is the fundamental conception of this *Weltanschauung*. Its admiration of the universe is essentially æsthetic, and the taste of the cultivated man is, for Shaftsbury, the basis of both religious and moral feeling. For this reason his teleology also is the tasteful one of artistic apprehension; like Giordano Bruno he seeks the purposiveness of the universe in the harmonious beauty of each of its individual structures. All that is petty and utilitarian in teleological thought is here stripped off, and a wave of poetic world-glorification that carries all before it goes through Shaftesbury's writings. It was on this account that they worked so powerfully upon the German poets, upon Herder,[1] and upon Schiller.[2]

3. Few, indeed, of the philosophers of the Enlightenment stand upon this height. Voltaire and Diderot[3] allowed themselves at first to be swept along to such an enthusiastic view of the world. Maupertius and Robinet had also something of the universalistic tendency; in Germany, Reimarus in his reflections concerning the mechanical instincts of animals, shows at least a sensibility for the artistically delicate detailed work of Nature and for the internal

[1] Herder, *Vom Erkennen und Empfinden.*
[2] Schiller, *Philisophische Briefe* (Julius).
[3] Particularly in the *Pensées Philosophiques.*

end which she realises in her organic structures. But the great mass of the philosophical writers of the eighteenth century is so controlled by the anthropological interest and the practical aims of philosophy that it investigates rather the *uses* which the arrangement of the universe and the activities of its parts yield for the *wants of man;* and if those of higher temper have in view principally the furthering and perfecting of the moral nature, they still do not despise the point of view of usefulness and every-day "happiness."

Thus æsthetic teleology is cut off by the Stoic doctrine of utility, and the technical analogy, with which men like Leibniz, Newton, and Clark had thought of the subordination of mechanism to teleology, could not but be favourable to this utilitarian conception. For the purposiveness of machines consists just in yielding an advantage, just in the fact that their product is something else, something in addition to their own working. And this analogy was quite welcome also to the "Enlighteners," who frequently praised the harmony of their philosophy with natural science; they employed this mode of view as against the conception of miracle found in positive religion. Reimarus, too, held that only bunglers need to assist their machines afterwards, and that it is unworthy of perfect intelligence to come into such a position. But if it was asked what the end of the world-machine is, the answer of the Enlightenment was, the *happiness of man,* or perhaps at most, that of created beings in general. This trade in the small wares of usefulness (*Nützlichkeitskrämerei*) was carried out in the most tasteless manner in the German Enlightenment. Wolff's empirical teleology (*Designs of Natural Things*) excites one's mirth by the petty points of view which he assigns to the creative intelligence, and the *Popular Philosophers* vied with each other in portraying in broad and pleasing pictures the neat and comfortable way in which this universe is fitted up for the *homo sapiens,* and how well one may live in it if he bears himself well.

A nobler thought, even at that time, was that of *Kant,* when in his *Natural History of the Heavens* he adopted the Leibnizo-Newtonian conception, but left behind all that talk about the use of the world for man, and directed his look toward the perfection which displays itself in the infinite multiplicity of the heavenly bodies, and in the harmony of their systematic constitution; and with him, by the side of the happiness of creatures, appears always their ethical perfecting and elevation. But he, too, esteems the *physico-theological*[1] *proof* for the existence of God as that which is the most

[1] This term points back into the seventeenth century, and seems to have arisen from the Neo-Platonic circles in England. Samuel *Parker* published in 1669 *Tentamina Physico-theologica de Deo*, and William *Derham*, in 1713, a *Physico-theology*.

impressive for man, though he grants strict cogency as little to this as to the cosmological and ontological. The popular philosophy, on the contrary, had its favourite just in this proof, and it forms a general characteristic of natural religion.

4. The presupposition of this course of thought was the conviction that the world is really so perfect and purposive as to support the proof in question. Believing souls brought this conviction with them, and the literature of the eighteenth century proves that it was assumed without question in wide circles as a valid premise of the argument; sceptical minds demanded that this also should be demonstrated, and so roused the problems of *theodicy.* In most cases the Enlightenment philosophy resorted here to the same (ancient) arguments which Shaftesbury brought into the field, but the sceptical-orthodox method, of pointing to the limited nature of human knowledge and to the darkness in the ways of Providence, was not despised.

A new turn was given to theodicy by *Leibniz.* He had been brought by Bayle's incisive criticism to the necessity of adding experimental proof to his system of Monadology by showing the perfection of the universe. Setting in motion to this end the highest conceptions of his metaphysics, he attempted to show that the actual presence of evil in the world does not make out a case against its having originated from an all-good and all-powerful creative activity. Physical evil, he maintains, is a necessary consequence of moral evil in the ethical world-order; it is the natural punishment of sin. Moral evil, however, has its ground in the finiteness and limitation of creatures, and this latter is *metaphysical evil.* As a finite thing the monad has obscure and confused sensuous representations or ideas, and from these follow necessarily the obscure and confused sensuous impulses, which are the motives to sin. The problem of theodicy is thus reduced to the question, Why did God create or permit metaphysical evil?

The answer to this question is very simple. Finiteness belongs to the conception of a created being; limitation is the essential nature of all creatures. It is a logical necessity that a world can exist only out of finite beings which reciprocally limit each other and are determined by their creator himself. But finite beings are imperfect. A world that should consist of nothing but perfect beings is a contradiction in terms. And since it is also an "eternal," that is, a conceptional or rational truth, that out of metaphysi-

cal evil follows first moral and further physical evil, that out of finiteness follows sin, and out of sin sorrow, it is then a logical necessity that a world without evil is unthinkable. However much, therefore, the goodness of God might desire to avoid evil, the divine wisdom, the "*région des vérités éternelles*," makes a world without evil an impossibility. Metaphysical truths are independent of the divine will; the latter in its creative activity is bound to them.

But, on the other hand, the goodness, which belongs to the conception of God as truly as does his wisdom, is a guarantee that the evils are as few as possible. The world is contingent, *i.e.* it may be thought as being other than it is. There is an infinite number of possible worlds, none of them entirely without evil, but some affected with much more numerous and heavy evils than others. If now from among all these possible worlds, which God's wisdom spread out before him, he created this actual world, it can only have been the choice of the best that guided him in so doing; he has made real the one which contains the least and the fewest evils. The contingency of the world consists in the fact that it exists, not with metaphysical necessity, but through a choice exercised among many possibilities; and since this choice proceeds from the all-good will of God, it is unthinkable that the world is any other than the best. Theodicy cannot proceed to deny the evil in the world, for evil belongs to the very idea of the world; but it can prove that this world contains as little evil as is in any way possible in accordance with metaphysical law. God's goodness would gladly have produced a world without evil, but his wisdom permitted him only the *best among possible worlds*.

Hence arises the common expression, *optimism*. Whether this experimental proof of the physico-theological view of the world succeeds, may be left undecided. The eighteenth century conceived of the matter as though it was the essential aim of Leibniz to prove that the world is the most perfect that can be thought; that he did this only under the presupposition of the metaphysical necessity of evil, was, in characteristic fashion, scarcely noted in the literature of that time, which itself was through and through "optimistic" in its thought. In a historical aspect the most noteworthy thing in this theodicy is the peculiar mixture of Thomist and Scotist metaphysics. The world is such as it is only because God has so willed it; by virtue of his omnipotence he might have chosen another; but in the choice of the possibilities before him the divine will is bound to the divine intellect as the "eternal truths." Above all reality hovers the fate prescribed by logic.

5. In the forms hitherto developed the teachers of natural religion believed that they could attain along the physico-theological path to the conception of the deity as creative intelligence, and for this phase of the development the name *Deism* is customarily employed. The conception of God as personality, which survived in this procedure as the last remnant from positive religion, offered a hold for the moral side also of natural religion, and in turn found in that its support. But where only the theoretical element was pursued, natural religion found itself involved in the course of development taken by naturalistic metaphysics, and found in this finally its downfall. Toland already gave a completely *pantheistic* turn to the admiration of Nature, which for him constituted the essential content of religious feeling, and with the hylozoism which developed among the French natural scientists (cf. § 34, 9) the transcendence of God, as well as his personality, was at an end; and when then the complete dominance of the mechanical explanation of Nature was proclaimed, when the organic world also was recognised as in principle the product of the universal mechanism of Nature, the physico-theological proof lost its power over the mind. In addition to this the premises of the argument were questioned. The Lisbon earthquake (1755) which shocked all Europe made many waver in their ideas of the perfection and adaptedness of the world's arrangement; the indifference with which Nature destroys human life and all its content of ends and worth seemed to speak much more for a blind necessity in all that takes place than for a teleological disposition of the world-process. Voltaire, in whom this revolution in point of view became complete, began in *Candide* to make sport of the "best of possible worlds," and the element of natural philosophy in natural religion crumbled to pieces.

The *Système de la Nature* drew the last consequences with its atheism and materialism. All adaptation, all order of Nature, is only a phenomenon in the human mind. Nature itself knows only the necessity of atomic motion, and in it there are *no worth-determinations*, which are dependent upon ends or norms of value. Nature's conformity to law is active with the same rigour in those things which appear to us aimless or unpurposive, irregular or anomalous, as in the things which we judge with reference to their agreement with our designs or customs, and approve as purposeful. The wise man should make this *indifference of Nature* his own; he should see through the relativity of all conceptions of ends; there is no real norm or order. This principle was applied by Diderot to æsthetics. The *correctness of Nature* is accordingly the only thing that art should display, the only thing that it should grasp and give back;

beauty is one of those valuations which have no objective validity. Materialism knows only an *art void of ideals*, only the indifferent copy of any reality whatever.

6. While the foundations of Deism based on natural philosophy were thus crumbling from within, its epistemological basis began also to waver; for all attacks upon the possibility of a metaphysics struck also at that of a natural religion, which indeed in its contents exhibited but a survival of religious metaphysics. In this respect the *Baconian* system was the most dangerous foe of the deistic doctrine. It allowed religion to stand only as revelation and combated the possibility of knowing its doctrines by the aid of reason, or even of merely bringing them into accord with reason. No one supported this standpoint more energetically than Pierre *Bayle*. He worked systematically to show that all dogmatic doctrines were contrary to reason; he laid bare their contradictions with penetrating keenness; he sought to prove that they were absurd for the natural reason. But he uncovered, also, the weak points in Deism; he denied the cogency of the philosophical arguments for the existence of God and the immortality of the soul, and took special occasion in connection with the problems of theodicy to prove the inadequacy of the "natural light": even in controversy with Leibniz he was not worsted. Religion is, therefore, possible for him only as positive revelation in contradiction with philosophical knowledge. He defends with all keenness the twofold truth. And therefore, although perhaps for himself he might have credit for a faith contrary to reason, — his writings and especially the articles of his much read *Dictionnaire* were not less dangerous to the theoretical doctrines of positive religion than to those of Deism.

Finally *Hume*, also, on epistemological grounds dissolved the union which the other English empiricists and nominalists, and indeed, even the materialists, like Hartley and Priestley, sought to maintain with natural religion. If there is no metaphysics of things at all, philosophical religion falls also. Hume, indeed (as Cleanthes in the dialogue), acknowledges in the spirit of his practical probabilism that the world on the whole makes the incontestable impression of purposiveness and rational order, and finds, therefore, that that belief, on which all our experience rests, is applicable also to the (physico-theological) assumption of a unity in creation and in the direction of the whole. But from the standpoint of science (as Philo) he cannot regard this belief as capable of being established by reason. In particular he asserts, in accordance with the principles of the theory of probability, that it is quite explicable, even on the hypothesis of a purely mechanical theory, that amid

the countless combinations of atoms, one which was durable, purposive, and well ordered should at last come about and become fixed. So the case remains with a problematical decision. Natural religion is a reasonable mode of view for the practical man, but it should not profess to be a scientific doctrine.

7. The more the metaphysical factor in Deism retreated for these or other reasons, the more the "true Christianity," which Deism professed to be, became restricted to a *moral conviction*. This had been already prepared by Herbert of Cherbury, who stood farther removed from natural philosophy, and had been quite definitely expressed by Spinoza. According to this view the essence of religion consists in moral action, and the religious life has for its true content, deliberation upon duty, and the seriousness of a conduct of life determined by this. This in itself alone gave but very pale and vanishing lines for a *Weltanschauung*. There remained an indefinite idea of an all-good God, who created man for happiness, who should be worshipped by a virtuous life, and who will exercise an equalising justice in an eternal life, so that such virtue will receive the reward which is lacking to it here. No one will fail to notice the pure, noble thought which lived in this moralising Deism, or the high value which belongs to it historically, because in opposition to the one-sidedness and strife of confessional zeal it brought the ideals of toleration and philanthropy, respect for the purely human appreciation of the ethical disposition, and modesty in personal opinion, to a position of honour in literature and social life. But, on the other hand, it is also true that there has never been a more meagre form of religious life than this. Its religion has no taste of earth, and with the mysteries which the Enlightenment would not tolerate, understanding for the depths of religious life was lost also. There is nothing more of anxiety for the soul's salvation, of the struggle for redemption, of the ardent feeling of deliverance. Deism, therefore, failed in vital religious power; it was an artificial product of cultured society, and when the German Enlighteners wrote books to preach the deistic morals to children, they only proved how little they understood of real religion.

Among the great mass of the supporters of this standpoint in the "*popular philosophy*" all possible degrees of uncertainty prevail as to how far those moral remnants of the religious view of the world are still capable of a theoretical grounding, and how far they are to be regarded as merely constituents of the ethical consciousness. Full clearness on this point rules in *Voltaire's* later thought. Here he has been so far seized upon by Bayle's scepticism as to acknowledge no longer any metaphysical authorisation: the deity

and immortality are now for him only valid as *postulates of the moral feeling;* faith in them is regarded as only the condition for moral action. If this belief should perish, the motives for honest conduct, and thus the foundations of social order, would, he thinks, perish with it: *si Dieu n'existait pas, il faudrait l'inventer.*

8. Different as are these individual forms in which natural religion developed, they all agree on one point, — in their depreciatory criticism of positive religions. Only that is regarded as true in these religions, in which they all agree with each other and with natural religion; all that is taught beyond this, with an appeal to a special revelation, the deists turn from the door, and it was precisely in this respect that they called themselves *free thinkers.* The claims made by the revelational doctrine encountered, therefore, an especially vigorous contradiction. Collins refuted the proof from prophecy, Woolston the proof from miracles,— both by seeking to give for the corresponding accounts in the religious documents a natural explanation so far as possible. This attempt, which aimed not to involve in doubt the credibility of the biblical narratives, but to explain them by purely natural causes, frequently in a very fantastic fashion and excluding all that is mysterious and supernatural, has been characterised and employed in Germany especially as *rationalistic* interpretation. It was here, too, that *Reimarus,* in his *Schutzschrift,* proceeded in the sharpest manner against the possibility of revelation, which he declared to be superfluous, unthinkable, and untrue. Others directed their criticism against individual doctrines of dogmatics. Diderot attacked the moral attributes in the Christian conception of God, and Voltaire exercised his wit in unsparing derision of the dogmas and ceremonies of all religions and Confessions.

But in his case also there was at bottom the earnest thought, that all these additions of the positive religions were so many obscurations and corruptions of the true religion, for which, like the other deists, he felt called to contend. They were filled with the conviction that natural religion is an inheritance of all men, a conviction set within the nature of man himself, and that it was, therefore, the original state of the religious life. From this point of view all positive religions appear as depraved forms which have entered in the course of history, and a progress in the history of religion consists, therefore, in every case in nothing but a return to the primitive, pure, and uncorrupted religion. Hence according to *Tindal* the true Christianity, which coincides with Deism, is as old as creation. Jesus did not bring a revelation, he only rehabilitated the true worship of God in the face of the decay of the

ancient religions; but the Christian churches have again corrupted his work, and free-thinking desires to return to him. So, too, *Lessing* distinguished between Christianity and the religion of Christ.

If now it was asked, what were the causes that brought about this distortion of true religion, the Enlighteners were entirely devoid of any historical comprehension for these: what they held to be false seemed to them possible only through voluntary invention. They were so strongly convinced of the evidence that their Deism was the only true system, that all other teachings seemed to them explicable only by lying and deceit, and that the proclaimers of these seemed to have acted only in their own interests. It is then the general doctrine of the deists that the historical basis of positive religions is invention and deceit. Even Shaftesbury knew no other way of explaining how enthusiasm, which constitutes true religion, could be distorted to the fanaticism of superstition. The hatred of priests felt by the Enlighteners was most sharply expressed on this point also in the *Schutzschrift* of Reimarus.

9. Such incapacity to do justice to the historical nature of positive religions agreed well with the universal lack in historical sense and understanding which was peculiar to the whole philosophy of the Enlightenment. This had its ground in the fact that modern thought had made its growth, hand in hand with natural science, in investigating that which is either timelessly or always valid. Only in a few instances was this ban broken through.

This was done first and with clearest consciousness by David *Hume.* While he found that religion cannot be based upon demonstrative rational knowledge, he showed also that the question as to the origin of religion in the human mind must be completely separated from the speculative investigation. This new question he treated solely in accordance with psychological principles, as a "*Natural History of Religion.*" He shows how in the primitive apprehension of Nature and in the feelings of fear and hope, of terror and of blessing, which are associated with it, and in the comparison of the course of Nature with the vicissitudes of human life, there lay the incitements to the formation of ideas of higher beings, and to worship designed to appease or to flatter. The natural, primitive form of religion is, therefore, polytheism, which thinks and treats these higher powers in a completely anthropomorphic manner. But the manifold forms assumed by myth fuse in accordance with the laws of the association of ideas; myths pass over into each other, and ultimately the whole body of religious ideas becomes condensed into the belief in a single divine being, to whom the purposeful order of the universe is due, — a faith, to be sure, which

cannot preserve itself in a pure form, but is associated in various ways with its original presuppositions. The history of religion is the gradual transformation of polytheism into monotheism, and its result coincides with that teleological view of the world which Hume had developed as the view of the intelligent man, not, indeed, capable of scientific proof, but bound up with the natural feeling of belief.

This mode of apprehending the subject from the point of view of psychology and the history of civilisation was reinforced by that from the point of view of philology and the history of literature, which found expression in the *historical biblical criticism* founded by Salomon *Semler*. This began to carry out the thought formulated by Spinoza,[1] that the biblical books must be treated just as other writings as regards their theoretical contents, their origin, and their history; that they must be understood from the point of view of their time and the character of their authors. Semler directed particular attention to the point that the different parties of the early Christians find expression in the books of the New Testament. While it may be that the hypotheses to which he came in this respect have been left behind by later science, it is nevertheless true that a scientific way out of the radicalism into which the deistic movement had run was here shown, and Semler therefore raised his voice against the spokesmen of the Enlightenment.

Lessing took part in these questions from still another side. He was certainly not the man to make his conviction bend to a tenet; he saw through and rejected, as few others, the limitation which will find its sole truth in that which has been transmitted historically; but he guarded himself well from playing the judge, who now, after thousands of years, shall decide as to the genuineness of the three rings. But it is not merely this that separates him from the great mass of the Enlighteners; he is himself a deep, religious nature, and, like Herder,[2] sees in religion a living relation of man to God, and God to man. Hence *religion is not possible without revelation*, and the history of religions is the series of the revelations of God, is the *education of the human race* by God. Lessing assumes the well-planned succession of these revelations to be such,

[1] In what degree Spinoza's writings were known to the religious Enlighteners in Germany appears, among other things, from the interesting fact that Lorenz Schmidt, the leader of the Wertheim translation of the Bible, is the anonymous editor of a book in which, under the mask of a "Refutation of the Doctrine of Spinoza by the Famous Philosopher Christian Wolff," an excellent translation of Spinoza's ethics is offered, and finally only a few paragraphs from Wolff's German writings are appended (printed Frankfort and Leips. 1744).

[2] Cf. Herder's treatise on the *Aelteste Urkunde des Menschengeschlechts.*

that the deeper meaning of each is unfolded more clearly and distinctly in that which follows. So even the New Testament, the second elementary book, over which the more advanced scholar now "stamps and glows," gives us a premonition of an *eternal gospel.* In carrying out this thought of Origen's,[1] Lessing indicates in but a tentative manner indefinite lines which lie in the direction of a mystico-speculative interpretation of dogmas.

[1] *Education of the Human Race*, § 72 ff.

CHAPTER II.

PRACTICAL QUESTIONS.

THE natural religion of the eighteenth century sought in morals the support which a metaphysics of the natural-science sort could not permanently afford it. This was possible by reason of the fact, that in the meantime this branch also of philosophical investigation had won its complete independence of positive religion. And in fact, this freeing process, which had already begun in the train of the religiously indifferent metaphysics of the seventeenth century, had completed itself in a relatively speedy and simple manner. But the peculiar character of the new age asserted itself here also, in the very early transfer of the point of interest in these investigations to the *psychological* domain; and here philosophy encountered the literary inclination of the age, which was directed toward a profounder employment of man with himself, toward an overhauling of his feelings and an analysing of his motives, and toward the "sentimental" fostering of personal relations. The individual revelling in his own inner life, *the monad enjoying self*, is the characteristic phenomenon of the age of the Enlightenment. The individualism of the Renaissance, which in the seventeenth century had been repressed by external forces, now broke forth again with a more inward power from the stiff dignity of ceremonious, formal life: bounds were to be broken through, externalities cast away, and the pure, natural life of man brought out.

But the more important the individual thus became to himself, and the more many-sided his view in weighing questions regarding the import of his true happiness, the more morality, society, and the state became to him a problem. How comes the *individual* — so runs the fundamental practical question of the Enlightenment philosophy — to a life connected with others, which extends in influence and authority beyond the individual himself? Through all the animated discussions of these problems goes, as a tacit assumption, the view that the individual in his natural (as it was always conceived) determinate character is the original datum, is that which is self-

intelligible, and that all the relations which go beyond the individual are to be explained from him as a starting-point. In so far the naturalistic metaphysics of the seventeenth century — thought here more after the analogy of atomism, there more after that of the Monadology — forms the background for the morals of the eighteenth.

The constantly progressing process in which these presuppositions became more clear and distinct brought with it the result, that the *principles of ethics* found a valuable clearing up in the discussions of this period. For inasmuch as the ethical life was regarded as something added to the natural essence of the individual, as something that must first be explained, it was necessary, on the one hand, to establish by an exact discrimination what the thing to be explained really is, and on the other hand, to investigate on what the worth and validity of the ethical life rests: and the more morality appeared to be something foreign to the natural essence of the individual, the more the question as to the motives which induce man to follow ethical commands asserted itself, side by side with the question as to the ground of the validity of those commands. And so three main questions appeared, at the beginning much involved, and then becoming complicated anew: what is the content of morality? on what rests the validity of the moral laws? what brings man to moral action? The *principles of morals* are set forth according to the three points of view of the *criterion*, the *sanction*, and the *motive*. This analysis and explanation, however, showed that the various answers to these separate questions were capable of being combined with each other in the most various ways: so the clearing and separating process above named results precisely from the motley variety and changing hues exhibited by the doctrines of moral philosophy in the eighteenth century. *Shaftesbury* stands in the centre of the movement as the mind that stimulates in all directions and controls in many lines; while, on the other hand, the movement reaches no definite conclusion in this period, on account of the differences in the statements of the question (cf. § 39).

A typical feature of the fundamental individualistic tendency of this ethics was the repeatedly renewed consideration of the *relation of virtue and happiness:* the final outcome, expressed more or less sharply, was that the satisfaction of the individual's impulses was raised to be the standard of value for the ethical functions. The system of practical philosophy built up upon this principle is *Utilitarianism*, the varied development of which forms the centre in the complicated courses of these reflections.

But out of this arose the much more burning question, as regards the political and social order, — the question, namely, as to the *value*

for happiness of the social union, of public institutions and their historical development. That which exists and has come into being historically has lost once more its immediate validity and naïve valuation: it should justify itself before the critical consciousness, and prove its right to existence by the advantages which it yields for the happiness of individuals. From this point of view was developed the political and social philosophy of the eighteenth century; upon this standpoint this philosophy assumed its critical attitude toward historical reality, and in accordance with this standard, finally, it examined the results of the historical progress of human civilisation. The worth of *civilisation* itself and the *relation of Nature and history* became thus a problem which received its most impressive formulation from *Rousseau*, and which, in opposition to the movements excited by him, and in conjunction with the convulsions of the Revolution, gave form to the beginnings of the *Philosophy of History.*

§ 36. The Principles of Morals.

Fr. Schleiermacher, *Grundlinien einer Kritik der bisherigen Sittenlehre* (1803), W. W. III. Vol. 1.
H. Sidgwick, *The Methods of Ethics* (4th ed., Lond. and N.Y. 1890).
[J. Martineau, *Types of Ethical Theory*, Vol. II.]
[W. L. Courtney, *Constructive Ethics.*]

THE most fruitful incitements to the discussion of ethical problems proceeded in both positive and negative directions from *Hobbes.* The "selfish system" propounded by him extended its influence throughout the entire eighteenth century. It was carried out into all of its consequences, and was an ever-powerful stimulus to draw out opposing theories, which just for this reason were also dependent upon it. In a certain sense this is true of Cumberland, who indeed defended the validity of ethical laws as eternal truths in opposition to psychological relativity, and yet at the same time would have the *universal welfare* regarded as their essential and determining content.

1. The position of *Locke* with reference to these questions is still less definitely formulated than his attitude with regard to theoretical questions. No doubt the treatment of practical principles occupies almost the larger space in his attack upon "innate ideas," as is natural from the fact that his opposition is there directed against the Platonism of the Cambridge school. But the positive indications upon ethical subjects (and indeed there is nothing that goes beyond indications), which are found scattered through his

writings, do not in any important degree transcend mere psychologism. Locke regards the moral judgment as demonstrative knowledge, because it has for its object a relation, namely, the agreement or non-agreement of a man's action with a *law* ["conformity or disagreement men's voluntary actions have to a rule, to which they are referred, and by which they are judged of"].[1] Accordingly the *imperative* character seems essential for ethics. The existence of such norms, however, presupposes not only a law-giver, but also his power to visit obedience to his laws with a reward, and disregard of them with punishment; for only through the expectation of these consequences, Locke holds, can a law work upon the will.

If the philosopher was certain of not deviating from the "common sense" of the average man with such principles, he was equally secure in the three instances which he adduces of the law-giving authority, — public opinion, the state, and God. And in the highest of these instances he found again the point of attachment for the remnant of Cartesian metaphysics which his empiricism had preserved. For identically the same will of God is known by revelation and by the "natural light" (according to Locke's philosophy of religion; cf. § 35, 1). The law of God is the law of Nature. But its content is, that the order of Nature fixed by God attaches injurious consequences to certain actions, and useful consequences to others, and that *therefore* the former are forbidden, the latter commanded. Thus the moral law gains a metaphysical root without losing its utilitarian content.

2. The need of a *metaphysical basis of morals* asserted itself also in other forms, and in part in a still stronger degree, though it was common to the whole Cartesian school to regard right will as the necessary and inevitable consequences of right insight. In this respect Cartesianism was seconded by the whole throng of Platonists, who were so hostile to it in natural philosophy — at first, Henry More[2] and Cudworth,[3] later, especially, Richard Price.[4] They all proceeded from the thought that the moral law is given with the inmost nature of reality which has proceeded forth from God, and that it is therefore written with eternal and unchangeable letters in every reasonable being. With much enthusiasm but with few new arguments, they defended the Stoic-Platonic doctrine in its Christian-theistic transformation.

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[1] Cf. *Essay conc. Hum. Un.*, II. 28, 4 ff.
[2] *Encheiridion Ethicum* (1667).
[3] Whose *Treatise concerning Eternal and Immutable Morality* was first published by Chandler, in 1731.
[4] *Questions and Difficulties in Morals* (Lond. 1758).

This *intellectualism*, in connection with rationalistic metaphysics, took a direction that was widely removed from the Scotist recourse to the divine will which had been revived by Descartes and still more by Locke, and instead of this proceeded to determine the content of the moral law solely by metaphysical relations, and, accordingly, in the last instance, by logical criteria. Just in this appeared its contrast to all the psychologically influenced theories, which, in some form or other, always returned to feelings of pleasure and pain as the central nerve of ethical determinations. This is clearest in the case of *Clarke*, who professed to find the objective principle of morals in the "fitness" of an action to its determining relations, and who claimed for the knowledge of this fitness a self-evidence analogous to the knowledge of mathematical truth, and in the Cartesian spirit was convinced that the feeling of obligation, by which the will is determined to the appropriate action, develops inevitably from such an insight into the fitness of things. Ethical inferiority, accordingly, appeared quite in the ancient fashion (cf. § 7, 6) to be the result of ignorance or of erroneous opinion. *Wollaston*, stimulated by Clarke, gave to the same thought the turn, that since every action involves a (theoretical) judgment as to its underlying relations, the decision as to whether the act is right or wrong in the ethical sense depends upon the rightness (correctness) or wrongness of this judgment.

3. Pierre *Bayle* takes a peculiar position with reference to these questions: he supports a *rationalism without any metaphysical background*. In his case the interest of fixing morals upon a firm basis, as opposed to all dependence upon dogmatic doctrines, was active in the strongest and most radical manner. While in declaring metaphysical knowledge in general to be impossible he opposed the rational grounding of natural religion as well as that of positive dogma, he yet gave back with full hands to the "reason" in the practical domain what he had taken from it in the theoretical realm. Incapable of knowing the essence of things, the human reason is, according to him, completely furnished with the consciousness of its duty: powerless without, it is complete master of itself. What it lacks in science it has in conscience: a knowledge of eternal and unchangeable truth.

The ethical reason, Bayle holds therefore, remains everywhere the same, however different men, peoples, and times may be in their theoretical insight. He teaches for the first time with clear consciousness the *practical reason's complete independence of the theoretical;* but this, too, he is glad to bring to its sharpest point with reference to theology. Revelation and faith are regarded by him in

the Catholic manner as essentially theoretical illumination, and just on this account they seem to him to be indifferent for morality. He admired the ethical excellence of ancient heathenism, and believed in the possibility of a morally well-ordered community of atheists. While, therefore, his theoretical scepticism might seem favourable to the Church, his moral philosophy was necessarily attacked as her most dangerous foe.

If the ethical principles were in this discussion proclaimed by Bayle also as "eternal truths," he did it in the original Cartesian sense, where interest centered not so much about the psychological question of innateness, as rather about the epistemological point of view of immediate evidence not brought about through the medium of logic. In this sense the virtual innateness of ethical truths was held of course by *Leibniz*, and it was in the spirit of both that *Voltaire*, who approached Bayle's standpoint the more in proportion as his attitude toward metaphysics became more sceptical (cf. § 35, 5), said of the ethical principles that they were innate in man just as his limbs were: he must learn to use both by experience.

4. Bayle very likely had the support of general opinion when he ascribed to the ethical convictions a worth exalted above all change and all difference of theoretical opinions; but he was successful, perhaps, just because he treated those convictions as something known to all, and did not enter upon the work of bringing their content into a system, or of expressing them as a unity. Whoever attempted this seemed hardly able to dispense with a principle taken either from metaphysics or from psychology.

Such a determination of the conceptions of morality by a principle was made possible by the metaphysics of *Leibniz*, though it was only prepared by him incidentally and by way of indications, and was first carried out by Wolff in systematic, but also in cruder forms. The Monadology regards the universe as a system of living beings, whose restless activity consists in unfolding and realising their original content. In connection with this Aristotelian conception the Spinozistic fundamental idea of the "*suum esse conservare*" (cf. § 32, 6) becomes transformed into that of a purposeful vocation or destiny, which Leibniz and his German disciples designated as *perfection*.[1] The "law of Nature," which for this ontology also is coincident with the moral law, is the striving of all beings toward perfection. Since now every process of perfecting, as such, is connected with pleasure, and every retrogression in life's development with pain, there follows from this the ancient identification of the ethically good with well-being or happiness.

[1] Leibniz, *Monad.* 41 ff.

Natural law, therefore, demands of man that he should do all that serves his perfection, and forbids all that threatens to bring him loss in his perfection. From this thought Wolff develops the whole system of duties, bringing to his aid especially the principle of mutual furtherance: man needs for his own perfecting other men, and works toward his own perfection in helping them toward the fulfilment of their vocation. In particular, however, it followed from these premises that man must know what truly conduces to his perfecting; for not all that is momentarily felt to be a furtherance of life proves truly and permanently a step toward perfection. Hence morality is throughout in need of ethical knowledge, — of right insight into the nature of man and things. From this point of view the *enlightenment or "clearing up" of the understanding* appears the *pre-eminent ethical task*. With Leibniz this follows immediately from the conception of the monad.[1] The monad is the more perfect, — and perfection Leibniz defines in genuine scholastic fashion as *grandeur de la réalité positive*, — the more it shows its activity in clear and distinct representations; the natural law of its development is the clearing up of its original obscure representative content (cf. § 31, 11). Wolff's circumstantial deduction takes rather the form of pointing out in experience the useful consequences of knowledge. It remains thus quite within the setting of the homely aim which the German teacher-philosopher (*Kathederphilosoph*) set before his scientific work, viz. to make philosophy usable and practically efficient, by clearness of conceptions and plainness of proofs.

5. This tendency Wolff had adopted from his teacher *Thomasius*, the father of the Enlighteners, a man who was indeed wanting in the pre-eminence that characterised the mind of Leibniz, but was given all the more an understanding for the wants of his time, a capacity for agitation, and a spirit for efforts toward the public good. Intellectual movements of the Renaissance that had been checked in the seventeenth century revived again at its close. Thomasius would transplant philosophy from the lecture hall into real life, — put it into the service of the general weal; and since he understood little of natural science, his interest turned toward criticism of public institutions. Reason only should rule in the life of the whole, as well as in that of the individual: so he fought honourably and victoriously against superstition and narrowness, against torture and witch-trials. Enlightenment in the sense of Thomasius is hence far from having the metaphysical dignity which Leibniz gave it. It gains its value for individuals and for society first by the uses which it yields and which can be expected from it alone.

[1] Cf. Leibniz, *Monad.* 48 ff.

Perfection and *utility* are accordingly the two characteristics which with Wolff make *Enlightenment* an ethical principle. The former comes out more strongly in connection with the general metaphysical basis; the latter in the particular building out of the system. And in the same way this duality of criteria goes through Wolff's school and the whole popular philosophy, — only, the more superficial the doctrines become, the broader the space taken by utility. Even *Mendelssohn* gives as the reason for turning aside from all deeper and more refined subtilty, that philosophy has to treat only just so much as is necessary for man's happiness. But because this eudæmonism of the Enlightenment had from the outset no higher point of view than that of the education and welfare of the average man, it fell into another limitation, the most jejune philistinism and sensible, prosaic commonplace. This might be in place and most beneficial in effect in a certain stratum of popular literature, not high, indeed, but broad; but when such a success on the part of the Enlighteners "went to their heads," when they applied the same measuring rod to the great phenomena of society and history, when this excessive pride of the empirical understanding would allow nothing to stand except what it had known "clearly and distinctly," then the noble features of the Enlightenment became distorted to that well-intentioned lack of comprehension, as type of which *Friedrich Nicolai*, with all his restless concern for the public good, became a comic figure.[1]

6. The great mass of the German Enlighteners did not suspect how far they were wandering from the living spirit of the great Leibniz with this dry utility of abstract rules. Wolff, indeed, had already let the pre-established harmony fall metaphysically also, and so proved that the finest meaning of the Monadology had remained hidden from him. Hence he and his successors had no comprehension for the fact, that Leibniz's principle of perfection made the *unfolding of the content of the individual life* and the shaping out of its dimly felt originality, the task of the ethical life, in the same degree as his metaphysics asserted the peculiar nature of each individual being in the face of all others. This side of the matter first came into power in Germany, when the period of genius dawned in literature, and the passionate feeling of strongly individual minds sought its own theory. The form which it then found in Herder's treatises, and likewise in Schiller's *Philosophical Letters*, was, however, much more strongly determined by another doctrine

[1] Cf. Fichte, *Fr. Nicolai's Leben und sonderbare Meinungen* (1801), W. W. VIII. 1 ff.

than it was by Leibniz, — by a doctrine which, in spite of the difference in the conceptions in which it was carried out, had in its ethical temper the closest relationship with that of the German metaphysician.

Shaftesbury had given to the idea of perfection a form that was less systematic but all the more impressive and clear to the imagination. The ancient conception of life, in accordance with which morality coincides with the undisturbed unfolding of man's true and natural essence, and therefore with his true fortune, was directly congenial to him and became the living basis of his thought. Hence, with Shaftesbury, the ethical appears as the truly human, as the flower of man's life, as the complete development of his natural endowments. In this is fixed at the outset Shaftesbury's attitude toward Cumberland and Hobbes. He cannot, like the latter, regard egoism as the sole fundamental characteristic of the natural man; he rather agrees with the former in recognising the altruistic inclinations as an original inborn endowment. But neither can he see in these inclinations the sole root of morality; to him morality is the completion of the entire man, and therefore he seeks its principle in symmetrical development and in the harmonious interaction of the two systems of impulses. This theory of morals does not demand the suppression of one's own weal in favour of that of others; such a suppression appears to it to be necessary only in the lower stages of development: the fully cultivated man lives as truly for himself as for the whole,[1] and just by unfolding his own individual character does he set himself as a perfect member in the system of the universe. Here Shaftesbury's optimism expresses itself most fully in his belief, that the conflict between the egoistic and the altruistic motives, which plays so large a part in the lower strata of humanity, must be completely adjusted in the ripe, mature man.

But for this reason the ethical ideal of life is with this thinker an entirely *personal* one. Morality consists for him, not in the control of general maxims, not in the subordination of the individual's will to norms or standards, but in the rich and *full living out of an entire individuality*. It is the sovereign personality which asserts its ethical right, and the highest manifestation in the ethical realm is the *virtuosoship*, which allows none of the forces and none of the lines of impulse in the individual's endowment to be stunted,

[1] Pope compared this relation with the double motion of the planets about the sun and their own axes (*Essay on Man*, III. 314 ff.). Moreover, it was through the same poet that Shaftesbury's theory of life worked on Voltaire, while Diderot (in his work upon the *Inquiry concerning Virtue and Merit*) attached himself directly to Shaftesbury.

but brings all the manifold relations into harmony in a perfect conduct of life, and thus brings about both the individual's happiness and his most efficient working for the welfare of the whole. Thus the Greek ideal of the *kalokagathia* finds a new expression in the *Weltanschauung* of the Monadology (cf. § 7, 5).

7. While the moral principle has thus with Shaftesbury already received an æsthetical colouring in its contents, this colouring appears consistently in a yet stronger degree when he deals with the question as to the *source of knowledge* for ethical tasks. This source, by metaphysicians and sensualists alike, was found in rational knowledge either of the nature of things or of the empirically useful: in both cases principles resulted that were capable of demonstration and universally valid. The morals of virtuosoship, on the contrary, must take its individual life-ideal from the depths of the individual nature; for it morality was grounded upon *feeling*. The ethical judgments by which man approves those impulses which Nature has implanted within him to further his own and others' weal, or, on the other hand, disapproves the "unnatural" impulses that work against those ends, — these judgments rest on man's ability to make his own functions the object of study, *i.e.* upon "reflection" (Locke); they are not merely, however, a knowledge of one's own states, but are *emotions of reflection*, and as such they form within the "inner sense" the *moral sense*.

Thus the psychological root of the ethical was transplanted from the field of intellectual cognition to the feeling-side of the soul, and set in the immediate vicinity of the æsthetic. The good appeared as the beautiful in the world of will and action: it consists, like the beautiful, in a harmonious unity of the manifold, in a perfect development of the natural endowments; it satisfies and blesses as does the beautiful; it is, like the beautiful, the object of an original *approval* fixed in man's deepest nature. This parallel ruled the literature of the eighteenth century from Shaftesbury on: "taste" is the fundamental faculty ethically as æsthetically. This was perhaps most distinctly expressed by *Hutcheson*, but with a turn which to some degree led away again from Shaftesbury's individualism. For he understood by the "moral sense" — in the purely psychological meaning of "innateness" — an original faculty, essentially alike in all men, and with the function of judging what is ethically to be approved. The metaphysical accessories of the Platonists and Cartesians were gladly thrown overboard, and in their stead he held fast the more eagerly — especially in opposition to the "selfish system" — to the principle that man possesses a *natural feeling for the good as for the beautiful*, and declared the analysis of this feeling to be the business of philosophy.

The carrying over of this principle into the theoretical domain led in the *Scottish School* (cf. § 33, 8) to making the True parallel with the Good and the Beautiful, as the object of original approval, and thus assuming in "common sense" a kind of "logical sense." But the principle of *feeling as source of knowledge* was proclaimed in a far more pronounced manner by *Rousseau*, who based his deism upon the uncorrupted, natural feeling[1] of man, in opposition to the cool intellectual analysis with which the purely theoretical Enlightenment treated the religious life. This *feeling-philosophy* was carried out in a very indefinitely eclectic manner by the Dutch philosopher, Franz *Hemsterhuys* (of Groeningen, 1720–1790), and with quaint singularity by the talented enthusiast, *Hamann*, the "Wizard of the North." [2]

8. It was, however, in the *fusion of ethical and æsthetic investigations* that the above theory of the feelings, prepared by Shaftesbury and Hutcheson, made its influence most felt. The more the eudæmonistic morals was treated in a manner intelligible to the common mind, the more convenient it was for it to be able to invest the moral commands, as the object of a natural pleasure, with the garb of grace and attractiveness, and to be permitted to commend the good to the taste as something akin to the beautiful. The *Scottish School*, also, was not far from this mode of view, and *Ferguson* developed Shaftesbury's ideas in this manner with especial reference to the Leibnizian fundamental conception of perfection. The effect of this complication of thought for *æsthetics*, however, was that the beginnings toward a metaphysical treatment, which Shaftesbury had brought to the problems of the beautiful from the system of Plotinus, became completely overshadowed by the psychological method. The question asked was not, what the beautiful is, but how the feeling of the beautiful arises; and in the solution of this question the explanation of the æsthetic was brought into more or less close connection with ethical relations. This shows itself, too, in the case of those writers upon æsthetics who stood closer to the sensualistic psychology than did the Scots. Thus Henry *Home* conceives of the enjoyment of the beautiful as a transition from the purely sensuous pacification of desires to the moral and intellectual joys, and holds that the arts have been "invented" for that refinement of man's sensuous disposition which is requisite for his higher

[1] Cf. the creed of the Savoyard Vicar in *Émile*, IV. 201 ff.

[2] Johann Georg *Hamann* (of Königsberg, 1730–1788; collected writings ed. by Gildemeister, Gotha, 1857–73) combines this line of thought with a pietism not far removed from orthodoxy in his thoughtful, but illogical and unclear form of expression.

destiny. He seeks, therefore, the realm of the beautiful in the higher senses, hearing and especially sight, and finds as the basis, a taste common to all men for order, regularity, and combination of the manifold into a unity. When he then further distinguishes between the "intrinsic" beauty which is immediately an "object of sense," and the beauty of "relation," these relations look essentially toward what is for the common good ethically, in the service of which beauty is thus placed.[1] Even Edmund *Burke*, in his effort to derive the æsthetic from elementary states of sensation in accordance with the method of *associational psychology*, is very strongly dependent upon the form given to the problems by contemporary moral philosophy. His attempt to determine the *relation of the beautiful to the sublime* — a task at which Home, also, had laboured, though with very little success[2] — proceeds from the antithesis of the selfish and the social impulses. That is held to be sublime which fills us with terror in an agreeable shudder, "a sort of delightful horror," while we are ourselves so far away that we feel removed from the danger of immediate pain: that is beautiful, on the contrary, which is adapted to call forth in an agreeable manner the feelings either of sexual love or of human love in general.

In a manner similar to that of Home, *Sulzer* placed the feeling of the beautiful midway between that of the sensuously agreeable and that of the good, forming thus a transition from the one to the other. The possibility of this transfer he found in the intellectual factor which co-operates in our apprehension of the beautiful: it appeared to him — following the view of Leibniz (cf. § 34, 11) — as the feeling of harmonious unity in the manifold perceived by the senses. But just by reason of these presuppositions, the beautiful was for him valuable and perfect only when it was able to further the moral sense. Art, also, is thus drawn into the service of the morals of the Enlightenment, and the writer on æsthetics, who was so long celebrated in Germany, shows himself but a mechanical handicraftsman of Philistine moralising in his conception of art and its task. How infinitely freer and richer in *esprit* are the "Observations" which *Kant* instituted "concerning the Feeling of the Beautiful and the Sublime," at the time when he, too, pursued, from the psychological standpoint, and with admirable knowledge of the world, the

[1] For more detailed treatment, see the art. *Home* (Kames) by W. Windelband in *Ersch und Gruber's Enc.*, Vol. II. 32, 213 f.

[2] According to Home the beautiful is sublime if it is great. The antithesis between the qualitatively and the quantitatively pleasing seems to lie at the basis of his unclear and wavering characterisations.

fine ramifications of the ethical and æsthetic life in individuals, families, and peoples!

Finally these thoughts gave occasion in Germany to a change in psychological theory that was rich in results. Before this it had been the custom to divide the psychical activities according to the Aristotelian example into theoretical and practical. But now the feelings, which became thus recognised in their various significance, seemed incapable of being brought either into the group of knowing, or into that of willing, without disadvantage; it seemed rather that the feelings, as a peculiar mode of expression, in part lay at the basis, and in part followed, both of the above functions of the soul. Here, too, the suggestion came from the Leibnizian Monadology. *Sulzer*, in his Berlin lectures,[1] seems first to have pointed out that the obscure, primitive states of the monad should be separated from the developed forms of life seen in completely conscious knowing and willing, and he already found the distinguishing characteristic of these obscure states to be the conditions of pleasure and pain given with them. This was done also, in a similar way, from Leibnizian presuppositions by Jacob Friedrich *Weiss*.[2] Mendelssohn (1755) first named these states *Empfindungen*[3] [sensations], and later the same author designated the psychical power, which lies at their common basis, as the *faculty of approval* (*Billigungsvermögen*).[4] But the decisive influence on terminology was exercised by *Tetens* and *Kant*. The former substituted for sensations (*Empfindungen*) the expression *feelings* (*Fühlungen* or *Gefühle*),[5] and Kant used the latter almost exclusively. It was he, too, who later made the *triple division of the psychical functions into ideation, feeling, and willing* (*Vorstellen, Fühlen, und Wollen*) the systematic basis of his philosophy,[6] and since then this has remained authoritative, especially for psychology.

9. The counter-current, which proceeded from *Hobbes* and declared the profit or injury of the individual to be the sole possible content of the human will, maintained itself in the face of all these developments. In this theory, the criterion of ethical action was sought in a purely psychological manner in the *consequences* of such action

[1] 1751 f. Printed in the *Vermischten Schriften* (Berlin, 1773).
[2] J. F. Weiss, *De Natura Animi et potissimum Cordis Humani* (Stuttgart, 1761).
[3] In this Mendelssohn, with his *Letters concerning the Sensations*, refers directly to Shaftesbury.
[4] Cf. Mendelssohn, *Morgenstunden*, 1785, ch. 7 (W. I. 352).
[5] Cf. Tetens, *Versuche*, X. pp. 625 ff.
[6] In the article written between 1780 and 1790 designed at first as an introduction to the *Critique of Judgment* which has passed over into his writings under the title *Ueber Philosophie überhaupt*. Cf. Pt. VI. ch. 1.

for the *advantage of our fellow-men*. Morality exists only within the social body. The individual, if by himself and alone, knows only his own weal and woe; but in society his actions are judged from the point of view of whether they profit or injure others, and this alone is regarded as the standpoint of ethical judgment. This conception of the ethical criterion corresponded not only to the common view, but also to the felt need of finding for ethics a basis that should be destitute of metaphysics, and rest purely on empirical psychology. Cumberland and Locke even acceded to it in the last resort, and not only the theological moralists like Butler and Paley, but also the associational psychologists like Priestley and Hartley, attached themselves to it. The classical formula of this tendency was gradually worked out. An action is ethically the more pleasing in proportion as it produces more happiness, and in proportion as the number of men who can share this happiness becomes greater: the ethical ideal is *the greatest happiness of the greatest number*. This became the watch-word of *Utilitarianism*.

This formula, however, suggested the thought of determining *quantitatively* the ethical values for individual cases and relations. The thought of Hobbes and Locke, of grounding a knowledge of a strictly demonstrative ethics upon the utilitarian principle, seemed thereby to have found a definite form, welcome to the natural-science mode of thinking. This enticement was pursued by *Bentham*, and in this consists the peculiar element of utilitarian thought as carried out by him, — a work which he performed with a warm feeling for the public good, and which was later much referred to. The point is to find exact, definite points of view, according to which the value of every mode of action for the weal of the actor himself and of the community to which he belongs, can be determined, — partly in itself, partly in its relation to other modes of conduct; and Bentham in this table of values and their opposites, with an extensive consideration of both individual and social relations and needs, sketches a scheme of a pleasure and pain balance for reckoning the useful and injurious consequences of human activities and institutions. As with Hume (cf. below, No. 12), the reckoning of the ethically valuable falls to the province of the measuring intellect; but the factors with which it operates in this process are solely the feelings of pleasure and pain.

10. The close connection in which this utilitarianism stood historically after Hobbes with the selfish system — that is, with the assumption of the essentially egoistic character of human nature — led necessarily to the separation of the question as to the criterion of morality and the kind of knowledge by which it is apprehended,

from that as to the sanction of the moral commands and the motives for obeying them. For the metaphysical theories, the sanction of the ethical commands lay in the eternal truths of the law of Nature: and psychologically, also, there seemed to be no further and especial motive needed for the effort toward perfection, for the living out of the personality, for the following of innate ethical inclinations; morality was self-explaining under such presuppositions. But he who thought more pessimistically of man, he who held him to be a being determined originally and in his own nature solely by regard to his own weal or woe, — he must ask with what right an altruistic way of acting is required of such a being, and by what means such a being can be determined to obedience to this requirement. If morality was not of itself inherent in man's nature, it must be declared how it comes into him from without.

Here, now, the principle of *authority*, already adduced by Hobbes and Locke, performed its service. Its most palpable form was the *theological;* it was carried out with more finely wrought conceptions by *Butler*, and in a crude manner, intelligible to the common mind, by *Paley*. Utility is for both the criterion of ethical action, and the *divine command* is for both the ground of the ethical requirements. But while Butler still seeks the knowledge of this divine will in the natural conscience — his re-interpretation of Shaftesbury's emotions of reflection, for which he himself uses also the term "reflection" — for Paley, it is rather the positive revelation of the divine will that is authoritative; and obedience to this command seems to him explicable only because the authoritative power has connected its commandment with promises of reward and threatenings of punishment. This is the sharpest separation of ethical principles, and that perhaps which corresponds most to the "common sense" of the Christian world. The criterion of the moral is the weal of one's neighbour; the ground of our knowledge of the moral is the revealed will of God; the real ground which supplies the sanction is the will of the Supreme Being; and the ethical motive in man is the hope of the reward, and the fear of the punishment, which God has fixed for obedience and disobedience.

11. Paley thus explained the fact of ethical action by the hypothesis that man, in himself egoistic, is brought at last by the agency of the equally egoistic motives of hope and fear, and by the roundabout way of a theological motivation, to the altruistic mode of action commanded by God. The *sensualistic psychology* substituted for the theological agency the authority of the state and the constraining forces of social life. If the will of man is in the last resort always determinable only by his own weal and woe, his altruistic action is comprehensible only on the supposition that he sees in it the surest, simplest, and most intelligent means under the given relations for bringing about his own happiness. While, therefore, the theological utilitarians held that the natural egoism should be tamed by the rewards of heaven and punishments of hell, it seemed to the empiricists that the order of life arranged by the state and society was sufficient for this purpose. Man finds himself in such relations that when he rightly reflects he sees that he will find his own advantage best by subordination to existing morals and laws. The sanction of ethical demands lies, accordingly, in the legislation of the state and of public morality which is dictated by the principle of utility, and the motive of obedience consists in the fact that each one thus finds his own advantage. Thus *Mandeville*, *Lamettrie*, and *Helvétius* developed the "selfish system"; Lamettrie, especially, with tasteless cynicism that savoured of a desire for admiration, seeking to exhibit "hunger and love" in their lowest sensuous meaning as the fundamental motives of all human life — a wretched, because artificial, imitation of ancient Hedonism.

Morality, accordingly, appears to be only eudæmonistic shrewdness, the polished egoism of society, the refined cunning of the man who is familiar with life, and has seen that to be happy he can pursue no better path than to *act* morally, even if not to *be* moral. This view frequently finds expression in the Enlightenment philosophy as the governing principle of "the world" of that day: whether it be as the naïve, cynical confession of a writer's own disposition, as in Lord *Chesterfield's* well-known letters to his son, — or in the form of moralising reflections, as in *Labruyère's* "*Caractères*" (1680), and in *La Rochefoucauld's* "*Réflections*" (1690), where the mask is unsparingly torn off from man's ethical behaviour, and naked egoism is disclosed as the sole impelling motor everywhere, — or finally as bitter satire, as with *Swift*, where the true nature of the human beast is finally discovered by Gulliver among the Yahoos.

Hand in hand with this gloomy conception of the natural meanness of man the view goes through the age of the Enlightenment that man's education to ethical action has to appeal to just this low system of impulses, working through power and authority, with the aid of fear and hope. This shows itself characteristically even with those who claim for the mature and fully developed man, a pure morality raised above all egoism. So, for example, Shaftesbury finds positive religion with its preaching of rewards and punishments quite good enough for the education of the great mass. So,

too, Prussia's philosophical king *Frederick* the Great,[1] who for himself had a consciousness of duty so strict and pure and free from all selfish considerations, and declared such to be the highest ethical good, yet thought that in the case of the education which the state gives to men it should start with their closest interests, however low these might be; for he granted to the Encyclopædists that man as a genus is never to be determined by anything else than by his own personal interests. In this respect the French Enlighteners, especially, sought to analyse the motives, by awakening which the state can win the citizens to care for the interests of the whole. *Montesquieu* showed with fine psychology how different the forms are which this relation takes under different forms of constitution. Lamettrie pointed, as Mandeville had already done, to the sense of honour or repute as the most powerful factor in the social sentiment among civilised peoples, and Helvétius carried out this thought farther.

But if the sensualistic psychology thus looked for man's ethical education from the state alone, the degree of success with which this was accomplished must serve as a standard for estimating the value of public institutions. This consequence was drawn by *Holbach*, and the most winning feature of this dry book is perhaps the honourableness and energy with which it tries to show how little the rotten conditions of the public life of that time were adapted to raise the citizen above the meanness of selfish endeavours.

12. *Hume's* moral philosophy may be regarded as the most complete embodiment of this movement, and as the most refined consideration of the motives that contend within it. It, too, stands completely upon the basis of the psychological method: man's ethical life is to be understood by a genetic investigation of his passions, feelings, and volitions. The most significant element in Hume's teaching is the separation of utilitarianism from the selfish system. The criterion of ethical approval and disapproval is, for him, too, the effect which the quality or action to be judged is adapted to produce in the form of feelings of pleasure and pain, and, like the ancients and Shaftesbury, he interprets this in the widest sense, inasmuch as he regards as objects of ethical pleasure, not only the "social virtues," such as justice, benevolence, etc., but also [illegible] natural abilities,"[2] such as prudence or sagacity, fortitude, energy, etc. But we feel this approval, even when these qualities

[1] Cf. especially what is adduced by E. Zeller, *F. d. G. als Philosoph*, pp. 67 ff., 105 ff., and also especially Frederick's "*Antimacchiavelli*."

[2] Here, too, the old ambiguity of *virtus* (virtue) = moral virtue, and also ability or excellence, plays a part.

are completely indifferent to our own welfare, or indeed even injurious to the same; and this cannot possibly be traced back to egoism through the medium of mere psychological association. On the other hand, the relation which these judgments sustain to the complicated relations of experience forbids the assumption of their innateness. They must rather be reduced to a simple, elementary form, and this is *sympathy*,[1] *i.e.* primarily our capacity to *feel with* another his weal or woe as our own, at least in a weakened form. Such sympathetic feelings, however, are not only the impulsive grounds of moral judgments, but also the original motives of moral action, for the feelings are the causes of the decisions of the will. Still, these original impulses alone are not adequate to explain ethical judgment and action. For the more complicated relations of life, there is need of a clarification, ordering, and comparative valuation of the factors of feeling, and this is the business of *reason*. From the reflection of reason arise, therefore, in addition to the natural and original values, derivative "artificial" virtues, as the type of which Hume treats justice and the whole system of standards of rights and law — in this, evidently, still dependent upon Hobbes. But in the last resort these principles, also, owe their ability to influence judgment and volition, not to rational reflection as such, but to the feelings of sympathy to which this appeals.

Thus the crude conception of a "moral sense" is refined by Hume's investigation to a finely articulated system of moral psychology with its carefully differentiated conceptions, as the centre of which we find the principle of sympathy. A farther step in carrying out this same theory was taken in the ethical work of Adam *Smith*. As against the externality with which ordinary utilitarianism had placed the criterion of ethical judgment in the pleasurable or painful consequences of the act, Hume had energetically directed attention to the fact, that ethical approval or disapproval concerns rather the *disposition* manifesting itself in the action, in so far as this aims at the consequences in question. Hence Smith found the essence of sympathy, not only in the capacity of feeling these consequences with the one who experiences them, but also in the ability to transfer one's self into the disposition or sentiment of him who acts, and to feel his motives with him. And extending farther and farther the thought of transfer through sympathy, the judgment which the individual pronounces upon himself in the *conscience* is then conceived as a reflex, mediated through

[1] Cf. *Treatise*, II. 1, 11, and II. 2, 5.

feelings of sympathy, of the judgment which he receives from others and exercises upon others.

All phenomena of the ethical life are thus rooted, according to Hume and Smith, in the *social life*, whose psychological basis is sympathy, and the founder of political economy, with his great philosophical friend, sees in the mechanism of sympathetic transfers of feeling an adjustment of individual interests similar to that which he believed himself to have discovered in the realm of the exchange of external goods, which is conducted with reference to the straitness of the conditions of life, in the mechanism of supply and demand in connection with the competition of labour.[1] But with these insights into the thoroughgoing dependence of the individual upon a social body, which he does not create, but in which he finds himself actually placed, the philosophy of the Enlightenment is already pointing beyond itself.

§ 37. The Problem of Civilisation.

The fundamental thought, which the philosophy of the Enlightenment would hold as to the great institutions of human society and its historical movement, was prescribed for it in advance, partly by its dependence upon natural-science metaphysics, and partly by its own psychological tendency. This was to see in these institutions the products of the activities of individuals; and from this followed the tendency to single out those interests whose satisfaction the individual may expect from such general social connections when once these exist, and to treat them in a genetic mode of explanation as the motives and sufficient causes for the *origin* of the institutions in question, while at the same time regarding them from a critical point of view, as the standard for estimating the *value* of the same. Whatever was regarded as having been intentionally created by men should show also whether it was then really fulfilling their purposes.

1. This conception was guided into the political and juristic track primarily by *Hobbes*. The state appeared as the work of individuals, constructed by them under the stress of need, when in a condition of war with each other and in fear for life and goods. With its whole system of rights, it was regarded as resting upon the *compact* which the citizens entered into with each other from the above motives. The same Epicurean compact-theory, which had revived in the later Middle Ages, passed over with Nominalism into modern philosophy

[1] *Inquiry into the Nature and Causes of the Wealth of Nations* (Lond. 1776).

and extended its influence over the whole eighteenth century. But the artificial construction of absolutism, which Hobbes had erected upon it, gave place more and more in consequence of political events to the doctrines of *popular sovereignty*. This lay at the basis of the English Constitution of 1688, as well as at that of the theoretical shaping which *Locke* gave the same in his doctrine of the separation and equilibrium of the three departments of the state, the legislative, executive, and federative. It controlled, also, as an ideal requirement, the writings of Montesquieu, who, in considering the rotten administration of law at his time, would have complete independence given to the judicial power, while he thought of the executive and federative departments (as administration within and without, respectively) as united in the one monarchical head. It was finally carried out to a complete system of democracy in *Rousseau's Contrat Social*, in which the principle of transfer and representation was to be limited as much as possible, and the exercise of the sovereignty also to be assigned directly to the whole body of the people. In all these transformations of the doctrine of Hobbes, the influence of the realities of historical politics is obvious, but the antithesis between Hobbes and Rousseau has also its theoretical background. If man is regarded as by nature essentially egoistic, he must be compelled to keep the social compact by the strong arm of the state: if he is regarded as originally good and social in his feelings, as by Rousseau, it is to be expected of him that he will of himself always take part in carrying out, in the interest of the whole, the life prescribed by the compact.

It is interesting now to see that the compact-theory in the eighteenth century communicated itself also to those theories of the philosophy of right which did not have a merely psychological basis. The "*natural right*" of this time proceeds also from the right of the individual, and seeks to derive from this the rights of individuals in their relation to each other. Yet in carrying out this principle two different tendencies show themselves in German philosophy, leading to results that were extremely characteristic in their differences. Leibniz had derived the conceptions of right (or law) from the most general principles of practical philosophy, following the example of the ancients.[1] Wolff followed him in this respect also, but made it on this account the end of the political compact to secure the mutual furtherance of individuals in behalf of their mutual perfecting, enlightening, and happiness; according

[1] Cf. his introduction to the *Codex Juris Gentium Diplomaticus* (1693), Works (Erd.), 118 ff.

to him, therefore, the state has to care, not merely for external safety, but also for the general welfare in the broadest extent. The consequence of this is that Wolff assigns to the state the right and duty of a thorough tutelage of the great mass of unenlightened men who are controlled by error and passion, and of intermeddling even in their private relations in the way of education. Thus Wolff gave the theory for that "paternal" despotism of the benevolent police-state under which the Germans of his time lived with very mixed feelings.

The exactly opposite result attached itself theoretically to the separation of the philosophy of right from morals, for which the way had already been prepared by *Thomasius*, with his sharp parting of the *justum* and the *honestum*. In this line the disciple of Thomasius, *Gundling* (1671–1729), maintained that *right or law was to be treated solely as the ordering of the external relations* of individuals, that it has for its end the preservation of peace without, and therefore its decrees can be enforced only as to outward relations. This limitation of the state's activity to the external protection of law evidently corresponded most fully to the dualistic spirit of the Enlightenment. If the individual has conformed to the political compact only from need and want, he will evidently be inclined to make as few concessions to the state as possible, and will be willing to sacrifice to it of his original "rights" only so much as is unconditionally requisite for the end which it is to fulfil. This was not merely the thought of the Philistine citizen, who is indeed ready to call for the police at once when anything is the matter, but privately regards the order of the laws as an enemy that must be kept from his throat as much as possible; it was also the feeling of the Enlightener of high intellectual development, who had for his rich inner life only the interest of being able to devote himself unmolested to the enjoyments of art and science. In fact, the petty spirit of the small German states, with its lack of ideals, must necessarily produce the indifference toward public life which thus found its theoretical expression. The lowest stage which the depreciation of the state reached in this respect among the cultured classes is perhaps best characterised by *William von Humboldt's* "Ideas toward an Attempt to determine the Bounds of the Operation of the State."[1] Here every higher interest of man is carefully excluded from the province of the state's authority, and the task of public government is restricted to the lower service of protecting the life and property of the citizen.

[1] Written 1792, published 1851 by E. Cauer.

2. If in this respect German philosophy remained quite indifferent toward the actual political condition, on the other hand, there appeared in it also the general tendency of the Enlightenment to order the life of society, as that of the individual, according to the principles of philosophy. If it is glory enough for this period to have successfully cleared away much historical lumber that had accumulated in the house-keeping of European peoples, Thomasius and Wolff, Mendelssohn and Nicolai, certainly deserve credit for their share in the work (cf. § 36, 5). But this side of the matter came forward in an incomparably more powerful and efficient degree with the *French* Enlighteners. It is enough here to recall *Voltaire*, who appeared as a literary power of the first rank, working unweariedly and victoriously for reason and justice. But the contest which he carried on to a certain extent before the bar of public opinion of all Europe was taken up in detail by his fellow-countrymen, in a criticism of social institutions and by proposals for their improvement: in a broad and often passionate discussion philosophical reflection proceeds to the task of reforming the state. And here the weakness of the Enlightenment at once appears side by side with its strength. As always, it takes the standards of its criticism for existing institutions, and of its proposals for their change, from the universal, eternal nature of man or of things; thus it loses from sight the authorisation and vital force of historical reality, and believes that it is only needed to make a *tabula rasa* of the existing conditions wherever they show themselves contrary to reason, in order to be able to build up society entire in accordance with the principles of philosophy. In this spirit the literature of the Enlightenment, especially in France, prepared for the actual *break with history*, — the *Revolution*. Typical in this was the procedure of Deism which, because none of the positive religions withstood its "rational" criticism, would abolish them all and put in their place the religion of Nature.

So then the French Revolution, too, attempted to decree the abstract natural state of "liberty, equality, and fraternity," the realisation of "human rights" according to Rousseau's *Social Contract*. And numerous pens of very moderate quality hastened to justify and glorify the procedure.[1] It is for the most part a superficial Epicureanism standing upon the basis of Condillac's positivism that acts as spokesman. Thus *Volney* seeks, with the *Système de la Nature*, the source of all the evils of society in the

[1] The preference for the catechism, a form designed for education in the Church, is characteristic of this literature.

ignorance and covetousness of man, whose capacity for perfection has hitherto been restrained by religions. When all "illusions" shall be frightened away with these religions, then the newly organised society will have as its supreme rule of conduct, that "good" is only what furthers the interests of man, and the catechism for the citizen is comprehended in the rule "Conserve toi — instruis toi — modère toi — vis pour tes semblables, afin qu'ils vivent pour toi."[1] Still more materialistic is the form in which the theory of the Revolution appears with *St. Lambert*, from whom the definition that was much discussed in later literature comes: "L'homme est une masse organisée et sensible; il reçoit l'intelligence de ce qui l'environne et de ses besoins."[2] With the most superficial consideration of history, he celebrates in the Revolution the final victory of reason in history, and at the same time this Epicurean deduces that the democratic beginnings of this great event will be completed in Cæsardom! The extreme pitch of self-complacent boasting in this aspect of parliamentary dilettantism was reached by *Garat* and *Lancelin*.[3]

In contrast with these glittering generalities and declamations over the welfare of the people and the reign of reason, the earnest reality with which *Bentham* sought to make the utilitarian principle useful for legislation, appears in an extremely favourable light. This work he sought to accomplish by teaching the application of the quantitative determination of pleasure and pain values (cf. § 36, 9) to the consideration of the ends of particular statutes, with a careful regard to the existing conditions in every case.[4] Just in this he showed his insight into the fact that in the political movement the question at issue is not merely that of political rights, but above all that of *social interest*, and along just this line an enthusiastic and successful champion of the Revolution arose in *Godwin*,[5] who was not uninfluenced by Bentham. But along other lines, too,

[1] Volney, at the close of the *Catéchisme*, Œuvr., I. 310.

[2] St. Lambert, *Catéch. Introd.*, Œuvr., I. 53. For the characterisation of this literature it should not remain unmentioned that in St. Lambert's catechism the *Analyse de l'homme* is followed in a second book by an *Analyse de la — femme*.

[3] The organ of this movement most worthy of esteem was the *Decade Philosophique*, which saw and defended in the Revolution the triumph of the philosophy of the eighteenth century. Cf. Picavet, *Idéologues*, 86 ff.

[4] It is the more to be lamented that Bentham later in his *Deontology* attempted to give a kind of popular catechism of the utilitarian morals, which, in radical one-sidedness, in rancour and lack of understanding for other moral systems, equals the worst products of the time of the Revolution.

[5] William *Godwin* (1756–1836) published his *Inquiry concerning Political Justice and its Influence on General Virtue and Happiness* in 1793. Cf. C. Kegan Paul, *W. Godwin, his Friends and Contemporaries*, Lond. 1876, and L. Stephen, *English Thought*, II. 264 ff.

the social storm is heard in the literature of the Revolution, as dull thunder still dying away in the distance. The investigations concerning the problems of *political economy*, which in France especially were chiefly promoted by the *physiocratic school*, became more and more comprehensive, and were grounded with increasing independence upon empirical principles. But while the theory of the state demanded, above all, security of possessions, there rose, from the depth of society, the *question as to the right of personal property*; and while the philosophers considered with more and more dissension the problem, how the interests of the community could be reconciled with those of the individual (cf. below), the thought forced its way to the surface that the ground of all evil with the human race lies in the striving after individual possessions, and that a social morals and a moral society will begin with the denunciation of this original sin, and not till then. Such *communistic* ideas were thrown to the world by *Mably* and *Morelly*, and a Babeuf made the first abortive conspiracy to carry out these ideas, under the Directory.

3. But the *social question* had already before this cast up its waves from its lowest depth. The contrast between the classes representing luxurious wealth and most wretched poverty, which had so great importance among the causes of the Revolution, might indeed at first be more palpable and effective; but it first acquired its full sharpness by virtue of the *antithesis between culture and non-culture*, which was linked with it by the whole development of European life, and this separating chasm was deepest and baldest in the age of the Enlightenment. The more the age plumed itself upon its "culture," the more evident it became that this was in the main a privilege of the property-owing class. In this point, too, English Deism had led the way with typical frankness. The religion of reason should be reserved for the cultivated man, just as the free, beautiful morality should be: for the ordinary man, on the other hand, *Shaftesbury* held, the promises and threatenings of positive religion must remain standing as a wheel and gallows. *Toland*, too, had presented his cosmopolitan natural worship as an "*esoteric*" doctrine, and when the later Deists began to carry these ideas among the people in popular writings, *Lord Bolingbroke*, himself a free-thinker of the most pronounced kind, declared them to be a pest of society, against which the sharpest means were the best. Among the German Deists, also, men like *Semler* would have a very careful separation made between religion as a private matter and religion as a public order.

The *French* Enlightenment, as the relation of *Voltaire* to Boling-

broke shows, was from the beginning decidedly *more democratic*. Indeed, it had the agitative tendency to play off the enlightenment of the masses against the exclusive self-seeking of the upper ten thousand. But with this was completed a revolution, by virtue of which the Enlightenment necessarily turned against itself. For if in those strata in which it first took hold "culture" or civilisation had such consequences as appeared in the luxury of the "higher" classes, if it had been able to do so little in the way of yielding fruits that could be used for the needs of the masses also, its value must appear all the more doubtful the more philosophy regarded the "greatest happiness of the greatest number" as the proper standard for the estimation of things and actions.

In this connection the *problem of civilisation* shaped itself out for modern philosophy: the question whether and how far *civilisation*, *i.e.* intellectual improvement (which is a historical fact), and the change in human impulses and in the relations of human life, which has been connected with it — whether and in how far this civilisation has served to further the moral order and man's true happiness. The more proudly and self-complacently the average Enlightener praised the progress of the human mind, which had reached in him its summit of a clear and distinct rational life in theory and practice, the more burning and — uncomfortable this question became.

It is raised first, though not in a direct and square statement, by *Mandeville*. In his psychology an extreme adherent of the selfish system, he sought to show, as against Shaftesbury, that the whole life and charm of the social system rests solely upon the struggle which self-seeking individuals carry on in their own interests — a principle which worked also upon Adam Smith in his doctrine of supply and demand.[1] If we should think of man as stripped bare of all egoistic impulses (this is the meaning of the *Fable of the Bees*), and provided only with the "moral" qualities of altruism, the social mechanism would stand still from pure absence of regard for self. The motive power in civilisation is solely egoism, and, therefore, we must not be surprised if civilisation displays its activity, not by heightening the moral qualities, but only by refining and disguising egoism. And the individual's happiness is as little enhanced by civilisation as his morality. If it were increased, the egoism, on which the progress of civilisation rests, would be thereby weakened. In truth, it appears, rather, that every improvement of the material condition, brought about by intellectual advance, calls forth new and stronger wants in the individual, in consequence of which

[1] Cf. Lange, *Gesch. d. Mater.*, I. 285 [Eng. tr. I. 295].

he becomes more and more discontented; and so it turns out that the apparently so brilliant development of the whole is accomplished only at the cost of the morality and happiness of the individual.

4. In Mandeville these thoughts appear in a mild suggestion, and at the same time, in the repelling form of a cynical commendation of the egoism, whose "private vices" are "public benefits." They attained an importance for world-literature through the brilliant turn given them by *Rousseau*. With him the question concerned nothing more and nothing less than the *worth of all human history* — its worth for the morality and happiness of individuals. And he cast into the face of the Enlightenment the reproach that all growth in knowledge, and all refinement of life, had but made man more and more untrue to his true vocation and his true nature. History with its artificial structure of civilised society has deteriorated man:[1] he came forth from the hand of Nature good and pure, but his development has separated him from Nature step by step. The beginning of this "degeneration" Rousseau, in his second *Discourse*, found in the creation of property, which had for its result the division of labour, and with this the separation of the classes and, ultimately, the awakening of all evil passions: this it was that enlisted the work of the intellect permanently in the service of self-seeking.

In comparison with this unnatural condition of civilised barbarism the state of Nature appears at first as the lost paradise, and in this sense the sentimental yearning of a time intellectually and morally *blasé* found its nourishment in Rousseau's writings, above all in the *New Heloise*. The ladies of the salon were carried away with enthusiasm for the Gessnerian pastoral idyl; but on this account they mis-heard the admonition of the great Genevan.

For he did not wish to lead back to that state of Nature which had no society. He was convinced that man is provided by his creator with a capacity for being perfected (*perfectibilité*) which makes the development of his natural endowment both a duty and a natural necessity. If this development has been guided into wrong paths by the historical process which has hitherto prevailed, and, therefore, has led to demoralisation and wretchedness, *history must be begun anew;* in order to find the right way toward his development man must return from the unnatural condition of intellectual pride to the simple natural state of feeling, from the narrowness and falsehood of relations of society to his pure unstunted self. For this end, according to Rousseau, humanity as a whole needs a

[1] The English Deists' conception of the history of religion (cf. § 35, 8) is extended by Rousseau to all history.

political constitution, which affords the individual full freedom of personal activity in connection with the life of the whole body, and in accordance with the principle of equality of rights; and as individuals, humanity needs an *education*,[1] which allows the natural endowments of the individual to unfold from his own vitality without constraint. The optimism, which Rousseau finds in the constitution of the natural God-descended nature of man, makes him hope that our condition will be better, the more freely and naturally we can develop.

5. While we thus find Rousseau in lively opposition to the historical development, and in the zealous endeavour to put in its stead a new development "according to Nature," the last reconciling synthesis of the ideas of the Enlightenment is the endeavour to understand the previous course of human history itself as the natural development of human nature; in this thought the philosophy of the eighteenth century strips off all its one-sidedness and reaches its highest consummation. The first stirring of this is found in an isolated appearance of Italian literature, with *Vico*.[2] Influenced by the Neo-Platonic metaphysics of the Renaissance, especially by Campanella, and educated by Bodin and Grotius, he had grasped the idea of a general natural law of the development of life, which manifests itself in the history of peoples as well as in that of individuals, and with great learning had sought to prove this principle of the identity of all natural development. But if in such a conception of the naturally necessary correspondences between the different historical systems and the fundamental biological scheme, the thought of a purposeful inter-relation of the destinies of nations had remained foreign to him, this had previously found

[1] In its details Rousseau's *Émile* frequently uses the "Thoughts," which Locke had advanced with a much more limited purpose for the education of a young man of higher station in society: there, too, the complete development of the individuality was the main thing, from which the turning away from learned one-sidedness, the direction of attention to the real and practical, the appeal to perception and the use of individual instead of general truths in instruction and education, followed as a matter of course. These principles, thought out for the Englishman of superior rank, Rousseau adopts as elements in an education which sought to develop in man, not the member of a definite class or of a future profession, but only "the man." In this spirit his pedagogical doctrines passed over to the school of German *philanthropy*, which, under the lead of *Basedow* (1723–1790), combined the principle of natural development with that of utility, and thought out the appropriate forms of an education for a community by which the individual should be trained to become by the natural way a useful member of human society.

[2] Giov. Battista *Vico* (1668–1744) became influential chiefly through his *Principj d' una scienza nuova d' intorno alla commune natura delle nazioni* (1725). Cf. K. Werner, *Giambattista V. als Philosoph und gelehrter Forscher* (Vienna, 1879); R. Flint, *Vico* (Edin. and Lond. 1884); and likewise for the following, Flint, *The Philosophy of History in Europe*, Vol. I., 1874.

all the more forcible support in *Bossuet*.[1] The French prelate continues the patristic philosophy of history, which had pushed the Redemption into the centre of the world's events. He would have the christianising of modern nations through the empire of Charles the Great, regarded as the concluding and decisive epoch of universal history, the whole course of which is the work of divine providence, and the goal of which is the dominance of the one Catholic Church. Such a theological view of the world and of history had now, indeed, been energetically put aside by modern philosophy, but the meagreness of the results yielded for the consideration of history by the treatment of human society from the point of view of individual psychology is seen in the trivial lucubrations of *Iselin*,[2] in spite of his leaning upon Rousseau.

It was in a mind of *Herder's* universal receptiveness and fineness of feeling that Rousseau's ideas first found in this respect, also, a fruitful soil. But his optimism, which had matured in the atmosphere of Leibniz and Shaftesbury, did not allow him to believe in the possibility of that aberration which the Genevan would regard as the nature of previous history. He was rather convinced that the natural development of man is just that which has taken place in history. While Rousseau's conception of man's perfectibility was treated by the Genevan's French adherents, such as St. Lambert, and especially *Condorcet*, as the voucher for a better future, and as an infinite perspective toward the perfecting of the race, Herder used it — against Rousseau — as a principle of explanation for the past, also, of the human family. *History* is nothing but the uninterrupted progress of *natural development*.

This concerned, above all, the *beginning* of history. The beginning of the life of society is to be understood, not as an arbitrary act, whether of human reflection or of divine determination, but as a gradually formed result of the natural connection. It has neither been invented nor commanded, but has *become*. Characteristically enough, these opposing views as to the origin of history, asserted themselves earliest in theories of *language*. The individualism of associational psychology saw in language, as is manifest particularly in the case of Condillac,[3] an *invention* of man, — supra-naturalism, defended in Germany by *Süssmilch*[4] saw a divine inspiration; here

[1] Jacques Bénigne *Bossuet* (1627–1704), the celebrated eloquent divine, wrote the *Discours sur l'Histoire Universelle* (Paris, 1681) originally for the instruction of the Dauphin.

[2] Isaak *Iselin* of Basle (1728–1782) published in 1764 his *Philosophischen Muthmassungen über die Geschichte des Menschheit*, 2 vols.

[3] *Logique* and *Langue des Calculs*.

[4] *Beweis, dass der Ursprung der menschlichen Sprache göttlich sei* (Berlin, 1766).

Rousseau had already spoken the word of solution when he saw in language a natural, involuntary unfolding of man's essential nature.[1]

Herder not only made this conception his own (cf. above, § 33, 11), but he extended it also consistently to all man's activities in civilisation. He proceeds, therefore, in his philosophy of history from the point of view of man's position in Nature, from that of the conditions of life which the planet affords him, and from that of his peculiar constitution, to understand from these sources the beginnings and the direction of his historical development: and in the progress of his exposition of universal history he makes, likewise, the peculiar character of each people and of its historical significance proceed from its natural endowments and relations. But at the same time the developments of the various nations do not fall apart in his treatment, as was still the case with Vico: on the contrary, they are all arranged organically as a great chain of ascending perfection. And they all form in this connected whole the ever-maturer realisation of the general constitution of human nature. As man himself is the crown of creation, so his history is the unfolding of human nature. The *Idea of Humanity* explains the complicated movement of national destinies.

In this consideration, the unhistorical mode of thinking which had characterised the Enlightenment was overcome: every form in this great course of development was valued as the natural product of its conditions, and the "voices of the peoples" united to form the harmony of the world's history, of which humanity is the theme. And out of this sprang also the task of the future, — to bring to ever richer and fuller development all the stirrings of human nature, and to realise in living unity the ripe fruits of the historical development. In the consciousness of this task of the "world-literature," far from all the pride of the meaner Enlightenment, full of the presage and anticipation of a new epoch, *Schiller* could call out, in valedictory to the "philosophical century," the joyful words: —

> "Wie schön, o Mensch, mit deinem Palmenzweige
> Stehst du an des Jahrhunderts Neige
> In edler, stolzer Männlichkeit!"[2]

[1] With his arguments, though in part of another opinion, St. Martin the Mystic attacked the crude presentation of Condillac's doctrine by Garat; cf. *Séances des Écoles Normales*, III. 61 ff.

[2] In rude paraphrase:

> How fair, O man, with victory's palm,
> Thou standest at the century's wane
> In noble pride of manliness.

PART VI.

THE GERMAN PHILOSOPHY.

To the literature cited on pp. 348 and 437, we add: —

H. M. Chalybaeus, *Historische Entwicklung der speculativen Philosophie von Kant bis Hegel.* Dresden, 1837. [Tr. Edin. and Andover, 1854.]
F. K. Biedermann, *Die deutsche Philosophie von Kant bis auf unsere Tage.* Leips. 1842 f.
K. L. Michelet, *Entwickelungsgeschichte der neuesten deutschen Philosophie.* Berlin, 1843.
C. Fortlage, *Genetische Geschichte der Philosophie seit Kant.* Leips. 1852.
O. Liebmann, *Kant und die Epigonen.* Stuttgart, 1865.
Fr. Harms, *Die Philosophie seit Kant.* Berlin, 1876.
A. S. Willm, *Histoire de la Philosophie Allemande depuis Kant jusqu'à Hegel.* Paris, 1846 ff.
H. Lotze, *Geschichte der Æsthetik in Deutschland.* Munich, 1868.
R. Flint, *Philosophy of History in Europe*, I. Edin. and Lond. 1874.
R. Fester, *Rousseau und die deutsche Geschichtsphilosophie.* Stuttgart, 1890.
[J. Royce, *The Spirit of Modern Philosophy.* Boston, 1892.]

A fortunate union of various intellectual movements produced in Germany, during the close of the preceding and at the beginning of the present century, a bloom of philosophy, which in the history of European thought can be compared only with the great development of Greek philosophy from Socrates to Aristotle. In a development, powerful alike in its intensity and extent, the German mind during the short span of four decades (1780–1820) produced a wealth of systems of philosophical *Weltanschauung*, grandly projected on all sides, such as has at no other time been compressed within so narrow a space; and in all of these the thoughts of preceding philosophy combine to form characteristic and impressive structures. They appear in their totality as the ripe fruit of a long growth, out of which germs of a new development, as yet scarcely recognisable, are to spring.

This brilliant phenomenon had its general cause in the incomparable vigour and spirit with which the German nation at that time took up again with new strength, and carried to its completion, the movement of civilisation which began in the Renaissance and had

been interrupted by external force. Germany attained the summit of its inner development at the same time that its outer history reached its lowest condition, — a process that has no equal in history. When it lay politically powerless, it created its world-conquering thinkers and poets. Its victorious power, however, lay just *in the league between philosophy and poetry*. The contemperaneousness of Kant and Goethe, and the combination of their ideas by Schiller, — these are the decisive characteristics of the time.

The history of philosophy at this point is most intimately interwoven with that of general literature, and the lines of mutual relation and stimulus run continuously back and forth. This appears characteristically in the heightened and finally decisive significance which fell in this connection to the *problems and conceptions of æsthetics*. Philosophy found thus opened before her a new world, into which she had hitherto had but occasional glimpses, and of which she now took possession as of the Promised Land. In their matter as well as their form, æsthetic principles gained the mastery, and the motives of scientific thought became interwoven with those of artistic vision to produce grand poetical creations in the sphere of abstract thought.

The ensnaring magic which literature thus exercised upon philosophy rested mainly upon its *historical universality*. With Herder and Goethe begins what we call, after them, world-literature; the conscious working out of true culture from the appropriation of all the great thought-creations of all human history. The Romantic School appears in Germany as the representative of this work. And, in analogy to this, philosophy also developed out of a wealth of historical suggestions; it resorted with conscious deepening of thought to the ideas of antiquity and of the Renaissance, it plunged intelligently into what the Enlightenment had shown, and ended in Hegel by understanding itself as the systematically penetrating and formative comprehension of all that the human mind had hitherto thought.

But for this mighty work it needed a new conceptional basis, without which all those suggestions from general literature would have remained without effect. This philosophical power to master the ideal material of history dwelt within the *doctrine of Kant*, and this is its incomparably high historical importance. Kant, by the newness and the greatness of his points of view, prescribed to the succeeding philosophy not only its problems, but also the means for their solution. His is the mind that determines and controls on all sides. The work of his immediate successors, in which his new principle unfolded itself in all directions and finished its life historically with an assimilation of earlier systems, is best comprehended in accordance with its most important characteristic, under the name of *Idealism*.

Hence we treat the history of the German Philosophy in two chapters, of which the first embraces Kant, and the second the development of idealism. In the thought symphony of those forty years the Kantian doctrine forms the theme, and idealism its development.

CHAPTER I.

THE CRITIQUE OF REASON.

C. L. Reinhold, *Briefe über die Kantische Philosophie* (*Deutsch. Merkur*, 1786 f.). Leips. 1790 ff.
V. Cousin, *Leçons sur la Philosophie de Kant.* Paris, 1842.
M. Desdouits, *La Philosophie de Kant, d'après les Trois Critiques.* Paris, 1876.
E. Caird, *The Philosophy of Kant.* Lond. 1876.
[E. Caird, *The Critical Philosophy of I. Kant*, Glasgow, Lond., and N.Y., 2 vols., 1889.]
C. Cantoni, *Em. Kant* (3 vols.). Milan, 1879–1884.
W. Wallace, *Kant.* Oxford, Edin., and Lond. 1882.
J. B. Meyer, *Kant's Psychologie.* Berlin, 1870.

THE pre-eminent position of the Königsberg philosopher rests upon the fact that he took up into himself the various motives of thought in the literature of the Enlightenment, and by their reciprocal supplementation matured a completely new conception of the problem and procedure of philosophy. He passed through the school of the Wolffian metaphysics and through an acquaintance with the German popular philosophers; he plunged into Hume's profound statement of problems, and was enthusiastic for Rousseau's gospel of Nature; the mathematical rigour of the Newtonian natural philosophy, the fineness of the psychological analysis of the origin of human ideas and volitions found in English literature, Deism from Toland and Shaftesbury to Voltaire, the honourable spirit of freedom with which the French Enlightenment urged the improvement of political and social conditions,—all these had found in the young Kant a true co-worker, full of conviction, who with a rich knowledge of the world and admirable sagacity, and also, where it was in place, with taste and wit, though far from all self-complacency and boasting, united typically within himself the best features of the Enlightenment.

But it was in connection with the difficulties of the *problem of knowledge* that he wrought out from all these foundation elements the work which gave him his peculiar significance. The more he

had originally prized metaphysics just because it claimed to give scientific certainty to moral and religious convictions, the more lasting was its working upon him when he was forced to become convinced by his own progressive criticism in his constant search for truth, how little the rationalistic school system satisfied that claim which it made. But the more, also, was his vision sharpened for the limitations of that philosophy which empiricism developed by the aid of psychological method. In studying David Hume this came to his consciousness in such a degree that he grasped eagerly for the aid which the *Nouveaux Essais* of Leibniz seemed to offer toward making a metaphysical science possible. But the epistemological system, which he erected upon the principle of virtual innateness extended to mathematics (cf. pp. 465 f. and 485 f.), very soon proved its untenability, and this led him to the tedious investigations which occupied him in the period from 1770 to 1780, and which found their conclusion in the *Critique of Pure Reason.*

The essentially new and decisive in this was that Kant recognised the *inadequacy of the psychological method* for the solution of philosophical problems,[1] and completely separated the questions which surround the *origin* and the actual development of man's rational activities, from those which relate to its *value.* He shared permanently with the Enlightenment the tendency to take the starting-point of his investigations, not in our apprehension of *things*, which is influenced by most various presuppositions, but in considering the reason itself; but he found in this latter point of view universal judgments which extend beyond all experience, whose validity can neither be made dependent upon the exhibition of their actual formation in consciousness, nor grounded upon any form of innateness. It is his task to fix upon these judgments throughout the entire circuit of human rational activity, in order from their content itself and from their relations to the system of the rational life determined by them, to understand their authority or the limits of their claims.

This task Kant designated as the *Critique of Reason*, and this method as the *critical or transcendental method;* the subject-matter to which this method was to be applied he considered to be the investigation as to the *possibility of synthetic judgments a priori.*[2]

[1] Cf. the beginning of the transcendental deduction of the pure conceptions of the understanding in the *Critique of Pure Reason*, II. 118 ff.

[2] This expression took form gradually in connection with the origination of the *Kr. d. r. V.* through the importance which the conception of *synthesis* acquired. Cf. § 38. Kant develops the above general formula in his introduction to the *Critique* in the following way: judgments are analytical when the relation of the predicate to the subject, which is therein asserted, has its ground

This rests upon the fundamental insight that the validity of the principles of reason is entirely independent of how they rise in the empirical consciousness (whether of the individual or of the race). All philosophy is *dogmatic*, which seeks to *prove* or even merely to judge of this validity by showing the genesis of those principles out of elements of sensation, or by their innateness, whatever the metaphysical assumptions in the case may be. The critical method, or transcendental philosophy, examines the form in which these principles actually make their appearance, in connection with the capacity which they possess of being employed *universally* and *necessarily* in experience.

From this there followed for Kant the task of a systematic investigation of reason's functions in order to fix upon their principles, and to examine the validity of these; for the critical method, which was first gained in epistemology, extended its significance of itself to the other spheres of the reason's activity. But here the newly acquired scheme of psychological division (cf. p. 512, note 6) proved authoritative for his *analysis and treatment of philosophical problems*. As *thinking*, *feeling*, and *willing* were distinguished as the fundamental forms in which reason expresses itself, so the criticism of reason must keep to the division thus given; it examined separately the *principles of knowledge*, of *morality*, and of the working of things upon the reason through the medium of *feeling*, — a province independent of the other two.

Kant's doctrine is accordingly divided into a *theoretical*, a *practical*, and an *æsthetical* part, and his main works are the *three Critiques*, of the *Pure Reason*, of the *Practical Reason*, and of the *Judgment*.

Immanuel Kant, born April 22, 1724, at Königsberg, Prussia, the son of a saddler, was educated at the Pietistic Collegium Fridericianum, and attended in 1740 the University of his native city to study theology; but subjects of natural science and philosophy gradually attracted him. After concluding his studies, he was a private teacher in various families in the vicinity of Königsberg from 1746 to 1755, habilitated in the autumn of 1755 as *Privatdocent* in

in the concept itself which forms the subject ("explicative judgments"); synthetical, when this is not the case, so that the addition of the predicate to the subject must have its ground in something else which is logically different from both ("ampliative judgments"). This ground is, in the case of synthetical judgments *a posteriori* ("judgments of perception," cf. *Prolegomena*, §-18, III. 215 f.), the act of perception itself; in the case of synthetical judgments *a priori*, on the contrary, *i.e.* of the universal principles employed for the interpretation of experience, it is something else; what it is is just that which is to be sought. *A priori* is, with Kant, not a psychological, but a purely epistemological mark; it means not a chronological priority to experience, but a *universality and necessity of validity in principles of reason which really transcends all experience, and is not capable of being proved by any experience* [*i.e.* a *logical*, not a *chronological* priority]. No one who does not make this clear to himself has any hope of understanding Kant.

the philosophical faculty of Königsberg University, and was made full Professor there in 1770. The cheerful, brilliant animation and versatility of his middle years gave place with time to an earnest, rigorous conception of life and to the control of a strict consciousness of duty, which manifested itself in his unremitting labour upon his great philosophical task, in his masterful fulfilment of the duties of his academic profession, and in the inflexible rectitude of his life, which was not without a shade of the pedantic. The uniform course of his solitary and modest scholar's life was not disturbed by the brilliancy of the fame that fell upon his life's evening, and only transiently by the dark shadow, that the hatred of orthodoxy, which had obtained control under Frederick William II., threatened to cast upon his path by a prohibition upon his philosophy. He died from weakness of old age on the 12th of February, 1804.

Kant's life and personality after his earlier works has been drawn most completely by Kuno Fischer (*Gesch. d. neueren Philos.*, III. and IV., 3d ed., Munich, 1882); E. Arnoldt has treated of his youth and the first part of his activity as a teacher (Königsberg, 1882); [J. H. W. Stuckenberg, *Life of Kant*, Lond. 1882].

The change which was taking place in the philosopher toward the end of the seventh decade of the eighteenth century appears especially in his activity as a writer. His earlier "pre-critical" works (of which those most important philosophically have been already cited, p. 445) are distinguished by easy-flowing, graceful presentation, and present themselves as admirable occasional writings of a man of fine thought who is well versed in the world. His later works show the laboriousness of his thought and the pressure of the contending *motifs*, both in the form of the investigation with its circumstantial heaviness and artificial architectonic structure, and in the formation of his sentences, which are highly involved, and frequently interrupted by restriction. Minerva frightened away the graces; but instead, the devout tone of a deep thought and an earnest conviction which here and there rises to powerful pathos and weighty expression hovers over his later writings.

For Kant's theoretical development, the antithesis between the Leibnizo-Wolffian metaphysics and the Newtonian natural philosophy was at the beginning of decisive importance. The former had been brought to his attention at the University by Knutzen (cf. p. 444), the latter by Teske, and in his growing alienation from the philosophical school-system, his interest for *natural science*, to which for the time he seemed to desire to devote himself entirely, co-operated strongly. His first treatise, 1747, was entitled *Thoughts upon the True Estimation of the Vis Viva*, a controverted question between Cartesian and Leibnizian physicists; his great work upon the *General Natural History and Theory of the Heavens* was a natural science production of the first rank, and besides small articles, his promotion treatise, *De Igne* (1755), which propounded a hypothesis as to imponderables, belongs here. His activity as a teacher also showed, even on into his later period, a preference for the subjects of natural sciences, especially for physical geography and anthropology.

In theoretical philosophy Kant passed through many reversals (*mancherlei Umkippungen*) of his standpoint (cf. §§ 33 and 34). At the beginning (in the *Physical Monadology*) he had sought to adjust the opposition between Leibniz and Newton, in their doctrine of space, by the ordinary distinction of things-in-themselves (which are to be known metaphysically), and phenomena, or things as they appear (which are to be investigated physically); he then (in the writings after 1760) attained to the insight that a metaphysics in the sense of rationalism is impossible, that philosophy and mathematics must have diametrically opposed methods, and that philosophy as the empirical knowledge of the given cannot step beyond the circle of experience. But while he allowed himself to be comforted by Voltaire and Rousseau for this falling away of metaphysical insight, through the instrumentality of the "natural feeling" for the right and holy, he was still working with Lambert at an improvement of the method of metaphysics, and when he found this, as he hoped, by the aid of Leibniz's *Nouveaux Essais*, he constructed in bold lines the mystico-dogmatic system of his *Inaugural Dissertation*.

The progress from there on to the *System of Criticism* is obscure and controverted. Cf. concerning this development, in which the time in which he was influenced by Hume and the direction which that influence took are especially

in question, the following: Fr. Michelis, *Kant vor und nach 1770* (Braunsberg, 1871); Fr. Paulsen, *Versuch einer Entwicklungsgeschichte der kantischen Erkenntnisstheorie* (Leips. 1875); A. Riehl, *Geschichte und Methode des philosophischen Kriticismus* (Leips. 1876); B. Erdmann, *Kant's Kriticismus* (Leips. 1878); W. Windelband, *Die verschiedenen Phasen der kantischen Lehre vom Ding-an-sich* (*Vierteljahrschr. f. wissensch. Philos.*, 1876). Cf. also the writings by K. Dieterich on Kant's relation to Newton and Rousseau under the title *Die kantische Philosophie in ihrer inneren Entwicklungsgeschichte*, Freiburg i. B. 1885.

From the adjustment of the various tendencies of Kant's thought proceeded the "Doomsday-book" of German philosophy, the *Critique of Pure Reason* (Riga, 1781). It received a series of changes in the second edition (1787), and these became the object of very vigorous controversies after attention had been called to them by Schelling (W., V. 196) and Jacobi (W., II. 291). Cf. concerning this, the writings cited above. H. Vaihinger, *Commentar zu K. K. d. r. V.* (Vol. I., Stuttgart, 1887 [Vol. II., 1892]), has diligently collected the literature. Separate editions of the *Kritik*, by K. Kehrbach, upon the basis of the first edition, and by B. Erdmann [and E. Adickes] upon the basis of the second edition. [Eng. tr. of the *Critique* (2d ed.), by Meiklejohn, in the Bohn Library, and by Max Müller (text of 1st ed. with supplements giving changes of 2d ed.), Lond. 1881; Paraphrase and Commentary by Mahaffy and Bernard, 2d ed., Lond. and N.Y. 1889; partial translations in J. H. Stirling's *Text-book to Kant*, and in Watson's *Selections*, Lond. and N.Y. 1888. This last contains also extracts from the ethical writings and from the *Critique of Judgment*.]

The additional main writings of Kant in his critical period are: *Prolegomena zu einer jeden künftigen Metaphysik*, 1783; *Grundlegung zur Metaphysik der Sitten*, 1785; *Metaphysische Anfangsgründe der Naturwissenschaft*, 1785; *Kritik der praktischen Vernunft*, 1788; *Kritik der Urtheilskraft*, 1790; *Die Religion innerhalb der Grenzen der blossen Vernunft*, 1793; *Zum ewigen Frieden*, 1795; *Metaphysische Anfangsgründe der Rechts- und Tugendlehre*, 1797; *Der Streit der Fakultäten*, 1798; [Eng. tr. of the *Prolegomena*, by Mahaffy and Bernard, Lond. and N.Y. 1889; of the *Prolegomena* and *Metaphysical Foundations of Natural Science*, by Bax, Bohn Library; of the ethical writings, including the first part of the *Religion within the Bounds of Pure Reason*, by T. K. Abbott, 4th ed., Lond. 1889; of the *Critique of Judgment*, by J. H. Bernard, Lond. and N.Y. 1892; of the *Philosophy of Law*, by W. Hastie, Edin. 1887; *Principles of Politics*, including the essay on *Perpetual Peace*, by W. Hastie, Edin. 1891. The contents of *Kant's Essays and Treatises*, 2 vols., Lond. 1798, is given in *Ueberweg*, II. 138 (Eng. tr.)].

Complete editions of his works have been prepared by K. Rosenkranz and F. W. Schubert (12 vols., Leips. 1833 ff.), G. Hartenstein (10 vols., Leips. 1838 f., and recently 8 vols., Leips. 1867 ff.), and J. v. Kirchmann (in the *Philos. Biblioth.*).[1] They contain, besides his smaller articles, etc., his lectures upon logic, pedagogy, etc., and his letters. A survey of all that has been written by Kant (including also the manuscript of the *Transition from Metaphysics to Physics*, which is without value for the interpretation of his critical system) is found in *Ueberweg-Heinze*, III. § 24; there, too, the voluminous literature is cited with great completeness. Of this we can give here only a choice of the best and most instructive; a survey of the more valuable literature, arranged according to its material, is offered by the article *Kant*, by W. Windelband in *Ersch und Gruber's Enc.* [The *Journal of Speculative Philosophy* contains numerous articles upon Kant. We may mention also Adamson, *The Philosophy of Kant*, Edin. 1879; art. *Kant*, in *Enc. Brit.*, by the same author; arts. in *Mind*, Vol. VI., by J. Watson, and in *Philos. Review*, 1893, by J. G. Schurmann. — E. Adickes has begun an exhaustive bibliography of the German literature in the *Philos. Review*, 1893.]

[1] The citations refer to the older Hartenstein edition In the case of many works the convenient editions by K. Kehrbach (*Reclam. Bib.*) make easy the transfer of the citations to the other editions.

§ 38. The Object of Knowledge.

Erh. Schmid, *Kritik der reinen Vernunft im Grundrisse*. Jena, 1786.
H. Cohen, *Kant's Theorie der Erfahrung*. Berlin, 1871.
A. Hölder, *Darstellung der kantischen Erkenntnisstheorie*. Tübingen, 1873.
A. Stadler, *Die Grundsätze der reinen Erkenntnisstheorie in der kantischen Philosophie*. Leips. 1876.
Joh. Volkelt, *I. Kant's Erkenntnisstheorie nach ihren Grundprincipien analysirt*. Leips. 1879.
E. Pfleiderer, *Kantischer Kriticismus und englische Philosophie*. Tübingen, 1881.
J. Hutchinson Stirling, *Text-Book to Kant*. Edin. and Lond. 1881.
Seb. Turbiglio, *Analisi, Storia, Critica della Ragione Pura*. Rome, 1881.
G. S. Morris, *Kant's Critique of Pure Reason*, Chicago, 1882.
Fr. Staudinger, *Noumena*. Darmstadt, 1884.
[K. Fischer's *Criticism of Kant*, trans. by Hough. Lond. 1888.]
[J. Watson, *Kant and his English Critics*. Lond. 1886.]
[H. Vaihinger, *Commentar zu Kant's Kritik d. r. Vernunft*, II. (on the *Æsthetic*). Stuttgart, 1892.]

Kant's theory of knowledge followed with tenacious consistency from the statement which modern Terminism had given to problems of knowledge (cf. pp. 466 and 482). The philosopher had grown up in the naïve realism of the Wolffian school, which without close scrutiny regarded logical necessity and reality as identical; and his liberation from the ban of this school consisted in his seeing the impossibility of determining out of "pure reason," *i.e.* through mere logical operations with conceptions, anything whatever as to the existence[1] or the causal relation[2] of real things. The metaphysicians are the architects of many a world of thought in the air;[3] but their structures have no relation to reality. Kant now sought this relation first in the conceptions given through experience, since the genetic connection of these with the reality to be known by science seemed immediately evident, but he was shaken from this "dogmatic slumber" by Hume,[4] who demonstrated that precisely the constitutive Forms of the conceptional knowledge of reality, especially the Form of causality, are not given in perception, but are

[1] Cf. Kant's *Sole Possible Proof for the Existence of God*.
[2] Cf. the *Essay on Negative Magnitudes*, especially the conclusion (W., I. 59 ff.).
[3] *Dreams of a Ghost Seer*, I. 3; W., III. 75.
[4] In connection with this frequently mentioned confession of Kant, it is for the most part not thought of that he characterised as "dogmatic" not only rationalism, but also the empiricism of the earlier theory of knowledge, and that the classical passage at which he uses this expression (in the preface to the *Prolegomena*, W., III. 170 f.) does not contrast Hume with Wolff, but with Locke, Reid, and Beattie entirely. The dogmatism from which, therefore, Kant declared that he had been freed through Hume *was that of empiricism*.

products of the mechanism of association without any demonstrable relation to the real. Reality was not to be known from the "given" conceptions, either. And then Kant, prompted by Leibniz, deliberated once more whether the purified conception of virtual innateness, with the aid of the "pre-established harmony" grounded in God between the monad which knows and the monad which is to be known, might not solve the mystery of the relation of thought and Being, and in his *Inaugural Dissertation* he had convinced himself that this was the solution of the problem. But cool reflection soon showed that this pre-established harmony was a metaphysical assumption, incapable of proof and unable to support a scientific system of philosophy. So it appeared that neither empiricism nor rationalism had solved the cardinal question, —*the relation of knowledge to its object*, in what does it consist and on what does it rest?[1]

1. Kant's own, long-weighed answer to this question is the *Critique of Pure Reason*. In its final systematic form, which found an analytical explication in the *Prolegomena*, his criticism proceeds from the *fact of the actual presence of synthetic judgments a priori* in three theoretical sciences; viz. in *mathematics*, in *pure natural science*, and in *metaphysics;* and the design is to examine their claims to universal and necessary validity.

In this formulation of the problem the insight into the nature of reason's activity, which Kant had gained in the course of his critical development, came into play. This activity is synthesis, *i.e.* the uniting or unifying of a manifold.[2] This conception of *synthesis*[3] is a new element which separates the *Critique* from the *Inaugural Dissertation;* in it Kant found the common element between the Forms of the sensibility and those of the understanding, which in his exposition of 1770 were regarded as entirely separate, in accordance with their characteristic attributes of receptivity and spontaneity respectively.[4] It now appeared that the *synthesis of the theoretical*

[1] Kant's letter to Marcus Herz, Feb. 21, 1772.

[2] This frequently repeated definition makes the fundamental conception of of the critical doctrine of knowledge appear in closest proximity to the fundamental metaphysical conception of the Monadology. Cf. § 31, 11.

[3] Which is introduced in the *Transcendental Analytic* in connection with the doctrine of the categories. Sections 10 and 15 (of the first edition of the *Critique*).

[4] Hence the conception of synthesis in the present form of the *Critique of Pure Reason* comes in collision with the psychological presuppositions which passed over to the *Critique* out of the German working-over of the *Inaugural Dissertation*, which forms the *Transcendental Æsthetic* and the beginning of the *Transcendental Logic* (this was originally to have appeared immediately after 1770 under the title *Limits of the Sensibility and of the Understanding*). In the *Prolegomena* these psychological presuppositions became obliterated. Earlier, sensibility and understanding were set over against each other as receptivity and spontaneity; but space and time, the pure Forms of the sensibility, were indeed the principles of the synthetical ordering of the sensations, and thus belonged under the general conception of synthesis, *i.e.* spontaneous unity of the manifold. Thus the conception of synthesis burst the psychological schema of the *Inaugural Dissertation*.

reason completes itself in three stages: the combination of sensations into perceptions takes place in the Forms of space and time; the combination of the perceptions into experience of the natural world of reality takes place by means of concepts of the understanding; the combination of judgments of experience into metaphysical knowledge takes place by means of general principles, which Kant calls Ideas. These three stages of the knowing activity develop, therefore, as different Forms of synthesis, of which each higher stage has the lower for its content. The critique of reason has to investigate what the especial Forms of this synthesis are in each stage, and in what their universal and necessary validity consists.

2. As regards *mathematics*, the conception of the *Inaugural Dissertation* fits aptly, in the main, into the critique of reason. Mathematical propositions are synthetic; they rest in the last resort upon construction in pure perception, not upon the development of conceptions. Their necessity and universal validity, which cannot be established by any experience, is, therefore, to be explained only if an *a priori principle of perception* lies at their basis. Kant, therefore, shows that the general ideas of *space and time*, to which all insights of geometry and arithmetic relate, are "pure Forms of perception" or "perceptions *a priori*." The ideas of the one infinite space and of the one infinite time do not rest upon the combination of empirical perceptions of finite spaces and times; but with the very attributes of limit in the "beside-of-one-another" and "after-one-another" (co-existence and succession), the whole of space and the whole of time respectively are already involved in the empirical perception of particular space and time magnitudes, which can accordingly be presented to the mind only as parts of space in general and of time in general. Space and time cannot be "concepts," since they relate to an object which is only a single, unique object, and which is not thought as complete, but is involved in an infinite synthesis; and further, they are related to the ideas of finite magnitudes, not as class-concepts are to their particular examples, but as the whole to the part. If they are, accordingly, pure perceptions (*Anschauungen*), *i.e.* perceptions not founded upon empirical perceptions (*Wahrnehrnungen*), but lying at the basis of all empirical perceptions,[1] then they are, as such, necessary; for we can indeed think

[1] Here once more it must be recalled that it is but a perverted and completely erroneous conception of Kant to conceive of this "lying at the basis of" or "preceding," as referring to time. The *nativism*, which holds space and time

everything away from them, but cannot think them away. They are the given Forms of pure perception from which we cannot escape, the *laws of relations*, in which alone we can mentally represent with synthetic unity the manifold of sensations. And further, space is the form of the outer sense, time that of the inner sense; all objects of the particular senses are perceived as spatial, all objects of self-perception as in time.

If, then, space and time are the "unchangeable Form of our sensuous receptivity," cognitions determined by these two kinds of perception without any regard to the particular empirical content, possess universal and necessary validity for the entire compass of all that we can perceive and experience. In the realm of the sensibility, — so the "Transcendental Æsthetic" teaches, — the only object of *a priori* knowledge is the *Form of the synthesis* of the manifold given through sensation, — the law of arrangement in space and time. But the universality and necessity of this knowledge is intelligible only if *space and time are nothing but the necessary Forms of man's sensuous perception.* If they possessed a reality independent of the functions of perception, the *a priori* character of mathematical knowledge would be impossible. Were space and time themselves things or real properties and relations of things, then we could know of them only through experience, and, therefore, never in a universal and necessary way. This last mode of knowledge is possible only if they are nothing but the Form under which all things in our perception must *appear*.[1] According to this principle the *a priori* and the *phenomenal* become for Kant interchangeable conceptions. *The only universal and necessary element in man's knowledge is the Form under which things appear in it.* Rationalism limits itself to the Form, and holds good even for this only at the price of the "subjectivity" of the same.

3. While Kant would thus have the spatial and chronological relations of objects of perception regarded as wholly a mode of mental representation, which does not coincide with the reality of things themselves, he distinguished this conception of their *ideality* very exactly from that "subjectivity of the qualities of sense" which was held by him, as by all philosophy after Descartes and Locke, to be self-evident.[2] And the point at issue here again is solely the ground of the phenomenality. As regards colour, taste, etc., the phenomenality had been based, since the time of Protagoras and Democritus,

to be inborn ideas, is un-Kantian throughout, and stands in contradiction to express declarations of the philosopher (cf., *e.g.*, above, p. 465 f.).

[1] This thought is developed with especial clearness in the *Prolegomena*, § 9.

[2] Cf. *Critique*, § 3, b. W., II. 68.

upon the difference and relativity of impressions; for the Forms of space and time, Kant deduces their phenomenality precisely from their invariability. For him, therefore, the qualities of sense offered only an individual and contingent mode of representation; while the Forms of space and time, on the other hand, present *a universal and necessary mode in which things appear.* All that perception contains, is, indeed, not the true essence of things, but an appearance or phenomenon; but the contents of sensation are "phenomena" in quite another sense than that in which the Forms of space and time are such; the former have worth only as the states of the individual subject, the latter as "objective" Forms of perception for all. Even on this ground, therefore, Kant, too, sees the task of natural science to lie in the reduction of the qualitative to the quantitative, in which alone necessity and universal validity can be found upon a mathematical basis, agreeing in this with Democritus and Galileo; but he differed from his predecessors in holding that, *philosophically considered*, even the mathematical mode of representing Nature can be regarded only as an appearance and phenomenon, though in the deeper sense of the word. Sensation gives an individual idea, mathematical theory gives a necessary, universally valid perception of the actual world; but both are merely different stages of the *phenomenal appearance*, behind which the true thing-in-itself remains unknown. Space and time hold without exception for all objects of perception, but for nothing beyond; they have "*empirical reality*" and "*transcendental ideality.*"

4. The main advance of the *Critique of Reason* beyond the *Inaugural Dissertation* consists in the fact that these same principles are extended in a completely parallel investigation to the question as to the epistemological value which belongs to the *synthetic Forms of the activity of the understanding.*[1]

Natural science needs besides its mathematical basis a number of general principles as to the connection of things. These principles, such as that every change must have its cause, are of a synthetic nature, but, at the same time, are not capable of being established by experience, though they come to consciousness through experience, are applied to experience, and find there their confirmation. Of such principles a few have indeed been incidentally propounded and treated hitherto, and it remains for the *Critique* itself to discover the "system of principles," but it is clear that without this basis the knowledge of Nature would be deprived of its necessary

[1] This parallelism is seen most plainly by comparing §§ 9 and 14 of the *Prolegomena*.

and universal validity. For "Nature" is not merely an aggregate of spatial and temporal Forms, of corporeal shapes and motions, but a *connected system*, which we perceive through our senses, but *think at the same time through conceptions*. Kant calls the faculty of thinking the manifold of perception in synthetic unity, the *Understanding*; and the *categories or pure conceptions of Understanding* are the *Forms of the synthesis of the Understanding*, just as space and time are the Forms of the synthesis of perception.

If now *Nature*, as object of our knowledge, were a real connected system of things, independent of the functions of our reason, we could know of it only through experience and never *a priori*; a universal and necessary knowledge of Nature is possible only if our conceptional Forms of synthesis determine Nature itself. If Nature prescribed laws to our understanding, we should have only an empirical, inadequate knowledge; *an a priori knowledge of Nature is therefore possible only if the case be reversed and our understanding prescribes laws to Nature*. But our understanding cannot determine Nature in so far as it exists as a thing-in-itself, or as a system of things-in-themselves, but *only in so far* as it appears in our thought. *A priori* knowledge of Nature is therefore possible *only if the connection which we think between perceptions is also nothing but our mode of ideation*; the conceptional relations also, in which Nature is an object of our knowledge, must be only "phenomenon."

5. In order to attain this result, the *Critique of Reason* proceeds first to assure itself of these synthetic Forms of the understanding in systematic completeness. Here it is clear from the outset that we have not to do with those analytic relations which are treated in *formal logic*, and grounded upon the principle of contradiction. For these contain only the rules for establishing relations between conceptions according to the contents already given within them. But such modes of combination as are present when we affirm the relation of cause and effect, or of substance and accident, are not contained in those analytical Forms — just this had been shown by Hume. Kant discovers here the completely new task of *transcendental logic*.[1] Side by side with the (analytic) Forms of the understanding, in accordance with which the relations of conceptions which are given as to their contents are established, appear the *synthetic Forms of understanding*, through which perceptions are made objects of conceptional knowledge. Images of sensation, co-ordinate in space and changing in time, become "objective" only by being *thought* as

[1] Cf. M. Steckelmacher, *Die formale Logik Kant's in ihren Beziehungen zur transscendentalen* (Breslau, 1878).

things with abiding qualities and changing states; but this relation expressed by means of the *category* inheres analytically neither in the perceptions nor in their perceptional relations as such. In the analytic relations of formal logic thinking is dependent upon its objects, and appears ultimately with right as only a reckoning with given magnitudes. The synthetic Forms of transcendental logic, on the contrary, let us recognise the understanding in its creative function of *producing* out of perceptions the *objects of thought itself*.

At this point, in the distinction between formal and transcendental logic, appears for the first time the fundamental antithesis between Kant and the conceptions of the Greek theory of knowledge which had prevailed up to his time. The Greek theory assumed "the objects" as "given" independently of thought, and regarded the intellectual processes as entirely dependent upon the objects; at the most it was the mission of the intellectual processes to reproduce these objects by way of copy, or allow themselves to be guided by them. Kant discovered that the objects of thought are none other than the products of thought itself. This *spontaneity* of reason forms the deepest kernel of his *transcendental idealism*.

But while he thus with completely clear consciousness set a new epistemological *logic of synthesis* by the side of the analytical logic of Aristotle, which had as its essential content the relations involved in subsuming ready-made conceptions under each other (cf. § 12), he yet held that both had a common element, viz: *the science of judgment*. In the judgment the relation thought between subject and predicate is asserted as holding objectively; all objective thinking is judging. Hence if the *categories* or *radical conceptions of the understanding* are to be regarded as the relating forms of the synthesis by which objects arise, there must be as many categories as there are kinds of judgments, and every category is the mode of connecting subject and predicate which is operative in its own kind of judgment.

Kant accordingly thought that he could deduce the *table of the categories* from that of the judgments. He distinguished from the four points of view of Quantity, Quality, Relation, and Modality, three kinds of judgments for each: Universal, Particular, Singular, — Affirmative, Negative, Infinite, — Categorical, Hypothetical, Disjunctive, — Problematic, Assertoric, Apodictic; and to these were to correspond the twelve categories: Unity, Plurality, Totality, — Reality, Negation, Limitation, — Inherence and Subsistence, Causality and Dependence, Community or Reciprocity, — Possibility and Impossibility, Existence and Non-existence, Necessity and Contingency. The artificiality of this construction, the looseness of

the relations between Forms of judgment and categories, the unequal value of the categories, — all this is evident, but Kant unfortunately had so much confidence in this system that he treated it as the architectonic frame for a great number of his later investigations.

6. The most difficult part of the task, however, was to demonstrate in the "Transcendental Deduction of the Pure Conceptions of the Understanding" how the categories "make the objects of experience." The obscurity into which the profound investigation of the philosopher necessarily came here is best brightened up by a fortunate idea of the *Prolegomena*. Kant here distinguishes *judgments of perception, i.e.* those in which only the relation of sensations in space and time for the individual consciousness is expressed, and *judgments of experience, i.e.* those in which such a relation is asserted as objectively valid, as given in the object; and he finds the difference in epistemological value between them to be, that in the judgment of experience the spatial or temporal relation is regulated and grounded by a category, a conceptional connection, whereas in the mere judgment of perception this is lacking. Thus, for example, the succession of two sensations becomes objective and universally valid when it is thought as having its ground in the fact that one phenomenon is the cause of the other. All particular constructions of the spatial and temporal synthesis of sensations become objects only by being combined according to a *rule of the understanding*. In contrast with the individual mechanism of ideation, in which individual sensations may order themselves, separate and unite in any way whatever, stands objective thinking, which is equally valid for all, and is bound to fixed, coherent, ordered wholes, in which the connections are governed by conceptions.

This is especially true in the case of relations in time. For since phenomena of outer sense belong to the inner sense as "determinations of our mind," all phenomena without exception stand under the Form of the inner sense, *i.e.* of time. Kant, therefore, sought to show that between the categories and the particular Form of perception in time a "schematism" obtains, which first makes it possible at all to apply the Forms of the understanding to the images of perception, and which consists in the possession by every individual category of a schematic similarity with a particular form of the time relation. In empirical knowledge we use this schematism to interpret the empirically perceived time relation by the corresponding category [*e.g.* to apprehend regular succession as causality]; transcendental philosophy, conversely, has to seek the justification

of this procedure in the fact that the category, as a rule of the understanding, gives the corresponding time relations a rational basis as object of experience.

In fact, the individual consciousness finds in itself the contrast between a movement of ideas (say of the fancy), for which it claims no validity beyond its own sphere, and, on the other hand, an *activity of experience*, in the case of which it knows itself to be bound in a way that is likewise valid for all others. Only in this dependence consists the reference of thought to an object. But if it was now recognised that the ground of the objective validity of the time (and space) relation can rest only in its determination by a rule of the understanding, it is on the other hand a fact that the consciousness of the individual knows nothing of this co-operation of the categories in experience, and that he rather accepts the result of this co-operation as the objective necessity of his apprehension of the synthesis of sensations in space and time.

The production of the object, therefore, does not go on in the individual consciousness, but lies already at the basis of this consciousness; for this production, a higher common consciousness must therefore be assumed, which comes into the empirical consciousness of the individual, not with its functions, but only with their result. This Kant termed in the *Prolegomena, consciousness in general;* in the *Critique, transcendental apperception*, or the "*I*" [or "*self*," or "*ego*"].

Experience is accordingly the system of phenomena in which the spatial and temporal synthesis of sensation is determined by the rules of the understanding. Thus "Nature as phenomenon" is the object of an *a priori* knowledge; for the categories hold for all experience, because experience is grounded only through them.

7. The universal and necessary force and validity of the categories find expression in the *Principles of the Pure Understanding*, in which the conceptional Forms unfold themselves through the medium of the schematism. But here it is at once evident that the main weight of the Kantian doctrine of the categories falls upon the third group, and thus upon those problems in which he hoped "to solve Hume's doubt." From the categories of Quantity and Quality result only the "Axiom of Perception," that all phenomena are extensive magnitudes, and the "Anticipations of Empirical Perception" according to which the object of sensation is an intensive magnitude; in the case of Modality there result only definitions of the possible, actual, and necessary, under the name of the "Postulates of Empirical Thought." On the other hand, the *Analogies of Experience* prove that in Nature substance is permanent, and that

its quantum can be neither increased nor diminished, that all changes take-place according to the law of cause and effect, and that all substances are in thorough-going reciprocity or inter-action.

These, therefore, are the universally and necessarily valid principles and highest premises of all natural science, which are universally and necessarily valid without any empirical proof; they contain what Kant calls the *metaphysics of Nature*. In order that they may be employed, however, upon the Nature given through our senses, they must pass through a mathematical formulation, because Nature is the system of sensations perceived in the Forms of space and time and ordered according to the categories. This transition is effected through the empirical conception of *motion*, to which all occurrence and change in Nature is theoretically to be reduced. At least, science of Nature, in the proper sense, reaches only so far as we can employ mathematics: hence Kant excluded psychology and chemistry from natural science as being merely descriptive disciplines. The "Metaphysical Elements of Natural Science" contain, accordingly, all that can be inferred universally and necessarily concerning the laws of motion, on the ground of the categories and of mathematics. The most important point in Kant's philosophy of Nature, as thus built up, is his *dynamic theory of matter*, in which he now deduces from the general principles of the *Critique* the doctrine already laid down in the "Natural History of the Heavens," that the substance of that which is movable in space is the product of two forces which maintain an equilibrium in a varying degree, — those of attraction and repulsion.

8. But in accordance with Kant's presuppositions, the above metaphysics of Nature can be only a *metaphysics of phenomena*: and no other is possible, for the categories are Forms for relating, and as such are in themselves empty; they can refer to an object only through the medium of perceptions, which present a manifold content to be combined. This perception, however, is, in the case of us men, only the sensuous perception in the forms of space and time, and as a content for their synthetic function we have only that given in sensations. Accordingly, *the only object of human knowledge is experience, i.e.* phenomenal appearance; and the division of objects of knowledge into phenomena and noumena, which has been usual since Plato, has no sense. A knowledge of things-in-themselves through "sheer reason," and extending beyond experience, is a nonentity, a chimera.

But has, then, the conception of the thing-in-itself any rational meaning at all? and is not, together with this, the designation of all objects of our knowledge as "phenomena," also without meaning?

This question was the turning-point of Kant's reflections. Hitherto all that the naïve conception of the world regards as "object" has been resolved partly into sensations, partly into synthetic Forms of perception and of the understanding; nothing seems to remain besides the individual consciousness as truly existing, except the "consciousness in general," the transcendental apperception. But where, then, are the "things," of which Kant declared that it had never come into his mind to deny their reality?

The *conception of the thing-in-itself* can, to be sure, no longer have a positive content in the *Critique of Reason*, as it had with Leibniz, or in Kant's *Inaugural Dissertation;* it can no longer be the object of purely rational knowledge, it can no longer be an "object" at all. But it is at least no contradiction, merely to think it. Primarily, purely hypothetically, and as something the reality of which is neither to be affirmed nor to be denied, — a mere "problem." Human knowledge is limited to objects of experience, because the perception required for the use of the categories is in our case only the receptive sensuous perception in space and time. If we suppose that there is another kind of perception, there would be for this other objects, likewise, with the help of the categories. Such objects of a non-human perception, however, remain still only phenomena, though this perception again might be assumed as one which arranges the *given* contents of sensation in any manner whatever. Nevertheless, if one should think of a *perception of a non-receptive kind*, a perception which synthetically produced not only its Forms, but also its contents, — a truly "productive imagination," — its objects would necessarily be no longer phenomena, but things-in-themselves. Such a faculty would deserve the name of an *intellectual perception* (or intuition), or *intuitive intellect;* it would be the unity of the two knowing faculties of sensibility and understanding, which in man appear separated, although by their constant reference to each other they indicate a hidden common root. The possibility of such a faculty is as little to be denied as its reality is to be affirmed; yet Kant here indicates that we should have to think a supreme spiritual Being in this way. Noumena, or *things-in-themselves*, are therefore *thinkable in the negative sense as objects of a non-sensuous perception*, of which, to be sure, our knowledge can predicate absolutely nothing, — they are thinkable as *limiting conceptions* of experience.

And ultimately they do not remain so completely problematical as would at first appear. For if we should deny the reality of things-in-themselves, "all would be immediately resolved into phenomena," and we should thus be venturing the assertion that

nothing is real except what appears to man, or to other sensuously receptive beings. But this assertion would be a presumption completely incapable of proof. Transcendental idealism must, therefore, not deny the reality of noumena; it must only remain conscious that they cannot in any wise become objects of human knowledge. Things-in-themselves must be thought, but are not knowable. In this way Kant won back the right to designate the objects of human knowledge as "*only* phenomena."

9. With this the way was marked out for the third part of the critique of the reason, the *Transcendental Dialectic.*[1] A metaphysics of that which cannot be experienced, or, as Kant prefers to say, of the supersensuous, is impossible. This must be shown by a criticism of the historical attempts which have been made with this in view, and Kant chose, as his actual example for this, the Leibnizo-Wolffian school-metaphysics, with its treatment of rational psychology, cosmology, and theology. But at the same time, it must be shown that that which is incapable of being experienced, which cannot be known, must yet necessarily be thought; and the *transcendental illusion* must be discovered, by which even the great thinkers have at all times been seduced into regarding this, which must necessarily be thought, as an object of possible knowledge.

To attain this end Kant proceeds from the antithesis between the activity of the understanding and the sensuous perception by the aid of which alone the former produces objective knowledge. The thinking, which is determined by the categories, puts the data of the sensibility into relation with one another in such a way, that every phenomenon is *conditioned* by other phenomena: but in this process the understanding, in order to think the individual phenomenon completely, must needs *grasp the totality of the conditions* by which this particular phenomenon is determined in its connections with the whole experience. But, in view of the endlessness of the world of phenomena in its relation to space and time, this demand cannot be fulfilled. For the categories are principles of relation between phenomena; they cognise the conditionality or conditional character of each phenomenon only *by means of other phenomena*, and demand for these again insight into their conditional nature as determined by others, and so on to infinity.[2] Out of this relation

[1] As regards the subject matter, the Transcendental Æsthetic, Analytic, and Dialetic, as the Introduction shows, form the three main co-ordinate parts of the *Critique;* the formal schematism of the division which Kant imitated from the arrangement of logical text-books usual at that time, is, on the contrary, entirely irrelevant. The "Doctrine of Method" is in fact only a supplement extremely rich in fine observations.

[2] Cf. the similar thoughts in Nicolaus Cusanus and Spinoza, though there metaphysically applied; above, pp. 347 and 419.

between understanding and sensibility result for human knowledge *necessary and yet insoluble problems;* these Kant calls Ideas, and the faculty requisite for this highest synthesis of the cognitions of the understanding he designates as *Reason* in the narrower sense.

If now the reason will represent to itself as solved, a problem thus set, the sought totality of conditions must be thought as some thing *unconditioned*, which, indeed, contains in itself the conditions for the infinite series of phenomena, but which is itself no longer conditioned. This conclusion of an infinite series, which for the knowledge of the understanding is in itself a contradiction, must nevertheless be thought, if the task of the understanding, which aims at totality in connection with the infinite material of the data of the senses, is to be regarded as performed. The Ideas are hence ideas or mental representations of the unconditioned, which must necessarily be thought without ever becoming object of knowledge, and the transcendental illusion into which metaphysics falls consists in regarding them as given, whereas they are only *imposed* or *set as a task* (*aufgegeben*). In truth they are not constitutive principles through which, as through the categories, objects of knowledge are produced, but only *regulative principles*, by which the understanding is constrained to seek for farther and farther connecting links in the realm of the conditioned of experience.

Of such Ideas Kant finds three; the unconditioned for the totality of all phenomena of the inner sense, of all data of the outer sense, of all the conditioned in general, is thought respectively as the *soul, the world, and God.*

10. The criticism of rational psychology in the "Paralogisms of Pure Reason" takes the form of pointing out in the usual proofs for the substantiality of the *soul*, the *quaternio terminorum* of a confusion of the logical subject with the real substrate; it shows that the scientific conception of substance is bound to our perception of that which persists in space, and that it is therefore applicable only in the field of the external sense, and maintains that the Idea of the soul as an unconditioned real unity of all phenomena of the inner sense, is indeed as little capable of proof as it is of refutation, but is at the same time the heuristic principle for investigating the inter-connections of the psychical life.

In a similar way, the section on the "Ideal of the Reason" treats the Idea of *God.* Carrying out with greater precision his earlier treatise on the same subject, Kant destroys the cogency of the arguments brought forward for the existence of God. He combats the right of the *ontological* proof to infer existence from the concep-

tion alone; he shows that the *cosmological* proof involves a *petitio principii* when it seeks the "first cause" of all that is "contingent" in an "absolutely necessary" being; he proves that the teleological or *physico-theological* argument at the best — granted the beauty, harmony, and purposiveness or adaptation of the universe — leads to the ancient conception of a wise and good "Architect of the world." But he emphasises that the denial of God's existence is a claim which steps beyond the bounds of our experiential knowledge, and is as incapable of proof as the opposite, and that rather the belief in a living, Real unity of all reality constitutes the only powerful motive for empirical investigation of individual groups of phenomena.

Most characteristic by far, however, is Kant's treatment of the Idea of the world in the *Antinomies of Pure Reason*. These antinomies express the fundamental thought of the transcendental dialectic in the sharpest manner, by showing that when the universe is treated as the object of knowledge, propositions which are mutually contradictory can be maintained with equal right, in so far as we follow, on the one hand, the demand of the understanding for a completion of the series of phenomena, and on the other, the demand of the sensuous perception for an endless continuance of the same. Kant proves hence, in the "thesis," that the world must have a beginning and end in space and time, that as regards its substance it presents a limit to its divisibility, that events in it must have free, *i.e.* no longer causally conditioned, beginnings, and that to it must belong an absolutely necessary being, God; and in the antithesis he proves the contradictory opposite for all four cases. At the same time the complication is increased by the fact that the proofs (with one exception) are indirect, so that the thesis is proved by a refutation of the antithesis, the antithesis by refutation of the thesis; each assertion is therefore both proved and refuted. The solution of the antinomies in the case of the first two, the "mathematical," takes the form of showing that the principle of excluded third loses its validity where something is made the object of knowledge, which can never become such, as is the case with the universe. In the case of the third and fourth antinomies, the "dynamical," which concern freedom and God, Kant seeks to show (what, to be sure, is impossible in a purely theoretical way), that it is perhaps thinkable that the antitheses hold true for phenomena, and the theses, on the other hand, for the unknowable world of things-in-themselves. For this latter world, it is at least not a contradiction to think freedom and God, whereas neither is to be met with, it is certain, in our knowledge of phenomena.

§ 39. The Categorical Imperative.

H. Cohen, *Kant's Begründung der Ethik*. Berlin, 1877.
E. Arnoldt, *Kant's Idee vom höchsten Gut*. Königsberg, 1874.
B. Pünjer, *Die Religionsphilosophie Kant's*. Jena, 1874.
[N. Porter, *Kant's Ethics*. Chicago, 1886.]
[J. G. Schurmann, *Kantian Ethics and the Ethics of Evolution*. Lond. 1882.]

The synthetic function in the theoretical reason is the combination of mental presentations into perceptions, judgments, and Ideas. The *practical synthesis* is the relating of the will to a presented content, by which this latter becomes an *end*. This relating Form Kant carefully excluded from the primary conceptions of the knowing understanding; it is instead the *fundamental category of the practical use of the reason*. It gives no objects of knowledge, but instead, objects of will.

1. For the critique of the reason there rises from this the problem, whether there is a *practical synthesis a priori*, that is, whether there are *necessary and universally valid objects of willing;* or whether anything is to be found which the reason makes its end or demands *a priori, without any regard to empirical motives*. This universal and necessary object of the practical reason we call the *moral law*.

For it is clear for Kant from the outset, that the activity of pure reason in proposing ends to itself, if there is any such activity, must appear as a *command*, in the form of the *imperative*, as over against the empirical motives of will and action. The will directed toward the particular objects and relations of experience is determined by these and dependent upon them; the pure rational will, on the contrary, can be determined only through itself. It is hence *necessarily directed toward something else* than the natural impulses, and this something else, which the moral law requires as over against our inclinations, is called *duty*.

Hence the predicates of ethical judgment concern only this kind of determination of the will; they refer to the *disposition*, not to the act or to its external consequences. Nothing in the world, says Kant,[1] can be called good without qualification except a Good Will; and this remains good even though its execution is completely restrained by external causes. Morality as a quality of man is a *disposition conformable to duty*.

2. But it becomes all the more necessary to investigate as to

[1] *Grundlegung zur Metaphysik der Sitten*, I. (W., IV. 10 ff.); Abbott, p. 9.

whether there is such an *a priori* command of duty, and in what consists a law, to which obedience is required by the reason quite independently of all empirical ends. To answer this question Kant proceeds from the teleological connections of the actual volitional life. Experience of natural causal connections brings with it the consequence, that we are forced to will according to the *synthetic relation of end and means*, one thing for the sake of another. From practical reflection on such relations arise (technical) rules of dexterity and ("practical") counsels of prudence. They all assert, "If you will this or that, then you must proceed thus or so." They are on this account *hypothetical imperatives*. They presuppose a volition as actually present already, and demand on the ground of this the further act of will which is required to satisfy the first.

But the moral law cannot be dependent upon any object of will already existing in experience, and moral action must not appear as means in service of other ends. The requirement of the moral command must be propounded and fulfilled *solely for its own sake*. It does not appeal to what the man already wishes on other grounds, but demands an act of will which has its worth in itself only, and the only truly moral action is one in which such a command is fulfilled without regard to any other consequences. The moral law is a *command absolute*, a *categorical imperative*. It holds unconditionally and absolutely, while the hypothetical imperatives are only relative.

If now it is asked, what is the content of the categorical imperative, it is clear that it can contain no empirical element: the demand of the moral law does not stand in relation to the "matter of the act of will." For this reason happiness is not adapted to be the principle of morals, for the striving after happiness is already present empirically, it is not a demand of reason. Eudæmonistic morals leads, therefore, to merely hypothetical imperatives; for it, the ethical laws are only "counsels of prudence or sagacity" advising the best method of going to work to satisfy the natural will. But the demand of the moral law is just for a will other than the natural will; the moral law exists for a higher purpose than to make us happy. If Nature had wished to place our destiny and vocation in happiness, it would have done better to equip us with infallible instincts than with the practical reason of conscience, which is continually in conflict with our impulses.[1] The "happiness morals" is even, for Kant, the type of false morals, for in this the law always is that I should do something because I desire something

[1] *Grundlegung zur Metaphysik der Sitten*, IV. 12 f.; Abbott, p. 11.

else. Every such system of morals is *heteronomous;* it makes the practical reason dependent upon some thing given outside of itself, and this reproach applies to all attempts to seek the principle of morality in metaphysical conceptions, such as that of perfection. The theological morals is completely rejected by Kant with the greatest energy, for it combines all kinds of heteronomy when it sees the sanction in the divine will, the criterion in utility, and the motive in the expectation of reward and punishment.

3. The categorical imperative must be the expression of the *autonomy of the practical reason, i.e.* of the pure self-determination of the rational will. It concerns, therefore, solely the Form of willing, and requires that this should be a *universally valid law*. The will is heteronomous if it follows an empirically given impulse; it is autonomous only where it carries out a law given it by itself. The categorical imperative demands, therefore, that instead of acting according to impulses we should rather act according to *maxims*, and according to such as are adapted for a universal legislation for all beings who will rationally. "*Act as if the maxim from which you act were to become through your will a universal law of nature.*"

This purely formal principle of conformity to law gains a material import by reflection upon the various kinds of worths. In the kingdom of ends that which is serviceable for some end, and can therefore be replaced by something else, has a price, but that only has *worth* or dignity, which is absolutely valuable in itself, and is the condition for the sake of which other things may become valuable. This worth belongs in the highest degree to the moral law itself, and, therefore, the motive which stimulates man to obey this law must be nothing but *reverence for the law itself*. It would be dishonoured if it were fulfilled for the sake of any external advantage. The worth or dignity of the moral law, moreover, passes over to the man who is determined by this alone in the whole extent of his experience, and is able to determine himself by the law itself, to be its agent, and to identify himself with it. Hence *reverence for the worth of man* is for Kant the material principle of moral science. Man should do his duty not for the sake of advantage, but *out of reverence for himself*, and in his intercourse with his fellow-man he should make it his supreme maxim, never to treat him as a mere means for the attainment of his own ends, but always to honour in him the *worth of personality*.

From this Kant deduces a proud and strict system of morals[1] in

[1] *Metaphysische Anfangsgründe der Tugendlehre*, W., V. 221 ff.

which, as set forth in his old age, we cannot fail to discern the features of rigourism and of a certain pedantic stiffness. But the fundamental characteristic of the *contrast between duty and inclination* lies deeply rooted in his system. The principle of autonomy recognises as moral, only acts of will done in conformity to duty, and wholly out of regard for maxims; it sees in all motivation of moral action by natural impulses a falsification of pure morality. Only that which is done solely from duty is moral. The empirical impulses of human nature are, therefore, in themselves, ethically indifferent; but they become bad as soon as they oppose the demand of the moral law, and the moral life of man consists in realising the command of duty in the warfare against his inclinations.

4. The self-determination of the rational will is, therefore, the supreme requirement and condition of all morality. But it is impossible in the realm of the experience which is thought and known through the categories: for this experience knows only the determination of each individual phenomenon by others; self-determination, as the power *to begin* a series of the conditioned, is impossible according to the principles of cognition. This power with reference to the will we call *freedom*, as being an action which is not conditioned by others according to the schema of causality, but which is determined only through itself, and is on its part the cause of an endless series of natural processes. Hence if the theoretical reason, whose knowledge is limited to experience, had to decide as to the reality of freedom, it would necessarily deny it, but would thereby reject also the possibility of the moral life. But the *Critique of Pure Reason* has shown that the theoretical reason cannot assert anything whatever as to things-in-themselves, and that, accordingly, there is no contradiction in thinking the possibility of freedom for the supersensuous. But as it is evident that freedom must necessarily be real if morality is to be possible, the *reality of things-in-themselves and of the supersensuous*, which for the theoretical reason must remain always merely problematical, is herewith guaranteed.

This guarantee is, to be sure, not that of a proof, but that of a *postulate*. It rests upon the consciousness; *thou canst, for thou oughtest*. Just so truly as thou feelest the moral law within thee, so truly as thou believest in the possibility of following it, so truly must thou also believe in the conditions for this, viz. autonomy and freedom. Freedom is not an object of knowledge, but an object of faith, — but of a faith which holds as universally and necessarily in the realm of the supersensuous, as the principles of the understanding hold in the realm of experience, — an *a priori faith*.

Thus the practical reason becomes completely independent of the

theoretical. In previous philosophy "the primacy" of the theoretical over the practical reason had prevailed; knowledge had been assigned the work of determining whether and how there is freedom, and accordingly of deciding as to the reality of morality. According to Kant, the reality of morality is the fact of the practical reason, and, therefore, we must believe in freedom as the condition of its possibility. From this relation results, for Kant, *the primacy of the practical over the theoretical reason;* for the former is not only capable of guaranteeing that which the latter must decline to vouch for, but it appears also that the theoretical reason in those Ideas of the unconditioned in which it points beyond itself (§ 38, 9) is determined by the needs of the practical reason.

Thus there appears with Kant, in a new and completely original form, *the Platonic doctrine of the two worlds* of the sensuous and the supersensuous, of phenomena and things-in-themselves. Knowledge controls the former, faith the latter; the former is the realm of necessity, the latter the realm of freedom. The relation of antithesis and yet of mutual reference, which exists between these two worlds, shows itself best in the nature of man, who alone belongs in like measure to both. So far as man is a member of the order of Nature he *appears* as *empirical character* — *i.e.* in his abiding qualities as well as in his individual decisions — as a necessary product in the causal connection of phenomena; but as a member of the supersensuous world *he is intelligible character, i.e.* a being whose nature is decided by free self-determination within itself. The empirical character is only the manifestation, which for the theoretical consciousness is bound to the rule of causality, of the intelligible character, whose freedom is the only explanation of the feeling of responsibility as it appears in the *conscience*.

5. But freedom is not the only *postulate* of *a priori* faith. The relations between the sensuous and the moral world demand yet a more general bond of connection, which Kant finds in the *conception of the highest good*.[1] The goal of the sensuous will is happiness; the goal of the ethical will is virtue; these two cannot sustain to each other the relation of means to end. The striving after happiness does not make an act virtuous; and virtue is neither permitted to aim at making man happy, nor does it actually do so. Between the two no causal relation exists empirically, and ethically no teleological connection can be permitted to enter. But since man belongs as well to the sensuous as to the ethical world, the "highest good" must consist for him in the *union of virtue and happiness*. This

[1] *Critique of Prac. Reason*, Dialectic, W., IX. 225 ff.; Abbott, 202 ff.

last synthesis of practical conception, however, can be morally thought only in the form that *virtue alone is worthy of happiness.*

The demand of the moral consciousness, here expressed, is nevertheless not satisfied by the causal necessity of experience. Natural law is ethically indifferent, and affords no guarantee that virtue will necessarily lead to happiness; on the contrary, experience teaches rather that virtue requires renunciation of empirical happiness, and that want of virtue is capable of being united with temporal happiness. If, therefore, the ethical consciousness requires the *reality of the highest good,* faith must reach beyond the empirical life of man, and beyond the order of Nature, on into the supersensuous. It postulates a reality of personality which extends beyond the temporal existence — the *immortal life* — and a *moral order of the universe,* which is grounded in a Supreme Reason — in *God.*

Kant's *moral proof* for freedom, immortality, and God is, therefore, not a proof of knowledge, but of faith. Its postulates are the conditions of the moral life, and their reality must be believed in as fully as the reality of the latter. But with all this they remain knowable theoretically, as little as before.

6. *The dualism of Nature and morality* appears with Kant in its baldest form in his *Philosophy of Religion,* the principles of which, agreeably to his theory of knowledge, he could seek only in the practical reason; universality and necessity in relation to the supersensuous are afforded only by the ethical consciousness. Only that can be *a priori* in religion, which is based upon morals. Kant's religion of reason is, therefore, not a natural religion, but "moral theology." Religion rests upon *conceiving moral laws as divine commands.*

This religious form of morality Kant develops once more from the twofold nature of man. There are in him two systems of impulses, the sensuous and the moral; on account of the unity of the willing personality neither can be without relation to the other. Their relation should be, according to the moral demand, that of the subordination of the sensuous impulses to the moral; but as a matter of fact, according to Kant, the reverse relation naturally obtains with man,[1] and since the sensuous impulses are evil as soon as they even merely resist the moral, there is in man a *natural bent*

[1] The pessimistic conception of man's natural essence doubtless has with Kant its occasion in his religious education; but he guards himself expressly against the identification of his doctrine of the radical evil with the theological conception of hereditary sin; cf. *Rel. innerh. d. Grenze d. r. V.,* I. 4; W., VI. 201 ff.; [Abbott, p. 347].

to evil. This "radical evil" is not necessary; for otherwise there would be no responsibility for it. It is inexplicable, but it is a fact; it is a deed of intelligible freedom. The task which follows from this for man is the *reversal of the moving springs,* which is to be brought about by the warfare between the good and evil principle within him. But in the above-described perverted condition, the brazen majesty of the moral law works upon man with a terror that dashes him down, and he needs, therefore, to support his moral motives, *faith in a divine power,* which imposes upon him the moral law as its command, but also grants him the help of *redeeming love* to enable him to obey it.

From this standpoint Kant interprets the essential portions of Christian doctrine into a "pure moral religion," viz. the ideal of the moral perfection of man in the Logos, redemption through vicarious love, and the mystery of the new birth. He thus restores to their rightful place, from which they had been displaced by the rationalism of the Enlightenment, the truly religious motives which are rooted in the *felt need of a redemption,* — though he does this in a form which is free from the historical faith of orthodoxy. But the true Church, for him also, is only the invisible, the moral kingdom of God, the ethical community of the redeemed. The historical manifestations of the moral community of men are the Churches; they need the means of revelation and of "statutory" faith. But they have the task of putting this means into the service of the moral life, and if instead of this they lay the main weight upon the statutory, they fall into service for a reward, and into hypocrisy.

7. It is connected with his restriction of ethical judgment by making it apply only to the disposition, that in his *Philosophy of Right* Kant pursued that direction which treats the same, so far as possible, independently of morals. Kant distinguished (even with regard to ethical valuation) between *morality of disposition* and *legality of action,* between voluntary obedience to the moral law and external conformity of action to what is demanded by positive law. Actions are subject to compulsion, dispositions never. While morals speaks of the duties of the disposition, law or right is employed with the external duties of action which can be enforced, and does not ask as to the disposition with which they are fulfilled or broken.

And yet Kant makes *freedom,* which is the central conception of his whole practical philosophy, the basis also of his science of right. For right or law is also a demand of the practical reason, and has in this its *a priori,* valid principle: it cannot therefore be deduced as a product of empirical interest, but must be understood from the

general rational vocation or destiny of man. This latter is the vocation to freedom. The community of men consists of those beings that are destined for ethical freedom, but are yet in the natural state of caprice or arbitrary will, in which they mutually disturb and check each other in their spheres of activity. Law has for its task to establish the conditions under which the will of the one can be united with the will of another according to a universal law of freedom, and, by enforcing these conditions, to make sure the freedom of personality.

From this principle follows analytically, according to Kant's deduction, all private law, public law, and international law. At the same time, it is interesting to observe how the principles of his theory of morals are everywhere authoritative in this construction. Thus, in private law it is a far-reaching principle — corresponding to the categorical imperative — that man must never be used as a thing. So, too, the penal law of the state is grounded not by the task of maintaining the state of right, but by the ethical necessity of retribution.

Law in a state of nature is therefore valid only in a provisory way; it is completely, or, as Kant says, peremptorily, valid, only when it can be certainly enforced, that is, in the state. The supreme rule for justice in the state, Kant finds in this, that nothing should be decreed and carried out which might not have been resolved upon if the state had come into existence by a *contract*. The contract theory is here not an explanation of the empirical origin of the state, but a norm for its task. This norm can be fulfilled with any kind of constitution, provided only law really rules, and not arbitrary caprice. Its realisation is surest if the three public functions of legislation, administration and judicial procedure are independent of each other, and if the legislative power is organised in the "republican" form of the representative system, — a provision which is not excluded by a monarchical executive. It is only by this means, Kant thinks, that the freedom of the individual will be secured, so far as this can exist without detriment to the freedom of others; and not until all states have adopted this constitution can the state of Nature in which they now find themselves in their relations to each other, give place to a state of law. Then, too, the law of nations, which is now only provisory, will become "peremptory."

Upon foundations of philosophy of religion and philosophy of law is built up, finally, Kant's theory of *history*.[1] This took form

[1] Cf. besides the treatises cited on pp. 417–422. the treatises, *Idea of a Universal History from a Cosmopolitical Point of View* (1784) [tr. by Hastie in *Principles of Politics*] ; *Recension von Herder's Ideen* (1785) ; *Muthmasslicher Anfang der Weltgeschichte* (1786) ; *Das Ende aller Dinge* (1794).

in dependence upon the theories of Rousseau and Herder, a dependence which follows from the antithesis between those authors. Kant can see in history neither the aberration from an originally good condition of the human race, nor the necessary, self-intelligible development of man's original constitution. If there ever was a primitive paradisiacal state of humanity, it was the *state of innocence* in which man, living entirely according to his natural impulses, was as yet entirely unconscious of his ethical task. The *beginning of the work of civilisation*, however, was possible only through a break with the state of Nature, since it was in connection with its transgression that the moral law came to consciousness. This (theoretically incomprehensible) "*Fall*" was the beginning of history. Natural impulse, previously ethically indifferent, now became evil, and was to be opposed.

Since then the *progress of history* has consisted *not in a growth of human happiness*, but in approximation to ethical perfection, and in the extension of the *rule of ethical freedom*. With deep earnestness Kant takes up the thought that the development of civilisation succeeds only at the cost of individual happiness. He who takes this latter for his standard must speak only of a retrogression in history. The more complicated relations become, the more the vital energy of civilisation grows, by so much the more do individual wants increase, and the less is the prospect of satisfying them. But just this refutes the opinion of the Enlighteners, as if happiness were man's vocation. The ethical development of the whole, the control of practical reason, grows in an *inverse ratio* to the empirical satisfaction of the individual. And since history represents the outer social life of humanity, its goal is the completion of right and law, the establishing of the best political constitution among all peoples, perpetual peace — a goal whose attainment, as is the case with all ideals, lies at an infinite distance.

§ 40. Natural Purposiveness.

A. Stadler, *Kant's Teleologie*. Berlin, 1874.
H. Cohen, *Kant's Begründung der Æsthetik*. Berlin, 1889.
[J. H. Tufts, *The Sources and Development of Kant's Teleology*. Chicago, 1892.]

By his sharp formulation of the antithesis of Nature and Freedom, of necessity and purposiveness (or adaptation to ends), the

theoretical and practical reason diverge so widely in Kant's system, that the unity of the reason seems endangered. The critical philosophy needs, therefore, in a manner that prefigures the methodical development of its system,[1] a *third principle* that shall afford a definitive mediation, and in which the synthesis *of the above opposites* shall be effected.

1. *Psychologically*, the sphere in which this problem is to be solved can, in accordance with the triple division adopted by Kant (cf. § 36, 8), be only the *faculty of feeling or "approval."* This, in fact, takes an intermediate position between ideation and desire. Feeling or approval presupposes a complete idea of the object, — complete in the theoretical sense, — and sustains a synthetic relation to this; and this *synthesis* as a feeling of pleasure or pain, or as approval or disapproval, always expresses in some way that the object in question is felt by the subject to be either *purposive, i.e.* adapted to its end, or not to the purpose.

The standard of this valuation may have existed beforehand as a conscious design, forming thus a case of intentional volition, and in such cases the objects are termed *useful* or injurious; but there are also feelings which, without being referred to any conscious purposes whatever, characterise their objects immediately as *agreeable* or disagreeable, and in these also a determination with reference to an end must be somehow authoritative.

The critique of the reason, accordingly, has to ask, Are there *feelings a priori*, or *approvals that have universal and necessary validity?* and it is clear that the decision upon this case is dependent upon the nature of the ends which determine the feelings and approvals in question. With regard to the purposes of the will, this question has been already decided by the *Critique of the Practical Reason;* the only end of the conscious will which has *a priori* validity is the fulfilling of the categorical imperative, and on this side, therefore, only the feelings of approval or disapproval in which we employ the ethical predicates "good" and "bad," can be regarded as necessary and universally valid. For this reason the new problem restricts itself to the *a priori* character of those feelings in which no conscious purpose or design precedes. But these, as may be seen from the beginning, are the feelings of the *Beautiful* and the *Sublime.*

2. But the problem widens upon another side, when we take into consideration the *logical* functions which are concerned in all feelings and approvals. The judgments in which these are expressed are evidently all synthetic. Predicates such as agreeable, useful, beautiful, and good, are not analytically contained in the subject, but express the worth of the object with reference to an end; they are estimations of adaptation, and contain in all cases the *subordination of the object to its end.* Now in the psychological scheme which lies at the basis of the *Critique of Pure Reason*, Kant designates the faculty of subsuming the particular under the general by the name *Judgment.* And this, too, was regarded as playing among the theoretical functions, also, the mediating part between Reason and Understanding, in such a sort that the former gives principles, the latter objects, while the Judgment performs the task of applying the principles to the objects.

[1] Cf. note at the close of the Introduction of the *Critique of Judgment*, W., VII. 38 f.

But in its theoretical use the Judgment is analytical, since it determines its objects by general conceptions according to rules of formal logic; the attainment of a correct conclusion depends only on finding the appropriate minor for a given major, or *vice versa.* In contrast with this determining Judgment, which thus needs no "Critique," Kant sets the *reflecting* Judgment, in the case of which the synthesis consists just in subordination to an end. And accordingly the problem of the *Critique of the Judgment* takes this formulation: *Is it a priori possible to judge Nature to be adapted to an end?* Evidently this is the highest synthesis of the critical philosophy; the *application of the category of the practical reason to the object of the theoretical.* It is clear from the outset that this application itself can be neither theoretical nor practical, neither *a knowing nor a willing:* it is only a *looking at Nature from the point of view of purposiveness or adaptation to ends.*

If the reflecting Judgment gives to this contemplation the direction of judging Nature with regard to her adaptation to the contemplating subject as such, it proceeds *æsthetically, i.e.* having regard to our mode of feeling or sensibility;[1] if, on the contrary, it regards Nature as if she were purposive in herself, then it proceeds *teleologically* in the narrower sense, and so the *Critique of the Judgment* is divided into the investigation of æsthetic and teleological problems.

3. In the first part Kant is primarily concerned to separate the *æsthetic judgment* with exactness from the kinds of judgments of feeling or approval which border upon it on both sides, and to this end he proceeds from the point of view of the feeling of the *beauti-*

[1] *Empfindungsweise;* thus Kant justifies his change in terminology, W., VII. 28 ff.; cf. II. 60 f. and above, p. 483 f.

ful. The beautiful shares with the good the *a priori* character, but the good is that which agrees with the end presented as a norm in the moral law, while the beautiful, on the contrary, pleases *without a conception.* For this reason, also, it is impossible to set up a universal criterion which shall contain a content according to which beauty shall be judged with logical clearness. An æsthetic doctrine is impossible; there is only a "*Critique of the Taste,*" that is, an investigation as to the possibility of the *a priori* validity of æsthetic judgments.

On the other hand, the beautiful shares with the agreeable its conceptionless quality, the absence of a conscious standard of judgment, and, therefore, the immediacy of the impression. But the distinction here lies in the fact that the agreeable is something individually and contingently gratifying, whereas the beautiful forms the object of universal and necessary pleasure.[1] The principle that there is no disputing over tastes, is true only in the sense that in matters of taste nothing is to be effected by proofs with conceptions, but this does not exclude the possibility of an appeal to universally valid feelings.

Finally, the beautiful distinguishes itself from both the good and the agreeable, in that it is the object of a *completely disinterested pleasure.* This appears in the circumstance that the *empirical reality* of its object is a matter of complete indifference for the æsthetic judgment. The hedonic feelings all presuppose the material presence of the phenomena which excite them; ethical approval or disapproval concerns just the realisation of the moral end in willing and acting; the æsthetic feelings, on the contrary, require as their condition a *pure delight in the mere represented image* of the object, whether the same is objectively present for knowledge or not. The æsthetic life lacks the power of the feelings of personal weal and woe, just as it lacks the earnestness of a universally worthy work for ethical ends; it is the mere *play* of ideas in the imagination.

Such a delight which relates *not* to the object, but only to the *image of the object,* cannot concern the objective material of the object, —for this always stands in relation to the interests of the subject, —but only the *form* in which the object is *presented to the mind;* and in this, therefore, if anywhere, is to be sought the ground of the *a priori* synthesis which belongs to the æsthetic judgments. The purposiveness of æsthetic objects cannot consist in their adaptation to some interest or other; it can be only in their adaptation to the

[1] Cf. F. Blencke, *Kant's Unterscheidung des Schönen vom Angenehmen* (Strassburg, 1889), where the analogy to the judgments of perception and of experience is emphasised.

knowing Forms, by the aid of which they are imaged in the mind. But the faculties which are active in presenting every object are sensibility and understanding. The *feeling of beauty* arises, therefore, in connection with those objects in the apprehension of which in the imagination sensibility and understanding co-operate in harmonious manner. Such objects are purposive with regard to their working upon our ideational activity, and to this relates the disinterested delight which manifests itself in the feeling of their beauty.[1]

But this relation to the formal principles of objective ideation has its ground, not in merely individual activities, but in the "consciousness in general," in the "supersensuous substrate of humanity." On this account the feeling of a fitness or purposiveness of objects with reference to this consciousness in general is *universally communicable,* though not capable of proof by conceptions, and from this is explained the *a priori* character of the æsthetic judgments.

4. While the "undesigned fitness" or appropriateness of the beautiful is thus set in relation with the working of the object upon the cognitive functions, Kant conceives the nature of the *sublime* from the point of view of an adaptation of the working of the object to the relation between the sensuous and supersensuous parts of human nature.

While the beautiful signifies a delightful rest in the play of the knowing faculties, the impression of the sublime is effected through the medium of a painful feeling of inadequacy. In the presence of the immeasurable greatness or overpowering might of objects, we feel the inability of our sensuous perception to master them, as an oppression and a casting down; but the supersensuous power of our reason raises itself above this our sensuous insufficiency. If here the imagination has to do only with extensive magnitudes, — the mathematically sublime, — then the firmly shaping activity of the theoretical reason gains the victory; but if, on the contrary, it has to do with the relations of power, — the dynamically sublime, — then the superiority of our moral worth to all the power of Nature comes to consciousness. In both cases the discomfort over our sensuous inferiority is richly outweighed and overcome by the triumph of our higher rational character. And since this is the appropriate

[1] [A fragment published by Reicke in his *Lose Blätter aus Kant's Nachlass* (B. II. p. 112) shows that Kant at one time connected this adaptation with the psychological and physiological conception of a general furtherance of life, whether through the senses or through the play of intellectual faculties. Cf. J. H. Tufts, *op. cit.*, p. 35 f.]

relation of the two sides of our being, these objects have an exalting, "*subliming*" effect, and produce the feeling of a delight of the reason, and this feeling, again, because it is based only upon the relation of our ideational Forms, is universally communicable and of *a priori* operation.

5. Kant's æsthetic theory, accordingly, in spite of its "subjective" point of departure, takes essentially the course of an explanation of the beautiful and the sublime *in Nature;* and determines the same through the relation of the *ideational Forms.* Hence the philosopher finds *pure* beauty only where the æsthetic judgment relates solely to forms that have no meaning. Where with the delight there is mingled a regard for the meaning of the forms for any norm whatever, however indefinite, there we have *dependent* beauty. This appears everywhere where the æsthetic judgment is directed toward objects in which our thought puts a reference to an end. Such norms of dependent beauty rise necessarily as soon as we contemplate in the individual phenomenon the relation to the class which it represents. There is no norm of beauty for landscapes, arabesques, or flowers, but there may be such perhaps for the higher types of the organic world. Such norms are æsthetic *ideals,* and the true ideal of the æsthetic judgment is *man.*

The presentation of the ideal is *art,* the power of æsthetic production. But while this is a function of man which is performed with reference to an end, its product will make the impression of the beautiful only when it appears as undesigned, disinterested, and free from the attempt to represent a conception, as is the case with the beauty of Nature. *Technical art* produces structures corresponding to definite ends according to rules and designs, — structures which are adapted to satisfy definite interests. *Fine art* must work upon the feeling as does a purposeless product of Nature; it must "be able to be regarded as Nature."

This, therefore, is the secret of artistic creation, and the characteristic element in it, viz. that the mind which builds with a purpose works, nevertheless, in the same way as Nature, which builds without designs and disinterestedly. The great artist does not create according to general rules; he creates the rules themselves in his involuntary work; he is original and prototypal. *Genius* is an *intelligence that works like Nature.*

In the realm of man's rational activity the desired synthesis of freedom and nature, of purposiveness and necessity, of practical and theoretical function, is then represented by genius, which with undesigning purposiveness or appropriateness creates the work of fine art.

6. In the Critique of the *Teleological* Judgment the most prominent task is to establish the relations which, from the points of view of transcendental idealism, exist between the scientific explanation of Nature and the consideration of the adaptation that dwells within her. The *theory of natural science* can in all lines be only *mechanical.* "End" (*Zweck*) is not a category or a constitutive principle of objective knowledge: all explanation of Nature consists in pointing out the causal necessity with which one phenomenon produces another; a phenomenon can never be made intelligible by emphasising its adaptation or fitness. Such "lazy" teleology is the death of all philosophy of Nature. The apprehension of purposiveness can, therefore, never profess to be an act of knowledge.

But, on the other hand, the standpoint of the mechanical explanation of Nature would give us the right to completely reject teleological consideration of Nature, only in case we were in a position to make intelligible with the aid of scientific conceptions the whole system of experience, even to the last remnant, in principle at least. But should points be found where scientific theory is inadequate for the explanation of the given material, not indeed on account of the limited nature of the material hitherto available in human experience, but on account of the permanent form of the principle which determines this material, then in these points the possibility of supplementing our knowledge by a teleological consideration must be conceded, if, at the same time, it appears that that which is mechanically inexplicable makes upon us the inevitable impression of the purposive. Critical teleology can, therefore, concern only the *limiting conceptions of the mechanical explanation of Nature.*

The first of these is *Life.* A mechanical explanation of the organism has not only not yet succeeded, but it is, according to Kant, impossible in principle. All life can be explained only through other life. We are to understand the individual functions of organisms through the mechanical connection of their parts with each other and with the environment; but we shall always be obliged to bring into our account the peculiar nature of organised matter and its capacity of reaction, as a factor incapable of further reduction. An archæologist of Nature may trace back the genealogy of life, the origination of one species from another according to mechanical principles as far as possible;[1] he will always be obliged to stop with an *original organisation* which he cannot explain through the mere mechanism of inorganic matter.

[1] The passages, in which Kant anticipated the latter theory of descent, are collected in Fr. Schultze, *Kant und Darwin* (Jena, 1874).

This explanation is impossible because the essential nature of an organism is, that the whole is determined by the parts just as the part is determined by the whole, — that every member is both cause and effect of the whole. This *reciprocal causality* is incomprehensible mechanically: the organism is the miracle in the world of experience.[1] It is just this inter-related play of forms and forces which in the organism makes the *impression of the purposive*, or of adaptation to an end. Therefore the teleological view of organisms is *necessary and universally valid*. But it must never profess to be anything else than a mode of consideration. Thought must never be satisfied with this in an individual case; but the insight into this purposeful activity must rather serve as a *heuristic principle* for seeking out the mechanical connections by which this purposeful vitality realises itself in each particular case.

7. A second limit of the knowledge of Nature Kant designates by the name of the *Specification of Nature*. From pure reason arise the general Forms of the uniformity of Nature [*i.e.* causality, etc.], but only these. The *particular laws of Nature* do indeed range themselves beneath those general laws, but do not follow from them. Their particular content is only empirical, *i.e.* from the standpoint of pure reason it is contingent, and has only the force and validity of an actual matter of fact,[2] [not that of *a priori* necessity]. It is never to be understood why there is just this and not some other content. But at the same time, this particular aspect of Nature proves completely purposive; on the one hand, with reference to our knowledge, since the wealth of the matter of fact in our experience shows itself to be adapted to be ordered under the *a priori* Forms of experience, — and on the other hand, as purposive in itself, also, inasmuch as the whole varied multiplicity of the given fits together to form a concrete world of reality, which is objectively unitary.

In this lie the reasons *a priori for regarding Nature as a whole from the point of view of purposiveness*, and for seeing in the vast mechanism of her causal connections the realising of a *supreme end of reason*. But in accordance with the primacy of the practical reason, this end can be none other than the *moral law*, and thus the teleological consideration issues in the moral faith in the divine world-order.

Finally, if we consider Nature as purposive, in the sense that in

[1] Cf. above, p. 480.

[2] Here Kant joins on in an extremely interesting manner to the latest speculations of the Leibnizian Monadology; cf. above, p. 425 [cf. further on this point *Ueber eine Entdeckung, etc.*, and J. Dewey, *Leibniz's New Essays*, last chapter].

it the universal Forms and the particular contents completely harmonise with each other, then the divine mind, as the reason which creates the content at the same time with its Forms, appears as *intellectual perception or intuitive understanding*.[1] In this conception the ideas of the three Critiques run together.

[1] *Critique of Judg.*, § 77. Cf. G. Thiele, *Kant's Intellectuelle Anschauung* (Halle, 1876).

CHAPTER II.

THE DEVELOPMENT OF IDEALISM.

R. Haym, *Die romantische Schule.* Berlin, 1870.
[A. Seth, *From Kant to Hegel.*]

THE development of the principles won by Kant, to the comprehensive systems of German philosophy, took place under the cooperation of very different kinds of circumstances. Externally, it was of primary importance that the doctrine of criticism, after at first experiencing the fortune of being neglected and misunderstood, was first raised as a standard by the leading spirits of the University of *Jena*, and made the centre of a brilliant teaching activity. But in this lay the incitement to build out a unified and impressive *system of instruction*, the foundations of which Kant had laid by a careful separation and fine arrangement of philosophical problems. The systematic impulse ruled philosophical thought at no period so energetically as at this, and this was due in good part to the desires of an audience in a state of high and many-sided excitement, which demanded from the teacher a complete scientific *Weltanschauung*.

But in Jena philosophy found itself close by *Weimar*, the residence of Goethe, and the main literary city of Germany. In constant personal contact, *poetry and philosophy* mutually stimulated each other, and after Schiller had joined the thoughts of the two, their interaction became constantly more intimate and deep with their rapid forward movement.

A third factor was of a purely philosophical nature. A coincidence that was rich in results willed that just at the time when the Critique of Reason of the "all-crushing" Königsberger began to break its path, the most firmly articulated and most influential of all metaphysical systems, the type of "dogmatism," became known in Germany — *Spinozism*. Through the strife between Jacobi and Mendelssohn, which related to Lessing's attitude to Spinoza, the latter's doctrine was brought into the most lively interest, and thus,

in spite of the deep opposition which prevails between the two, Kant and Spinoza became the two poles about which the thought of the following generation moved.

The predominance of the Kantian influence may be chiefly recognised in that the common character of all these systems is *idealism*;[1] they all develop out of the antagonistic thoughts which were interwoven in Kant's treatment of the *conception thing-in-itself*. After a short time of critical hesitation, *Fichte*, *Schelling*, and *Hegel* took the lead in the unresting effort to understand the world as a *System of Reason*. Over against the bold energy of metaphysical speculation of these thinkers, which was extended by numerous disciples to a many-coloured variety, there appears in men like *Schleiermacher* and *Herbart* the Kantian reminder of the limits of human knowledge; while, on the other hand, the same motive unfolded in the construction of a *Metaphysics of the Irrational* in *Schelling's* later doctrine, and with *Schopenhauer*.

Common to all these systems, however, is the all-sidedness of philosophical interest, the wealth of creative thoughts, the fineness of feeling for the needs of modern culture, and the victorious power of an elaboration from the point of view of a principle, of the historical material of ideas.

The *Critique of the Pure Reason* found little regard at first, and then later violent opposition. The most important impetus to this was given by Friedrich Heinrich **Jacobi** (1743–1819, finally President of the Munich Academy). His main treatise bears the title, *David Hume über den Glauben, oder Idealismus und Realismus* (1787); in addition to this the treatise *Ueber das Unternehmen des Kriticismus die Vernunft zu Verstande zu bringen* (1802). The treatise *Von den göttlichen Dingen und ihrer Offenbarung* (1811) was directed against Schelling. Cf. also his introduction to his philosophical writings in the second volume of the complete edition (6 vols., Leips. 1812–1825). His main disciple was Fr. **Köppen** (1775–1858; *Darstellung des Wesens der Philosophie*, Nuremberg, 1810; cf. on him the art. *K.* by W. Windelband in *Ersch u. Gruber's Enc.*).

As further opponents of Kant are to be named Gottlob Ernst **Schulze** (1761–1823), the author of the anonymous writing, *Æenesidemus oder über die Fundamente der Elementarphilosophie* (1792), and of a *Kritik der theoretischen Philosophie* (Hamburg, 1801); J. G. **Hamann** (cf. above, p. 510), whose "review" of the *Critique* was first printed in 1801 in Reinhold's *Beiträgen*,

[1] Let it be remarked here at the outset that not only the main series of the development from Reinhold to Fichte, Schelling, Krause, Schleiermacher, and Hegel is idealistic, but also the series which is usually opposed to this, Herbart and Schopenhauer, in so far, that is, as by "idealism" is understood the dissolution or resolution (*Auflösung*) of the world of experience in the process of consciousness. Herbart and Schopenhauer are "idealists" in the same degree as Kant; they posit things-in-themselves, but the world of the senses is to them also a "phenomenon of consciousness." With Schopenhauer this is usually noted. With Herbart, on the contrary, the circumstance that he called the things-in-themselves "Reals" (*Realen*), in connection with the fact that for entirely other reasons he opposed the Fichte-Hegel line of thought, has led to the completely distorted and misleading mode of expression which has run through all previous text-books of the history of philosophy, of terming his doctrine "realism," and him in opposition to the "idealists" a "realist."

and G. **Herder** in his treatise, *Verstand und Vernunft, eine Metakritik zur Kritik der reinen Vernunft* (1799).

Jac. Sig. **Beck** (1761–1842; *Einzig möglicher Standpunkt, aus welchem die kritische Philosophie beurtheilt werden muss*, Riga, 1796) worked more positively in the development of the Kantian doctrine, as did also Salomon **Maimon** (died 1800; *Versuch einer Transscendentalphilosophie*, 1790; *Versuch einer neuen Logik*, 1794; *Die Kategorien des Aristoteles*, 1794; cf. J. Witte, *S. M.*, Berlin, 1876).

In Jena the Kantian philosophy was introduced by Professor Erh. **Schmid**; its main organ was the *Allgemeine Litteraturzeitung*, which appeared there after 1785, edited by Schütz and Hufeland. The greatest success for extending the doctrine of Criticism was gained by K. L. **Reinhold's** *Briefe über die kantische Philosophie*, which first appeared in Wieland's *Deutscher Merkur* (1786).

The same author begins also the series of re-shapings and transformations of the doctrine. Karl Leonh. Reinhold (1758–1823; fled from the cloister of the Barnabites in Vienna; 1788, Professor in Jena; from 1794 Professor in Kiel) wrote *Versuch einer neuen Theorie des menschlichen Vorstellungsvermögens* (Jena, 1789) and *Das Fundament des philosophischen Wissens* (1791). Later, after many changes in his standpoint, he fell into fantasticalness and was forgotten. His teaching presented in his Jena period gave in crude outlines a superficially systematic exposition, which soon became the school-system of the "Kantians." To tear from forgetfulness the names of these numerous men is not for this place.

Much finer, richer, and more independent was the work which Fr. **Schiller** gave to Kant's ideas. Of his philosophical writings are here principally to be named *On Grace and Dignity*, 1793; *On the Sublime*, 1793; *Letters upon the Æsthetical Education of Man*, 1795; *On Naïve and Sentimental Poetry*, 1796 [Eng. tr. Bohn Library]. In addition to these the philosophical poems such as *Die Künstler*, *Ideal und Leben*, and the correspondence with Körner, Goethe, and W. v. Humboldt. Cf. K. Tomaschek, *Sch. in seinem Verhältniss zur Wissenschaft*, Vienna, 1862; K. Twesten, *Sch. in seinem Verhältniss zur Wissenschaft*, Berlin, 1863; Kuno Fischer, *Sch. als Philosoph*, 2d ed., 1891; Fr. Ueberweg, *Sch. als Historiker und Philosoph*, pub. by Brasch, Leips. 1884.

Johann Gottlieb **Fichte**, born 1762, at Rammenau in Lusatia, educated in the "Princes' School" at Pforta and at the University of Jena, after he had experienced many changes of fortune as a private teacher and had become famous by his *Kritik aller Offenbarung*, which appeared by chance anonymously, and was universally ascribed to Kant (1792), was called in 1794, while living in Zurich, to become Reinhold's successor as Professor at Jena. After a brilliant activity there, he was dismissed in 1799, on account of the "atheism controversy" (cf. his *Appellation an das Publicum* and the *Gerichtliche Verantwortungsschrift*), and went to Berlin, where he came into connection with the Romanticists. In 1805 he was for a time assigned to the University of Erlangen; in 1806 he went to Königsberg, and then returned to Berlin, where in the winter of 1807 to 1808 he delivered the *Reden an die deutsche Nation*. At the newly founded Berlin University he acted as Professor and as the first Rector. He died, 1814, of hospital fever. His main writings are *Grundlage der gesammten Wissenschaftslehre*, 1794; *Grundriss des Eigenthümlichen der Wissenschaftslehre*, 1795 [these two, together with other minor works, are translated by A. E. Kroeger, under the title *The Science of Knowledge*, Lond. 1889]; *Naturrecht*, 1796 [tr. by A. E. Koeger, *The Science of Rights*, Lond. 1889]; the two *Introductions to the Wissenschaftslehre*, 1797; *System der Sittenlehre*, 1798; *Die Bestimmung des Menschen*, 1800; *Der geschlossene Handelsstaat*, 1801; *Ueber das Wesen des Gelehrten*, 1805; *Grundzüge des gegenwärtigen Zeitalters*, 1806; *Anweisung zum seligen Leben*, 1806 [of the last five all but the second are trans. by W. Smith, *Fichte's Popular Works*, Lond. 1889. There are also translations and criticisms in *Jour. of Spec. Phil.*]; Works, 8 vols., Berlin, 1845 f.; Post. works, 3 vols., Bonn, 1834; *Life and Correspondence*, Sulzbach, 1830; *Correspondence with Schelling*, Leips. 1856; cf. J. H. Löwe, *Die Philos. Fichte's*, Stuttgart, 1862; R. Adamson, *Fichte*, Lond. 1881; [also art. in *Enc. Brit.*; C. C. Everett, *Fichte's Science of Knowledge*, Chicago, 1883].

Friedrich Wilhelm Joseph **Schelling**, born, 1775, at Leonberg in Würtemberg, came to Leipsic in 1796 after his education in Tübingen, was made Professor in Jena in 1798, and in Würzburg in 1803. Called in 1806 to the Munich Academy, and for a time (1820–1826) active at the Erlangen University, he entered in 1827 the newly founded University of Munich. From here he accepted, in 1840, a call to Berlin, where he soon gave up his activity as a teacher. He died in 1854 in Ragaz. Cf. *Aus Sch.'s Leben in Briefen*, ed. by Plitt, Leips. 1869 f.; *Caroline, Briefe*, etc., ed. by G. Waitz, Leips. 1871. Schelling's development as philosopher and author falls into five periods: (1) Philosophy of Nature, *Ideen zu einer Philos. der Natur*, 1797; *Von der Weltseele*, 1798; *Erster Entwurf eines Systems der Naturphilosophie*, 1799; (2) Æsthetic Idealism, *Der transcendentale Idealismus*, 1800; *Vorlesungen über die Philosophie der Kunst;* (3) Absolute Idealism, *Darstellung meines Systems der Philosophie*, 1801; *Bruno, oder über das natürliche und göttliche Princip der Dinge*, 1802; *Vorlesungen über die Methode des akademischen Studiums*, 1803; (4) his Doctrine of Freedom, *Philosophie und Religion*, 1804; *Untersuchungen über das Wesen der menschlichen Freiheit*, 1809; *Denkmal der Schrift Jacobi's von den göttlichen Dingen*, 1812; (5) Philosophy of Mythology and Revelation, *Lectures* in Part II. of the writings; Collected works, 14 vols., Stuttg. and Augsb. 1856–1861; [J. Watson, *Schelling's Transcendental Idealism*, Chicago, Griggs series].

Among the thinkers who stood in close relation to Schelling may be noticed, of the Romantic School, Fr. **Schlegel** (1772–1829; Characteristics and Criticisms in the "Athenæum," 1799 f.; *Lucinde*, 1799; *Philosophical Lectures*, in the years 1804–6, ed. by Windischmann, 1836 f.; Complete writings, 15 vols., Vienna, 1846 [Eng. tr. of the *Philosophy of History* and of the *Philosophy of Life and of Language* in Bohn Library]) and **Novalis** (Fr. v. Hardenberg, 1772–1801), also K. W. F. **Solger** (1780–1819; *Erwin*, 1815; *Philosophische Gespräche*, 1817; *Vorlesungen über Æsthetik*, ed. by Heyse, 1829); further, Lor. **Oken** (1779–1851; *Lehrbuch der Naturphilosophie*, Jena, 1809; cf. A. Ecker, *L. O.*, Stuttgart, 1880); H. **Steffens** (1773–1845; a Norwegian, *Grundzüge der philosophischen Naturwissenschaft*, 1806), G. H. **Schubert** (1780–1860; *Ahndungen einer allg. Geschichte des Lebens*, 1806 f.), Franz **Baader** (1765–1841; *Fermenta Cognitionis*, 1822 ff.; *Speculative Dogmatik*, 1827 ff. Complete writings with a biography ed. by Fr. Hoffmann, Leips. 1851 ff.); and finally, K. Chr. Fr. **Krause** (1781–1832; *Entwurf des Systems der Philosophie*, 1804; *Urbild der Menschheit*, 1811; *Abriss des Systems der Philosophie*, 1825; *Vorlesungen über das System der Philosophie*, 1828. Some years since an inexhaustible body of material has appeared from his literary remains, ed. by P. Hohlfeld and A. Wünsche. Cf. R. Eucken, *Zur Erinnerung an K.*, Leips. 1881).

Georg Wilhelm Friedrich **Hegel**, Schelling's older friend, was born, 1770, in Stuttgart, studied in Tübingen, was a private teacher in Berne and Frankfort, and began, in 1801, his activity as a teacher in Jena, where, in 1805, he became Professor Extraordinary. After 1806 he became editor of a review in Bamberg, and in 1808 Gymnasium Director in Nuremberg. In 1816 he went as Professor to Heidelberg; in 1818 from there to Berlin, where he worked until his death in 1831 as the head of a school which extended with greater and greater brilliancy. Besides the articles published in the *Kritische Journal der Philosophie*, which he edited in connection with Schelling, he published *Phänomenologie des Geistes* (1807) [tr. of chs. 1, 2, and 3 in *Jour. Spec. Phil.*, Vol. II.; tr. in prep. by J. Royce, Holt & Co., N.Y.]; *Wissenschaft der Logik* (1812 ff.) [tr. of Vol. II. by W. T. Harris, *Hegel's Doctrine of Reflection*]; *Encyclopädie der philosophischen Wissenschaften* (1817) [of this the *Logic* is trans. with *Prolegomena* by W. Wallace, Clar. Press, 1874, 2d ed., in 2 vols., 1892]; *Grundlinien der Philosophie des Recht's* (1821). After 1827 the *Jahrbücher für wissenschaftliche Kritik* was the organ of his school. His works, including his lectures edited by his students, were published in 18 vols. (Berlin, 1832 ff.) [trans. of the *Philosophy of History*, by J. Sibree, Bohn Library; of the *Introd. to Phil. of Art*, by B. Bosanquet (Lond. 1886); of the *Phil. of Art*, abr. by W. Hastie (Edin.), and of the second part of the same in *Jour. Spec. Phil.*, Vols. V.–XIII.; of the *History of Philosophy*, by E. S. Haldane, in 3 vols.,

Vol. I. (Lond. 1892); of the *Phil. of Religion and of the State*, in part in *Jour. Spec. Phil.*, Vols. XV.–XXI.]. From the very extensive literature we may name C. Rosenkranz, *H.'s Leben* (Berlin, 1844), and *H. als deutscher Nationalphilosoph* (Berlin, 1870) [part. trans. G. S. Hall, St. Louis, 1876]; R. Haym, *H. und seine Zeit* (Berlin, 1857); K. Köstlin, *H.* (Tübingen, 1870); J. Klaiber, *Hölderlin, Schelling und Hegel in ihren schwäbischen Jugendjahren* (Stuttgart, 1877) [*The Secret of Hegel*, by J. H. Stirling (Lond. 1865), 2 vols.; *Hegel*, by E. Caird (Edin. and Lond. 1883); *Hegelianism and Personality*, by Seth (Edin. and Lond., 2d ed., 1893); *Critical Expositions* in Griggs series (Chicago); of the *Æsthetics*, by J. S. Kedney (1885); of the *Philosophy of the State and of History*, by G. S. Morris (1887); and of the *Logic*, by W. T. Harris (1890); numerous articles in the *Jour. Spec. Phil.* cited in last-named work].

Friedrich Ernst Daniel **Schleiermacher**, born, 1768, in Breslau, educated at the Herrnhuter educational institutions in Niesky and Barby, and at the University of Halle, after private positions took a vicarship in Landsberg, and in 1796 began his duties as preacher at the Berlin Charité. In 1802 he went as court preacher to Stolpe; in 1804 as Professor Extraordinary to Halle; in 1806 returned to Berlin, where in 1809 he became preacher at the *Dreifaltigkeitskirche;* and in 1810 Professor at the University. He acquitted himself well in both offices, occupying at the time a successful position in the ecclesiastical movement (Union) until his death in 1834. His philosophical writings form the third part of his works collected after his death (Berlin, 1835 ff.). They contain his lectures on *Dialectic*, *Æsthetic*, etc.; among his writings are to be mentioned: *Reden über die Religion an die Gebildeten unter ihren Verächtern* (1799); *Monologen* (1800); *Grundlinien einer Kritik der bisherigen Sittenlehre* (1803). The most important work, the *Ethik*, is given in the coll. works, in the edition by Al. Schweizer; it is also published in an edition by A. Twesten (Berlin, 1841). — Cf. *Aus Sch.'s Leben in Briefen*, ed. by L. Jonas and W. Dilthey, 4 vols. (Berlin, 1858–1863); W. Dilthey, *Leben Schleiermacher's*, Vol. I. (Berlin, 1870) [art. *S.* in *Enc. Brit.*, J. F. Smith].

Johann Friedrich **Herbart**, born, 1776, at Oldenburg, educated there and at the Jena University, for a time private teacher in Berne and acquainted with Pestalozzi, became in 1802 Privatdocent in Göttingen, was from 1809 to 1833 Professor in Königsberg, and then returned to Göttingen as Professor, where he died, 1841. His main writings are: *Hauptpunkte der Metaphysik* (1806); *Allgemeine praktische Philosophie* (1808); *Einleitung in die Philosophie* (1813); *Lehrbuch zur Psychologie* (1816) [Eng. tr. by M. K. Smith, N.Y. 1891]; *Psychologie als Wissenschaft* (1824 f.). Complete edition by G. Hartenstein, 12 vols. (Leips. 1850 ff.); in process of appearance, ed. by K. Kehrbach, since 1882. The pedagogical writings have been edited by O. Willmann in 2 vols. (Leips. 1873 and 1875). Cf. G. Hartenstein, *Die Probleme und Grundlehren der allgemeinen Metaphysik* (Leips. 1836); J. Kaftan, *Sollen und Sein* (Leips. 1872); J. Capesius, *Die Metaphysik Herbart's* (Leips. 1878) [Ward, art. *Herbart*, in *Enc. Brit.*].

Arthur **Schopenhauer**, born, 1778, in Danzic, passed over somewhat late to philosophical life, studied in Göttingen and Berlin, received his degree in 1813 at Jena with his treatise on the *Fourfold Root of the Principle of Sufficient Reason*, lived for a time at Weimar and Dresden, habilitated as Privatdocent in Berlin in 1820, but withdrew after he had won no success in a work as teacher which was frequently interrupted by journeys, and spent the rest of his life in private, after 1831, in Frankfort on the Main, where he died in 1860. His main work is *Die Welt als Wille und Vorstellung*, 1819 [*The World as Will and as Idea*, tr. by R. B. Haldane and J. Kemp, Lond. and Boston, 3 vols., 1884–86]. To this were attached *Ueber den Willen in der Natur*, 1836; *Die beiden Grundprobleme der Ethik*, 1841; finally, *Parerga und Paralipomena*, 1851. Complete edition in 6 vols. (Leips. 1873 f.), and since then frequently edited. [Tr. of the *Fourfold Root* and of *On the Will in Nature*, by K. Hillebrand, Bohn Library, 2d ed., 1891; of selected essays by Bax, Bohn Library, also by T. B. Saunders, 5 vols., Lond. and N.Y., 3d ed., 1892.] Cf. W. Gwinner, *Sch.'s Leben*, 2d ed. (Leips. 1878); J. Frauenstädt, *Briefe über die Sch.'sche Philosophie* (Leips. 1854); R. Seydel, *Sch.'s System* (Leips. 1857); A. Haym, *A. Sch.* (Berlin, 1864); G. Jellinek, *Die Weltanschauungen Leibniz' und Schopenhauer's* (Leips. 1872) [H. Zimmern, *Schopenhauer, His Life and Phil.*, Lond. 1876; J. Sully, *Pessimism*, 2d ed., Lond. 1891; Adamson in *Mind*, 1876].

By the side of the main metaphysical development runs a **psychological side-line**, a series of schools which, in an eclectic way, frequently approached the doctrines of the great systems by the path of the psychological method. Such is the relation to Kant and Jacobi of J. Fr. **Fries** (1773–1843; *Reinhold, Fichte und Schelling*, 1803; *Wissen, Glaube und Ahndung*, 1805; *Neue Kritik der Vernunft*, 1807; *Psychische Anthropologie*, 1820 f. Cf. Kuno Fischer, *Die beiden kantischen Schulen in Jena*, Acad. Address, Stuttg. 1862), — to Kant and Fichte of Wilh. Traug. **Krug** (1770–1842; *Organon der Philosophie*, 1801; *Handwörterbuch der philos. Wissenschaften*, 1827 ff.), — to Fichte and Schelling of Fried. **Bouterwek** (1766–1828; *Apodiktik*, 1799; *Æsthetik*, 1806), — and finally, to Herbart of Fr. **Beneke** (1798–1854; *Psychologische Skizzen*, 1825 and 1827; *Lehrbuch der Psychologie, als Naturwissenschaft*, 1832; *Metaphysik und Religionsphilosophie*, 1840; *Die neue Psychologie*, 1845).

§ 41. The Thing-in-Itself.

The compelling power which Kant's philosophy gained over the minds and hearts of men was due chiefly to the earnestness and greatness of its ethical conception of the world;[1] the progress of thought, however, attached itself primarily to the new form which had been given to the principles of the theory of knowledge in the *Critique of the Pure Reason*. Kant took the antithesis of phenomena and noumena from earlier philosophy; but by his transcendental analytic he widened the realm of phenomena to include the whole compass of human knowledge, and the thing-in-itself survived only as a problematical conception, like a rudimentary organ, which might be indeed characteristic for the historical genesis of this theory of knowledge, but which performed no living function in it.

1. This was first seen by *Jacobi*, when he confessed that without the presupposition of realism one could not enter the Kantian system, and with the same could not remain in it;[2] for the conception of the sensibility introduced at the beginning involves the causal relation of being affected by things-in-themselves, — a revelation which, according to the doctrine of the analytic that categories must not be applied to things-in-themselves, it is forbidden to think. In this contradiction of professing to think things-in-themselves and yet of not being permitted to think them, the whole critique of the reason moves; and at the same time this contradictory assumption does not at all help to guarantee to our knowledge of phenomena even the slightest relation to truth. For, according to Kant, the mind presents to itself in thought "neither itself nor

[1] This is especially to be recognised from Reinhold's *Briefen über die kant. Ph.*

[2] Jacobi, W., II. 304.

other things, but solely and alone that which is neither what the mind is itself, nor what other things are."[1] The faculty of cognition hovers between a problematical X of the subject and an equally problematical X of the object. The sensibility has nothing behind it, and the understanding nothing before it; "in a twofold enchanter's smoke, called space and time, rise the ghostly forms of phenomena or appearances in which nothing appears."[2] If we assume things, Kant teaches that knowledge has not the least to do with them. The critical reason is a reason busy about pure nothing, *i.e.* only about itself. If, therefore, criticism will not fall into nihilism or absolute scepticism, the transcendental idealist must have the courage to assert the "strongest" idealism;[3] he must declare that only phenomena are.

In the claim that what Kant calls the object of knowledge is in truth "nothing," inheres as a presupposition the same naïve realism, the destruction of which was the great service of the transcendental analytic; and the same realism determines also the epistemology of *Faith*, which Jacobi opposes to "the transcendental uncertainty," not without being entirely dependent upon it. All truth is knowledge of the actual; but the actual asserts itself in human consciousness not through thought, but through feeling; just Kant's experiment proves that thought alone moves in a circle out of which there is no access to actuality, in an endless series of the conditioned in which no unconditioned is to be found. The fundamental law of causality may indeed be formulated in exactly this manner, viz. there is nothing unconditioned. *Knowledge*, therefore, or thought that can be demonstrated, is in its very nature, as Jacobi says, Spinozism, — a doctrine of the mechanical necessity of all that is finite: and it is the interest of science that there be no God, — indeed, a God who could be known would be no God.[4] Even he who is in his heart a Christian must be in his head a heathen; he who will bring into his intellect the light which is in his heart quenches it.[5] But this knowledge is only a *mediate* knowing; the true, *immediate knowing* is *feeling;* in this we are truly one with the object,[6] and possess it as we possess ourselves in the certainty of a *faith* that has no proof.[7] This feeling, however, as regards its objects, is of a twofold kind: the reality of the sensuous reveals itself to us in *perception*, that of the supersensuous in the "*reason*."

[1] *Allwill*, XV.; W., I. 121.
[2] W., III. 111 f.
[3] W., II. 310.
[4] W., III. 384.
[5] To *Hamann*, I. 367.
[6] W., II. 175.
[7] Hume's conception of belief and his distinction of impressions and ideas (here called *Vorstellungen*) experience in this a noteworthy transformation.

For this *supra-natural sensualism*, therefore, "reason" signifies the immediate feeling of the reality of the supersensuous, of God, freedom, morality, and immortality. In this limitation Kant's dualism of theoretical and practical reason and of the primacy of the latter return in Jacobi,[1] to be placed in the service of a mystical extravagance of feeling, which manifests itself also in the character of a style which is warm and full of spirit, but rhapsodical and more given to assertion than to proof.

This same fundamental conception, brought somewhat nearer to Kant, appears with *Fries*. In demanding that the knowledge of the *a priori* forms to which the critical philosophy aspired must itself arise *a posteriori*, through *inner experience*, and therefore that Kant's results must be established or set right by an "anthropological" critique, he rested upon the conviction that the immediate, proper cognitions of the reason are given originally in an obscure form through the feeling,[2] and transformed into intellectual knowledge only by means of *reflection*. This Leibnizian body ends, however, in the critical tail, since the perceptional and conceptional Forms of this reflection are regarded as only an expression of the phenomenal mode in which the above original truth [as experienced in feeling] appears; on the other hand, the body received a Kant-Jacobi head, when the limitation of knowledge to these phenomenal Forms had set over against it the immediate relation of moral faith to things-in-themselves, while at the same time — with a decided attachment to the *Critique of Judgment* — the æsthetic and religious feelings had ascribed to them the significance of a *presage* (*Ahndung*) that the Being which lies at the basis of phenomena is just that to which the practical reason relates.

2. The untenability of the Kantian conception of the thing-in-itself, so keenly recognised by Jacobi, became palpable to a certain extent when *Reinhold* in his *Elementary Philosophy* made the attempt to present the critical doctrine in a systematic unity. He admired Kant and adopted entirely his solutions of the individual problems, but missed in him the formulation of a simple, fundamental principle from which all particular insights might be deduced. Through the fulfilment of this (Cartesian) demand,[3] opposing private opinions would be at last replaced by *the* philosophy, — Philosophy without any surname. He himself believed that he had found this principle in the principle which he supposed to be quite free from presuppositions, — that in consciousness every idea is distinguished by the

[1] W., III. 351 ff.
[2] Fries, *Neue Kritik*, I. 206.
[3] Reinhold, *Beiträge*, I. 91 ff.

consciousness of subject and object, and is related to both (*Principle of Consciousness*).[1] Hence there inheres in every idea something that belongs to the subject and something that belongs to the object. From the object comes the manifold of the *material*, from the subject the synthetic unity of the *Form*. From this it follows that neither the object in itself, nor the subject in itself, is knowable, but only the world of consciousness which hovers between the two; from this results further the opposition of the (sensuous) *material impulse* and of the (ethical) *Form impulse;* in the former the heteronomy of the dependence of the will upon things may be recognised; in the latter the autonomy of the will directed toward the formal conformity to law.

In this crude form the *Kantian School* propagated the doctrine of the master; all the fineness and profound meaning of the analytic of the "object" had become lost, and the only substitute was Reinhold's effort to find in the "ideational faculty" (*Vorstellungsvermögen*), or "consciousness," the deeper unity of all the different cognitive powers which Kant had separated from each other as Sensibility, Understanding, Judgment, and Reason. In so far the "fundamental philosophy" opposed with a positive hypothesis the objections which the sharp *separation of the sensibility and the understanding* in the Kantian doctrine encountered with many contemporaries. This separation presented itself in the exposition determined by the after-working of the *Inaugural Dissertation* (cf. p. 538, note 4), still more strongly than the spirit of the *Critique of Reason* required, and became at the same time still more palpable by the dualism of the practical philosophy. So the tendency was awakened to replace the sensibility again in its rights as against Kant, and the Leibnizian doctrine of the gradual transition from the functions of sense to those of reason proved the source of a powerful counter-current against Kant's "dissection" of the soul, — a dissection more apparent than serious. *Hamann* in his review, and in conjunction with him, *Herder* in his *Metakritik*, urged this against the *Critique of Pure Reason*. Both lay chief emphasis upon language as the fundamental, unitary, sensuous-intellectual work of the reason, and seek to show how from the first "splitting apart" of sensibility and understanding all the other chasms and dualisms of the critical philosophy necessarily followed.[2]

[1] *Neue Theorie des Vorst.*, pp. 201 ff.

[2] Herder, *Metakritik*, 14, 111. Works in 40 vols., XXXVII. 333 ff. Moreover, this thought as Herder presented it in the *Metakritik*, a silly composition of personal irritation, was for a long time a positively impelling moment in the development. Cf. § 42.

3. The weak points in Reinhold's system could not escape the sceptics, but their attacks applied at the same time to Kant himself. They were united most effectively in Schulze's *Æenesidemus*. He shows that the critical method ensnares itself by setting for itself a task, the solution of which is according to its own results impossible. For if the *Critique* seeks the conditions which lie at the basis of experience, these conditions are yet not themselves objects of experience (a conception which certainly corresponded better with Kant's meaning than did Fries' attempt at a psychological discovery of the *a priori*): the critical method demands, therefore, that philosophical knowledge, at all events a thinking in categories, shall go beyond experience; and just this the *Analytic* declares impermissible. In fact, the "reason" and each of the knowing faculties, as sensibility, understanding, etc., is a thing-in-itself, an imperceptible ground of the empirical activities of the kind of cognition in question; and of all these things-in-themselves and their relations to each other and to experience, the critical philosophy — the metaphysics of knowledge — offers a very circumstantial body of information. To be sure, this information is, if closely examined, very slight; for such a "faculty" is ultimately thought only as an unknown common cause of empirical functions, and is to be characterised only through these its workings.

"Æenesidemus" develops this criticism in connection with Reinhold's conception of the "ideational faculty";[1] he shows that we explain nothing at all, when we postulate over again the content of that which is to be explained, provided with the problematical mark "power" or "faculty." Schulze thus turned against the "faculty theory," which was employed by the empirical psychologists of the Enlightenment in rather a thoughtless manner. It is only descriptively that there is any sense in comprehending like phenomena of the psychical life under one generic conception; but to hypostatise this conception to a metaphysical power — this is a mythological treatment of psychology. With this watch-word Herbart[2] extended the criticism of Schulze to the whole earlier psychological theory, and Beneke also saw in the bringing into prominence of this conception the essential progress towards a natural science of the soul; *i.e.* the associational psychology.[3]

For Schulze, this is only one of the elements in a proof that the critical philosophy, while aiming to prove the authority of the causal conception as against Hume, professes to limit the same

[1] *Æenesid.*, p. 98.

[2] Herbart, *Lehrb., z. Psych.*, § 3; W., V. 8 and elsewhere.

[3] Beneke, *Neue Psych.*, pp. 34 ff.

to experience, and yet everywhere makes the assumption of a causal relation between experience and that which "lies at its basis." Here, too, belongs of course the contradiction, already exhibited by Jacobi, in the conception of the thing-in-itself by which the "sensibility" is said to be affected. Every attempt of the *Critique of Pure Reason* to go beyond the circuit of experience, even merely problematically, is judged in advance by itself.[1]

4. The first attempt to transform the conception of the thing-in-itself, untenable in its Kantian shape, proceeded from Salomon *Maimon*. He saw that the assumption of a reality to be placed outside of consciousness involves a contradiction. What is thought is in consciousness; to think of a something outside of consciousness is as imaginary as it would be mathematics to regard the requirement $\sqrt{-a}$ as a real quantity. *The thing-in-itself is an impossible conception.* But what was the inducement to form it? It lay in the need of explaining the *given* in consciousness.[2] It meets us, that is to say, in our ideas of the antithesis between the *Form* which we ourselves create and are conscious of creating, and the *material* which we only find present in us, without knowing how we come by it. Of the Forms we have, therefore, a *complete* consciousness; of the matter, on the contrary, only an *incomplete consciousness;* it is something that is in consciousness, without being produced with consciousness. But since nothing outside of consciousness is thinkable, the given can be defined only by the lowest grade of the completeness of consciousness. Consciousness can be thought as diminishing through an infinite number of intermediate stages down to nothing, and the idea of the limit of this infinite series (comparable to the $\sqrt{2}$) is that of the merely-given, the thing-in-itself. Things-in-themselves are, therefore, as Maimon says with direct reference to Leibniz —*petites perceptions;* cf. p. 424 —*differentials of consciousness.*[3] The thing-in-itself is the limiting conception for the infinite decreasing series from complete consciousness down — an *irrational* quantity. The consequence of this fundamental assumption with Maimon is, that of the given there can always be only an incomplete knowledge, as there is only an incomplete consciousness,[4] and that complete

[1] The author of the *Ænesidemus* repeated the thoughts of his polemic in most concise and comprehensive manner in his *Kritik der theoretischen Philosophie* (II. 549 ff.), — a work, moreover, which contains not only an analysis of the *Critique of Pure Reason* (I. 172–582), which is one of the best even to the present day, but also a criticism of the same, supported by deep historical understanding (found II. 126–722). Cf. on the relation to *Leibniz*, II. 176 ff.

[2] Maimon, *Transscendentalphilos.*, pp. 419 f.

[3] Ib. 27 ff.

[4] Cf. the contingency of the world with Leibniz and the specification of Nature with Kant, pp. 398 f., 566.

knowledge is limited to the knowledge of the autonomous Forms of the theoretical consciousness, to mathematics and logic. In his esteem for these two demonstrative sciences Maimon's critical scepticism is in harmony with Hume; with regard to their theories of the knowledge of that which is empirically given they diverge diametrically.

With this, however, it had become clear that the investigations of the *Critique of Pure Reason* require a new conception of the *relation of consciousness and Being. Being is to be thought only in consciousness, only as a kind of consciousness.* Thus the prophecy of Jacobi begins to be fulfilled; Kant's doctrine urges toward the "strongest idealism."

This is seen in a disciple who stood in the closest relations to Kant himself: Sigismund *Beck*. He found[1] the "Only Possible Standpoint for Estimating the Critical Philosophy" in this, that the datum of the individual consciousness, given it as "object," is made the content of an "*original*," supra-individual[2] consciousness, which for this reason is authoritative for the truth of the empirical knowing process. In the place of the things-in-themselves he set Kant's "consciousness in general." But he explained to himself in this way the *a priori* character of the pure conceptions and categories: the given in the sensuous manifold remained for him also the unsolved remnant of the Kantian problem.

5. The full idealistic disintegration of the conception of the thing-in-itself was the work of *Fichte*. We may best understand the matter by following the course of thought in his introductions to his *Science of Knowledge*,[3] which attaches itself directly, in a free reproduction, to the most difficult part of the Kantian doctrine, — the transcendental deduction, — and illumines with complete clearness the culmination of the movement of thought here considered.

The fundamental problem of philosophy — or, as Fichte calls it, just on this account, of the *Wissenschaftslehre* [lit. "doctrine of science," where science has the twofold meaning of knowledge as a mental act, and knowledge as a body of truth = philosophy (cf. p. 94, note 2,)] — is given in the fact, that in contrast with the ideas of individual consciousness, which may come and go in a voluntary and contingent manner, another set of our ideas maintain themselves there, and these latter are characterised by a *feeling of necessity* that can be distinguished with entire certainty. To make this necessity intelligible is the chief task of philosophy or the Science

[1] 3d vol. of his *Erläuternder Auszug*, from Kant's writing (Leips. 1796).

[2] Ib. p. 120 ff.

[3] *Fichte's W.*, I. 419 ff.

of Knowledge. We call the system of those ideas which emerge with the feeling of necessity experience; the problem runs, therefore, "What is the ground of experience?" To its solution there are only two paths. Experience is an activity of consciousness directed toward objects; it can therefore be derived only from things or from the consciousness. In the one case the explanation is dogmatic, in the other idealistic. *Dogmatism* regards consciousness as a product of things; it traces the activities of intelligence also back to mechanical necessity of the causal relations; if consistently thought, therefore, it cannot end otherwise than fatalistically and materialistically. *Idealism*, on the contrary, sees in things a product of consciousness, of a free function determined only by itself; it is the system of freedom and of deed. These two modes of explanation, each of which is consistent in itself, are in such thorough-going contradiction to each other and so irreconcilable that Fichte regards the attempt of *syncretism*, to explain experience by dependence both upon things-in-themselves and upon the reason, as a failure from the outset. If one will not fall a victim to sceptical despair, he must choose between the two.

This choice, since both present themselves logically as equally consistent systems, will primarily depend "on what sort of a man one is"[1] (*"was für ein Mensch man ist"*); but while the ethical interest thus already speaks for idealism, there is still a theoretical consideration which comes to its aid. The fact of experience, in the constant reciprocal relation of *"being"* and *"being conscious"* (*Sein and Bewusstseins*), consists in this, that the *"real series"* of objects is perceived in the *"ideal" series* of mental representations.[2] This "doubleness" dogmatism cannot explain; for the causality of things is only a simple series (of "mere being posited"). The repetition of Being in consciousness (or in the being conscious) is incomprehensible, if the being is to serve as a ground of explanation for being conscious. On the contrary, it belongs to the very *nature of intelligence "to see itself."* Consciousness, in that it acts or functions, knows also that it acts and what it does; in conjunction with the real (primary) series of its own functions it produces always at the same time the ideal (secondary) series of the knowledge of these functions. If, therefore, consciousness yields the sole ground of explanation for experience, it does this only in so far as it is the

[1] *Fichte's W.*, I. 434.

[2] If the antithesis of dogmatism and idealism points back to the Kantian antithesis of Nature and Freedom, in which connection, moreover, the system of the necessity of things already appears with a strong Spinozistic character, the systematic influence of Spinoza's doctrine concerning the two attributes asserts itself for the first time in this relation of the two series.

activity which perceives itself and is reflected back into itself, *i.e.* as *self-consciousness*. The science of knowledge has to show that all consciousness (of experience) which is directed toward something else — toward a Being, toward objects, toward things — has its root in the original relation of consciousness to itself.

The principle of idealism is self-consciousness; in a subjective, methodical aspect, in so far as the science of knowledge aims to develop all of its insights from the *intellectual perception* alone, with which consciousness accompanies its own activities, from *reflection* upon that which consciousness knows of its own deed, — in objective, systematic aspect, in so far as in this way those functions of intelligence are to be pointed out, by means of which that which in common life is called thing and object, and in the dogmatic philosophy thing-in-itself, is produced. This last conception, that of the thing-in-itself, which is through and through contradictory, is thus resolved to its last remnant; all Being is comprehensible only as product of reason, and the subject-matter of philosophical knowledge is the *system of the reason* (cf. § 42).

For Fichte and his successors, the conception of the thing-in-itself thus became indifferent, and the old antithesis between Being and consciousness sank to the secondary significance of an immanent relation within the activities of the reason. An object exists only for a subject; and the common ground of both is the reason, the *I* which perceives itself and its action.[1]

6. While the main development of German metaphysics followed this Fichtean tendency, the syncretism above mentioned did not remain without supporters whom the *Wissenschaftslehre* had thrust from the threshold. Its metaphysical type had been stamped out by Reinhold; but it was likewise close at hand for all who took their point of departure from the individual consciousness with the psychological method, and believed that they found the individual consciousness equally dependent upon the Real and upon the universal essence of the intellect. The *"transcendental synthetism,"* which *Krug* taught, may be conceived of as an example of this mode of view. For him, philosophy is an explanation of self by means of the reflection of the "I" upon the "facts of consciousness." But in this the primitive fact proves to be the transcendental synthesis, that real and ideal are posited in consciousness as equally original and in relation to each other.[2] We know Being only in so far as it appears in consciousness, and consciousness only in so far as it refers to Being;

[1] Cf. also Schelling's youthful opuscule, *Vom Ich als Princip der Philosophie*, W., I. 151 ff.

[2] Krug, *Fundamentalphilosophie*, pp. 106 ff.

but both are objects of an immediate knowledge just as is the community existing between them in our world of ideas.

These thoughts found a finer turn given them in *Schleiermacher's* dialectic. All knowledge has as its end to establish the *identity of Being and thinking;* for the two emerge in human consciousness separate, as its *real and ideal factors,* perception and conception, organic and intellectual functions. Only their complete adjustment would give knowledge, but they remain always in a state of difference. In consequence of this, science is divided with reference to its subject matter into physics and ethics, with reference to its methods into empirical and theoretical disciplines; natural history and natural science, history of the world, and science of morals. In all these particular disciplines one or the other of the two factors has the *predominance,*[1] materially or formally, although the opposites strive toward each other — the empirical branches of knowledge toward rational articulation, the theoretical towards an understanding of the facts, physics towards the genesis of the organism and of consciousness out of the corporeal world, ethics towards the control and inter-penetration of the sensuous by the will, which acts according to ends. But the complete adjustment of the real and the ideal is nowhere attained in actual cognition; it forms rather the absolute, unconditioned, infinitely removed goal of the thinking which desires to become knowledge, but will never completely succeed.[2] Hence philosophy is the science not of knowledge, but of knowledge in a perpetual state of becoming, — *dialectic.*

But just for this reason it presupposes the reality of this goal which is never to be attained in human knowledge; the *identity of thought and Being.* This Schleiermacher, with Spinoza (and Schelling), calls *God.* It cannot be an object of the theoretical reason, and just as little can it be such of the practical reason. We do not know God, and therefore we cannot order our ethical life with reference to him. Religion is more than knowing and right-doing; it is the community of life with the highest reality, in which Being and consciousness are identical. This communion, however, emerges only in the feeling, in the "pious" (*frommen*) feeling of an "absolute" dependence upon the infinite world-ground which cannot be exhausted by thought (cf. § 42, 6). Spinoza's God and Kant's thing-in-itself coincide in the infinite, but thus are raised above all human knowledge and will, and made the objects of a *mystical* feeling whose delicate vibrations harmonise in Schleiermacher (as in

[1] This relation in Schleiermacher's *Dialectic* appears copied after the metaphysical form of Schelling's *System of Identity;* cf. § 42, 8.

[2] *Dialektik,* W., III. 4 b 68 f.

a somewhat different form in Fries, also) with the inwardness of the religious life among the *Moravians.*

Thus the traditions of Mysticism pass through Pietism — in which the orthodox tendency toward a coarser view became more and more prominent after Spener and Francke, and so called forth the opposition of the Brothers of the Common Life — up to the summits of the idealistic development; and indeed the doctrine of Eckhart and the transcendental philosophy are in close touch in the spirit which desires to transpose all the outer into the inner; both have a genuinely Germanic savour, they seek the world in the "*Gemüth*" [the mind as the seat of the feeling and sentiments].

7. In putting aside the possibility of a scientific knowledge of the world-ground Schleiermacher remained nearer to Kant, but the intuition of religious feeling which he substituted was all the more dependent upon Spinoza and upon the influences which the latter had exercised upon the idealistic metaphysics after Fichte's Science of Knowledge. This monism of the reason (cf. the development in § 42) *Herbart* combated by an entirely different re-shaping of the Kantian conception of the thing-in-itself. He desired to oppose the dissolution of this conception, and found himself forced thereby to the paradox of a metaphysics of things-in-themselves, which yet should hold fast to their unknowableness. The contradictions of the transcendental analytic appear here grotesquely magnified.

This is the more noteworthy as the retrogressive tendency which has been ascribed to Herbart's doctrine, perhaps in contrast with the idealistic innovations, developed itself in his attack upon Kant's transcendental logic (cf. § 38, 5). Herbart saw in this with right the roots of idealism. It teaches, indeed, the Forms with which the "Understanding" produces the world of objects, and in Fichte's "I" we only have in a completely developed form that which in germ was in Kant's "consciousness in general" or "transcendental apperception." Herbart's inclination toward the earlier philosophy consists in this, that he denies the creative spontaneity of consciousness, and, like the associational psychologists, finds it determined and dependent in both Form and content from without. He opposes also the virtual innateness which had propagated itself from Leibniz on through the *Inaugural Dissertation* into the *Critique of Pure Reason:* the forms of relation expressed in the categories are for him, like space and time, products of the ideational mechanism. As regards the psycho-genetic questions, he stands entirely upon the platform of the philosophy of the Enlightenment. For this reason he knows no other logic than the formal logic whose principle is the principle of contradiction, *i.e.* the prohibition to commit a contra-

diction. The supreme principle of all thought is, that which contradicts itself cannot be truly real or actual.[1]

Now it is evident that the conceptions in which we think experience are full of internal contradictions; we assume *things*, which are to be identical with themselves and yet made equal to a variety of attributes; we speak of *alterations* in which that which is equal to itself is successively different; we trace all inner experience back to an "*I*" or "*self*" which as that "which mentally represents itself" (*sich selbst Vorstellende*) involves an infinite series in the subject as well as in the object, — we trace all outer experience back to a *matter*, in the idea of which the attributes of the discrete and the continuous are at variance. This experience can be only phenomenon; but this phenomenon must have at its basis something real which is free from contradictions, seeming things must have absolute "*Reals*" (*Reale*), seeming occurrence and change a real occurrence and change. Whatever seeming there is, there is just so much indication of Being. To discover this is the task of philosophy; it is a *working over of the conceptions of experience* which are given and which must be re-shaped according to the rules of formal logic, until we know the reality that has no internal contradictions.

The general means to this end is the *method of relation*. The fundamental form of contradiction always is, that something simple is thought as having differences (the synthetic unity of the manifold in Kant). This difficulty can be removed only by assuming a plurality of simple beings, through the relation of which to each other the "illusion" of the manifold or changeable is produced in any individual object. Thus the conception of substance can be maintained only if we suppose that the various qualities and changing states which substance is said to unite, concern not substance itself, but only the relation in which it successively stands to other substances. The things-in-themselves must be many; from a single thing-in-itself the multiplicity of qualities and states could never be understood. But each of these metaphysical things must be thought as entirely *simple and unchangeable;* they are called by Herbart, "*Reals*" (*Realen*). All qualities which form the characteristics of things in experience are relative, and make these characteristics

[1] Cf. *Einleitung in die Philos.*, W., I. 72–82. The historical stimulus to this sharp presentation of the principle of contradiction was no doubt the depreciation which this principle found in the dialectic method (cf. § 42, 1); logically, however, Herbart's doctrine (with the exception of his treatment of the "I" conception) is entirely independent of it. The *Eleatic* element in the Herbartian philosophy (cf. I. 225) is given with the postulate of *Being void of contradictions*, and to this circumstance the philosopher, who otherwise had little historical disposition, owed his fineness of feeling for the metaphysical motive in the Platonic doctrine of Ideas. Cf. I. 237 ff. and XII. 61 ff.

appear only in relation to other things; the *absolute qualities* of the Reals are, therefore, *unknowable*.

8. But they must be thought as the ground which determines the qualities that appear; and likewise we must assume as ground of the seeming changes which the mutation of qualities exhibits in the case of empirical things, an *actual process or occurrence*, a change of relations between the Reals. Here, however, this whole artificial construction of that which lies beyond experience began to waver. For the Eleatic rigidity of these Reals in nowise permits us to form an idea of the kind of "actual relations" which are held to obtain between them. First of all, these cannot be spatial;[1] space and time are products of the series formed by ideas, products of the psychical mechanism, and hence phenomenal for Herbart in almost a higher degree than for Kant. Only in a transferred sense can the changing relations of substances be termed a "coming and going in the intelligible space"; what they are themselves the Herbartian doctrine has no term to express. Only, in a negative direction it is obliged to make a questionable concession. Every Real has only simple and unchangeable determinations: the relation, therefore, which exists or arises between two Reals is not essential to either, and has not its basis in either. A *tertium quid*, however, which this relation would postulate, is not to be discovered in this metaphysics.[2] Hence the relations which the Reals sustain to each other, and from which the appearance of things and their relations are said to follow, are called "contingent views" (*zufällige Ansichten*) of the Reals; and Herbart's meaning in several passages is scarcely to be understood otherwise than that *consciousness* is the intelligible space in which the above relations between the Reals obtain, that the real process or occurrence, also, is some thing which itself only "takes place for the spectator" as "objective seeming."[3] If we add to this, that the "Being" of the Reals or absolute qualities is

[1] Not only in this point do Herbart's Reals distinguish themselves from the atoms of Democritus, with which they have the common basis of a *pluralistic re-shaping of the Eleatic conception of Being*, but also by the difference in (unknowable) quality, in the place of which atomism allows only quantitive differences. Just as little are the Reals to be confused with Leibniz's monads, with which indeed they share their absence of windows, but not the attribute of being a unity of the manifold. With the Platonic Ideas, they have in common the attributes of the Eleatic Being, but not the character of class-concepts.

[2] In this gap of his metaphysics *Herbart* inserted his *philosophy of religion;* for since there is no knowledge of the real ground of the relations between the Reals, from which the world of phenomena proceeds, the impression of purposiveness which the latter makes permits us to believe, in a manner which is theoretically unassailable, upon a supreme intelligence as the ground of these relations, — a very pale revival of the old physico-theological proof.

[3] Cf. W., IV. 93 ff., 127–132, 233, 240 f., 248 ff.; see also E. Zeller, *Gesch. d. deutsch. Philos.*, 844.

defined by Herbart as "*absolute position*," *i.e.* as a "*Setzung*,"[1] a positing in which Being is at rest, and which is not taken back, we have opening before us the perspective into an "absolute" idealism.

This was, indeed, carried out by Herbart still less than by Kant; here, too, it would have led to absolute contradiction. For the theory of Reals aims to deduce consciousness also, as a consequence, emerging in the realm of phenomena, of the "co-existence of the Reals." The Reals are held to reciprocally "disturb" each other, and to call forth in each other as reactions against these disturbances, inner states which have the significance of *self-preservations*."[2] Such self-preservations are immediately known to us as those by the aid of which the unknown Real of our *soul* maintains itself against disturbance by other Reals; they are *ideas* (*Vorstellungen*). The soul as a simple substance is naturally unknowable; psychology is only the science of its self-preservations. These, the ideas, sustain within the soul, which simply furnishes the indifferent stage for their co-existence, once more the relations of Reals; they disturb and *inhibit* each other, and the whole course of the psychical life is to be explained from this *reciprocal tension of ideas*. By their tension the ideas lose in intensity; and the consciousness depends upon the degree of intensity. The lowest degree of strength, which the ideas can have and still be regarded as actual, is the *threshold of consciousness*. If the ideas are pressed by others below this threshold, they change into *impulse*. Hence the essential nature of those psychical states which are called feeling and will is to be sought in the inhibitory relations of ideas. All these relations must be developed as a "statics and mechanics of ideas,"[3] and since we have to do here essentially with the determining of differences of force, this metaphysical psychology must take on the form of a *mathematical theory of the mechanism of ideas*.[4] Herbart lays particular

[1] Cf. W., IV. 71 ff.

[2] The "*suum esse conservare*," with Hobbes and Spinoza the fundamental instinct of individuals, appears with Herbart as the metaphysical activity of the Reals, by virtue of which they produce the world of seeming, *i.e.* experience.

[3] On this metaphysical basis Herbart erected the structure of an immanent *associational psychology*. The assumption of a mechanical necessity of the ideational process, and the view that the volitions follow from this as likewise necessary relations, proved a fortunate basis for a scientific theory of *pedagogics*, — a discipline which Herbart made also dependent upon ethics, since the latter teaches the goal of education (the formation of ethical character), while psychology teaches the mechanism through which this is realised. In a similar way Beneke, who took the standpoint of associational psychology without Herbart's metaphysics, found the path to a systematic pedagogics.

[4] In carrying out this thought Herbart assumed that ideas in their reciprocal inhibitions lose in intensity as much as the weakest of them possesses, and that this inhibition-sum is divided among the individual ideas in inverse ratio to their original strength, so that if in the simplest case, $a > b$, a is reduced by the inhibition to $\frac{a^2 + ab - b^2}{a + b}$, and b to $\frac{b^2}{a + b}$. Cf. on this arbitrarily axiomatic assumption and on the mistaken nature of the whole "psychological calculus," A. Lange, *Die Grundlegung der mathematischen Psychologie*, Duisburg, 1865.

weight upon the investigation of the process by which newly entering ideas are "assimilated," ordered, formed, and in part altered, by the ideas already present; he employs for this the expression *apperception* (first coined by Leibniz; cf. p. 463), and his theory of this takes the form of an explanation of the "I" or "self" by associational psychology. The "I" is thought as the moving point in which the apperceiving and apperceived ideas continually converge.

While the self-preservation of the Real which constitutes the soul, against disturbance by other Reals thus produces the phenomena of the ideational life, the reciprocal self-preservation and "partial inter-penetration" of several Reals produce for the consciousness of the spectator the "objective seeming or illusion" of *matter*. The various physical and chemical phenomena are here tortured out of the metaphysical presuppositions with an unspeakably toilsome deduction,[1] — an attempt forgotten to-day, which remained as destitute of results in natural science as in philosophy.

9. Another Göttingen professor, *Bouterwek*, attacked the thing-in-itself with other weapons. He showed in his *Apodiktik*, that if the doctrines of the Critique of Pure Reason are to be taken in earnest, nothing remains for the "object to which the subject necessarily relates" except a completely inconceivable X. We cannot talk of a thing-in-itself, or of things-in-themselves; for in this are involved already the categories of Inherence, of Unity and Plurality,[2] and of Reality, which hold good only for phenomena. The transcendental philosophy must become "negative Spinozism."[3] It can teach only that to the "consciousness in general" a "something in general" corresponds, concerning which nothing whatever is to be affirmed in absolute knowledge. (Cf. with regard to Spinoza, above, pp. 408 f.). On the other hand, this absolutely real asserts itself in all *relative knowledge* through the *consciousness of willing*.[4] For this shows everywhere the *living force of individuality*. We know of the subject because it wills something, and of the object because it furnishes

[1] *Allgem. Metaphysik*, §§ 240 ff., 331 ff.; W., IV. 147 ff., 327 ff. In Herbart's metaphysics the branching out of general ontology into the beginnings of psychology and natural philosophy is designated by the names *Eidology* and *Synechology*.

[2] Cf. esp. *Apodiktik*, I. 261, 392 ff.

[3] Ib. 385 ff.

[4] Following the example of Kant and Fichte, Bouterwek ends his theoretical *Apodiktik* in scepticism or in completely abstract-formal, absolute knowledge; it is the "practical" apodictic which first gains a relation of its content to reality.

resistance to this will. The antithesis of *force and resistance* thus furnishes a common basis to the knowledge of the reality of ourselves, and to that of the reality of other things, — of the I and the Not-I.[1] This doctrine Bouterwek would have called *absolute Virtualism*. We know our own reality in that we will, and the reality of other things in that our will finds in them a resisting force. The feeling of resistance refutes pure subjectivism or solipsism, but this relative knowledge of the particular forces of the real is supplemented by the consciousness of our own willing to form a merely empirical science.[2]

This thought of his Göttingen teacher was developed by *Schopenhauer*, under the influence of Fichte, to a metaphysics. With a bold leap he swings himself up from the position of Virtualism to the knowledge of the essential nature of all things. We recognise the will within us as the true reality, and the resistance from which we know the reality of other things must, therefore, be likewise will. This is demanded by the "*metaphysical need*" of a unitary explanation for all experience. The world "as idea" can be only phenomenon; an object is possible only in the subject and determined by the Forms of the subject. Hence the world in man's idea or mental representation (as "phenomenon of the brain," as Schopenhauer has often said with a dangerously contradictory laxity of expression) appears as a manifold ordered in *space* and *time*, a manifold whose connection can be thought only in accordance with the principle of *causality*, — the only one of the Kantian categories which Schopenhauer can admit to an originality of the same rank as that which belongs to the pure perceptions. Bound to these Forms, conceptional knowledge can have for its object only the necessity which prevails between individual phenomena: for causality is a relation of phenomena to each other; science knows nothing absolute, nothing unconditioned; the guiding thread of causality, which leads from one condition to the other, never breaks off and must not be broken off arbitrarily.[3] The conceptional work of science can, therefore, in nowise raise itself above this infinite series of phenomena; only an *intuitive interpretation* of the whole world of ideas, a look of genius over experience, an immediate apprehension, can penetrate to the true essence, which appears in our ideas as the world determined in space and time and by causality. This intuition, however, is that by which the knowing subject is given *immediately* through itself as *will*. This word solves, therefore, the mystery of the outer world

[1] *Apodiktik* II. 62 ff. [2] Ib. II. 67 f.
[3] In this Schopenhauer is in complete agreement with Jacobi (cf. above, p. 574).

also. For we must apprehend the significance of all that is given to us immediately in space and time as idea,[1] according to this analogy of the only thing which is immediately given. *The thing-in-itself is the Will.*

The word "will" as here used must indeed be taken in an extended sense. In men and in animals the will appears as *motivation* determined through ideas, in the instinctive and vegetative life of the organism as *susceptibility to stimulation*, in the rest of the world of experience as *mechanical processes*. The meaning which is common to these different internal or external kinds of causality, should be designated *a potiori* as will, in accordance with that form in which alone it is immediately known to us. Accordingly the philosopher emphasises expressly the point, that the particular peculiarities with which the will is given in human self-perception, *i.e.* its motivation through ideas and conceptions, must be kept quite apart from our notion of the will as thing-in-itself, — a requirement which it was, indeed, hard enough for Schopenhauer himself to fulfil.

At the same time, however, the relation between thing-in-itself and phenomenon must not be thought according to the rule of the understanding, *i.e.* causally. *The thing-in-itself is not the cause of phenomena.* Even in the case of man the will is not the cause of his body or of the bodily activities; but the same reality, which is given us mediately, through our ideas in space and time perception, as body, and which in cognition is conceived as something causally necessary and dependent upon other phenomena, — this is immediately given as will. Because the thing-in-itself is not subject to the principle of sufficient reason, we have the paradox, that man feels himself as will immediately free, and yet in idea knows himself to be necessarily determined. So Schopenhauer adopts Kant's doctrine of intelligible and empirical character. In the same way, however, phenomenal Nature must everywhere be regarded as *objectification*; that is, as the perceptional and conceptional mode of representation of the will or the immediately real, and must not be regarded as the product of the latter. The relation of essence to phenomenon is not that of cause and effect.

Further, the will as thing-in-itself can be only the *one, universal "world-will."* All plurality and multiplicity belong to perception in space and time; these latter are the *principium individuationis*. Hence things are different and separate from each other only as phenomena — in idea and cognition; in their true essence they are

[1] Cf. *World as Will*, etc., II. §§ 18-23.

all the same. The will is the ἓν καὶ πᾶν. Here lies for Schopenhauer the metaphysical root of morals. It is the deception of the phenomenal that makes the individual distinguish his own weal and woe from that of other individuals, and brings the two into opposition: in the fundamental moral feeling which feels another's sorrows as one's own — in *sympathy*, the transcendental unity of will of all reality comes to light.

Finally, the will can have for its object no particular content that can be empirically presented in consciousness; for every such content belongs already to its "objectivity." The world-will has only itself for its object; it wills only to will. It wills only to be actual; for all that actually is, is itself only a willing. In this sense Schopenhauer calls it the *will to live*. It is the thing-in-itself which ever gives birth to itself in timeless, eternal process, and as such it is represented in the restless mutation of phenomena.

§ 42. The System of Reason.

The direction which the main line of the idealistic development was to take was prescribed by the principle from which Fichte made bold to throw overboard the conception of the thing-in-itself. The relation of Being and consciousness can be explained only out of consciousness, and by the fact that consciousness "looks at its own action" and creates thereby at once the real and the ideal series of experience — objects and the knowledge of them. The problem of the *Wissenschaftslehre* is, therefore, to comprehend the world as a necessary connected whole of rational activities, and the solution can proceed only by reflection on the part of the philosophising reason upon its own action and upon that which *is requisite* therefor. The necessity, therefore, which prevails in this *system of reason* is *not causal, but teleological*. The dogmatic system understands the intelligence as a product of things, the idealistic develops intelligence as an inherently purposeful connection of acts, some of which serve to produce objects. The progress of philosophical thought should not take the form, that because something is, therefore something else is also, but should rather shape itself after the guiding principle that *in order that something may take place, something else must take place also*. Every act of reason has a task; to perform this it needs other acts and thus other tasks; the connected series of all activities for the fulfilment of all tasks, taken as a purposeful unity, is the system of the reason, the "history of consciousness." The ground or reason of all Being lies

in the ought; that is, in the activity of self-consciousness directed toward an end.

The schema for carrying out this thought is the *dialectical method*. If the world is to be comprehended as reason, the system of reason must be developed from an original task; all particular acts of intelligence must be deduced as means to its performance. This act [lit. "deed-act," *Thathandlung*] is *self-consciousness*. A beginning without assumptions, such as philosophy needs, is not to be found by means of an assertion or proposition, but by means of a *demand*, which every one must be able to fulfil: "*Think thyself!*" And the whole business of philosophy consists in making clear what takes place in this act, and what is requisite for it. But this principle can lead on farther, only so long as it is shown that between that which should take place and that which does take place to this end, there is still a contradiction, out of which the new task results, and so on. The dialectical method is a system in which every problem or task creates a new one. There is in the reason itself a resistance to the result it seeks to achieve, and to overcome this resistance it unfolds a new function. These *three momenta* are designated as *Thesis*, *Antithesis*, and *Synthesis*.

If Kant had maintained the necessity of insoluble problems of reason for his explanation and criticism of metaphysics, the idealistic metaphysics now makes this thought a positive principle. By this means the reason's world becomes an infinity of self-production, and the *contradiction* between the task and the actual doing is declared to be the real nature of the reason itself. This contradiction is necessary and cannot be abolished. It belongs to the essential nature of the reason; and since only the reason is real, the contradiction is thus declared to be real. Thus the dialectical method, this metaphysical transformation of Kant's transcendental logic, came into stronger and stronger opposition to formal logic. The rules of the understanding, which have their general principle in the principle of contradiction, are adequate, perhaps, for the ordinary elaboration of perceptions into conceptions, judgments, and conclusions; for the intellectual perception of the philosophising reason they do not suffice, before the problems of "speculative construction" they sink to a relative importance.

This doctrine asserts itself already in the first exposition which Fichte gave to his Science of Knowledge;[1] it was then spoken out more and more boldly by disciples and associates like Fr. Schlegel, and, ultimately, the speculative reason affected a superiority to the

[1] *Grundlage der ges. W.-L.*, § 1; W., I. 92 ff. [Kroeger's tr., pp. 63 ff.].

"reflective philosophy of the understanding" hemmed in within the principle of contradiction. Schelling[1] appealed to the *coincidentia oppositorum* of Nicolaus Cusanus and Giordano Bruno, and Hegel[2] sees in the triumph of the "narrow understanding" over the reason the hereditary error of all earlier philosophy.[3] Metaphysics, of which Kant has shown that it is not possible for the understanding, seeks an organ of its own in *intellectual perception or intuition*, and a form of its own in the dialectical method. The *productive* synthesis of the manifold must keep its unity above the antitheses into which it divides itself. It is the essential nature of mind or spirit to disunite itself, and from this state of being rent apart, to return back to its original unity.

This *triplicity* rests entirely upon the above (Fichtean) fundamental characterisation of the mind as that which beholds itself. The reason is not only "in-itself" as a simple ideal reality, but also "for-itself"; it appears to itself as "something other, alien"; it becomes for itself an object different from the subject, and this otherness is the principle of *negation*. The doing away with this difference, the negation of the negation, is the synthesis of the two moments above named. These are annulled or sublated ["*aufgehoben*," which has no exact English equivalent; Bosanquet suggests "put by"] in the threefold aspect that their one-sided force is overcome, their relative meaning is preserved, and their original sense transmuted into a higher truth. Following this scheme of the "in-itself," "for-itself," and "in-and-for-itself" (*An-sich, Für-sich, An-und-für-sich*). *Hegel* developed his dialectical method with great virtuosoship by making each conception "turn into its opposite," and from the contradiction of the two making the higher conception proceed, which then experienced the same fortune of finding an antithesis which required a still higher synthesis, and so on. The Master himself, in his employment of this method, particularly in the *Phœnomenology* and in the *Logic*, worked in an astonishing wealth of knowledge, a quite unique fineness of feeling for conceptional connections, and a victorious power of combining thought, while occasionally his profundity passed over into obscurity and schematic word-building. In the case of his disciples, a philosophical jargon grew out of this, which pressed all thought into the triple scheme, and by the thoughtless externality with which it was used,—

[1] Sixth *Vorl. über Meth. d. ak. St.*, W., V. 267 ff.
[2] Cf. esp. his article on *Glauben und Wissen*, W., I. 21 ff.
[3] It is from this point of view that we best can understand Herbart's polemic against absolute idealism. He, too, finds contradictions in the fundamental conceptions of experience, but just on this account they ought to be worked over until the contradictionless reality is recognised; cf. above, § 41, 7.

and used for a time in widely extended circles, — it was all too well adapted to discredit philosophy as an empty bombast.[1]

2. The system of reason with *Fichte*, in the first period of his philosophical activity (about 1800), is, in its content also, in full accord with the above method. The original "act" (*Thathandlung*) of self-consciousness, which is determined by nothing except itself, is that the "*I*" or self can only be "posited" by being distinguished from a "*Not-I*" or "not-self." Since, however, the not-self is posited only in the self, — *i.e.* historically expressed, the object posited only in consciousness, — the self and the not-self (*i.e.* subject and object) must reciprocally determine each other within the "I" or self. From this results the theoretical or the practical series of self-consciousness, according as the Not-I or the "I" is the determining part.

The functions of the *theoretical* reason are now developed by Fichte in the following manner: The particular stages result from the reflection of consciousness upon its own previously determined action. By virtue of its own activity, which is limited by nothing external, it presses beyond every bound which the "I" has set for itself in the Not-I as object. The pure perceptions, space and time, the categories as rules of the understanding, and the principles of the reason, are treated as the several forms of this self-determining. In place of the antitheses which Kant had set up between these particular strata, Fichte set the principle, that in each higher stage the reason apprehends in purer form what it has accomplished in the lower stage. Knowing is a process of self-knowledge on the part of the reason, beginning with sense perception and ascending to complete knowledge.[2] But this whole series of the theoretical reason presupposes an original "self-limitation" of the I. If this is given, the entire series is comprehensible in accordance with the principle of self-perception; for every activity has its object and its reason in the preceding. The first self-limitation has its ground in no preceding act, and therefore, theoretically, no ground whatever. It is a *groundless, free activity*, but as such, the ground of all other activities. This groundless [undetermined] free act is *sensation*. It falls into consciousness, therefore, only in its content, which is to be taken up into perception; as act it is, like all that has

[1] Cf. the humorous portrayal in G. Rümelin, *Reden und Aufsatze*, pp. 47–50, Freiburg, 1888.
[2] Without any directly visible influence from Leibniz, his conception of the relation of the different knowing faculties asserts itself here in contrast with the Kantian separation. Only it is to be noted that this "history of the development of reason" is, with Leibniz, determined causally, with Fichte teleologically. What Hamann and Herder (cf. above, p. 576) demanded as a requirement of the unity of intelligence in the Leibnizian sense, Fichte and Schelling had meanwhile performed in quite another sense.

no ground, *unconscious*.[1] In this consists its "givenness," by virtue of which it appears as foreign and coming "from without." In place of the thing-in-itself comes, therefore, the *unconscious self-limitation of the I.* Fichte calls this activity *the productive imagination.* It is the world-producing activity of the reason.

For sensation there is then no *ground* which determines it; it is there with absolute freedom, and determines on its part all knowledge as regards content. Hence it can be comprehended only through its *end* — in the *practical Wissenschaftslehre,* which has to investigate to what end the self limits itself. This is only to be understood if we regard the I or self, not as resting Being, but as in its nature *infinite activity* or *impulse.* For since all action is directed toward an object in connection with which it develops, so the self, which finds its object not given to it, as is the case with the empirical will, must, in order to remain impulse and action, *set objects* for itself. This takes place in sensation: sensation has no *ground,* but only the *end* of creating for the impulse of the self a limit beyond which the self passes in order to become object for itself. The actual world of experience, with all its things, and with the "Reality" which it has for the theoretical consciousness, is only the *material for the activity of the practical reason.*

The inmost essence of the ego, therefore, is its action, directed only toward itself, determined only by itself, — the *autonomy of the ethical reason.* The system of reason culminates in the categorical imperative. The I is the ethical will, and the world *is the material of duty put into sensuous form.* It is there, to the end that we may be active in it. It is not that Being is the cause of doing, but Being is brought forth for the sake of the doing. All that *is,* is only to be understood or explained from the point of view of that which it *ought to be* (*soll*).

The demand of the *Wissenschaftslehre,* so paradoxical for the ordinary consciousness,[2] amounts, accordingly, to robbing the *category*

[1] The paradox of the "unconscious activities of consciousness" lies in the expression, not in the thing. German philosophers have frequently been very unfortunate in their terminology, most unfortunate precisely where they wished to give German words a new meaning. Fichte not only uses consciousness and self-consciousness promiscuously, but he understands by consciousness, on the one hand, the actual idea or mental presentation of the individual or the empirical ego (hence in this sense "unconscious," *bewusstlos*), and on the other hand, the functions of the "consciousness in general," of the transcendental apperception or the "universal ego or self" (in this sense he speaks of "history of consciousness"). In these verbal relations rests a good part of the difficulty of Fichte's exposition and of the misunderstanding which it has called forth.

[2] In this spirit Fr. H. Jacobi protested against this knitting, not indeed of the stocking, but of the knitting (W., III. 24 ff.). Cf., on the other hand, C. Fortlage, *Beiträge zur Psychologie* (Leips. 1875), pp. 40 f.

of substantiality of the fundamental significance which it has in the naïve, sensuous view of the world. In this a something that "is," a "Being" ("*Seiendes*") is always thought as support and cause of activities; in Fichte's thought the "doing" or action is conceived as the original, and Being is regarded as only the means posited for that end. This antithesis came sharply to light in the atheism controversy, which had so important consequences for Fichte personally. The *Wissenschaftslehre* could not allow *God* to be regarded as "substance"; in this case he would necessarily be something derived; it could seek the metaphysical conception of God only in the "Universal Ego or Self" (*allgemeinen Ich*), in the absolutely free, world-creating action; and in clear contrast to the *natura naturans* of dogmatism it calls God the *Moral World-order,*[1] the *ordo ordinans.*

Accordingly, the chief philosophical discipline for Fichte is *moral science.* Projected before Kant's Metaphysics of Morals, Fichte's system takes from the same the categorical imperative in the formula "act according to thy conscience," for the starting-point of a strictly carried out science of duties, which develops the general and particular tasks of man from the opposition appearing in the empirical self between the natural impulse and the moral impulse. At the same time, the Kantian rigour is softened by the fact, that man's sensibility, also, is permitted to assert its rights as product of reason. The dualism still survives, but it is already on the way toward being overcome, and in the thought that the purposeful connected whole of the reason assigns each of its members a vocation prescribed by its natural manifestation, ethical theory is brought to an elaboration of the "material for the fulfilment of duty," which is much more penetrating and gives a deeper value to the data of experience. This shows itself in Fichte's exposition of professional duties, in his nobler conception of marriage and family life, in the finer penetration of his ethical investigations into the manifold relations of human life.

The like is true, also, of Fichte's treatment of the problems of public life. A youthful energy masters the Kantian fundamental thoughts here, and gives them a much more impressive formulation than they could receive from Kant himself, who undertook the systematic carrying out of these thoughts, only in his old age. The reciprocal limitation of spheres of freedom in the outer social life of individuals is, for Fichte also, the principle of Natural Right. As "primitive rights" he regarded the claims of the individual to

[1] Fichte, W., V. 182 ff., 210 ff.

freedom of his body as the organ for performance of duty, of his property as being the external sphere of operation to this end, and finally of his self-preservation as personality. But these primitive rights become efficient as compulsory rights or laws only through the authority of (positive) laws in the state. The idea of the compact which is at the basis of the state, Fichte analyses into the citizen, the property, and the defence contract. It is interesting in this connection to see how these thoughts culminate in his politics in the principle, that the state has to make provision that every one may be able to live by his work, — the doctrine, named after him, of the so-called *right to work*.[1] Work is the duty of the moral personality, the condition of existence of the physical; it must unconditionally be furnished by the state. Hence the regulation of the relations of labour must not be left to the natural working of supply and demand (as according to Adam Smith), and the profits of labour must not be left to the mechanism of society's war of interests, but the rational law of the state must enter here. From the point of view of this thought, with a careful consideration of the conditions given by experience,[2] Fichte projected his *ideal of the socialistic state* as "the complete industrial state" (*geschlossenen Handelsstaates*), which itself takes in hand all production and manufacturing, and all trade with foreign countries, in order to assign to each citizen his work and also the full revenue for his work. The powerful idealism of the philosopher did not shrink from a deep system of compulsion, if he could hope to assure to every individual thereby a sphere for the free fulfilment of duty.

3. The problem of conceiving the universe as a system of reason was solved in the main in the Science of Knowledge by the method of deducing the external world of the senses as a product, appearing in the empirical ego, of the "consciousness in general"; in this sense Fichte's doctrine, like Kant's, was later characterised as "subjective idealism." Fichte's meaning in this, however, was throughout that "Nature," which it was his intention to have posited as an organic whole,[3] should possess the full significance of an objective product of reason, in contrast with the ideas of individuals; to set this forth he lacked the penetrating knowledge of his subject which he possessed in the case of the relations of human life. Thus it was a supplementing of this work, that was welcome to Fichte also,

[1] *Naturrecht*, § 18; W., III. 210 ff.; *Geschl. Handelsst.*, I. 1; W., III. 400 ff.
[2] Cf. G. Schmoller, *Studie über J. G. Fichte* in Hildebrand's *Jahrb. f. Nat. u. Stat.*, 1865; also W. Windelband, *Fichte's Idee des deutschen Staates* (Freiburg, 1890).
[3] Fichte, W., IV. 115.

when *Schelling* undertook to solve the other part of the problem and took up in earnest the thought of constructing or deducing *Nature as the objective system of reason*. According to the Science of Knowledge and Kant's Philosophy of Nature this was possible only if Nature could be successfully comprehended as a connected whole of forces, having their ultimate end in a service toward the realisation of the reason's command. The starting-point for this construction was necessarily Kant's *dynamic* theory, which derived the existence of *matter* from the relation of the forces of attraction and repulsion (cf. § 38, 7), and its goal was given by that manifestation of Nature in which alone the practical reason evinces itself — the human *organism*. Between the two the whole wealth of Nature's forms and functions must be spread out as a *life in unity*, whose rational meaning was to be sought in the organic growth of the final goal out of the material beginnings. *Nature is the ego, or self, in process of becoming* — this is the theme of Schelling's *Philosophy of Nature*. This task, which had its basis in philosophical premises, seemed at the same time set by the condition of *natural science*, which had once again reached the point where scattered detail-work craved a living conception of Nature as a whole. And this craving asserted itself the more vigorously, as the progress of empirical science gave little satisfaction to the highly pitched expectations which had been set upon the principle of the mechanical explanation of Nature after the seventeenth century. The derivation of the organic from the inorganic remained, as Kant stated, problematical, to say the least; a genetic development of organisms on this basis was a vexed question; for the theory of medicine, which was then passing through a great movement, no key had as yet been found by which it could be fitted into the mechanical conception of the world; now came, also, the discoveries of electric and magnetic phenomena, for which at that time it could not be anticipated that it would be possible to subsume their peculiar mysterious qualities under the point of view of the Galilean mechanics. In contrast with this, *Spinoza* had made his powerful impression upon the minds of men just because he thought all Nature, man not excluded, as a connected unity, in which the divine Being manifests itself in all its fulness, and for the development of German thought it became of decisive importance that *Goethe* made this conception his own. The poet, indeed, as we find it best expressed in his splendid aphorisms *Die Natur*, reinterpreted this view in his own way; in the stead of the "mathematical consequence" and its mechanical necessity he set the concrete idea of a *living unity of Nature*, in which the *Weltanschauung* of the Renaissance was revived, though without a

formulation in abstract thought. This *poetic Spinozism*[1] became an essential link in the development of the idealistic systems.

All these motives come into play in Schelling's *Philosophy of Nature:* as a result its central conception is *life*, and it makes the attempt to consider Nature from the point of view of the *organism*, and to understand the connection of its forces from the ultimate end of the production of organic life. Nature is not to be described and measured, but the meaning and *significance* which belong to its particular phenomena in the purposeful system of the whole are to be understood. The "categories of Nature" are the forms or shapes in which the reason sets itself as objective to itself; they form a system of development in which every particular phenomenon finds its logically determined place. In carrying out this idea Schelling was of course dependent upon the condition of the natural science of his time. Of the connection of forces, of their transformation into each other, which was the principal point of interest for his purpose, ideas at that time were still very imperfect, and the philosopher did not hesitate to fill out the gaps of knowledge by hypotheses, which he took from the *a priori* construction of the teleological system. In many cases these theories proved valuable heuristic principles (cf. above, p. 566), in others they proved false paths by which investigation could attain no useful results.

The element in the *Philosophy of Nature*, which is of historical significance, is its opposition to the dominance of the Democritic-Galilean principle of the purely mechanical explanation of Nature. Quantitative determination is here again regarded as only external form and appearance, and the causal mechanical connection as only the mode of representation which conforms to the understanding. The meaning of the structures of Nature is the significance which they have in the system of the development of the whole. If, therefore, Schelling turned his look toward the relationship of forms in the organic world, if he used the beginnings of comparative morphology, in which *Goethe* played so important a role, in order to exhibit the *unity of the plan* which Nature follows in the succession of animate beings, yet this connected system was not for him, or for his disciples such as *Oken*, properly a causal genesis in time, but the expression of a gradually succeeding fulfilment of the end. In the different orders of animate beings we see in separate forms, according to Oken, what Nature intends with the organism, and what she first reaches completely in man. This teleological interpretation

[1] It took Herder prisoner also, as is proved by his conversations on Spinoza's system under the title *Gott* (1787).

does not exclude a causal relation in time, but, with Schelling and Oken at least, it does not include it. It is not their point to ask whether one species has arisen from another; they only wish to show that one is the preliminary stage for that which the other accomplishes.[1]

From this we can understand why the mechanical explanation of Nature, which has again attained the victory in the nineteenth century, is wont to see in the period of the Philosophy of Nature, only a fit of teleological excess, now happily overcome, which checked the quiet work of investigation. But the chronicles of the controversy, which since the time of Democritus and Plato has filled the history of the mode of conceiving Nature, are not yet closed, even to-day. The reduction of the qualitative to the quantitative, which presses forward victoriously under the flag of mathematics, has repeatedly encountered the need which seeks behind motions in space a reality of rational meaning. This felt need of a living content of Nature Schelling's theory aimed to meet, and for this reason the great poet, who endeavoured to demonstrate as the true reality in the charming play of colours not a vibration of atoms, but a something that is originally qualitative, felt drawn toward it. This is the philosophical meaning of Goethe's "Theory of Colours."

With Schelling the system of *Nature* is ruled by the thought that in it the objective reason struggles upward from its material modes of manifestation, through the multitude of forms and transformations of forces, up to the organism in which it comes to *consciousness.*[2] *Sensitive* beings form the termination of the life of Nature; with sensation the system of the Science of Knowledge begins. The devious way which Nature pursues to this goal is frequently altered in details in the various remodellings which Schelling gave to his Philosophy of Nature, but in its main outlines it remained the same. In particular, it was the conception of *duality*, of the opposition of forces which negate each other in a higher unity, that formed the fundamental schema of his "construction of Nature," — a conception due to the Science of Knowledge, — and from this point of view the *polarity* in electric and magnetic phenomena which

[1] The "interpretation" of phenomena was, to be sure, a dangerous principle from a scientific point of view; it opened the gates of the Philosophy of Nature to poetic fancy and brilliant flashes. These guests forced their way in even with Schelling, but still more with his disciples, such as *Novalis*, *Steffens*, and *Schubert*. In the case of Novalis especially we have a magical, dreamy symbolism of Nature in a play which is admirable in poetry but questionable in philosophy.

[2] The poetry of this fundamental thought was expressed in most characteristic form by Schelling himself in the beautiful verses which are printed in *Sch.'s Leben in Briefen*, I. 282 ff.

busied Schelling's contemporaries as a newly found enigma was particularly significant for him.

4. When Schelling wished to place beside his Philosophy of Nature an elaboration of his own of the Science of Knowledge, under the name of "Transcendental Idealism," an important change had taken place in the common thought of the Jena idealists, to which he now gave the first systematic expression. The impetus to this came from *Schiller*, and from the development which he had given to the thoughts of the *Critique of Judgment*. It had become plainer step by step that the system of reason must become perfected for idealism in the æsthetic function, and in place of the ethical idealism which the Science of Knowledge taught, and the physical idealism which the Philosophy of Nature presented, appeared now *æsthetic idealism*.

The re-shaping, so rich in results, which Kant's thoughts experienced through Schiller, by no means concerned merely the æsthetic questions which lay nearest the poet, but likewise the ethical questions and those pertaining to the history of philosophy, and therewith the whole system of reason. For Schiller's thoughts, even before his acquaintance with Kant, — as is shown among other things by his poem, *Die Künstler*, — had been turned to the problem of the significance of art and the beautiful in the whole connected system of man's rational life and its historical development, and by solving this problem with Kantian conceptions he gave to the idealism of the Science of Knowledge a decisive turn.

This began with the new Forms which Schiller found for Kant's conception of beauty. The synthesis of the theoretical and the practical in the æsthetic reason (cf. § 40, 2) could perhaps find no more fortunate expression than in Schiller's definition of *beauty as freedom in phenomenal appearance*.[1] It asserts that æsthetic contemplation apprehends its object without subjecting it to the rules of the cognising understanding; it is not subsumed under conceptions, and we do not ask for the conditions which it has in other phenomena. It is perceived *as if* it were free. *Schopenhauer* afterwards expressed this in the form that the enjoyment of the beautiful is the contemplation of the object in independence of the principle of sufficient reason. Schiller later laid still more weight upon the point that the æsthetic process is as independent of the practical reason as of the theoretical. The beautiful (in distinction from the agreeable and the good) is as little an object of the sensuous as it

[1] Cf. chiefly the letters to Körner of February, 1793, also the sketch on "The Beautiful in Art," printed with the letter of the 20th of June of that same year, — all fragments of the dialogue *Kallias* which was not completed.

is of the moral impulse; it lacks that quality of want or need which belongs to the life of empirical impulse, just as it lacks the earnestness of the practical reason. In the æsthetic life the *play impulse* unfolds itself;[1] every stirring of the will is silent in disinterested contemplation. In this, too, Schiller was followed by Schopenhauer, when the latter found the happiness of the æsthetic condition in the overcoming of the unhappy will to live, in the activity of the pure, willess subject of knowledge.[2]

From this Schiller concluded in the first place that wherever we have to do with educating man, subject to his sensuous nature, to a condition where he shall will morally, the æsthetic life offers the most effective means to this end. Kant had designated the "reversal of motives" as the ethical task of man (cf. above, § 39, 6); for the transition from the sensuous to the ethical determination of the will he offered man, as an aid, religion; Schiller offered art.[3] Faith and taste cause man to act legally, at least, when he is not yet ripe for morality. In intercourse with the beautiful the feelings become refined, so that natural rudeness vanishes, and man awakes to his higher vocation. Art is the fostering soil for science and morality. Such was the teaching of Schiller in the *Artists;* his *Letters on the Æsthetic Education of the Human Race* go deeper. The æsthetic condition, or state (*Staat*), because it is the completely disinterested state, destroys the sensuous will, also, and thus makes room for the possibility of the moral will; it is the necessary point of transition from the physical state, ruled by needs, into the moral state. In the physical state man endures the power of Nature; in the æsthetic state he frees himself from it; and in the moral state he controls it.

But already in the *Artists* the beautiful had been assigned a second higher task of ultimately giving also the culmination and completion to moral and intellectual cultivation, and in building this thought into the critical system the poet passes over from supplementing to transforming the Kantian doctrine. The two sides of human nature are not reconciled if the moral impulse is obliged to overcome the sensuous impulse. In the physical and in the "moral" state one side of human nature is always suppressed in favour of the

[1] The attempt which Schiller makes in his *Letters concerning Æsthestic Education* (11 f.) to lay a basis for this in transcendental psychology remind us strongly of the Reinhold-Fichte time when "Jena whirred with the buzz of Form and Matter."

[2] *World as Will*, etc., I. §§ 36–38. In this connection Schopenhauer no doubt claims the same value for scientific knowledge. Cf. § 43, 4.

[3] Cf. the conclusion of the essay, *Ueber den moralischen Nutzen ästhetischer Sitten*.

other. We have a complete manhood only where neither of the two impulses prevails over the other. Man is truly man, only where he plays, where the war within him is silent, where his sensuous nature is exalted to so *noble a sentiment or sensibility* that it is no longer needful for him to will loftily. The Kantian rigorism holds wherever sensuous inclination stands over against duty: but there is the higher ideal of the "*schöne Seele*" — the *beautiful soul* — which does not know this internal conflict because its nature is so ennobled that it fulfils the moral law from its own inclination. And just this ennobling is gained by man, only through æsthetic education. Through it alone is the sensuous-supersensuous discord in human nature abolished; in it alone does complete, full manhood come to realisation.

5. In the ideal of the "*schöne Seele*" the "virtuososhiip" of Shaftesbury overcomes the Kantian dualism. The completion of man is the æsthetic reconciliation of the two natures which dwell within him; *culture* is to make the life of the individual a *work of art*, by ennobling what is given through the senses to full accord with the ethical vocation. In this direction Schiller gave expression to the ideal view of life characteristic of his time in antithesis to the rigorism of Kant, and the *æsthetic Humanism* which he thus wrested from abstract thought found besides his, a wealth of other characteristic manifestations. In them all, however, *Goethe* appeared as the mighty personality, who presented in living form this ideal height of humanity in the æsthetic perfection of his conduct of life, as well as in the great works of his poetic activity.

In this conception of the genius Schiller was first joined by *William von Humboldt*.[1] He sought to understand the nature of great poems from this point of view; he found the ideal of man's life in the harmony of the sensuous and the moral nature, and in his treatise which laid the foundations for the *science of language*[2] he applied this principle by teaching that the nature of language is to be understood from the organic interaction of the two elements.

An attitude of sharper opposition to the Kantian rigorism had already been taken, in the Shaftesbury spirit, by *Jacobi* in his romance patterned after Goethe's personality, "*Allwill's Briefsammlung.*" The moral genius also is "exemplary"; he does not subject himself to traditional rules and maxims, he lives himself out and thereby gives himself the laws of his morality. This "ethical Nature" is the highest that the circuit of humanity affords.

[1] Born 1767, died 1835. Works, 7 vols. (Berlin, 1841 ff.). Aside from the correspondence, especially that with Schiller, cf. principally the *Ästhetischen Versuche* (Brunswick, 1799). Also Rud. Haym, *W. v. H.* (Berlin, 1856).

[2] *Ueber die Kawi-Sprache* (Berlin, 1836).

Among the *Romantic School* this ethical "geniality" in theory and practice came to its full pride of luxuriant efflorescence. Here it developed as an *æsthetic aristocracy of culture* in opposition to the democratic utility of the Enlightenment morals. The familiar word of Schiller's as to the nobility in the moral world was interpreted to mean, that the Philistine, with his work ruled by general principles, has to perform his definite action determined by ends, while the man of genius, free from all external determination by purposes and rules, merely lives out his own important individuality as a something valuable in itself, — lives it out in the disinterested play of his stirring inner life, and in the forms shaped out by his own ever-plastic imagination. In his morals of genius, the sensibility (*Sinnlichkeit*) in the narrowest significance of the word is to come to its full, unstunted right, and by æsthetic enhancement is to become equal in rank to the finest stirrings of the inner nature, — a sublime thought, which did not prevent its carrying out in Schlegel's *Lucinde* from running out into ingenious and refined commonplace.

Schleiermacher's ethics brought back the Romantic morals to the purity of Schiller's intention.[1] It is the complete expression of the life-ideal of that great time. All ethical action seems to it to be directed toward the unity of Reason and Nature. By this is determined in general the moral law, which can be none other than the natural law of the reason's life; by this is also determined in detail the task of every individual, who is to bring this unity to expression in a special way, proper only for him. In the systematic carrying-out of this thought, Schleiermacher distinguishes (according to the organic and the intellectual factors of intelligence, cf. § 41, 6) the organising and the symbolising activities, according as the unity of Nature and Reason is procured by striving, or is presupposed, and thus result in all four fundamental ethical relations, to which correspond as goods, the state, society, the school, and the Church. From these the individual has to develop in self-activity to a harmonious life of his own.

Finally, *Herbart*, also, reduced ethical theory to the æsthetic reason in a completely independent manner; for him, morals is a branch of general æsthetics. Besides the theoretical reason, which contains the principles for knowledge of Being, he recognises as original only the *judging or estimation of the existent in accordance with æsthetic Ideas*. This estimation has to do with the will and the needs of the empirical self as little as has the knowing activity; "Judgments of taste" hold necessarily and universally with direct self-evidence,

[1] Cf. also Schleiermacher's *Vertraute Briefe über die Lucinde* (1800).

and always refer to the *relations in the existent:* these have an original pleasure or displeasure inherent in them. The application of these principles to the narrower field of the æsthetic is only indicated by Herbart: ethics, on the contrary, is regarded by him as the science of the judgments of taste pronounced upon the relations of human will. It has not to explain anything — that is the business of psychology; it has only to settle the norms by which the judgment mentioned above is passed. As such norms, Herbart finds the five *ethical Ideas,* — Freedom, Affection, Benevolence, Right, and Equity, — and according to these he seeks to arrange the systems of the moral life, while for his genetic investigation he always employs the principles of the associational psychology, and thus in the statics and mechanics of the state undertakes to set forth the mechanism of the movements of the will, by which the social life of man is maintained.

6. From *Schiller's* æsthetic morals resulted, also, a *philosophy of history,* which made the points of view of Rousseau and Kant appear in a new combination. The poet unfolded this in an entirely characteristic manner in his essays on *Naïve and Sentimental Poetry,* by gaining the fundamental æsthetic conceptions from bringing forward historical antitheses, and constructing a general plan of their movement. The different ages and the different kinds of poetry are characterised, in his view, by the different relations sustained by the spirit to the realm of Nature and the realm of Freedom. As the "Arcadian" state, we have that where man does what is in accordance with the moral order instinctively, without commandment, because the antithesis of his two natures has not yet unfolded in consciousness: as the Elysian goal, we have that full consummation in which his nature has become so ennobled that it has again taken up the moral law into its will. Between the two lies the struggle of the two natures, — the actual life of history.

Poetry, however, whose proper task it is to portray man, is everywhere determined by these fundamental relations. If it makes the sensuous, natural condition of man appear as still in harmonious unity with his spiritual nature, then it is *naïve;* if, on the contrary, it sets forth the contradiction between the two, if in any way it makes the inconsistency between the reality and the ideal in man appear, then it is *sentimental,* and may be either satirical or elegiac or, also, in the form of the idyl. The poet who is himself Nature presents Nature naïvely; he who possesses her not has the sentimental interest in her of calling back, as Idea in poetry, the Nature that has vanished from life. The harmony of Nature and Reason is given in the former, set as a task in the latter — there as reality,

here as ideal. This distinction between the poetic modes of feeling is, according to Schiller, characteristic also for the contrast between the ancient and the modern. The Greek feels naturally, the modern man is sensible of Nature as a lost Paradise, as the sick man is sensible of convalescence. Hence the ancient and naïve poet gives Nature as she is, without his own feelings; the modern and sentimental only in relation to his own reflection: the former vanishes behind his object, as the Creator behind his works; the latter shows in the shaping of his material the power of his own personality striving toward the ideal. There realism is dominant; here idealism; and the last summit of art would be the union in which the naïve poet should set forth the sentimental material. So Schiller sketched the form of his great friend, the modern Greek.

These principles were eagerly seized upon by the *Romanticists.* Virtuosos of the reviewer's art, such as were the *Schlegels,* rejoiced in this philosophical schema for criticism and characterisation, and introduced it into their comprehensive treatment of the history of literature. In this *Frederick* Schlegel gave Schiller's thoughts the specifically romantic flavour, for which he knew how to use Fichtean motifs with ready superficiality. While he designated the antithesis propounded by Schiller with the new names *classic* and *romantic,* he remodelled it materially, also, by his doctrine of *irony.* The classic poet loses himself in his material; the romantic poet hovers as a sovereign personality above it; he annuls matter by the form. In going with his free fancy beyond the material which he posits, he unfolds, in connection with it, merely the play of his genius, which he limits in none of its creation. Hence the romantic poet has a tendency to the infinite, toward the never complete: he himself is always more than any of his objects, and just in this the irony evinces itself. For the infinite doing of the ethical will, of which Fichte taught, the Romanticist substitutes the endless play of the fancy, which creates without purpose, and again destroys.

The elements in Schiller's doctrine that concern the *philosophy of history* found their full development in *Fichte,* from whom they borrowed much. As the result of their influence he allowed the antitheses of his *Wissenschaftslehre* to become reconciled in the æsthetic reason. Already in his Jena lectures on the Nature of the Scholar, and in the treatment which the professional duties of the teacher and the artist found in the "*System of Ethics*" we hear these *motifs*; in his Erlangen lectures they have become the ruling theme. When he proceeded to draw the "*Characteristics of the Present Age,*" he did it in the pithy lines of a construction of universal history. As the first ("Arcadian") state of mankind

appears that of *rational instinct* or *instinctive reason* ("*Vernunftinstinct*"), as the representatives of which a normal people is assumed. In this age the universal consciousness is dominant over and in individuals with immediate, uncontested certainty of natural necessity; but it is the vocation of the free individual ego to tear himself loose from this government of custom and tradition, and follow his own impulse and judgment. With this, however, begins the age of sinfulness. This sinfulness becomes complete in the intellectual and moral crumbling of social life, in the anarchy of opinions, in the atomism of private interests. With clear strokes this "*complete sinfulness*" is characterised as the theory and practice of the Enlightenment. The community of mankind has here sunk to the "state based upon needs" ("*Nothstaat*"), which is limited to making it externally possible for men to exist together, — and ought to be so limited, since it has nothing to do with any of man's higher interests, — morality, science, art, and religion, — and must leave them to the sphere of the individual's freedom. But for this reason the individual has no living interest in this "actual" state; his home is the world, and perhaps also at any moment the state which stands at the summit of civilisation.[1] This civilisation, however, consists in the subordination of individuals to the known law of reason. Out of the sinful, arbitrary free-will of individuals must rise the autonomy of the reason, the self-knowledge and self-legislation of the universally valid, which is now consciously dominant in the individual. With this the age of the *rule of reason* will begin, but it will not be complete until all the powers of the rationally matured individual are placed at the service of the whole in the "true state," and so the commandment of the common consciousness is again fulfilled without resistance. This ("Elysian") final state is that of *rational art* or *artistic reason* ("*Vernunftkunst*"). It is the ideal of the "*schöne Seele*" carried over to politics and history. To bring about this age, and in it to lead the community, the "kingdom," by reason, is the task of the "teacher," the scholar, and the artist.[2]

The "beginning of the rule of reason" Fichte's vigorous idealism saw just where sinfulness and need had risen to the highest point. In his "*Addresses to the German Nation*" he praised his people

[1] The classical passage for the cosmopolitanism of the culture of the eighteenth century is found in Fichte, W., VII. 212.

[2] In the religious turn which Fichte's thought takes at the close, this picture of the ideal civilised state of the future takes on more and more theocratic features: the scholar and artist have now become the priest and seer. Cf. W., IV. 453 ff., and *Nachgel. Werke*, III. 147 ff.

as the only one that still preserves its originality and is destined to create the true civilised state. He cries to his people to bethink itself of this its vocation, on which the fate of Europe is hanging, to raise itself from within by a completely new education to the kingdom of reason, and to give back freedom to the world.

7. The point of view of the *æsthetic reason* attained full mastery in the whole system of the idealistic philosophy through *Schelling*. In his working out of the "*Transcendental Idealism*" he developed the Fichtean antithesis of the theoretical and practical *Wissenschaftslehre* by the relation between the conscious and unconscious activity of the self (cf. above, No. 2). If the conscious is determined by the unconscious, the self is theoretical; in the reverse case it is practical. But the theoretical self, which looks on at the productiveness of the unconscious reason, manifested in feeling, perceiving, and thinking, never comes to an end with this, and the practical self, also, which re-shapes and transforms the unconscious reality of the cosmos in the free work of individual morality, of political community, and of historical progress, has the goal of its activity in the infinite. In neither series does the whole essential nature of the reason ever come to its full realisation. This is possible only through the *unconscious-conscious activity of the artistic genius*, in which the above antitheses are abolished. In the undesigned appropriateness of the creative activity, whose product is freedom in phenomenal appearance, the highest synthesis of all activities of reason must be sought. Kant had defined genius as the intelligence that works like Nature; Schiller had characterised the æsthetic condition of play as the truly human; Schelling declared the æsthetic reason to be the capstone of the idealistic system. The work of art is that phenomenon in which the reason attains purest and fullest development; *art* is the true organon of philosophy. It is in art that the "spectator thought" has to learn what reason is. Science and philosophy are one-sided and never completed series of the development of the subjective reason; only art is complete in all its works as entirely realised reason.

After he had written the *Transcendental Idealism* Schelling delivered in Jena his lectures on the *Philosophy of Art*, which carried out this fundamental thought with an intelligent appreciation for artistic character and mode of production, that showed admirable fineness and acuteness especially in its treatment of poetry. These lectures, not printed at that time, determined the whole subsequent development of æsthetics by their influence upon the Jena circle. As published later they present that form which Schelling gave them some years after, when delivering them in

Würzburg. In this later form[1] the change in general point of view, to which the philosopher had meanwhile advanced, asserts itself still more.

8. The æsthetic *motif* was active also, at least formally, in that a common systematic basis was sought for the Philosophy of Nature and the Transcendental Philosophy. The former treated the objective, the latter the subjective reason; the two, however, must be indentical in their ultimate essence; whence this phase of idealism is called the *System of Identity* (*Identität-system*). According to this, a common principle is required for Nature and the self. In the treatise which Schelling entitled "Exposition of my System of Philosophy," this common principle is called the "*Absolute Reason*" or the "*Indifference* of Nature and Spirit, of object and subject"; for the highest principle can be determined neither as real nor as ideal; in it all antitheses must be obliterated. The "Absolute" is here as undetermined in its content,[2] with Schelling, as in the old "negative theology," or as in Spinoza's "substance." With the latter conception it has in common the property, that its phenomenal manifestation diverges into two series, the real and the ideal, Nature and Spirit or Mind. This kinship with Spinoza as regards his thought, Schelling strengthened by formal relationship, imitating in his *Exposition* the schematism of the *Ethics*. Nevertheless this idealistic Spinozism is different throughout from the original in its conception of the world. Both desire to set forth the eternal transmutation of the Absolute into the universe; but in this Spinoza regards the two attributes of materiality and consciousness as completely separate, and each finite phenomenon as belonging solely to one of the two spheres. Schelling, however, requires that "Reality" and "Ideality" must be contained in every phenomenon, and construes particular phenomena according to the degree in which the two elements are combined. The dialectical principle of *absolute idealism* is the *quantitative difference between the real and the ideal factors*; the Absolute itself is just for this reason complete indifference.[3] The *real series* is that in which the objective factor predominates ("*überwiegt*"); it leads from matter through light, electricity, and chemism to the *organism* — the relatively spiritual manifestation of Nature. In the ideal series the subjective factor predominates. In it the development proceeds from morality

[1] In the coll. works, V. 353 ff., first printed 1859.

[2] Schiller's disciple, Oken, expressed this very characteristically when he placed the Absolute, already called God by him, $= \pm 0$.

[3] Schelling illustrates this schematically by the example of the magnet, in the different parts of which north and south magnetism are present with varying intensities.

and science to the *work of art*, the relatively most natural appearance in the realm of Spirit. And the total manifestation of the Absolute, the *universe*, is, therefore, at once the most perfect organism and the most perfect work of art.[1]

9. In this system Schelling would comprehend the entire issue of the investigations which had previously diverged in various directions. The different stages of the self-differentiation of the Absolute he termed at first, "potencies," but soon introduced another name, and at the same time another conception of the matter. This was connected with the *religious turn* which the thinking of the Romanticists took at about the close of the last and the beginning of the present century. The incitement to this came from *Schleiermacher*. He proved to the "Cultured Despisers of Religion," that the *system of reason can become complete only in religion*. In this, too, was a victory for the *æsthetic* reason. For what Schleiermacher then preached as religion (cf. § 41, 6) was not a theoretical or practical behaviour of man, but an æsthetic relation to the World-ground, the feeling of absolute dependence. Therefore, religion, too, was in his view limited to pious feeling, to the complete permeation of the individual by this inward relation to the universal, and put aside all theoretical form and practical organisation. For the same reason religion was held to be an individual matter, and positive religion was traced back to the "religious genius" of its founder. In view of this kinship we can understand the influence which Schleiermacher's "*Reden*" exercised upon Romanticism: to this is due the inclination of the latter to expect from religion the unitary solution of all problems of mankind, to desire to bring in it the separated spheres of the activity of civilisation into inner and intimate union again, and, finally, to seek the eternal welfare of all in that rule of religion over all spheres of life, which obtained in the Middle Ages. As Schiller created an idealised Greece, so the later Romanticists created an idealised Middle Ages.

Schelling followed this line of thought with great acuteness and fineness of feeling. Like Spinoza, he now named the Absolute "*God*" or the "Infinite," and likewise as Spinoza had inserted the attributes and the "infinite modes" (cf. p. 409 f.) between "substance" and the particular finite realities, so the "potencies" are now regarded as the eternal forms of the phenomenal manifestation of God, while the empirical particular phenomena are the finite copies of these. But when in this sense they were also termed by Schelling *Ideas* (in his *Bruno* and in his *Method of Academical Study*)

[1] W., I. 4, 423.

another influence still comes to light in this. Schleiermacher and Hegel, the latter of whom had exerted a personal influence upon Schelling since 1801, both pointed to *Plato;* but the philosophical knowledge of that time[1] still saw Plato's doctrine through the spectacles of *Neo-Platonism*, which conceived of the *Ideas as God's vision or intuition of himself* (*Selbstanschauung Gottes*). And so Schelling's doctrine turned back into a *Neo-Platonic Idealism*, according to which the "Ideas" formed the intermediate link through which the Absolute became transformed into the world.

This religious idealism of Schelling's doctrine of Ideas has a number of parallel and succeeding phenomena. The most interesting of these personally is *Fichte's* later doctrine, in which he paid to the victory of Spinozism the tribute of making the infinite impulse of the I proceed forth from an "absolute Being" (*Sein*) and be directed toward the same. For finite things, he held fast to his deduction of them as products of consciousness; but the infinite activity of this consciousness he now deduced from the end of "imitating" an absolute Being, the deity, and hence the vocation and destiny of man appeared to him no longer the restless activity of categorical imperative, but the "blessed life" of sinking into a contemplation of the divine original, — a mystical dying note of the mighty thinker's life, which makes the victory of the æsthetic reason appear in its full magnitude.

The religious *motif* was followed still farther by Schelling's disciple *Krause*. He wished to combine the pantheistic *Weltanschauung* of idealism, which Schelling even at that time still defended (in Spinozistic fashion), with the conception of divine personality. He, too, regards the world as the development of the divine "essence," which is distinctly stamped out in the Ideas; but these ideas are the *intuition which the supreme personality has of himself.* Essence (*Wesen*) — this is Krause's term for God — is not indifferent Reason, but the personal, living ground of the world. In his farther carrying out of the system, which was characterised as "Panentheism," Krause has scarcely any other originality than the very objectionable one of presenting the thoughts common to the whole idealistic development in an unintelligible terminology, which he himself invented, but declared to be pure German. He carries out, especially, his conception of the entire life of reason from the point of view of the "*Gliedbau*" (in German, organism). He not only, like Schelling, regards the universe as a "*Wesengliedbau*"

[1] On Herbart's independent position, the importance of which becomes clear just in antithesis to that of Schelling and Hegel, see above, p. 584, note 1.

(divine organism), but also regards the structures of society as continuations of the organic vital movement beyond the individual man; every union (*Bund*) is such a "*Gliedbau*," and inserts itself again into a higher organism as a member (*Glied*), and the course of history is the process of the production of more and more perfect and comprehensive unions.

For the *Romantic æsthetics*, finally, Schelling's new doctrine gave rise to the result that the Neo-Platonic conception of beauty, as phenomenal manifestation of the Idea in the sensuous, became again recognised as authoritative. The relation of inadequacy between the finite appearance and the infinite Idea agreed with Schlegel's principle of irony, and these thoughts *Solger*, especially, made the basis of his theory of art.

10. The consummation of this whole rich and varied development is formed by *Hegel's logical idealism.* He signifies in the main a return from Schelling to Fichte, a giving up of the thought that the living wealth of the world can be derived or deduced from the "Nothing"[1] of absolute indifference, and the attempt to raise this empty substance again to *spirit*,[2] — to the self-determined *subject.* Such knowledge, however, cannot have the form of intuition or immediate perception (*Anschauung*), which Fichte and Schelling had claimed for the Ego or the Absolute, but only that of the *conception or notion* (*Begriff*). If all that is real or actual is the manifestation of spirit or mind, then metaphysics coincides with the logic[3] which has to develop the creative self-movement of spirit as a dialectical necessity. The conceptions into which mind or spirit takes apart and analyses its own content are the *categories of reality*, the forms of the cosmic life; and the task of philosophy is not to describe this realm of forms as a given manifold, but to comprehend them as the *moments* of a single unitary development. The dialectical method, therefore, serves, with Hegel, to determine the essential nature of particular phenomena by the *significance* which they have as members or links in the self-unfolding of spirit. Instead of Spirit (*Geist*) Hegel also uses Idea or God. It is the highest task that has ever been set philosophy, to comprehend the world as a development of those principles or determinations which form the content of the divine mind.

[1] Hegel, *Phänomen; Vorr.*, W., II. 14.

[2] [*Geist*, as in § 20, has the connotation of both "mind" and "spirit." The former seems more appropriate where logical relations are under consideration, though the latter is usually retained for the sake of uniformity.]

[3] This metaphysical logic is of course not formal logic, but in its determining principle is properly Kant's transcendental logic. The only difference is that the "phenomenon" is for Kant a human mode of representation, for Hegel an objective externalising of the Absolute Spirit.

In this, Hegel sustains not only to the German philosophy, but to the whole earlier intellectual movement, a relation similar to that of Proclus to Greek thought:[1] in the "schema of trinities" of Position, Negation, and Sublation or Reconciliation, all conceptions with which the human mind has ever thought reality or its particular groups, are woven together into a unified system. Each retains its assigned place, in which its necessity, its relative justification, is said to become manifest: but each proves by this same treatment to be only a *moment* or factor which receives its true value only when it has been put in connection with the rest and introduced into the whole. It is to be shown that the antitheses and contradictions of conceptions belong to the nature of mind itself, and thus also to the essential nature of the reality which unfolds from it, and that their truth consists just in the systematic connection in which the categories follow from one another. "The phenomenon is the arising and passing away, which itself does not arise and pass away, but 'is' in-itself, and constitutes the reality and movement of the life of truth."[2]

Hegel's philosophy is, therefore, essentially *historical*, a *systematic elaboration of the entire material of history*. He possessed both the necessary erudition and also the combining power and fineness of feeling for the discovery of those logical relations which were of importance for him. The interest in his philosophy lies less in the individual conceptions, which he took from the intellectual labours of two thousand years, than in the systematic *combination* which he brought about between them: and just by this means he knew how to portray in masterly manner the meaning and significance of individual details, and to throw a surprising light upon long-standing structures of thought. He, indeed, displayed in connection with his data the *arbitrariness* (*Willkür*) of [*a priori*] *constructive thought*, which presents the actual reality, not as it offers itself empirically, but as it ought to be in the dialectical movement, and this violation of the actual matter of fact might be objectionable where the attempt was made to bring empirical material into a philosophical system, as in the philosophy of Nature, the history of philosophy, and history in general. All the more brilliant did the power of the thinking saturated by the historical spirit prove in those fields where it is the express province of philosophical treatment, merely to reflect on

[1] Cf. above, § 20, 8.

[2] This *Heracliteanism*, which was inherent already in Fichte's doctrine of action (cf. above, p. 594 f.), found its most vigorous opponent in Herbart's Eleaticism (cf. § 41, 7 f.). This old antithesis constitutes the essential element in the relation of the two branches of German idealism (cf. above, p. 584, note).

undoubted data, but not to give any account of empirical reality. So Hegel gave as æsthetics a historical structure built up of the *æsthetic ideals of mankind*. Following Schiller's method, and attaching himself also materially to Schiller's results, he displayed all the fundamental systematic conceptions of this science in the well-arranged series of the symbolic, the classic, and the romantic, and likewise divided the system of the arts into architecture, sculpture, painting, music, and poetry. So, too, from the fundamental conception of *religion* as being the relation of the finite to the absolute Spirit in the form of imaginative representation (*Vorstellung*) his philosophy of religion develops the *stages of its positive realisation* in the natural religion of magic, fire worship, and animal symbolism, in the religion of spiritual individuality of the sublime, the beautiful, and the intellectual, and finally in the absolute religion which represents God as what he is, the triune Spirit. Here, with a deep-going knowledge of his material, Hegel has everywhere drawn the main lines in which the empirical treatment of these same subjects later moved, and set up the philosophical categories for the general consideration of historical facts as a whole.

The same is true, also, of his treatment of universal history. Hegel understood by *Objective Spirit* the active and influential living body of individuals, which is not created by these, but rather forms the source from which they proceed as regards their spiritual life. The abstract form of this body is called *Right*;[1] it is the Objective Spirit "in itself." The subjection of the subjective disposition of the individual to the commands of the common consciousness the philosopher calls "*morality*," while he retains the name of "*Sittlichkeit*" [social morality or the moral order] for the realisation of the common consciousness in the *State*. In the immanent living activity of the human reason the state is the highest; beyond this are only art, religion, and science, which press forward to the Absolute Spirit. The state is the realisation of the ethical Idea; it is the spirit of the people become visible; it is in its Idea the living work of art, in which the inwardness of the human reason comes forth into outer manifestation. But this Idea, from which the system of the forms and functions of political life derives, appears in the actual world only in the individual structures of the states which arise and pass away. Its only true and full realisation is *universal history*, in which the peoples enter successively, to live out their spirit in the work of state formation, and then retire from the stage.

[1] Hence Hegel treats the doctrine of Objective Spirit under the title *Philosophy of Right* (*Rechtsphilosophie*).

So every epoch is characterised by the spiritual predominance of a definite people, which imprints the sign of its peculiar character upon all the activities of civilisation. And if it is the task of *history* as a whole to understand this connected order, then *politics*, too, must not suppose that it can construct and decree a political life from abstract requirements; it must, rather, seek in the quiet development of the national spirit the motives of its political movement. So in Hegel, the "Philosopher of the Restoration," the *historical Weltanschauung* turns against the revolutionary doctrinairism of the Enlightenment.

Hegel is less successful in the treatment of questions of natural philosophy and psychology; the energy of his thought lies in the domain of history. The external scheme of his system, as a whole, is in large the following: the Spirit in itself (*Geist an sich*), *i.e.* in its absolute content, is the realm of the categories; this is treated by the *Logic* as the doctrine of Being, of Essence, and of Conception or Notion. Spirit for itself (*Geist für sich*), *i.e.* in its otherness and self-estrangement or externalisation, is Nature, the forms of which are treated in Mechanics, Physics, and Organics. The third main part treats, as *Philosophy of Spirit*, the Spirit in and for itself (*an und für sich*), *i.e.* in its conscious life as returning to itself; here three stages are distinguished, viz. the Subjective (individual) Spirit; the Objective Spirit as Right, Morality, State, and History; finally, the Absolute Spirit as pure perception (*Anschauung*) in Art, as imaginative representation (*Vorstellung*) in Religion, as conception (*Begriff*) in the History of Philosophy.

He repeats, in all these parts of his philosophy, not only the formal dialectic of the construction of his conceptions, but also the material which constitutes the contents of the successive conceptions. So the *Logic* in its second and third parts develops already the fundamental categories of the Philosophy of Nature and of Spirit; so the development of the æsthetic ideals constantly points toward that of the religious *Vorstellungen;* and so the whole course of the *Logic* is parallel to his History of Philosophy. Just this relation belongs to the essential nature of the *system of reason*, which here embraces not only, as with Kant, the Forms, but also the content, and aims to unfold before its view this content in the variety of the "forms of the actual world of reality," although this content is ultimately everywhere the same with itself. The course of development is always the same, viz. that the "Idea," by differentiating and becoming at variance with itself, "*comes to itself.*" Hence the categories progress from the Being which has no content to the inner Essence, and from there to the Idea which understands

itself; hence the forms of the empirical world ascend from matter to the imponderables, then to the organism, consciousness, self-consciousness, reason, right, morality, and the social morality of the state, successively, to apprehend the Absolute Spirit in art, religion, and science; hence the history of philosophy begins with the categories of material existence, and becomes complete after all its fortunes in the doctrine of the self-comprehending Idea; hence, finally, the entrance into this "system of the reason," also, will best be found by making it clear to one's self how the human mind begins with the sensuous consciousness, and by the contradictions of this is driven to an ever higher and deeper apprehension of itself, until it finds its rest in philosophical knowledge, in the science of the conception. The inter-relation of all these developments Hegel has set forth with obscure language and many mysterious and thoughtful intimations, in his *Phenomenology.*

In this system of reason every particular has its truth and reality only in its being a *moment* in the development of the whole. Only as such is it real *in concreto*, and only as such is it comprehended by philosophy. But if we take it abstractly, if we think it in its isolation, in which it exists not *realiter*, but only according to the subjective apprehension of the understanding, then it loses that connection with the whole, in which its truth and actual reality consists: then it appears as accidental and without reason. But as such, it exists only in the limited thinking of the individual subject. For philosophical knowledge, the principle holds, that what is reasonable is real, and what is real is reasonable.[1] The System of Reason is the sole reality.

§ 43. The Metaphysics of the Irrational.

The "dialectic of history" willed it that the System of Reason should also change into its opposite, and that the insight into the insurmountability of the barriers which the attempt to deduce all phenomena from one fundamental principle necessarily encounters, caused other theories to arise close beside the idealistic doctrines already treated; and these other theories found themselves thereby forced to maintain the *unreason of the World-ground.* The first to pass through this process was the many-sided agent of the main development, the Proteus of idealism, Schelling. The new in this movement is not the knowledge that the rational consciousness always has ultimately something for its content, which it simply

[1] *Vorrede zur Rechtsphilos.*, W., VIII. 17.

finds present within itself, without being able to give any account of it: such limiting conceptions were the transcendental *X* as thing-in-itself, with Kant; as differential of consciousness, with Maimon; as a free act without rational ground, in Fichte. The new was, that this which could not be comprehended by the reason, and which resisted its work, was now also to be thought as something *irrational*.

1. Schelling was forced upon the path of irrationalism, remarkably enough, by taking up the religious *motif* into his absolute idealism (§ 42, 9). If "the Absolute" was thought no longer merely in Spinozistic fashion, as the universal, indifferent essence of all phenomena, if the divine and the natural principle of things were distinguished, so that the eternal Ideas as the Forms of the divine self-perception were assigned a separate existence beside finite things, then the transmutation of God into the world must again become a problem. This was really Hegel's problem also, and the latter was right when he taught later that, in his view, philosophy has the same task as theology. He aided himself with the dialectical method which aimed to show in the form of a higher logic, how the Idea agreeably to its own conceptional essence releases itself to "otherness" (*Anderssein*), *i.e.* to Nature, to finite phenomenal appearance.

Schelling sought to solve the same problem by the method of *theosophy*, *i.e.* by a mystico-speculative doctrine, which transposed philosophical conceptions into religious intuitions. His happening upon this method was due to the fact that the problem met him in the form of an attempt to limit philosophy by religion. He obligated himself, in a vigorous reaction against this in the name of philosophy, to solve the religious problem also. This, indeed, could only be done if philosophy passed over into theosophical speculations.

A disciple of the System of Identity, Eschenmayer,[1] showed that philosophical knowledge can indeed point out the reasonableness of the world, and its agreement with the divine reason, but cannot show how this world attains the self-subsistent existence with reference to the deity, which it has in finite things. Here philosophy ceases and religion begins. In order to vindicate this domain also for philosophy, and restore the old unity between philosophy and religion, Schelling lays claim to specifically religious intuitions as philosophical conceptions, and so re-shapes them in accordance with this claim that they appear usable for both disciplines: in doing which he makes a copious use of Kant's philosophy of religion.

[1] Eschenmayer (1770–1852), *Die Philosophie in ihrem Uebergange zur Nichtphilosophie* (1803).

In fact,[1] there is no continuous transition from the Absolute to the concrete reality; the origin of the world of sense from God is thinkable only by a *leap* (*Sprung*), a breaking off from the condition of absoluteness. A ground for this — Schelling still teaches here — is to be found neither in the Absolute nor in the Ideas: but in the nature of the latter the possibility at least is given. For to the Ideas as the "antitype" or counterpart of the Absolute, in which it beholds itself, the self-subsistence of the archetype communicates itself, — the *freedom* of that which is in itself ("*In-sich-selbst-seins*"). In this lies the possibility of the *falling away of the Ideas from God*, of their assuming metaphysical independence, by which they become actual and empirical, *i.e.* finite. But this falling away is not necessary and not comprehensible: it is a *fact without rational ground;* not, however, a single event, but as timeless and eternal as the Absolute and the Ideas. We see that the religious colouring of this doctrine comes from Kant's theory of the radical evil as a deed of the intelligible character, while the philosophical, on the contrary, comes from Fichte's conception of the free acts of the ego, which have no rationale. On this apostasy, therefore, rests the actualisation of the Ideas in the world. Hence the *content* of the actual reality is rational and divine; for it is God's Ideas that are actual in it: their *being actual*, however, is apostasy, sin, and unreason. This reality of the Ideas external to God is *Nature*. But its divine essence strives back to the original ground and archetype, and this *return of things into God* is *history*, the epic composed in the mind of God, whose Iliad is the farther and farther departure of man from God, and whose Odyssey is his return to God. Its final purpose is the *reconciliation of the apostasy*, the reuniting of the Ideas with God, the cessation of their self-subsistence. Individuality also experiences this change of fortunes: its selfness (*Ichheit*) is intelligible freedom, self-determination — breaking loose from the Absolute: its deliverance is a submergence in the Absolute.

In similar manner *Frederick Schlegel*[2] made the "triplicity" of the infinite, the finite, and the return of the finite to the infinite, the principle of his later theory, which professed to maintain the contradictions of the actual as a fact, to explain them from the fall, and to reconcile them through subjection to divine revelation; but merely concealed, with great pains, the philosophical impotence of its author under the exposition employed.

[1] Schelling, *Religion und Philosophie*, W., I. 6, pp. 38 ff.

[2] In the *Philosophische Vorlesungen*, edited by Windischmann (1804–1806), and likewise later in the *Philosophie des Lebens* and the *Philosophie der Geschichte* (1828–1829).

2. The subtlety of *Schelling*, on the contrary, could not free itself from the once-discovered problem. The monism, which had always controlled his thought, forced him to the question, whether the ground of the falling away was not ultimately to be found in the Absolute itself: and this could be affirmed only if the *irrational* was transferred *to the essence of the Absolute itself*. From the point of view of this thought, Schelling became friendly to the mysticism of *Jacob Boehme* (cf. p. 374 f.). This was brought near to him by his intercourse with Franz von *Baader*. The latter himself had received his stimulus both from Boehme and from Boehme's French prophet *St. Martin*,[1] and, holding fast to the Catholic faith, had elaborated his mysticism with obscure fantastic genius and unmethodical appropriation of Kantian and Fichtean thoughts. The original idea that stirred within him was, that the course of the life of man, who is the image of God, and who can know of himself only so much as God knows of him, must be parallel to the self-development of God. Since, now, man's life is determined by the fall as its beginning and redemption as its goal, the *eternal self-generation of God* must consist in God's unfolding himself out of his dark, irrational, primitive essence, through self-revelation and self-knowledge, to absolute reason.

Under such influences Schelling also began in his treatise[2] on freedom (1809) to speak of an *Urgrund*, *Ungrund*, or *Abgrund* [primordial ground, unreason, or abyss] in the divine nature, which is depicted as mere Being, and absolute primordial accident (*"Urzufall"*), as a dark striving, an infinite impulse. It is the unconscious will, and all actual reality is in the last instance will. This will, directed only toward itself, creates as its self-revelation the Ideas, the image in which the will beholds itself — the reason. Out of the interaction of the ever dark and blind urgency and its ideal self-beholding proceeds the world, which as Nature permits us to recognise the conflict between purposive formation and irrational impulse, and as historical process has for its content the victory of the universal will revealed in reason, over the natural

[1] *St. Martin* (1743–1803), "Le philosophe inconnu," the stern opponent of the Enlightenment and of the Revolution, was seized through and through by Boehme's teachings, and translated his *Aurora*. Of his writings, the most important are *L'Homme de Désir* (1790), *Le Nouvel Homme* (1796), and *De l'Esprit des Choses* (1801); the most interesting perhaps is the strange work, *Le Crocodile, ou guerre du bien et du mal arrivée sous la règne de Louis XV.*, *poème épicomagique* (1799). Cf. A. Franck, *La Philosophie Mystique en France* (Paris, 1866); also v. Osten-Sacken, *Fr. Baader und St. Martin* (Leips. 1860).

[2] This later doctrine of Schelling's is accordingly usually called the Doctrine of Freedom, as the earlier is called the System of Identity. Schelling, *Unters. über die Freiheit*, W., I. 7, 376.

unreason of the particular will. In this way the development of the actual leads from the unreason of the primordial will (*deus implicitus*) to the self-knowledge and self-determination of reason (*deus explicitus*).[1]

Thus at last religion became for Schelling the "organon of philosophy," as art had been earlier. Since the process of God's self-development goes on in the revelations, with which in the human mind he beholds himself, all *momenta* of the divine nature must appear in the succession of ideas which man in his historical development has had of God. Hence in the *Philosophy of Mythology and Revelation*, the work of Schelling's old age, the *knowledge of God is gained from the history of all religions:* in the progress from the natural religions up to Christianity and its different forms the self-revelation of God makes its way from dark primordial will to the spirit of reason and of love. God develops or evolves in and by revealing himself to men.[2]

In its methodical form this principle reminds us strongly of Hegel's conception of the history of philosophy, in which "the Idea comes to itself," and the happy combination and fineness of feeling with which Schelling has grouped and mastered the bulky material of the history of religions in these lectures shows itself throughout akin and equal in rank to the Hegelian treatment. But the fundamental philosophical conception is yet entirely different. Schelling terms the standpoint of this his latest teaching, *metaphysical empiricism*. His own earlier system and that of Hegel he now calls negative philosophy: this philosophy may indeed show that if God once reveals himself, he does it in the forms of natural and historical reality which are capable of dialectical *a priori* construction. But *that* he reveals himself and thus transmutes himself into the world, dialectic is not able to deduce. This cannot be deduced at all; it is only to be *experienced*, and experienced from the way *in which God reveals himself in the religious life of mankind*. To understand from this process God and his self-evolution into the world is the task of *positive philosophy*.

Those who both immediately and later derided Schelling's Philosophy of Mythology and Revelation as "*Gnosticism*" scarcely knew, perhaps, how well founded the comparison was. They had in mind only the fantastic amalgamation of mythical ideas with philosophical conceptions, and the arbitrariness of cosmogonic and theogonic constructions. The true resemblance, however, consists

[1] Cf. above, p. 290 f.

[2] Cf. Constantin Frantz, *Schelling's Positive Philosophie* (Cöthen, 1879 f.).

in this, that as the Gnostics gave to the warfare of religions, in the midst of which they were standing, the significance of a history of the universe and the divine powers ruling in it, so now Schelling set forth the development of human ideas of God as the development of God himself.

4. Irrationalism came to its full development in *Schopenhauer* by the removal of the religious element. The dark urgency or instinct directed only toward itself appears with him under the name of the *will to live*, as the essence of all things, as the thing-in-itself (cf. § 41, 9). In its conception, this will, directed only towards itself, has a formal resemblance to Fichte's "infinite doing," just as was the case with Schlegel's irony (cf. § 42, 5): but in both cases the real difference is all the greater. The activity directed solely toward itself is with Fichte the autonomy of ethical self-determination, with Schlegel the arbitrary play of fancy, with Schopenhauer the *absolute unreason of an objectless will*. Since this will only creates itself perpetually, it is the never satisfied, the *unhappy* will: and since the world is nothing but the self-knowledge (self-revelation —objectification) of this will, it must be a world of misery and suffering.

Pessimism, thus grounded metaphysically, is now strengthened by Schopenhauer[1] by means of the hedonistic estimate of life itself. All human life flows on continually between willing and attaining. But to will is pain, is the ache of the "not-yet-satisfied." Hence *pain is the positive feeling*, and pleasure consists only in the removal of a pain. Hence pain must preponderate in the life of will under all circumstances, and actual life confirms this conclusion. Compare the pleasure of the beast that devours with the torture of the one that is being devoured—and you will be able to estimate with approximate correctness the proportion of pleasure and pain in the world in general. Hence man's life always ends in the complaint, that the best lot is never to be born at all.

If life is suffering, then only sympathy can be the fundamental ethical feeling (cf. § 41, 9). The individual will is immoral if it increases the hurt of another, or also if it is merely indifferent toward it; it is moral if it feels another's hurt as its own and seeks to alleviate it. From the standpoint of sympathy Schopenhauer gave his psychological explanation of the ethical life. But this alleviation of the hurt is only a palliative; it does not abolish the will, and with the will its unhappiness persists. "The sun burns perpetual noon." The misery of life remains always the same;

[1] *World as Will and Idea*, I. §§ 56 ff.; II. ch. 46; *Parerga*, II. ch. 11 f.

only the form in which it is represented in idea alters. The special shapes change, but the content is always the same. Hence there can be no mention of a progress in history; intellectual perfecting alters nothing in the will which constitutes the essential nature of man. History shows only the endless sorrow of the will to live, which with an ever-new cast of characters constantly presents the same tragi-comedy before itself.[1] On this ground the philosophy of Schopenhauer has no interest in history; history teaches only individual facts; there is no rational science of it.

A deliverance from the wretchedness of the will would be possible only through the *negation or denial of the will itself*. But this is a mystery. For the will, the ἓν καὶ πᾶν — the one and all — the only Real, is indeed in its very nature self-affirmation; how shall it deny itself? But the Idea of this deliverance is present in the mystical asceticism, in the mortification of self, in the contempt of life and all its goods, and in the peace of soul that belongs to an absence of wishes. This, Schopenhauer held, is the import of the Indian religion and philosophy, which began to be known in Europe about his time. He greeted this identity of his teaching with the oldest wisdom of the human race as a welcome confirmation, and now called the world of idea the veil of Maia, and the negation of the will to live the entrance into *Nirvana*. But the unreasonable will to live would not let the philosopher go. At the close of his work he intimates that what would remain after the annihilation of the will, and with that, of the world also, would be for all those who are still full of will, certainly *nothing*; but consideration of the life of the saints teaches, that while the world with all its suns and milky ways is nothing to them, they have attained blessedness and peace. "In thy nothing I hope to find the all."

If an absolute deliverance is accordingly impossible, —were it ever possible, then in view of the ideality of time there could be no world whatever of the affirmation of the will, — there is yet a relative deliverance from sorrow in those intellectual states in which the pure willess subject of knowing is active, viz. in disinterested contemplation and disinterested thought. The object for both of these states he finds not in particular phenomena, but in the eternal

[1] Hence the thought of grafting the optimism of the Hegelian development system on this will-irrationalism of Schopenhauer's after the pattern of Schelling's *Doctrine of Freedom* was as mistaken as the hope of reaching speculative results by the method of inductive natural science. And with the organic combination of the two impossibilities, even a thinker so intelligent and so deep and many-sided in his subtle investigations as *Edward von Hartmann*, could have only the success of a meteor that dazzles for a brief period (*Die Philosophie des Unbewussten*, Berlin, 1869) [Eng. tr. *The Philosophy of the Unconscious*, by E. C. Coupland, Lond. 1884].

Forms of the objectification of the will — the *Ideas*. This Platonic (and Schellingian) element, however (as is the case also with the assumption of the intelligible character), fits with extreme difficulty into Schopenhauer's metaphysical system, according to which all particularising of the will is thought as only an idea in space and time; but it gives the philosopher opportunity to employ Schiller's principle of disinterested contemplation in the happiest manner to complete his theory of life. The will becomes free from itself when it is able to represent to itself in thought its objectification without any ulterior purpose. The misery of the irrational World-will is mitigated by morality; in art and science it is overcome.

PART VII.

THE PHILOSOPHY OF THE NINETEENTH CENTURY.

M. J. Monrad, *Denkrichtungen der neueren Zeit*. Bonn, 1879.
A. Franck, *Philosophes Modernes, Étrangers et Français*. Paris, 1873.
Ph. Damiron, *Essai sur l'Histoire de la Philosophie en France au 19e Siècle*. Paris, 1834.
H. Taine, *Les Philosophes Classiques Français au 19e Siècle*. Paris, 1857.
F. Ravaisson, *La Philosophie en France au 19e Siècle*. Paris, 1868.
L. Ferraz, *Histoire de la Philosophie en France au 19e Siècle*, 3 vols. Paris, 1880–1889.
D. Masson, *Recent English Philosophy*, 3d ed. Lond. 1877.
Har. Höffding, *Einleitung in die englische Philosophie der Gegenwart*. Leips. 1890.
L. Ferri, *Essai sur l'Histoire de la Philosophie en Italie au 19e Siècle*. Paris, 1869.
K. Werner, *Die italienische Philosophie des 19. Jahrhunderts*. Vienna, 1884 ff.
[O. Pfleiderer, *The Development of Rational Theology since Kant*. Lond. and N.Y. 1891.]

The history of philosophical principles is *closed* with the development of the German systems at the boundary between the preceding and the present centuries. A survey of the succeeding development in which we are still standing to-day has far more of literary-historical than of properly philosophical interest. For nothing essentially and valuably new has since appeared. The nineteenth century is far from being a philosophical one; it is, in this respect perhaps, to be compared with the third and second centuries B.C. or the fourteenth and fifteenth A.D. If one would speak in Hegel's language, he would be obliged to say that the *Weltgeist* of our time, so busy with the concrete reality and drawn toward the outer, is kept from turning inward and to itself, and from enjoying itself in its own peculiar home.[1] The philosophical literature of the nineteenth century is, indeed, extensive enough,

[1] Hegel, *Berliner Antrittsrede*, W., VI., XXXV.

and gives a variegated play of all the colours; the seed of Ideas, which has been wafted over to us from the days of the flower of the intellectual life, has grown luxuriantly in all spheres of science and public life, of poetry and of art; the thought-germs of history have been combined in an almost immeasurable wealth of changing combinations into many structures of personally impressive detail but even men like Hamilton and Comte, like Rosmini and Lotze, have their ultimate significance only in the energy of thought and fineness of feeling with which they have surveyed the typical thought-forms of history, and shaped them to new life and vigour. And the general course of thought, as indicated by the problems which interest and the conceptions that are formed in our century,[1] moves along the lines of antitheses that have been transmitted to us through history, and have at most been given a new form in their empirical expression.

For the decisive factor in the philosophical movement of the nineteenth century is doubtless the question as to the degree of importance which the natural-science conception of phenomena may claim for our view of the world and life as a whole. The influence which this special science had gained over philosophy and the intellectual life as a whole was checked and repressed at the beginning of the nineteenth century, to grow again afterwards with all the greater power. The metaphysics of the seventeenth, and therefore the Enlightenment of the eighteenth century, were in the main under the dominance of the *thinking of natural science*, the conception of the universal conformity to law on the part of all the actual world, the search for the simplest elements and forms of occurrence and cosmic processes, the insight into the invariable necessity which lies at the basis of all change,—these determined the theoretical investigation and thus also the estimates of the value of particulars, whose worth was measured by the standard of the "natural." The spread of this mechanical way of regarding the world was met by the German Philosophy with the fundamental thought, that all that is known in this way is but the phenomenal form and vehicle of a purposefully developing inner world, and that the true comprehension of the particular has to determine the

[1] To the literary-historical interest in this field, which is so hard to master on account of its multiplicity, the author has been for some years devoting a labour, comprehensive, from the nature of the case widely ramifying, and, as may be easily understood, frequently checked by external difficulties. The product of this he is now permitted to hope soon to present as special parts of the third (supplementary) volume of his *Geschichte der neueren Philosophie*. In this can be carried out in detail and proved what here can only be briefly sketched.

significance that belongs to it in a purposeful connected whole of life. The *historical Weltanschauung* was the result of the work of thought which the System of Reason desired to trace out.

These two forces contend with each other in the intellectual life of our century. And in the warfare between them all arguments from the earlier periods of the history of philosophy have been presented in the most manifold combinations, but without bringing any new principles into the field. And if the victory seems gradually to incline toward the side of the principles of Democritus, there are two main *motifs* favourable to this in our decades. The first is of essentially intellectual nature, and is the same that was operative in the times of intellectual life of previous centuries: it is the *simplicity and clearness to perception or imagination* (*anschauliche Einfachheit*), the certainty and definiteness of the natural-science knowledge. Formulated mathematically and always demonstrable in experience, this promises to exclude all doubt and opinions, and all trouble of interpretative thought. But far more efficient in our day is the evident *utility* of natural science. The mighty transformation in the external relations of life, which is taking place with rapid progress before our eyes, subjects the intellect of the average man irresistibly to the control of the forms of thought to which he owes such great things, and on this account we live under the sign of *Baconianism* (cf above, p. 386 f.).

If we are to bring out from the philosophical literature of this century and emphasise those movements in which the above characteristic antithesis has found its most important manifestation, we have to do primarily with the question, in what sense the psychical life can be subjected to the natural-science mode of cognition; for it is in connection with this point that the question must first be decided of the right of these thought-forms to absolute monarchy in philosophy. For this reason the question as to the task, the method, and the systematic significance of *psychology* has never been more vigorously contested than in the nineteenth century, and upon this point, too, the minds of the century have come into the most violent collision. In reaction against the highly strained idealism of the German Philosophy, a broad stream of *materialistic Weltanschauung* flows through the nineteenth century. This spoke out about the middle of the period, not indeed with any new reasons or information, but with all the more passionate emphasis. Since then it has indeed been much more modest in its claims to scientific value, but goes about all the more effective in the garb of sceptical and positivist caution.

To the most significant ramifications of this line of thought

belongs without doubt the endeavour to regard also the social life of man, the historical development, and the relations of mental and spiritual existence, from natural science points of view. On the other side, however, the historical view of the world has not failed to exercise a powerful influence upon natural science, and in the principles of the *evolutionary theories which study the history of development* the historical and natural science modes of viewing the world seem to have drawn as near together as is possible without a new philosophical Idea that shall grasp them both.

From the philosophical literature of the nineteenth century up to 1860–70 the following main points may be emphasised: —

In **France Ideology** divided into a more physiological and a more psychological branch. In the line of Cabanis worked principally the **Paris physicians**, such as Ph. **Pinel** (1745–1826; *Nosographie Philosophique*, 1798), F. J. V. **Broussais** (1772–1838; *Traité de Physiologie*, 1822 f.; *Traité de l'Irritation et de la Folie*, 1828), and the founder of *Phrenology*, Fr. Jos. **Gall** (1758–1828; *Recherches sur le Système Nerveux en général et sur celui du Cerveau en particulier*, 1809, which was edited in conjunction with **Spurzheim**). — The antithesis to this, physiologically, was formed by the school of **Montpellier**: **Barthez** (1734–1806; *Nouveaux Élémens de la Science de l'Homme*, 2d ed., 1806). Associated with this school were M. F. X. **Bichat** (1771–1802; *Recherches Physiologiques sur la Vie et la Mort*, 1800), **Bertrand** (1795–1831; *Traité du Somnambulisme*, 1823), and **Buisson** (1766–1805; *De la Division la plus Naturelle des Phénomènes Physiologiques* 1802). Corresponding to this was the development of Ideology with **Daube** (*Essai d'Idéologie*, 1803), and especially with Pierre **Laromiguière** (1756–1837; *Leçons de Philosophie*, 1815–1818) and his disciples, Fr. **Thurot** (1768–1832; *De l'Entendement et de la Raison*, 1830) and J. J. **Cardaillac** (1766–1845; *Études Élémentaires de Philosophie*, 1830). — Cf. Picavet, *Les Idéologues* (Paris, 1891).

A line of extensive historical study and of deeper psychology begins with M. J. **Degérando** (1772–1842; *De la Génération des Connaissances Humaines*, Berlin, 1802; *Histoire Comparée des Systèmes de Philosophie*, 1804) and has its head in Fr. P. Gonthier **Maine de Biran** (1766–1824; *De la Décomposition de la Pensée*, 1805; *Les Rapports du Physique et du Moral de l'Homme*, printed 1834; *Essai sur les Fondemens de la Psychologie*, 1812; *Œuvres Philosophiques*, edited by V. Cousin, 1841; *Œuvres Inédites*, edited by E. Naville, 1859; *Nouvelles Œuvres Inédites*, edited by A. Bertrand, 1887). The influences of the Scottish and German philosophy discharge into this line through P. **Prévost** (1751–1839), **Ancillon** (1766–1837), **Royer-Collard** (1763–1845), **Jouffroy** (1796–1842), and above all, **Victor Cousin** (1792–1867; *Introduction à l'Histoire Générale de la Philosophie*, 7th ed., 1872; *Du Vrai, du Beau et du Bien*, 1845; complete works, Paris, 1846 ff.; cf. E. Fuchs, *Die Philos. V. C.'s*, Berlin, 1847; J. Elaux, *La Philosophie de M. Cousin*, Paris, 1864). The numerous school, founded by Cousin, which was especially noted through its historical labours, is called the *Spiritualistic* or *Eclectic* School. It was the official philosophy after the July Revolution.

Its principal opponents were the philosophers of the *Church party*, whose theory is known as **Traditionalism**. Together with Chateaubriand (*Le Génie du Christianisme*, 1802), Jos. **de Maistre** (1753–1821; *Essai sur le Principe Générateur des Constitutions Politiques*, 1810; *Soirées de St. Petersbourg*, 1821) and J. **Frayssinons** (1765–1841; *Défense du Christianisme*, 1823), V. G. A. **de Bonald** (1753–1841; *Théorie du Pouvoir Politique et Religieux*, 1796; *Essai Analytique sur les Lois Naturelles de l'Ordre Social*, 1800; *Du Divorce*, 1801; *De la Philosophie Morale et Politique du 18e siècle;* complete works, 15 vols., Paris, 1816 ff.) stands here in the foreground. The traditionalism of P. S. **Ballanche** is presented in a strangely fantastic fashion (1776–1847; *Essai sur les Institutions Sociales*, 1817; *La Palingénesie Sociale;* complete works, 5 vols., Paris, 1883). In the beginning H. F. R. de **Lamennais** (1782–1854) also supported this line in his *Essai sur l'Indifférences en Matière de Religion* (1817); later, having fallen out with the Church (*Parole d'un Croyant*, 1834), he presented in the *Esquisse d'une Philosophie* (4 vols., 1841–1846) a comprehensive system of philosophy, which had for its prototype partly the Schellingian System of Identity and partly the Italian Ontologism.

Among the philosophical supporters of **Socialism** (cf. L. Stein, *Geschichte der socialen Bewegung in Frankreich*, Leips. 1849 ff.) the most important is Cl. H. de **St. Simon** (1760–1825; *Introduction aux Travaux Scientifiques du 19e siècle*, 1807; *Réorganisation de la Société Européenne*, 1814; *Système Industriel*, 1821 f.; *Nouveau Christianisme*, 1825; *Œuvres choisies*, 3 vols., 1859). Of his successors may be mentioned, B. **Enfantin** (1796–1864; *La Religion St. Simonienne*, 1831), Pierre **Leroux** (1798–1871; *Réfutation de l'Eclecticisme*, 1839; *De l'Humanité*, 1840), and Ph. **Buchez** (1796–1866; *Essai d'un Traité Complet de Philosophie au Point de Vue du Catholicisme et du Progrès*, 1840).

Aug. **Comte** occupies a most interesting position apart. He was born in Montpellier in 1798 and died alone in Paris in 1857: *Cours du Philosophie Positive* (6 vols., Paris, 1840–1842) [Eng. tr., or rather a condensation and reproduction by H. Martineau, *The Positive Philosophy of A. Comte*, 2 vols., Lond. 1853]; *Système de Politique Positive* (Paris, 1851–1854); *Catéchisme Positiviste* (1853); cf. *Littré C. et la Philosophie Positive*, Paris, 1868; J. St. Mill, *C. and Positivism*, Lond. 1865; J. Rig, *A. C. La Philosophie Positive Résumée*, Paris, 1881; E. Caird, *The Social Philosophy and Religion of C.*, Glasgow, 1885.

In England the **Associational Psychology** continues through Thomas Brown to men like Thomas **Belsham** (1750–1829; *Elements of the Philosophy of the Human Mind*, 1801), John **Fearn** (*First Lines of the Human Mind*, 1820), and many others; finds support here also in physiological and phrenological theories as with G. **Combe** (*A System of Phrenology*, Edin. 1825), Sam **Bailey** (*Essays on the Pursuit of Truth*, 1829; *The Theory of Reasoning*, 1851; *Letters on the Philosophy of the Human Mind*, 1855), and Harriet **Martineau** (*Letters on the Laws of Man's Nature and Development*, 1851), and reaches its full development through **James Mill** (*Analysis of the Phenomena of the Human Mind*, 1829), and his son, **J. Stuart Mill** (1806–1873; *System of Logic Ratiocinative and Inductive*, 1843; *Utilitarianism*, 1863; *Examination of Sir W. Hamilton's Philosophy*, 1865, posthumously, *Nature*, 1874. Cf. H. Taine, *Le Positivisme Anglais*, Paris, 1864). Closely connected with this line of thought stands Alex. **Bain** (*The Senses and the Intellect*, 1856; *Mental and Moral Science*, 1868; *The Emotions and the Will*, 1859). The related **Utilitarianism** is represented by G. **Cogan** (*Philosophical Treatise on the Passions*, 1802; *Ethical Questions*, 1817), John **Austin** (1790–1859; *The Philosophy of Positive Law*, 1832), G. Cornwall **Lewis** (*A Treatise on the Methods of Observation and Reasoning in Politics*, 1852). [As representatives of Utilitarianism, in addition to Mill, and Bain, *op. cit.* above, H. **Sidgwick**, *Methods of Ethics*, Lond. 1874; T. **Fowler**, *Principles of Morals*, Lond. 1886 f.; and perhaps also N. **Porter**, *Moral Science*, N.Y. 1885, should also be mentioned.] Comtean Positivism is represented by G. Henry **Lewes** (*Problems of Life and Mind*, 3d ed., 1874), and with a sort of dialectical re-shaping by **Herbert Spencer** (*First Principles*, 1862; *Principles of Psychology*, 1855; *Data of Ethics*, 1879; brought together as *System of Synthetic Philosophy* since 1862. [To the *Data of Ethics* have been added *Justice*, 1891, and the *Principles of Ethics* (including the *Justice*), 1893.]

[Other works in evolutionary ethics are, L. **Stephen**, *The Science of Ethics*, Lond. 1882; S. **Alexander**, *Moral Order and Progress*, Lond. 1889; C. M. **Williams**, *The Ethics of Evolution*, Lond. and N.Y. 1893, contains useful summaries of the chief works.]

Scottish Philosophy, after Dugald Stewart and James **Mackintosh** (1764–1832; *Dissertation on the Progress of Ethical Philosophy*, 1830), had at first unimportant supporters like **Abercrombie** (1781–1846; *Inquiry concerning the Intellectual Powers*, 1830; *Philosophy of the Moral Feelings*, 1833) and **Chalmers** (1780–1847), and was especially as academical instruction brought into affiliation with the eclecticism of Cousin by Henry **Calderwood** (*Philoso-*

phy of the Infinite, 1854), S. **Morell** (*An Historical and Critical View of the Speculative Philosophy of Europe in the 19th Century*, 1846), also H. **Wedgwood** (*On the Development of the Understanding*, 1848).

The points of view of English thought were widened by acquaintance with the German literature, to which Sam. Tayl. **Coleridge** (1772–1834), W. **Wordsworth** (1770–1850), and especially Thomas **Carlyle** (1795–1881; *Past and Present*, 1843 [the articles on various German thinkers and the *Sartor Resartus* belong here also]) contributed. In philosophy this influence made itself felt primarily through Kant, whose theory of cognition influenced J. **Herschel** (*On the Study of Natural Philosophy*, 1831), and especially W. **Whewell** (*Philosophy of the Inductive Sciences*, 1840).

In intelligent reaction against this influence, Scottish philosophy experienced a valuable re-shaping at the hands of **Sir William Hamilton** (1788–1856; *Discussions on Philosophy and Literature*, 1852; *On Truth and Error*, 1856; *Lectures on Metaphysics and Logic*, 1859; *Editions of Reid's and Stewart's Works*; cf. M. Veitsch, *S. W. H., The Man and his Philosophy*, Edin. and Lond. 1883 [*Memoir* in 2 vols., 1869, by same author]). In his school *Agnosticism* proper, supported principally by M. L. **Mansel** (1820–1871; *Metaphysics or the Philosophy of Consciousness*, 1860), is separated from a tendency inclining toward eclectic metaphysics: M. **Veitch**, R. **Lowndes** (*Introduction to the Philosophy of Primary Beliefs*, 1865), **Leechman**, **McCosh**, and others.

[One of the most influential factors of recent English thought is the so-called Neo-Kantian or Neo-Hegelian movement, whose leading representative was the late Thomas Hill **Green** (1836–1882), Professor at Oxford. His *Introd. to Hume* was followed by criticisms on Lewes and Spencer and (posthumously) by the *Prolegomena to Ethics*, 1883, and complete works (except the *Proleg.*), 3 vols., Lond. and N.Y. 1885, 1886, 1888. In sympathy with this idealistic and more or less Hegelian interpretation of Kantian principles are F. H. **Bradley** (*Logic*, Lond. 1883; *Ethical Studies*, 1876), B. **Bosanquet** (*Logic*, 2 vols., 1888, etc.), J. **Caird** (*Introduction to the Philosophy of Religion*, 1880), **E. Caird** (*Critical Phil. of Kant*, 2 vols., 1889; *Essays*, 2 vols., 1892, etc.), Seth and Haldane (*Essays in Phil. Criticism*, 1883), J. **Mackenzie** (*Social Philosophy*, 1890), J. H. **Stirling** (*The Secret of Hegel*, 2 vols., 1865). Cf. A. Seth, *Hegelianism and Personality*, 1887, and the review of this in *Mind*, by D. G. Ritchie.

In America idealistic lines of thought were introduced (in opposition to the prevalent Scottish philosophy) through the medium of Coleridge's interpretation of Kant, by James **Marsh** (1829) and Henry's trans. of V. Cousin's *Lectures on Locke* (1834), more directly from Germany by **L. P. Hickok** (*Rational Psychology*, 1848; *Emp. Psych.*, 1854 (rev. ed. by J. H. **Seelye**, 1883); *Moral Science*, 1853 (rev. ed. by J. H. Seelye), etc.). W. T. **Harris**, in the *Jour. Spec. Philosophy*, and elsewhere, has done an important work in the same line. Of more recent writers, J. **Royce** (*The Religious Aspect of Philosophy*, 1885; *Spirit of Modern Philos.*, 1892), J. **Dewey** (*Psychology*, 1886; *Outlines of Ethics*, 1891) are closer to the school of Green, while G. T. **Ladd** (*Phys. Psychology*, 1887; *Introd. to Phil.*, 1891) and B. T. **Bowne** (*Metaphysics*, *Psychological Theory*, *Ethical Theory*, etc.) stand nearer to Lotze. The extremely suggestive work of H. **James** (*Psychology*, 2 vols., 1890) should also be mentioned, and as representations of the modern treatment of this science, in addition to the works of Ladd and Dewey cited above, J. M. **Baldwin** (*Psychology*, 2 vols., 1890 f.) and G. S. **Hall** (in *Am. Jour. Psychology*) may be named as American writers, and Jas. **Ward** (art. *Psychology* in *Enc. Brit.*), S. H. **Hodgson** (*Time and Space*, 1865; *The Philosophy of Reflection*, 1878), and James **Sully** (*The Human Mind*, 2 vols., 1892) as Englishmen. **Darwin**, **Romanes**, and **Lloyd Morgan** have treated comparative psychology.

Finally, as the most prominent representative of intuitionist ethics, J. **Martineau** (*Types of Ethical Theory*, 1885; *A Study of Religion*, 1888; *Seat of Authority in Rel.*, 1890).]

The **Italian** philosophy of the nineteenth century has been determined still more than the French by political motives, and in the content of the thoughts that have been worked over for these ends, it has been dependent partly upon French, partly upon German, philosophy. At the beginning the

Encyclopædists' view of the world, both in its practical and its theoretical aspects, was dominant in men like **Gioja** (1766–1829) or his friend, **Romagnosi** (1761–1835), while as early as Pasquale **Galuppi** (1771–1846; *Saggio Filosofico sulla Critica delle Conoscenze Umane*, 1820 ff.; *Filosofia della Volontà*, 1832 ff.) Kantian influences assert themselves, — to be sure, under the psychologistic form of the Leibnizian virtual innateness.

At a later period philosophy, which was mainly developed by the clergy, was influenced essentially by the political alliance of the Papacy with democratic Liberalism, inasmuch as Rationalism wished to unite itself with revealed faith. The most characteristic representative of this tendency and the most attractive personally was Antonio **Rosmini-Serbati** (1797–1855; *Nuovo Saggio sull' Origine delle Idee*, 1830; *Principii della Scienza Morale*, 1831; *Posthum. Teosofia*, 1859 ff.; *Saggio Storico-Critico sulle Categorie e la Dialettica*, 1884) [Eng. tr. of the first, *Origin of Ideas*, 3 vols., Lond. 1883 f.; also *R.'s Philos. System*, by T. Davidson, with int. bibliog., etc., Lond. 1882; *Psychology*, 3 vols., Lond. and Boston, 1884–89]. Cf. on him F. X. Kraus (*Deutsche Rundschau*, 1890). The combination of Platonic, Cartesian, and Schellingian ideas proceeds in still more pronounced lines to an **Ontologism**, *i.e.* an *a priori* science of Being, in Vincenzo **Gioberti** (1801–1852; *Degli Errori Filosofico di Rosmini*, 1842; *Introduzione alla Filosofia*, 1840; *Protologia*, 1857. Cf. B. Spaventa, *La Filosofia di G.*, 1863). Terenzo **Mamiani** passed through this entire development (1800–1885; *Confessioni di un Metafisico*, 1865).

As opponents this tendency found, on the one hand, the rigid **orthodoxism** of **Ventura** (1792–1861), **Tapparelli** and **Liberatore** (*Della Conoscenza Intelletuale*, 1865), and, on the other hand, politically radical **scepticism**, as represented by Guiseppe **Ferrari** (1811–1866; *La Filosofia delle Revoluzioni*, 1851) and Antonio **Francki** (*La Religione del 19. Secolo*, 1853) [cf. for this Italian thought the App. in Ueberweg's *Hist. Phil.*, Eng. tr., Vol. II. 461 ff.].

In **Germany** (cf. J. E. Erdmann, *History of Phil.* [Eng. tr. Vol. III.] § 331 ff.) the first development was that of the great philosophic schools in the third and fourth decades of the century. **Herbart's** following proved the most complete in itself and firmest in its adherence. In it were prominent: M. **Drobisch** (*Religionsphilosophie*, 1840; *Psychologie*, 1842; *Die moralische Statistik und die menschliche Willensfreiheit*, 1867), R. **Zimmermann** (*Æsthetik*, Vienna, 1865), L. **Strümpell** (*Hauptpunkte der Metaphysik*, 1840; *Einleitung in die Philosophie*, 1886), T. **Ziller** (*Einleitung in die Allgemeine Pädagogik*, 1856). A special divarification of the school is formed by the so-called **Völkerpsychologie** [Comparative or Folk-Psychology], as opened by M. **Lazarus** (*Leben der Seele*, 1856 f.) and H. **Steinthal** (*Abriss der Sprachwissenschaft*, I.; *Einleitung in die Psychologie und Sprachwissenschaft*, 1871); cf. their common programme in Vol. I. of the *Zeitschrift für Völkerpsychologie und Sprachwissenschaft*.

The **Hegelian** School had rich experience in its own life of the blessing of dialectic; it split even in the Thirties upon religious antitheses. The important historians of philosophy, **Zeller** and **Prantl**, **Erdmann** and **Kuno Fischer**, went their way, not confused by this. Between the two parties, with a considerable degree of independent thinking, stand K. **Rosenkranz** (1805–1879; *Wissenschaft der logischen Idee*, 1858 f.) and Friedrich Theodor **Vischer** (1807–1887; *Æsthetik*, 1846–1858, also one in 1879).

The "right wing" of the Hegelian school, which resisted a pantheistic interpretation of the master, and emphasised the metaphysical importance of personality, attracted those thinkers who stood in a near relation to Hegel, and maintained Fichtean and Leibnizian motifs. Such were I. H. **Fichte** (son of the creator of the *Wissenschaftslehre*, 1797–1879; *Beiträge zur Characteristik der neueren Philosophie*, 1829; *Ethik*, 1850 ff.; *Anthropologie*, 1856), Christ. **Weisse** (1801–1866; *System der Æsthetik*, 1830 and 1871; *Grundzüge der Metaphysik*, 1835; *Das philosophische Problem der Gegenwart*, 1842; *Philosophie des Christenthums*, 1855 ff.), H. **Ulrici** (1806–1884; *Das Grundprincip der Philosophie*, 1845 f.; *Gott und die Natur*, 1861; *Gott und der Mensch*, 1866). Related to them was A. **Trendelenburg**, who set the conception of "Motion" in the place of Hegel's dialectical principle, and thought thereby to combat Hegel's philosophy. His merit, however, lies in the stimulus

which he gave to Aristotelian studies (1802–1872; *Logische Untersuchungen*, 1840; *Naturrecht*, 1860).

To the "Left" among the Hegelians belong Arnold **Ruge** (1802–1880; joint editor with Echtermeyer of the *Halle'sche Jahrbücher*, 1838–1840, and of the *Deutsche Jahrbücher*, 1841 f.; coll. writings in 10 vols., Mannheim, 1846 ff.), Ludwig **Feuerbach** (1804–1872; *Gedanken über Tod und Unsterblichkeit*, 1830; *Philosophie und Christenthum*, 1839; *Wesen des Christenthums*, 1841; *Wesen der Religion*, 1845; *Theogonie*, 1857; Works, 10 vols., Leips. 1846 ff.). Cf. K. Grün (*L. F.*, Leips. 1874), David Friedrich **Strauss** (1808–1874; *Das Leben Jesu*, 1835; *Christliche Glaubenslehre*, 1840 f.; *Der Alte und der neue Glaube*, 1872; Works, 12 vols., Berlin, 1876 ff.). Cf. A. Hausrath, *D. F. Str. und die Theologie seiner Zeit.* (Heidelberg, 1876 and 1878.)

From the **Materialism controversy** are to be mentioned: K. **Moleschott** (*Kreislauf des Lebens*, 1852), Rudolph **Wagner** (*Ueber Wissen und Glauben*, 1854; *Der Kampf um die Seele*, 1857), C. **Vogt** (*Köhlerglaube und Wissenschaft*, 1854; *Vorlesungen über den Menschen*, 1863), **L. Büchner** (*Kraft und Stoff*, 1855) [*Force and Matter*, Lond.].

By far the most important among the epigones of the German Philosophy was Rudolph Herm. **Lotze** (1817–1881; *Metaphysik*, 1841; *Logik*, 1842; *Medicinische Psychologie*, 1842; *Mikrokosmus*, 1856 ff.; *System der Philosophie*, I. *Logik*, 1874; II. *Metaphysik*, 1879) [*Microcosmus*, tr. by Hamilton and Jones, Edin. and N.Y. 1885; *Logic and Metaphysics*, 2 vols. each, tr. ed. by B. Bosanquet, Oxford, 1884, also 1888; *Outlines*, ed. by G. T. Ladd, Boston, 1885 ff.]. Cf. O. Caspari, *H. L. in seiner Stellung zur deutschen Philosophie* (1883); E. v. Hartmann, *L.'s Philosophie* (Berlin, 1888).

Interesting side phenomena are: G. T. **Fechner** (1801–1887; *Nanna*, 1848; *Physical. und philos. Atomenlehre*, 1855; *Elemente der Psychophysik*, 1860; *Drei Motive des Glaubens*, 1863; *Vorschule der Æsthetik*, 1876; *Die Tagesansicht gegenüber der Nachtansicht*, 1879) and Eug. **Dühring** (born 1833; *Natürliche Dialektik*, 1865; *Werth des Lebens*, 1865; *Logik und Wissenschaftstheorie*, 1878). — The following from the Catholic side have taken part in the development of philosophy: Fr. **Hermes** (1775–1831; *Einleitung in die christkatholische Theologie*, 1819), Bernh. **Bolzano** (1781–1848; *Wissenschaftslehre*, 1837), Anton **Günther** (1785–1863; *Ges. Schriften*, Vienna, 1881), and Wilhelm **Rosenkrantz** (1821–1874; *Wissenschaft des Wissens*, 1866).

§ 44. The Controversy over the Soul.

A characteristic change in the general scientific relations during the nineteenth century has been the constantly progressing *loosening and separation of psychology from philosophy*,[1] which may now be regarded as in principle complete. This followed from the rapid decline of metaphysical interest and metaphysical production, which appeared in Germany, especially, as a natural reaction from the high tension of speculative thought. Robbed thus of a more general base of support, in its effort to give itself a firm footing as purely empirical science psychology had at first but little power of resistance against the inroad of the method of natural science, according to which it should be treated as a special province of physiology or general biology. About this question a number of vigorous movements grouped themselves.

[1] Cf. W. Windelband, *Ueber den gegenwärtigen Stand der psychologischen Forschung* (Leips. 1876).

1. At the beginning of the century a brisk interchange of thought obtained between the French Ideology and the later developments of the English Enlightenment philosophy which had split into associational psychology and the common sense doctrine: in this interchange, however, France bore now the leading part. Here the antithesis which had existed in the French sensualism from the beginning between Condillac and Bonnet (cf. p. 458), came out more sharply. With Destutt de Tracy, and even as yet with Laromiguière, it does not come to a sharp decision. On the other hand, Cabanis is the leader of the *materialistic* line: his investigation as to the interconnection of the physical and the psychical (moral) nature of man, after considering the various influences of age, sex, temperament, climate, etc., comes to the result that the psychical life is everywhere determined by the body and its physical relations. Other physicians, such as *Broussais*, gave materialism a still sharper expression; the intellectual activity is "one of the results" of the brain functions. Hence men eagerly seized upon the strange hypothesis of *phrenology*, with which Gall professed to localise at definite places in the brain all the particular "faculties," which empirical psychology had provided up to that time. It was not merely an interesting diversion to hear in public that a more or less vigorous development of special psychical powers could be recognised in the skull; the thought was connected with this, especially among physicians, that now the materiality of the so-called soul-life was discovered, without doubt. In England especially, as is shown by the success of *Combe's* writings, the phrenological superstition called out very great interest and promoted a purely physiological psychology, in the line of that of Hartley. It was John Stuart *Mill* who first brought his countrymen back to Hume's conception of associational psychology. Without asking what matter and mind are in themselves, the student should proceed from the fact that the corporeal and mental states form two domains of experience, completely incapable of comparison, and that *psychology as the science of the laws of mental life* must study the facts of the latter in themselves, and may not reduce them to the laws of another sphere of existence.

2. In opposition to the materialistic abolition of the "soul," which, because it seemed no longer necessary physiologically as "vital force," was held to have outlived its usefulness as the agent or supporter of consciousness, emphasis was laid from another side upon the activity of consciousness. Following de Tracy's example *Laromiguière's* Ideology distinguished carefully between the "modifications," which are the mere consequence of bodily excitations, and the "actions" of the soul, in which this proves its independent

existence already in perception. In the school of Montpellier they still believed in the "vital force," which *Barthez*, indeed, would have thought as separate from body and soul, as a something completely unknown: but *Bichat*, too, distinguished the "animal" from the "organic" life by the characteristic of spontaneous "reaction." This element in psychology came to full development through *Maine de Biran*. The acute, subtle mind of this philosopher received many suggestions from English and German philosophy; with reference to the latter his acquaintance with Kant's and Fichte's doctrines — though only a superficial one — and with the virtualism of Bouterwek, who was named with remarkable frequency in Paris, is to be emphasised.[1] The fundamental fact on which Maine de Biran bases his theory, later called *spiritualism*, is that in the *will* we immediately experience at once our own activity and the *resistance* of the "*Non-Moi*" (primarily our own body). The reflection of personality upon this its own activity forms the starting-point of all philosophy: inner experience furnishes the form, experience of that which resists furnishes the matter. From this fundamental fact the conceptions force, substance, cause, unity, identity, freedom, and necessity are developed. Thus Maine de Biran builds upon psychology a metaphysical system, which frequently reminds of Descartes and Malebranche, but replaces the *cogito ergo sum*, by a *volo ergo sum;* just for this reason he exerts himself especially to fix securely the boundary lines between psychology and physiology, and particularly to exhibit the conception of *inner experience* (*sens intime*) as the clear and self-evident basis of all mental science. In a not dissimilar way *Beneke* treated inner experience, which for him, too, supports all the philosophical disciplines, as the immediate knowledge of the "primitive faculties," *i.e.* of the active elements of psychical activity, and *Fortlage* gave to this conception a still more Fichtean form.

In parallel fashion, the *Scottish* philosophy was deepened through *Hamilton*, in consequence of the influences of German philosophy, and especially of Kant. He, too, champions the standpoint of inner experience, and regards it as authoritative for all philosophical disciplines: necessity and universal validity are to be found only in the facts of consciousness that are common to all, and simply and immediately intelligible. But these facts (and to these belongs

[1] The lines of communication were here not merely literary (Villers, Degérando, etc.), but in a strong degree personal. Of great importance among other things was the presence of the Schlegels in Paris, especially the lectures of Frederick Schlegel. In Paris itself the society of Auteuil, to which also the Swiss embassador Stapfer, a prominent medium of influence, belonged, was of importance.

also every particular perception of the presence of an external thing) include only the finite in finite relations to other things and to our cognition, and in this sense (therefore without the Kantian conception of phenomenality) Hamilton regards human knowledge as limited to experience of the finite: of the Infinite and Absolute, *i.e.* of God, science has no idea, because it can think only what it can relate to another and distinguish from another (cf. Kant's conception of synthesis).

In the debates over these questions in France and England the religious or *theological interest* in the conception of the *substance of the soul* is naturally always a factor: the same interest stood in the foreground in the very violent controversies which led in Germany to the dissolution of the Hegelian school. They turned essentially about the *personality of God* and the *immortality of the soul*. Hegelianism could not continue as "Prussian state-philosophy," unless it maintained the "identity of philosophy with religion." The ambiguous mode of expression of the master who had no direct interest in these questions, enveloped as it was in the dialectical formalism, favoured this contest as to the orthodoxy of his teaching. In fact, the so-called "right wing" of the school, to which prominent theologians like Gabler, Göschel, and Hinrichs belonged, tried to keep this orthodoxy: but while it perhaps might remain doubtful how far the "coming-to-itself of the Idea" was to be interpreted as personality of God, it became clear, on the other side, that in the system of perpetual Becoming and of the dialectical passing over of all forms into one another, the finite personality could scarcely raise a plausible claim to the character of a "substance" and to immortality in the religious sense.

This motive forced some philosophers out of the Hegelian school to a "*theistic*" view of the world, which, like that of Maine de Biran, had for its centre the conception of *personality*, and with regard to finite personalities inclined to the Leibnizian Monadology. The younger *Fichte* termed these mental or spiritual realities *Urpositionen* [prime-positions]. The most important carrying-out of the thought of this group was the philosophical system of Chr. *Weisse*, in which the conception of the possible is placed ontologically above that of Being, to the end of deriving all Being from freedom, as the self-production of personality (Fichte). Carrying out this view in a more psychological manner, *Ulrici* regarded the self as the presupposition for the distinguishing activity, with which he identified all consciousness.

4. The orthodoxy, which at the time of the Restoration was growing in power and pretension, was attacked by the counter-party

with the weapons of Hegelianism, and in this contest Ruge served as leader in public support of both religious and political liberalism. How pantheistically and Spinozistically the idealistic system was apprehended by this wing is best seen from *Feuerbach's Thoughts on Death and Immortality*, where the divine infinitude is praised as the ultimate ground of man's life, and man's disappearance in the same as the true immortality and blessedness. From this ideal pantheism Feuerbach then rapidly advanced to the most radical changes of his doctrine. He felt that the panlogistic system could not explain the individual things of Nature: though Hegel had called Nature the realm of the accidental or contingent, which is incapable of keeping the conception pure. This inability, thought Feuerbach, inheres rather in the conception which man makes to himself of things: the general conceptions in which philosophy thinks are no doubt incapable of understanding the real nature of the individual thing. Therefore Feuerbach now inverts the Hegelian system, and the result is a *nominalistic materialism*. The actual reality is the individual known to the senses; everything universal, everything mental or spiritual, is but an illusion of the individual. Mind or spirit is "Nature in its otherness." In this way Feuerbach gives his purely *anthropological explanation of religion*. Man regards his own generic nature — what he wishes to be himself — as God. The epistemology of this "philosophy of the future" can be only sensualism; its ethics only eudæmonism: the impulse to happiness is the principle of morals, and the sympathetic participation in the happiness of another is the fundamental ethical feeling.

After materialism had shown so illustrious a metaphysical pedigree, others employed for its advantage the anthropological mode of argument which had been in use in French literature since Lamettrie, and which seemed to become still stronger through the progress of physiology. So the materialistic mode of thought began to spread in Germany also, among physicians and natural scientists, and this condition of affairs came to light at the convention of natural scientists at Göttingen in 1854. The contradiction between the inferences of natural science and the "needs of the heart" (*Gemüth*) became the theme of a controversy which was continued in writing also, in which Carl *Vogt* championed the absolute sovereignty of the mechanical view of the world, while Rudolph *Wagner*, on the contrary, professed to gain at the bounds of human knowledge the possibility for a faith that rescued the soul and its immortality. This effort,[1] which with extreme unaptness was termed

[1] It is not without interest to note the fact that this motif was not far removed from the French materialists. Of Cabanis and of Broussais we have expressions, made at the close of their life, which are in this spirit, and even of a mystical tendency.

"book-keeping by double entry," had subsequently its chief effect in creating among natural scientists who saw through the one-sidedness of materialism, but could not befriend the teleology of idealism, a growing inclination toward *Kant*, into whose thing-in-itself they thought the needs of the heart and soul might be permitted to make their escape. When, then, in 1860 Kuno Fischer's brilliant exposition of the critical philosophy appeared, then began the "return to Kant" which was afterwards destined to degenerate into literary-historical micrology. To the natural-science temper, out of which it arose, Albert Lange's *History of Materialism* gave expression.

Materialism was thus overcome in science; it lives in popular expositions, such as Büchner's "Force and Matter" (*Kraft und Stoff*), or in the more refined form of Strauss's "Old and New Faith" (*Alter und neuer Glaube*); it lives on also as a theory of life in just those circles which love to enjoy the "results of science" from the most agreeable hand.

For psychology as science, however, the necessity arose of renouncing the conception of a soul substance for the basis as well as for the goal of its investigation, and as a science of the laws of the psychical life to build only upon inner or outer experience. So we came by our "psychology without a soul," which is free from all metaphysical assumptions — or means to be.

5. A deeper reconciliation of the above antitheses was given by *Lotze* from the fundamental thoughts of German idealism. He regards the mechanism of Nature as the form in which the life impulse and formative tendency which constitute the mental and spiritual essence of all actual reality realise their end, the good. According to this, natural science has doubtless no other principle than that of the mechanical, causal connection, but the beginnings of metaphysics, like those of logic, lie only in ethics. In carrying out this *teleological idealism*, *motifs* from all the great systems of German philosophy accord to a new, harmonious work; every individual real entity has its essential nature only in the living relations in which it stands to other real entities; and these relations which constitute the connected whole of the universe are possible only if all that is, is grounded as a partial reality in a substantial unity, and if thus all that takes place between individuals is to be apprehended as purposeful realisation of a common life goal. By the powerful universality with which he mastered the material of facts and the forms of scientific elaboration in all the special disci-

plines Lotze was specially fitted to carry out fully this fundamental metaphysical thought, and in this respect, also, his personality as well as what he taught, joins worthily on to the preceding epoch.

Another way of escape from the difficulties of the natural-science treatment of the psychical life was chosen by *Fechner*. He would look upon body and soul as the modes of phenomenal manifestation — completely separated and different in kind, but in constant correspondence with each other — of one and the same unknown reality; and follows out this thought in the direction, that every physical connection has a mental series or system of connections corresponding to it, although the latter are known through perception only in the case of our own selves. As the sensations which correspond to the excitation of particular parts of the nervous system, present themselves as surface waves in the total wave of our individual consciousness, so we may conceive that the consciousness of a single person is in turn but the surface wave of a more general consciousness, — say that of the planetary mind: and if we continue this line, we come ultimately to the assumption of a *universal total-consciousness in God*, to which the universal causal connection of the atoms corresponds. Moreover, according to Fechner, the connection of inner and outer experience in our consciousness makes it possible to investigate the laws of this correspondence. The science of this is *psycho-physics*. It is the first problem of this science to find out *methods for measuring psychical quantities*, in order to obtain laws that may be formulated mathematically. Fechner brings forward principally the *method of just perceptible differences*, which defines as the unit of mass the smallest difference that is still perceptible between intensities of sensation, and assumes this to be equal everywhere and in all cases.

§ 45. Nature and History.

The dualism of the Kantian *Weltanschauung* is reflected in the science of the nineteenth century by the peculiar tension in the relation between *science of Nature and science of mind*. At no earlier time has this antithesis been so current as respects both material and methods, as in ours; and from this circumstance a number of promising new shiftings have arisen. If from the domain of mental science we take, as has been shown, the contested province of psychology, we then have remaining over against "Nature," what corresponds still more to Kantian thought — the *social life and its historical development* in its full extent in all directions. The thinking of natural science, pressing forward in its vigorous career of

annexation, from the nature of the case easily found points in the social phenomena as it had previously found in the psychological, where it might set the levers of its mode of consideration, so that a struggle became necessary upon this field, similar to that which had taken place on account of the soul; and thus the earlier antithesis culminated in that between *natural science and historical science*.

1. The first form in which the struggle between the natural-science and the historical *Weltanschauung* was fought out, was the successful opposing of the Revolution Philosophy by the *French Traditionalism*. After St. Martin and de Maistre had set forth the Revolution as the judgment of God upon unbelieving mankind, *de Bonald* proceeded to oppose to the social theories of the eighteenth century, which he too held responsible for the horrors of the Reign of Terror, the theory of the clerical-legitimist Restoration. Unschooled in abstract thought, a dilettante, especially in his predilection for etymology, he was influential by the warmth of his presentation and by the weight of the principle which he defended. It was the mistake of the Enlightenment, he taught, that it supposed the reason could from its own resources find out truth and order society, and that it would leave to the liking of individuals the formation of their life in common. But in truth all intellectual and spiritual life of man is a product of *historical tradition*. For it is rooted in *language*. Language, however (and just here Condillacism is most vigorously opposed), was given man by God as the first revelation; the divine Word is the source of all truth. Human knowledge is always only a participating in this truth; it grows out of conscience, in which we make that which holds universally, our own. But the bearer of the tradition of the divine word is the Church: her teaching is the God-given, *universal reason*, propagated on through the centuries as the great tree on which all the genuine fruits of human knowledge ripen. And only this revelation, therefore, can be also the foundation of society. The arrogance of the individuals who have rebelled against this has found its expiation in the dissolution of society, and it is now in point to build this once more upon the eternal basis: this was also the thought which held loosely together the obscure and strange fancies of *Ballanche*.

2. The philosophical factor in this church-political theory was, that the generic reason realising itself in the historical development of society was recognised as the ground of the intellectual and spiritual life of individuals: if the theological views were distracted from this Traditionalism, the reader found himself hard by *Hegel's* conception of the *Objective Spirit*. Hence it was extremely humorous when Victor *Cousin*, while adopting German philosophy on just

this side, to a certain extent took from the Ultra-montanes the cream of their milk. Eclecticism also taught a universal reason, and was not disinclined to see in it something similar to the Scottish "common sense," to which, however, it still did not deny a metaphysical basis, fashioned according to Schelling and Hegel. When, therefore, *Lamennais*, who at the beginning had been a traditionalist and had then passed through the school of the German Philosophy, treated the doctrine of Ideas in his *Esquisse d'une Philosophie*, he could fully retain the above theory of the conscience, so far as the thing itself was concerned.

Quite another form was assumed by the doctrine of Objective Spirit, where it was apprehended purely psychologically and empirically. In the mental life of the individual, numerous processes go on, which rest solely upon the fact that the individual never exists at all except as member of a psychical interconnected whole. This interaction and overreaching life, into which each one grows, and by virtue of which he is what he is, evinces itself not by conformity to natural laws, as do the general forms of the psychical processes: it is rather of a historical character, and the general mind which lies at the basis of individual life expresses itself objectively in language, in customs and morals, and in public institutions. Individual psychology must be broadened to a *social psychology* by a study of these. This principle has been propounded by *Lazarus* and *Steinthal*, and the eminently historical character which this must have when carried out they have indicated by the otherwise less fortunate name of *Völkerpsychologie* [Folk or Comparative Psychology].

3. One must take into account the fundamental social thought of Traditionalism to understand the religious colouring which is characteristic of *French* socialism since *St. Simon*, in contrast with the social-political theories of the last century. St. Simon's theory, however, stands not only under the pressure of the religious zeal which was growing to become a new social and political power, but also in lively relations to German philosophy, and indeed to its dialectic. All this passed over to his disciple, Auguste *Comte*, whose thought passed through an extremely peculiar course of development.

His projected *positive system of the sciences* first of all pushes Hume's and Condillac's conception to the farthest point. Not only is human knowledge assigned for its province to the reciprocal relations of phenomena, but there is nothing absolute whatever, that might lie unknown, as it were, at the basis of phenomena. The only absolute principle is, that *all is relative*. To talk of first causes or ultimate ends of things has no rational sense. But this relativism

(or, as it has later been termed, correlativism) is forfeited at once to the universalistic claim of the thinking of mathematical natural science, when science is assigned the task of explaining all these relations from the point of view that they are grounded in universal laws of Nature. To this latter end the sciences are arranged in a *hierarchy*, which progresses step by step from the simple to the complex: mathematics is followed by astronomy, then by physics, chemistry, biology, of which psychology is the highest branch, and finally by "*sociology*." Thus the science of society is in principle, no doubt, made to require the preceding disciplines for its rational basis: but in carrying out his scheme these are not employed even to the remotest degree. His social statics rather declines with characteristic emphasis to derive sociality from the individual, as was done in the Enlightenment philosophy. The social nature is an original fact, and the first social phenomenon is the family. Still more independent is his social dynamics, which without psychological explanation sets itself the task of discovering the *natural law of the history of society*. Comte finds this in the *principle of the three stages*, which society necessarily passes through (an *aperçu*, which has not merely Hegel and Cousin for its prototypes). Intellectually, man passes out of the theological phase, through the metaphysical, over into the positive. In the first he explains phenomena by supernatural powers and beings thought in anthropomorphic guise, in the second by general concepts [*e.g.* force, etc.] which he constructs as the essence working behind phenomena; in the positive stage he comprehends the particular only by the actually demonstrable conditions, from which it follows according to a law verifiable experimentally. To this universal law of mental life all special processes into which the same divides, and likewise the *movement of human history as a whole*, are subject, and in this the intellectual process is accompanied by a corresponding course of development in the external organisation of society, which passes out of the priestly, war-like condition, through the rule of the jurists, to the "industrial" stage. The victory of the positive *Weltanschauung* is the goal of the historical development of the European peoples, which the positive philosophy constructed in highly interesting fashion according to the above scheme.

But as if the law of the circuit of the three phases was to be first verified in the case of its author, Comte in the last ("subjective") period of his thinking fell back into the theological stage, making mankind as *Grand-être* the object of a religious veneration or worship, as whose high priest he imitated the whole apparatus of worship of the saints, with a positivist remodelling.

4. This foremost attempt to construct history according to natural laws shows, therefore, as carried out, the victory of historical thinking, and in this contradiction the real energy of Comte's thought comes to light. In this he stands far above his English disciple, Thomas *Buckle*, who in his *History of Civilisation in England* (1857) would set the task of historical science in seeking out merely the *natural laws of national life*. For this purpose those gradual changes of the social condition which find expression in the figures of statistical study, offer a very much more usable and exact material than the narration of particular events, to which the old style of chronicling history is limited. Here the proper meaning of the antithesis becomes disclosed: on the one side the abstract law, a generic concept of changes, — on the other, the living, independent value of the form which occurs but once and is determinate in itself. In this aspect the essence of the historical view of the world has been by no one so deeply grasped and so impressively and warmly set forth as by *Carlyle*.

5. But while history has thus to defend its autonomy against the obliteration of the boundary lines of science, it has resulted conversely upon a special domain of natural science in its theory of the organic world, that the *historical principle of development or evolution* has come to assert itself, according to which the whole connected system of organic and animate beings is regarded as the single process of a development of organic forms, determined by the teleological point of view of fitness for life. This conception, which had been prepared for along many lines, was made the centre of scientific interest through Charles *Darwin's* great work, *On the Origin of Species by Means of Natural Selections* (1859), and has in the last decades brought forth a wealth of wide and deep-going suggestions for the philosophical treatment of the most various problems. These suggestions are indeed as yet far from being ripe enough to be worked together into a system of "synthetic" philosophy, such as Herbert Spencer has attempted by translating the dialectical method into the schema of differentiation and integration which is more conformable to the times. But it is precisely to this work that philosophy is summoned, viz. to investigate the conceptional foundations on the basis of which that form of the principle of development which has now proved fruitful upon a more limited field of natural science, would be in a position to react upon historical knowledge.

The attainment of this ideal may seem to one to be nearer, to another, more remote: meanwhile, however, the outgoing of the century finds us still everywhere involved in controversy between historical and natural-science culture.

INDEX.

Abbt, 446.
Abelard, 272; life and writings, 274, 293 ff., 306 ff., 319.
Abercrombie, 627.
Absolute, the, with Schilling, 608, 617 f.
Abubacer, 317, 320.
Academy, Older, 101, 103, 159 (see also under names of its adherents); Middle, 103, 161 f., 207 (see also Arcesilaus and Carneades); New, 103, 162.
Academicians, 164.
Achillini, 355.
Adélard of Bath, 274, 297.
Ægydius, 314.
Ænesidemus (the Sceptic), 160, 163; his "tropes," 200; aporiæ, 206.
"Ænesidemus," see Schulze.
Æschines, 82.
Æsthetics (see also Beauty), beginning of, in Aristotle, 153; Plotinus, 248; of Baumgarten, 484; Diderot, 493 f.; Shaftesbury, 510; Home, 510 f.; Burke, 511; Sulzer, 511; influence on philos. of German idealism, 530; Kant's, 550–564; Schiller's, 600–602; Schelling's, 607; of Romanticists, 611; Hegel's, 613.
Agricola, 354 f., 360.
Agrippa (the Sceptic), 160, 163; his tropes, 201.
Agrippa of Nettesheim, 357, 373.
Alanus, 275.
Albert of Bollstädt (Albertus Magnus), 311, 313, 321, 326, 333, 340, 343 f., 487.
Alchemy, 373 f.
Alcidamas, 74.
Alcmæon, 46, 64, 67, 150.
d'Alembert, 442, 477.
Alexander Aphrod., 161, 234, 338 f., 359.
Alexandria, 158, 213; Catechists school of, 214, 217.
Alexander of Hales, 313, 344.
Alexander, S., 627.
Alexandrists, 354, 359.
Alexandrian Philosophy, 213 ff.; see also Neo-Pythagoreanism, Philo, Plotinus, etc.
Alexinus, 71, 89.
Alfarabi, 317.
Alfred de Sereshel, 344.
Algazel, 317.
Alhacen, 344.
Alkendi, 317.
Althus, 382, 433 f.
Amalric, Amalricans, 313, 339.
Amelius, 218.
Ammonius Saccus, 218.
Analogies of Experience, 545.
Anaxagoras, 29 f., 40 ff., 51 ff., 54 f., 57, 60, 62 f., 65, 91, 98, 128, 185, 187.
Anaximander, 27 ff., 33 ff., 49, 60.
Anaximenes, 27, 29, 32 f., 48, 60.
Ancillon, 626.
Andronicus, 104, 159.
Anniceris, 70, 87.
Anselm, 272, 295; life and writings, 274; ontological argument, 292 f.; 321, 331.
Antinomies, Kant's doctrine of, 550.
Antiochus, 103, 161 f.
Antisthenes, 70, 72, 83 f., 94, 96; see also Cynics.
Apelles, 258.
Apollodorus, 162.
Apollonius, 213, 215.
Apologists, 214, 217, 222 ff., 231, 237.
Apuleius, 213, 216, 228.
Apperception, distinguished from perception, by Leibniz, 463; transcendental, of Kant, 543.
A priori, meaning of, with Kant, 533 note 2. Cf. also 538 ff., 551 ff.
Arabian Philosophy, 15, 316 f., 319, 337 ff.
Arcesilaus, 103, 160 f., 260.
Archelaus, 76.
Archytas, 31, 103, 123, 215.
Aristides, 217.
Aristippus, 70, 72, 85 ff., 93, 165, 170; see also Cyrenaics.

Aristippus the Younger, 70, 72, 85 f.
Aristobulus, 216, 220 f.
Aristophanes, 81.
Aristotle, conception of philosophy, 2; completer of Greek science, 25, 99 f.; on θαυμάζειν and ἀρχή, 31 f.; as source for Sophistic doctrine, 88; life and writings, 103 f.; logic, 133–138, 543; his central principle, 139; doctrine of cause, 141 ff.; categories, 142; relation to Plato's ideas, 139, 142 f.; doctrine of matter, 144; of Being or essence, 139 f., 145 f.; monotheism, 145 f.; cosmology, 147; psychology, 149; ethics, 151 ff.; politics, 152 f.; poetics, 153 f.; influence on Stoics, 176, 181; immanence and transcendence in his doctrine, 178 f.; on freedom, 191 f.; on law in nature, 195; evil due to matter, 196; influence of his monotheism, 211; reception of his doctrine the decisive factor in Scholasticism, 269, 311 f.; cf. also 229, 236, 255, 320, 329, 331, 339 f., 354, 357 f., 359, 398, 402, 420.
Aristoxenus, 159, 161.
Arnauld, 381.
Arnobius, 214, 217, 224 f.
Arnold, 445.
Arrian, 174, 216.
ἀρχή of cosmologists, 32 ff.; the Ideas as ἀρχή with Plato, 118.
Association (see also Psychology), John of Salisbury, 307; Hobbes, 413; Hartley, 455; laws of, with Hume, 473; explains ideas of substance and causality, acc. to Hume, 473–476; in this century, 627, 631.
Ataraxy, 165; of Epicurus, 166; of Sceptics, 167; of Stoics, 160.
Athenagoras, 217, 224.
Atom, conception of, with Leucippus, 43; of Democritus, 107, 110 ff.; with Epicurus, 184; compared with monad of Bruno, 371; Buffon's, 480.
Atomism of Leucippus, 42; of Democritus, 108, 110 ff; of Epicurus, 183 f.; in Ethics, see Individualism.
Atomists, 29, 42 ff., 54; see also Leucippus, Democritus.
Attributes, the two, of Descartes, 405 f.; with Spinoza, 408 f., 419.
Augustine, 264 ff., 268, 270; life and works, 273; doctrine, 276–287, 303, 324, 326, 329, 331, 333, 340, 344, 353, 364. Cf. Descartes, 391, 394, 416.
Austin, 627.
Authority as philosophical principle, 219 ff.
Autonomy of practical reason, 553.
Avempace, 317.
Averroës and Averroism, 317 ff., 320, 328, 329, 331, 336, 338 ff., 354 f., 359.
Avicebron, 318, 332, 338 f., 341.
Avicenna, 299, 317, 340, 344.

Baader, 571.
Babeuf, 523.
Bacon, Francis, 379; life and writings, 380; his method, 383–388; "idols," 383; aim, 386 f.; attitude toward religion, 400; on final causes, 401; "the New Atlantis," 387, 429. Cf. also 406, 412, 477, 494, 625.
Bacon, Roger, 314, 319, 333, 341, 344 f., 360, 379.
Bailey, 627.
Bain, 627.
Baldwin, 628.
Ballanche, 626, 637.
Bardesanes, 217, 239.
Barso, 355, 371, 406.
Barthez, 626, 632.
Basedow, 446, 526.
Basileides, 214, 217, 243, 258 f.
Batteux, 456.
Baumgarten, 444, 484.
Bayle, 439, 442, 477, 491, 494, 495, 504 f.
Beattie, 442, 537.
Beauty, its relation to the good with Plato, 125; first treated independently by Plotinus, 248 f.; of the universe emphasised in Renaissance, 358, 367 ff.; and by Shaftesbury, 489; factor in ethics, 509; Home, Burke, Sulzer on, 511 f.; Kant, 560–563; Schiller, on, 600 f.
Beck, 570, 579.
Becker, 398.
Bede, 273.
Being, early Greek conceptions of, 31–47; as world-stuff with Milesians, 32; as corporeality or space-filling substance, Parmenides, 37; plurality of, assumed, 39 ff.; = atoms, 42 f.; plurality of, denied by Zeno, 44; found in numbers, Philolaus, 45; identified with the good by Euclid, 96; equivalent to atoms with Democritus, 108; to ideas with Plato, 109, 118; to essence with Aristotle, 139; and further to pure thought, 145; to spirit with Neo-Platonism and Patristic thought, 232; with Plotinus, 245; sought in the universal by John Scotus, 289 ff.; treated as an attribute of varying intensity, 291 f.; and by Descartes, 405; God as infinite, bodies and minds as finite, 405; to be thought only as a kind of consciousness, 579; comprehensible only as a product of reason, Fichte, 581; Eleatic conception of, in Herbart, 584; only a means, Fichte, 595; derived from freedom, Weisse, 633; see also Reality, Substance.

Bekker, 401.
Belief, Hume's theory of, 475, 477.
Bellarmin, 382.
Belsham, 627.
Beneke, 573, 577, 632.
Bentham, 441, 513, 522.
Berengar, 275, 297.
Bérigard, 355.
Berkeley, 439 f., 452, 469 f., 476 note.
Bernard of Chartres, 272, 274, 294, 302 f., 357.
Bernard of Clairvaux, 273, 275, 301, 305.
Bertrand, 626.
Bessarion, 354, 358 f.
Bias, 24.
Bichat, 626, 632.
Bilfinger, 444.
Bodin, 382, 427, 431, 433, 526.
Boerhave, 454 f.
Boëthius, 270, 273, 288, 296.
Boehme, 354, 357, 367 f., 369 f., 371, 373 ff., 403, 618.
Bolingbroke, 441, 523.
Bolzano, 630.
Bonald, 626, 637.
Bonaventura, 313, 333 f., 341.
Bonnet, 442, 458, 631.
Bosanquet, 628.
Bossuet, 486, 527.
Bouillé, 356, 368, 372.
Bouterwek, 573, 587, 632.
Bowne, 628.
Boyle, 380.
Bradley, 628.
Broussais, 626, 631, 634.
Brown, Peter, 440; Thomas, 440.
Brucker, 10, 444.
Bruno, 354, 356, 360, 367 ff., 389, 397, 402, 409, 422, 592.
Buchanan, 433.
Buchez, 627.
Büchner, 630, 635.
Buckle, 640.
Budde, 444.
Buffon, 442, 480.
Buisson, 626.
Buridan, 315, 331.
Burke, 441, 511.
Butler, 441, 513 f.

Cabanis, 442, 631, 634.
Cabbala, 317, 372.
Cæsalpinus, 355, 359.
Caird, E., 628; J., 628.
Calderwood, 627.
Callicles, 75.
Callippus, 147.
Calvin, 356, 364.
Cambridge school, see Neo-Platonism, English.
Campanella, 356, 370 f., 373, 376 f., 383, 387, 391, 403, 413, 427, 430, 526.
Cardaillac, 626.
Cardanus, 356, 372 f., 431.
Carlyle, 628, 640.
Carneades, 103, 160 f., 194 f., 201, 207.
Carpocrates, 217, 258.
Cartesians and Cartesianism, 414 ff., 448, 453, 467 ff., 470, 477, 503.
Cassiodorus, 270.
Catch questions among the Sophists and Megarians, 89.
Categories, Aristotle's, 142; Stoics, 198 f.; of Plotinus, 245; natural categories not to be applied to God, according to Augustine, 279 f.; of Kant, 542 f.; reduced to causality, Schopenhauer, 588; of nature, Schelling, 598; Hegel's doctrine of, 611.
Cause and causality, idea as, with Plato, 128; four causes of Aristotle, 141; final and mechahical, 144; emphasised by Stoics, 181; conception of, criticised by Sceptics, 205 f.; God as final, formal and efficient with Bruno, 367; God as rational ground and efficient cause with Boehme, 367; formal causes emphasised by Bacon, 384 ff.; given a new meaning by Galileo and his successors, 399 ff.; final, rejected by Bacon, Descartes, Spinoza, 401; sought in motion, not in substances, by Galileo, 410; God the sole true cause, Occasionalism, 415; occasional, 405; the central difficulty in the conception of causality, 405; equivalent to mathematical consequence with Spinoza, 418; analysed and declared the result of custom by Hume, 474–476; re-examined by Kant, 542–546; Kant's unjustifiable use of, 577 f.; the only category recognised by Schopenhauer, 588; thing-in-itself not cause of phenomena, 589.
Celsus, 216.
Cerdo, 258.
Cerinthus, 257.
Chalmers, 627.
Charron, 355, 362 f., 376, 391.
Chassebœuf, see Volney.
Chateaubriand, 626.
Chesterfield, 515.
Christianity, relation to Greek thought, 212, 223 f.; its view of authority and revelation, 221 ff.; of spirit and matter, 231 ff.; of personality of God, 238, 251; its view of history, 256 ff.; the "true" of Deism, 487 ff.; with Schelling, 619; see also Religion, Theology, God.
Chrysippus, 159, 162, 168, 181, 187, 193 f., 196, 203.
Chubb, 441.
Church, conceived as fellowship, 261;

preserves ancient civilisation and educates modern Europe, 263 ff.; one of the foci of Augustine's thought, 276, 283; doctrine definitively closed, 363.
Cicero, 161 f., 163, 177, 204, 223, 361.
Civilisation, as factor in history of philosophy, 13; influence on anthropological period of Greek thought, 66 ff.; its worth denied by Cynics, 84; affirmed by Cyrenaics, 86; the Hellenistic, 155 ff.; preserved by the Church, 263 ff.; of the Renaissance, 348 ff.; modern, 386 f.; problem of, in Enlightenment, 518 ff.; Mandeville, 524; Rousseau, 525; Kant on, 559; Fichte on, 605 f.
Clarke, 441, 490, 504.
Clauberg, 381, 415.
Cleanthes, 159, 162, 188.
Cleidemus, 70.
Clement of Alexandria, 214, 217, 252.
Clement of Rome, 259.
Clitomachus, 161.
Cogan, 627.
Cogito ergo sum, of Descartes, 391 f.
Coincidentia oppositorum, of Nicolaus Cusanus, 345; of Bruno, 368; of Boehme, 375; referred to by Schelling, 592.
Coleridge, 628.
Collier, 471.
Collins, 441, 496.
Combe, 627, 631.
Comenius, 385.
Comte, 624, 627, 638 ff.
Conception, its importance with Socrates, 95 f.; relation to idea with Plato, 118 f., 121; with Aristotle, 133, 142 f.; derived from sense perception by Stoics and Epicureans, 203; Abelard's theory, 306; Locke's, 451; Berkeley's, 457; as knowledge of the Absolute, Hegel, 611.
Concepts, Aristotle's doctrine of, 137; pure concepts of understanding, 542 ff.; see Conception, Universals, Ideas, Realism, Nominalism, Terminism.
Conceptualism, 272; of Abelard, 298.
Condillac, 439, 442, 456 ff., 478 f., 521, 527, 631, 638.
Conscience, 234; Abelard's view of, 308; Thomas, 333; Butler, 514.
Consciousness, defined, 234; certainty of, as starting-point with Augustine, 276 f.; with Descartes, 391; one of the two attributes of all reality, Descartes, 405; all minds modes of, 406; "in general," of Kant, 545, 563; with Beck, 579; self-consciousness Fichte's first principle, 580 f.; as intelligible space, Herbart, 585.
Constantinus, 302.
Contarini, 355.
Copernicus, 369.
Cordemoy, 381, 415.
Cornutus, 216.
"Correspondence concerning the nature of the Soul," 454.
Cosmic Processes, early Greek conceptions of, 47 ff.; Aristotle's principle for explaining, 140, 144.
Cosmological argument, 145, 469, 550.
Cousin, 626, 637, 639.
Crantor, 103, 164.
Crates of Athens, 103.
Crates of Thebes, 72, 85.
Cratylus, 70.
Creation, opposed to evolution and emanation, 252–254.
Cremonini, 355.
Creuz, 445.
Critias, 76.
Critical method, 533.
Criticism, immanent, 18.
Critique or criticism of reason, Kant's, 532 ff.
Crousaz, 444, 478.
Crusius, 444, 484 f.
Cudworth, 382, 401, 435, 449, 503.
Cumberland, 382, 435 f., 508, 513.
Cusanus, see Nicolaus.
Custom, explains substance and causality with Hume, 475, 476.
Cynics, 70, 82 ff., 90, 94, 96, 164, 166, 169, 171.
Cyrenaics, 70, 82, 86 f., 94, 165.

Daimonion (or Dæmon) of Socrates, 98.
Dalgarn, 398.
Damascius, 215, 218.
Dante, 311, 314, 327, 334, 426.
Darwin, Ch., 628, 640.
Darwin, Er., 440.
Daube, 626.
Daubenton, 443.
David of Dinant, 313, 339, 410.
Deduction, Aristotle's conception of, 134.
Degérando, 10, 626.
Deism and Deists, 488–497, 523.
Deity, first used as philosophical principle by Anaximander, 34; as Idea of the Good, Plato, 128; as demiurge, Plato, 130; as pure Form, with Aristotle, 145; as pneuma with Stoics, 186 f.; Epicurus', view of, 188; above knowledge and Being, 335; distinguished from God, 335; as *natura naturans*, with Eckhart, 335 f.; see also God.
Demetrius, 216.
Demiurge, Plato's idea of, 130; Valentinus, 254; Gnostics, 257 ff.

Democritus, belongs to Systematic Period, 25 f., 99 f.; life and writings, 100 f.; grounds metaphysics anew, 105–108; his system of materialism, 109–116; relation to Plato, 105–108, 118 f., 130; to Aristotle, 138 f., 148 ff.; to Epicurus, 165, 183–185, 202; to Stoics, 180 f.; revived, 353; influence in Renaissance, 369, 371 f.; his principle of reduction of qualitative to quantitative victorous with Galileo, 388; with Bacon, Descartes, Hobbes, 401, 403; influence on Leibniz, 422; compared with Kant, 541; opposed by Schelling and Goethe, 598 f.
Demonax, 213, 216.
Derham, 491.
Descartes, begins a new development, 379; life and writings, 380; method, 389 ff.; *cogito ergo sum*, 391 f.; innate ideas, 392; proofs for existence of God, 392 f., 405; on error, 394; on sense-qualities, 403; his dualism of substances, 404 f.; conception of substance and attribute, 406; doctrine of bodies, 406; on conservation of motion, 411; on the passions, 412; on mind and body, 413 f.; ethics, 414. Cf. also 400 f., 410, 467.
Development, Aristotle's central principle, 139 ff.
Dewey, 628.
Dexippus, 218.
Diagoras, 76.
Dialectic, of Zeno, 44, 55 f.; of Sophists, 69, 88 ff.; of Plato, 1, 20; of Aristotle, 132 f., 137; of Proclus, 251; of Scholasticism, 271; opposed by the Mystics, 272; of Abelard, 300; attacked in Renaissance, 360; "natural" of Ramus, 361; transcendental of Kant, 548; philosophy as, Schleiermacher, 582; of Fichte and Hegel, 591, 611 f.
Dicæarchus, 159, 161.
Diderot, 442, 457, 489, 493, 496, 508.
Didymus, see Arius.
Diodorus Cronus, 71, 89.
Diogenes of Apollonia, 32, 55, 62 ff., 70, 150, 187.
Diogenes of Babylon, 162.
Diogenes Laertius, 215.
Diogenes of Sinope, 70, 72, 84 f., 94.
Dionysidorus, 89.
Dionysius the Areopagite, 271.
Dippel, 445.
Dogmatism, of Reid, 483; defined by Kant, 534; by Fichte, 580.
Dominicans, 313, 340.
Doubt, as Augustine's starting-point, 277; of Descartes, 390 f.
Drobisch, 629.
Dualism, of Pythagoreans, 46; of Plato, 120, 130; overcome by Aristotle, 133; ethical and religious, in Alexandrian thought, 229 ff., 235 ff.; of Gnostics and Manichæans, 239 f.; with Augustine, 285 f.; anthropological, of body and soul, 384 ff.; metaphysical, 403 ff.; of substances, with Descartes, 404 f.; exception made in case of the passions, 413 f.; controlling view of Enlightenment, 448; moral, of Kant, 555 f.
Duclos, 443.
Dühring, 630.
Duns Scotus, personality and writings, 311, 314; separates theology from philosophy, 322 f.; metaphysical psychology, 324 f.; indeterminism, 330, 332 f.; on relation of intellect and will, 324; on individuality, 341 f.; gave impetus to empirical science, 344; influence on Bacon, 384; Descartes, 394; on Leibniz, 420, 423.
Duty, Stoics, 172; Kant, 551.

Eberhard, 446.
Eckhart, 311, 314, 330, 332, 334 ff., 340, 365, 375, 583.
Eclecticism, 161; see also Scepticism.
Ecstasy, with Philo, 227; Neo-Platonism, 228 f., 250.
Ecphantus, 46, 56.
Education, in Plato's Republic, 127; in Rousseau, 526; see also Pedagogics.
Ego, of Fichte, 593 ff.
Egoism, with Hobbes, 434 f.; Lamettrie, etc., 515; see Hedonism, Epicureanism.
Elean-Eretrian School, 70, 82.
Eleatics, 28; see also Xenophanes, 30, 34 ff., 51 ff., 59 ff., 89 f., 584 note, 585 note.
Elements, of Empedocles, 39 f.; as homoiomeriai, with Anaxagoras, 41; of Pythagoreans, 57.
Emanation systems, 243; of Proclus, 251.
Empedocles, 29 f., 39 f., 51 ff., 58 ff., 92.
Empiricism, favoured by Nominalism, 344; in Renaissance, 360 f., 362, 376 f., 379; of Hume, 476; Schelling's metaphysical, 619.
Encyclopædists, 439, 442.
Enfantin, 627.
Engel, 446.
Enlightenment, the Greek, 66 ff.; philos. of, 434 ff.; its meaning, 506 f.
Entelechy, of Aristotle, 140 ff.; revived by Leibniz, 420.
Epicharmus, 66.
Epictetus, 213, 216, 230.
Epicurus and Epicureanism, 158 f.;

life and writings, 162; ethics and theory of life, 165 f., 170 f.; theory of the State, 173 ff.; view of Nature, 180, 182–186; indeterminism, 193 f.; logic and theory of knowledge, 198, 202 f., 205. Cf. also 211 f., 229, 252, 353, 369, 521.
Epistemology, or theory of cognition, origin of its problems, 58; of Greek cosmologists, 58–65; treated psychologically by Protagoras, 91 ff.; of Aristippus, 93 f.; of Socrates, 94 ff.; made basis of metaphysics, 101, 104 ff.; of Democritus, 104 ff., 110 ff.; of Plato, 104 ff., 117 ff.; the principle of Aristotle's logic, 133; Stoic, 199, 207 ff.; of Sceptics, 200–202, 205–207; of Epicureans, 204 f.; of Augustine, 277–282; of Occam, 325; of Mysticism, 335 ff.; of humanistic Renaissance, 370; of Descartes, 392–394, 403; of Spinoza, 396, 408 f.; of Malebranche, 417; made central in philosophy of Enlightenment, 447; general character of modern is to emphasise inner experience, 466; of Locke, 467–469; of Berkeley, 469; of Collier, 471; of Hume, 472–477; of Condillac and Ideologists, 478 ff.; of Reid, 482 f.; of Leibniz, 483; Wolff, and his successors, 460 ff., 484 ff.; of Kant's pre-critical period, 465 f., 485 f.; general character of his critical, 533; exposition of the same, 537–550; of Kant's successors, 573 ff.; Fichte, 579; Schleiermacher, 582; Herbart, 583 ff.; Schopenhauer's, 588 f.; Hamilton, 633.
Erasmus, 360.
Eratosthenes, 162.
Erdmann, 629.
Eric of Aux., 273.
Erigena, John Scotus, 271, 274, 289–291, 335, 419.
Eschenmayer, 616.
Essence, with Aristotle, 139, 141.
Essenes, sect of, 213, 231.
Ethics, principle of, first propounded by Heraclitus, 63; problems raised by Sophists, 75 ff.; intellectualistic and eudæmonistic of Socrates, 77 ff.; of Democritus, 115 f.; of Plato, 123 ff.; the basis of his idealism, 108 f., 117 f.; of Aristotle, 151 ff.; of the Stoics, 163 ff.; of Epicureans, 165 ff.; of Sceptics, 165 ff.; of Augustine, 287; of Abelard, 308; of Thomas, 332 f.; of Descartes and Spinoza, 414; individualistic of 18th cent., 500 ff.; three main questions, 501; of Locke, 502 f.; intellectualistic, of Clarke, etc., 503 f.; Leibniz and Wolff, 505 ff.; æsthetic, of Shaftesbury and Hutcheson, 508 f.; utilitarian, of Bentham, 513; Butler and Paley, 514; egoistic, 515; utilitarian, separated from egoism, Hume, 516 ff.; of Smith, 517 f.; of Kant, 551–557; as chief philos. discipline, Fichte, 595; Schiller's æsthetic, 600 ff.; of genius, Romanticists, 603; branch of æsthetics, Herbart, 603; see also Virtue, Virtues, Good.
Eubulides, 71, 89.
Eudemus, 161, 198.
Eudorus, 216.
Eudoxus, 103, 147, 186.
Euemerus, 70.
Euclid, 70 f., 89, 96, 102.
Euripides, 66.
Euthydemus, 89.
Eusebius, 216.
Evil (see also Theodicy), negative with Plotinus and = matter, 247; Patristic doctrine of, 252 f.; negative with Augustine, 280; reduced to metaphysical and due to finiteness, Leibniz, 491.
Evolution, as opposed to emanation, 243; recent theories, 640; see also Development.

Faith, and reason (see Reason), *a priori* of Kant, 554 ff.; Jacobi's doctrine of, 574.
Fearn, 627.
Fechner, 630, 635.
Feder, 446.
Feeling, emphasised by Rousseau, 458 f.; made basis of belief in external world and in causality by Hume, 475–477; basis of morality with Shaftesbury, 509, and others, 510; recognised as distinct faculty by Tetens and Kant, 512; *a priori*, 560; immediate knowing, Jacobi, 574; as communion with the infinite, 582.
Ferguson, 441, 510.
Ferrari, 629.
Feuerbach, 630, 634.
Fichte, life and writings, 570; conception of philosophy and starting-point, 579 f.; dialectical method, 590 f.; system, 593–596; philosophy of history, 605 f.; latest doctrine, 610. Cf. also 432, 632.
Fichte, I. H., 629, 633.
Ficino, 354, 358.
Figulus, 215.
Fire, as first principle, Heraclitus, 36, 50.
Fischer, K., 13, 629, 635.
Fludd, 357.
Fontenelle, 410.
de la Forge, 318, 415.
Form, essential nature of things, with Democritus, 107, 111 ff.; with Plato, 107–109, 129 (see also Idea); contrasted with matter by Aristotle, 139 ff.; pure, 144 f.; in psychology of Scholastics, 324 f.; with Averroës, 338; individual Forms with Scotus, 341; used by Bacon, 384 f.; distinguished from content in ideas by Lambert, 461; by Kant, 465 f.; pure Forms of sensibility, 463 f., 539–542; of the understanding, 541 f.; furnished by the subject, Reinhold, 576; Maimon, 578; from without, Herbart, 583.
Fortlage, 632.
Foucher, Sim., 355.
Fowler, 627.
Franck, Seb., 356, 365, 368.
Francke, 445, 487, 629.
Francki, 629.
Francis of Mayro, 315, 342.
Franciscans, 313, 341.
Frayssinons, 626.
Fredegisus, 274.
Frederick II. of Sicily, 319.
Frederick II. of Prussia, 446, 516.
Freedom, ethical, maintained by Socrates, 191; distinguished from freedom of choice by Plato, 191; Aristotle's conception of freedom, 192; Stoics' deterministic views, 193; metaphysical freedom as indeterminism of Epicurus, 194 f.; applied to God by Patristic thought, 252; used to explain origin of evil, 252 f.; both maintained and denied by Augustine, 282–285; maintained as determinism by Thomism, 329 f.; as indeterminism by Scotus and Occam, 330 f.; as source of error, Descartes, 394; with Malebranche, 407; denied by Hobbes and Spinoza, 413; as postulate, Kant, 554 f.
Fries, 573, 575.
Fulbert, 302.

Gabler, 633.
Galen, 216, 316.
Galileo, 378 f., 388 f., 398 f., 400, 402 f., 410, 541.
Galuppi, 629.
Gall, 626, 631.
Garat, 443, 522.
Garve, 446.
Gassendi, 355, 391.
Gaunilo, 293.
Gaza, Theod., 354.
Gennadius, 359.
Gentilis, 382, 431.
Geometry and geometrical method (see Mathematics) made supreme by Cartesians, 395–399; in philos. of law, 432; opposed by Rüdiger, Crusius, and Kant, 484 f.

Georgius of Trebizond, 354, 359.
Gerbert, 272, 275, 302.
Gerson, 315, 323.
Gersonides, 318.
Geulincx, 379, 381, 396, 410, 415, 417.
Gibieuf, 381, 416.
Gilbert, 275, 335.
Gioberti, 629.
Gioja, 629.
Glanvil, 474.
Gnostics, 214, 217, 222, 224, 237, 239, 243, 257.
God (see also Deity, Theology), first philos. conception of, as matter, Anaximander, 34; as ἓν καὶ πᾶν, Xenophanes, 34 f.; his relation to the world in Hellenistic thought, 235 ff.; exalted above all mind or matter, 237 (see "Negative Theology"); personality of, in Christianity, 238, 251; personality of, rejected by Greek and Neo-Platonic thought, 238; source of truth for Augustine, 278 f.; Anselm's argument for existence of, 292 f., 335; distinguished from deity by Gilbert, 335; the final, formal, and efficient cause of universe with Bruno, 367; self-generation of, with Boehme, 375; Descartes' proofs for, 392 f.; as sole substance with Descartes, 405; as "*raison universelle*" with Malebranche, 407; as "*causa sui*," Spinoza, 408; as "*natura naturans*," 409; as central monad, Leibniz, 424; his existence demonstratively certain, Locke, 468; arguments for, criticised by Kant, 549 f.; as postulate of *a priori* faith, 556; as identity of thought and Being, Schleiermacher, 582; as moral world-order, Fichte, 595; as the Infinite, Schelling, 609; as Idea, Hegel, 611; personality of, in Hegelian School, 633.
Godwin, 522.
Goethe, 366, 530, 597 ff., 602.
Good, the, Socrates leaves it undefined, 79; virtue with Antisthenes, 85; pleasure with Aristippus, 87; Idea of, with Plato, 122 f., 125; happiness or well-being with Aristotle, 151; pleasure with Epicurus, 165 f., 170; virtue with Stoics, 168; recognised by God's wisdom, acc. to Thomas, 332; result of God's will, Scotus, 332; highest good = perfection with Leibniz, 505; Kant's doctrine of, 555.
Gorgias, 30, 69, 71, 89.
Göschel, 633.
Gottfried of Fontaine, 330.
Gottsched, 444.
Grace, realm of, opposed to nature, 318 ff.; irresistible with Augustine,

282, 284; supported by Thomas, denied by Scotus, 334.
Green, T. H., 628.
Gregory of Nyssa, 254, 261.
Grimm, 443.
Grote, 71.
Grotius, 382, 427, 431 f., 526.
Gundling, 520.
Günther, 630.

Hall, 628.
Hamann, 510, 569, 576, 593.
Hamilton, 624, 628, 632 f.
Hansch, 444.
Hardenberg, see Novalis.
Harris, 628.
Harmony, between substances, Geulincx, 415; pre-established, of Leibniz, 424, 483.
Hartley, 440, 455, 480, 513, 631.
Hartmann, 621.
Harvey, 402.
Hedonism and Hedonists, 70, 85 ff.; 93 f.; of Epicurus, 165 f., 170 f.; of Pyrrho, 167; of Lamettrie, etc., 515; see also Cyrenaics, Egoism, Epicureanism and Ethics.
Hegel, conception of history of philosophy, 10 f., 13; general work as philosopher, 530, 569; life and writings, 571 f.; dialectical method, 598; relation to Plato, 610; system, 611–615, 637 f., 639.
Hegesias, 70, 87
Hellenistic philosophy, 155 ff.
Helmont, 357.
Helvetius, 443, 515.
Hemming, 382.
Hemsterhuys, 510.
Henry of Ghent, 314, 330 f., 340 f., 345.
Hentsch, 445.
Heracleides, 103.
Heracleides Lembus, 161.
Heraclitus, general character of his thought, 28; life and writings, 30; conception of the universe, 36 ff.; of the cosmic process, 49 f.; of cognition, 58 f.; influence on Protagoras, 92; on the Stoics, 186, 205; on Ænesidemus, 200; his principle active in Fichte, 595, 612 note. Cf. also 72, 118.
Herbart, 569 and note, 572, 577, 583–587, 592, 603, 629.
Herbert of Cherbury, 379, 382, 436, 447 f., 495.
Herder, personality and writings, 439, 446, 570; psychology, 464 f.; influenced by Shaftesbury, 489, 507; his view of history, 527 f.; in literature, 530; influence on Kant, 559; criticises Kant, 576; influenced by Spinoza, 598.
Herennius (Pseudo.), 277.
Hermes (Trismegistus), 216.
Hermes, Fr., 630.
Hermetic writings, 227, 237.
Hermippus, 161.
Herschel, 628.
Hicetus, 56.
Hickok, 628.
Hierocles, 218.
Hildebert of Lavardin, 275.
Hinrichs, 633.
Hippasus, 57.
Hippias, 69, 71, 73 f., 88.
Hippodamus, 66, 74.
Hippocrates, 67, 316.
Hippolytus, 214.
Hippo, 70.
History, philosophy of, 19; its worth first recognised by Cicero, 177; problem of, first suggested by Christianity, 255 ff.; Patristic views of, 256 ff.; with Augustine, 285 f.; Lessing's sense for, 498 f.; worth of, examined by Rousseau, 525; philosophy of, with Vico, 526; with Herder, 527; with Kant, 559; with Schiller, 604 f.; Romanticists, 605; Fichte, 605 f.; as central principle with Hegel, 612; its antithesis to natural science, 636 ff.
Hobbes, life and writings, 381; method, 389; attitude toward religion, 400; on teleology, 401; mathematics the only rational science, thought a reckoning, 404; mechanical conception, 412; sensualistic psychology, 413; determinism, 413; theory of state and society, 431–434; opposed, 435; influence on the Enlightenment, 448 f., 502, 512 f., 514, 517, 518 f. Cf. also 403, 406, 411, 467, 508, 586.
Hodgson, 628.
Holbach, 443, 516; see also *Système de la Nature*.
Home, 441, 510 f.
Homoiomeriai of Anaxagoras, 41.
Huet, 395.
Hugo de Groot, see Grotius.
Hugo of St. Victor, 275, 305, 324, 334.
Humboldt, 520.
Humanism, 349 ff., 352 ff., 360.
Hume, life and writings, 441; "impressions and ideas," 453; theory of knowledge, 472–477; on causality, 474–476; on natural religion, 494 f.; "Natural History of Religion," 497; influence on Kant, 501, 537 note 4, 545. Cf. also 415 note 1, 574 note 7, 579, 631, 638.
Hutcheson, 441, 509.
Huyghens, 380, 421.
Hylozoism, 32, 48.

Idealism, Plato's system of, 116–131; psychological and epistemological of

Occam, 325 f.; Neo-Platonic of Eckhart, 335; subjective, of Berkeley, 470; of Collier, 471; transcendental or critical of Kant, 541, 543; development by Kant's successors, 568 ff.; Fichte's definition of, 580; his subjective, 596; Schelling's objective, 597–599; absolute or Spinozistic, 608; religious, 609 f.; Schiller's æsthetic, 600–602; Hegel's logical, 611–615; teleological of Lotze, 635; see also Idea, Neo-Platonism.
Ideas, with Plato, 109, 118 ff.; Aristotle's criticism on Plato's Ideas, 133; their influence on him, 142 f.; Plato's theory opposed by Stoics and Epicureans, 203; innate, 304; Plato's Ideas transformed to thoughts of God by Neo-Platonism, 233; Philo's doctrine, 240 f.; Plotinus, 245; Augustine, 279; in mediæval thought (see Universals); innate, of Descartes, 392, 449; of Cudworth, 449; Locke on, 450 f.; copies of impressions, Hume, 453, 472 ff.; abstract, how formed, Locke, 451; a fiction, Berkeley, 452; virtual innateness of, with Leibniz, 463; with Kant, 465 f.; with Tetens, 466; Platonic, revived by Kant as necessary problems of reason, 549; ethical of Herbart, 604; Neo-Platonic of Schelling, 609, 617; as God's intuition of himself, 610; God as Idea, Hegel, 611; state as Idea, 613; see also Idealism, Plato, Neo-Platonism, Conception.
Ideology, 457 ff., 478 ff., 626, 631 f.
Idols, Bacon's doctrine of, 383 f.
Immortality, with Plato, 124; as postulate with Kant, 555; with Hegelians, 633.
Imperative, categorical, of Kant, 551 ff.; of Fichte, 594.
Impressions, source of all ideas, with Hume, 453, 472 ff.
Indian Wisdom, 621.
Indifferentism, 297.
Individualism, of Democritus, 116; of Greek epigones, 163 ff.; of Epicurus, 170 f.; of the eighteenth century, 500 f.
Individuality, problem of, 337 ff.
Induction with Socrates, 97; Aristotle on, 137; Bacon's, 384–386; contrasted with Galileo's method, 388; Descartes' theory of, 390.
Infinite, regarded by Greeks as imperfect, 46; the, of Anaximander, 33; contradictions involved in conception of, Zeno, 44; made attribute of God with Nicolaus Cusanus, 345 f.; contrasted with finite by Bruno, 368; unknowable, Hamilton, 633.
Intellect, its relation to will with Thomists and Scotists, 329 ff.; active and passive with Alexander Aphrodisias and Averroës, 339 f.; see also Reason, Nous.
Intellectualism, of early science, 62; of Socrates, 79 f.; of Democritus, 115 f.; of Aristotle, 151, 154; of Augustine, 286 f.; of Thomas, 330, 333 f.; of Eckhart, 334–337; of Clark, 504.
Irenæus, 214, 221 f., 224, 226, 232, 259, 261.
Irving, 445.
Iselin, 527.
Isidore of Sevilla, 270, 273.

Jacobi, 569, 573 ff., 588, 594, 602.
Jamblichus, 31, 215, 218, 220, 222, 226, 250.
James, 628.
Jansenists, 416.
Jaucourt, 443.
Jewish philosophy, 317.
Jesuits, 416, 434.
Judgment, Aristotle's treatment of, 135 ff.; Stoics, 207 f.; with Ramus, 361; Descartes, 394; synthetic *a priori*, how possible, 533, 538, 542; as a faculty, 561; Kant's Critique of, 559 ff.; see also Logic.
John of Brescia, 320.
John of Damascus, 271, 273.
Joachim of Floris, 319.
John of Rochelle, 344.
John of Salisbury, 276, 307, 360.
Jouffroy, 626.
Julian, 218.
Jung, 381, 397.
Justin, 214, 223 f., 237, 259.
Justin Martyr, 217.

Kant, conception of philosophy, 4; life, and development, 534–536; writings of pre-critical period, 445; of critical period, 536; his pre-critical thought, 465 f., 474 note 3, 478, 479 f., 485 f., 490; critical period, general character, 533 ff.; his Critique of Pure Reason, 537–550; of Practical Reason, 551–556; philos. of religion, 556 f.; of law, 557 f.; of history, 558 f.; Critique of Judgment, 560 f.; æsthetics, 561 ff.; teleology, 490, 565–567; influence on succeeding thought, 530, 569, 573; his doctrine of thing-in-itself criticised and transformed, 573–590. Cf. also 198, 432, 484, 632.
Kantians, 570, 575 f.
Κάθαρσις, Aristotle's doctrine of, 153 f.
Kepler, 378 f., 388, 402.
Kircher, 398.

Knowledge, problems of, see Epistemology.
Knowledge, limits of, with Socrates, 97 f.; with Locke, 468; with Hume, 476; with Kant, 546 f.
Knutzen, 444.
Köppen, 569.
Krause, 569, 571, 610.
Krug, 573, 581.
Krüger, 445.

Labruyère, 515.
Lactantius, 217.
Ladd, 628.
Lamarck, 480.
Lambert, 445, 461, 480.
Lamennais, 627, 638.
Lamettrie, 442, 455 ff., 479 f., 515, 634.
Lancelin, 522.
Lanfranc, 275.
Lange, 635.
Language, bearing on philos. studies by Sophists, 87 f., 96; by Abelard, 306; by Ramus, 361; Locke on, 451; Condillac, 478; Humboldt, 602.
Languet, 433.
Laplace, 479 f.
Larochefoucauld, 55.
Laromiguière, 626, 631.
Law, first grasped clearly by Heraclitus, 37, 50; suggested by mathematics and astronomy, Pythagoreans, 56 f.; relation to Nature, 73; philos. of, see Right.
Lazarus, 629, 638.
Leechman, 628.
Lefèvre, 354.
Leibniz, writings, 382, 444; life, 443 f.; his method, 397–399; distinction between eternal and contingent truths, 398 f.; principle of sufficient reason, 399; attitude toward mechanism and teleology, 420–425; dynamical standpoint, 421; monadology, 422 ff.; pre-established harmony, 424, 483; on innate ideas, 462–464; on knowledge of external world, 483; theodicy, 491 f.; optimism, 492; ethical principle of perfection, 506; influence on Kant, 465, 535, 538, 566; on Fries, 575; Reinhold, 576; Maimon, 578; contrasted with Fichte, 593; influence on Hegelians, 629. Cf. also 379, 483 f., 486 f., 490, 494, 501, 511, 519, 527, 583.
Leroux, 627.
Lessing, 439, 446, 496, 498 f.
Leucippus, 29 f., 42 f., 52 ff., 60, 108, 111, 128 f.
Lewes, 11, 627.
Lewis, 627.
Liberatore, 629.
Life, as principle of explanation with Ionics, 32; with Aristotle, 141; with Leibniz, 422; as limit to mechanical theory, 565; as central conception of Schelling's Philos. of Nature, 598.
Lips, 355.
Locke, leader of English Enlightenment, 439; life and writings, 440; psychology, 450 f., 453; on knowledge of external world, 467 f.; on existence of God, 468; on toleration, 487; ethics, 502 f., 513; on the state, 519; influence in France, 456 ff.; developed by Berkeley, 469; and Hume, 472; criticised by Leibniz, 462–464. Cf. also 114, 391, 404, 537.
Logic, defined, 20; Sophists, 88 ff.; Socrates, 97 f.; Plato's, or dialectic, 119 ff.; Aristotle's, 132–138; Peripatetics, 197 f.; Stoics, 198 f.; hypostatisation of logical processes by Porphyry and Proclus, 250 f.; main topic of Middle Ages, 270 f.; logical relations identified with metaphysical, 290; formal logic the only possible for empiricism, 360 f.; of Ramus, 361; terministic of Condillac, 478 f.; transcendental of Kant, 543; this attacked by Herbart, 583; metaphysical, of Hegel, 611 ff.; see also Dialectic, Realism.
Logos, doctrine of, with Heraclitus, 36 f.; Stoics, 180 f., 186; influence of Stoic doctrine on Christian, 223 f.; Philo's doctrine of, 241 f.; origin, 254.
Longinus, 218.
Lossius, 445, 461.
Lotze, 624, 630, 635 f.
Lowndes, 628.
Lucretius, 162.
Lullus, 315, 321, 397.
Luther, 356, 364 f.
Lyceum, see Peripatetic School.
Lycophron, 74 f.

Mably, 443, 523.
Macchiavelli, 382, 426 f.
Mackenzie, 628.
Mackintosh, 627.
Magnenus, 355.
Maieutics, 97.
Maignanus, 355.
Maimon, 570, 578.
Maimonides, 318 f., 321.
Maine de Biran, 626, 632 f.
Maistre, Jos. de, 626, 637.
Malebranche, 379, 381, 405, 407, 410, 416 f., 435, 486, 632
Mamiani, 629.
Man, as centre of creation and end of history, 261; as microcosm, 347, 369 ff.; reverence for, Kant's material principle, 559.

Mandeville, 441, 515 f., 524 f.
Mani and Manichæism, 239 f., 286.
Mansel, 628.
Marcianus Capella, 296.
Marcion, 221, 258.
Marcus Aurelius, 213, 216, 230.
Mariana, 382.
Marsh, 628.
Marsilius of Inghen, 315.
Marsilius of Padua, 345, 426, 432.
Martineau, H., 627.
Martineau, Jas., 628.
Materialism, of Leucippus, 43; of Democritus, 108, 109 ff.; of Epicureans, 183–186; of Stoics, 186; of Hobbes, 413; of Spinoza's adherents, 454; of Hartley, etc., 455 f.; French, 456–458, 479 ff.; culminates in the *Système de la Nature*, 481; Feuerbach, 634; recent, 634 f.
Mathematics, with Pythagoreans, 45–47, 56 f.; in Plato's system, 129; influence on modern philos., 372 f., 379, 387–389, 395–399; on Spinoza, 396, 418; the sole demonstrative science with Hume, 473; how possible, 539 ff.; see also Geometrical Method.
Matter, cosmic, of Ionics, 32; Anaximander, 33; opposed to form by Aristotle, 139 ff.; accessory cause, 144; Non-being or space with Plotinus, 246 f.; evil, 247; regarded as self-moved, etc., by Averroës, 338; identified with space by Descartes and Spinoza, 406, 410; Kant's dynamic theory of, 546; contradiction in conception of, Herbart, 584.
Maupertius, 442, 478, 489.
Maximus Conf., 274.
Maximus of Tyre, 216.
McCosh, 628.
Mechanics, created by Galileo, 388; influence on philos., 400 f.
Mechanism and mechanical view of world, Leucippus, 53; with Strato, 179; Epicurus, 183; Galileo, Descartes, Spinoza, 401; opposed by Cudworth, etc., 401 f.; reconciled with teleology by Leibniz, 420 ff.; opposed by Schelling and Goethe, 598 f.; influential in this century, 625; see also Materialism, Naturalism.
Medici, Cosmo de, 354.
Megarians, 70, 82, 89.
Meier, F., 445.
Meiners, 446.
Melancthon, 356, 359, 364, 426.
Melissus, 28, 30, 44.
Melito, 217.
Mendelssohn, 445, 478, 483, 507, 512, 521.
Menedemus, 72.
Metaphysics, origin of name, 19; grounded anew by Democritus and Plato, 104; Plato's teleological, 128; connected with logic, 133; of Aristotle, 139 ff.; Theophrastus, 178; of Stoics, 180; religious, 214 ff.; of logical genera and species, 271 ff.; of inner experience, 276 ff.; logical, of Realism, 290 ff.; of Nominalism, 296; of psychology, 322 f.; Boehme's, 374 f.; as mathematical physics, Descartes, 393; Bacon's def. of, 401; Spinoza's, 408 ff.; Leibniz, 429 ff.; Wolff, 482; Berkeley, 470; as basis for morals, 503 f.; Kant's attitude toward, 465, 478, 486, 537; of intellectual perception, 592; of the irrational, 616 ff.
Method, problem raised in Renaissance, 378, 383; of Bacon, 383; of Galileo and Kepler, 388; of Descartes, 389 ff.; of Hobbes, 389; Descartes' method misunderstood by his disciples, 395; geometrical, supreme with Spinoza, 396 f.; continued by Wolff, 482; criticised by Rüdiger and Crusius, 484 f.; exploded by Kant, 485; inadequacy of psychological, recognised by Kant, 533; critical of Kant, 533; dialectical of Fichte and Hegel, 591 f.
Metrodorus, 76.
Metrodorus the Epicurean, 162.
Michael Psellus, 342.
Milesians, 28 f., 32 ff., 48 ff.
Mill, James, 627.
Mill, J. Stuart, 627, 631.
Milton, 433.
Mind (see Spirit, Soul, Psychology), mode of consciousness, 406.
Minucius, Felix, 214, 217, 224.
Mode, all bodies and minds modes of spatiality and consciousness, Descartes, 406; infinite and finite of Spinoza, 409 f.; everything a mode of both attributes, 420.
Moderatus, 215.
Moleschott, 630.
Monad, Bruno's conception of, 371; Leibniz, 423.
Monotheism, pantheistic with Xenophanes, 34; theistic with Aristotle, 140 f.; as final form of religion, 497 f.
Montaigne, 355, 362, 376, 403.
Montesquieu, 443, 516.
"Moral sense," 509, 517.
More, Henry, 382, 402, 404, 435, 450, 503.
More, Thomas, 382, 427 ff.
Morell, 628.
Morelly, 443, 523.
Morgan, 441.
Morgan, Lloyd, 628.
Moritz, 445.

Motekallemin, 317.
Motion as basis of mediating attempts, 39; the essence of change, 43; early theories of its cause, 52 ff.; contradictions in conception of, Zeno, 55; basis of feelings with Cyrenaics, 86; of perceptions with Protagoras, 92; with Democritus, 113 f., 115 f.; with Aristotle, 147 f.; made cause of all cosmic processes by Galileo, 388, 410; conservation of, Descartes, 411.
Musonius, 216.
Mutazilin, 318.
Mysteries, 124.
Mystics and Mysticism, source in Neo-Platonism, 227; a factor of Med. philos., 266 ff., 275, 304 ff., 333, 409, 487, 583.

Natura Naturans and *Natura Naturata*, probably first used by Averroism, 336, 338; with Eckhart, 337 f.; with Bruno, 368 f.; with Spinoza, 409.
Natural science among the Greeks, 27 ff.; daughter of Humanism, 351; favoured by Nominalism, 343 f., 376; its decisive influence on modern philos., 378; how possible, Kant, 541 ff.; influence in this century, 624 f., 636 ff.
Naturalism of Strato, 179; of Arabians, 338; of Renaissance, 401 ff.; of Enlightenment, 479 ff.; see also Materialism, Mechanism.
Nature, first object of philosophy, 25, 27 f.; contrasted with statute, 73 ff.; with Democritus, 116; Plato's philos. of, 129 f.; Aristotle's, 146 ff.; Stoic doctrine of life according to, 171 f.; regarded as equivalent to law, 171; Strato's view of, 179; Epicureans' view of, 183 ff.; Stoics', 186 f.; spiritualisation of, by Plotinus, 249; by Valentinus, 254; return to, by school of Chartres, 302 f.; relation to Deity with Eckhart, 335; return to, in Renaissance, 350 f., 366; regarded as God made creatural, 368; spiritualisation of, in Renaissance, 373; despiritualised again, 401; recognised as one, 402; identified with God, Spinoza, 409; opposed to institution, 435; Kant's philos. of, 546; purposiveness of, 559 ff., 565 ff.; specification of, 566; as objectification of will, Schopenhauer, 589; Schelling's philos. of, 597 ff.; Goethe's view, 597, 599.
Nausiphanes, 165.
Necessity, mechanical, with Leucippus, 53; with Plato, 130; logical, with Aristotle, 134; natural, with Stoics, 181; denied by Epicurus, 183; two kinds, Leibniz, 399; Spinoza's, 419; subjective, Kant, 466; of evil, Leibniz, 492; logical, identified with reality, 537; of *a priori* Forms, 539 ff.; feeling of, attaching to experience, Fichte, 579; teleological, of idealism, 590; see also Materialism, Mechanism.
Negative theology, with Philo, Apologists, and Neo-Platonists, 237 f.; with Scotus Erigena, 290; of Eckhart, 335; of Bruno, 368; of Spinoza, 408.
Nekkam, Alex., 344.
Neo-Platonism, dependent on earlier Greek conceptions, 123, 157; personality and writings, 215, 218; philosophical interpretation of myths, 222; on spirit and matter, 233 ff.; on nature of God, 237 ff.; on history, 255; in Middle Ages, 268 ff.; influence on Augustine, 279 f., 286; on John Scotus, 289 ff.; on Bernard of Chartres, 294; on William of Champeaux, 295; on Schelling, 610; see also Plotinus, Proclus.
Neo-Platonists, English, of Cambridge, 302, 435, 449 f., 490 note, 502 f.
Neo-Pythagoreans, 123, 213, 215, 233, 220 f., 230 f., 233, 237.
Newton, 378, 380, 402, 421, 479, 490.
Nicolai, 445, 483, 507, 521.
Nicolas d'Oresme, 345.
Nicolaus d'Autricuria, 344.
Nicolaus Cusanus, 312, 315, 335 f., 337, 343, 345 f., 368 f., 371, 402, 405, 409, 419, 422, 548, 592.
Nicole, 381.
Nicomachus, 213, 216.
Nifo, 355, 359.
Nigidius Figulus, 215.
Nizolius, 355, 360, 376.
Nominalism, 272; its origin, 296; of Roscellinus, 296 f.; revived, 312, 342; favours study of natural science, 343 f., 376; influence on Descartes, Locke, and Hobbes, 403 f.; on Locke, 451 f., 468; on Berkeley, 452, 469; see also Terminism.
Norris, 471.
Noumena, Kant's theory of, 547 f.
νοῦς, of Anaxagoras, 41, 54; of Plotinus, 245; of Augustine, 279.
Novalis, Fr. v. Hardenberg, 571, 599.
Numbers, with Pythagoreans, 45; in the Renaissance, 372.

Occam, see William of Occam.
Occasionalism, 416 ff., 474 note 4.
Odo (Odardus) of Cambray, 295.
Oinomaos, 216.
Oken, 571, 598, 608.
Oldendorf, 382.
One (ἕν), of Xenophanes, 34 f.; with Parmenides, 38; with Neo-Pythagoreans, 237 f; with Plato, 122; Proclus, 251.
Ontological argument of Anselm, 292 f.; restated by Descartes, 393.
Ontologism, 629.
Ophites, 258.
Opinion, opposed to knowledge, 58, 95, 105; to sense perceptions, 244.
Optimism, of Bruno, 368; of Shaftesbury, 489; of Leibniz, 492; Voltaire on, 493; of Rousseau, 526.
Oratory (Fathers of), 416.
Organism, as principle with Aristotle, 141; Bonnet's theory of, 480; as "miracle," Kant, 480, 565.
Origen, 214, 216 ff., 222, 233, 235, 253 f., 261, 499.
Osiander, 356, 365.
Oswald, 442.

Paley, 441, 513, 514 f.
Panætius, 161 f., 190.
Pan-psychism, 340.
Pantheism, suggestions for in Eleaticism, 34 f., 37; Strato's, 179; of Stoics, 180; in conjunction with theism, 236; logical of Realism, 295; of Averroism, 313, 338 ff.; of Amalricans, 339; tendency of Renaissance, 358, 367 ff.; of Cartesianism, 405 ff.; and esp. Spinozism, 408 f., 419; Schelling's, 608; Feuerbach's, 631.
Paracelsus, 357, 368, 370 f., 373 f., 403.
Paralogisms of Pure Reason, 549.
Parker, 491.
Parmenides, 28 ff., 37 ff., 46, 51, 58 ff., 90, 118, 129 f.
Participation, of things in the Ideas with Plato, 120; of finite minds in God, Malebranche, 407.
Pascal, 381, 393.
Passions, ancient conception of, 165; Stoics on, 168; Descartes and Spinoza, 412–414; Hobbes, 413.
Patristics, 214.
Patrizzi, 354, 369.
Pedagogy, of Baconian doctrine, with Comenius and Rattich, 385.
Perception, contrasted with reflective thought by cosmologists, 58 ff.; Protagoras's theory of, 91 ff.; Democritus, 105, 113 ff.; Epicurean theory, 202; Stoics', 202; only of our own states, acc. to Campanella, 370; with Leibniz, 467 f.; pure, with Kant, 539 ff.; implies a synthesis, 539; feeling of reality of sensuous, Jacobi, 570.
Peregrinus Proteus, 216.
Peripatetic School, 103, 159, 161, 164, 178, 180, 229, 411.
Persius, 216.
Personality, emphasised in Hellenistic thought, 223; found in spirit, 232; Christian view of, 231; emphasised by Christian thinkers as against Arabian pan-psychism, 340; worth of, Kant, 553; conception of in Hegelian School, 633.
Pessimism, among the Cyrenaics, 87; among Stoics, 169; in Christian doctrine, 252; Swift's, 515; Rousseau's, 525; Schopenhauer's, 620 ff.
Peter Lombard, 275.
Peter of Poitiers, 275.
Petrus Aureolus, 315.
Petrus Hispanus, 315, 342.
Phædo, 72.
Phædrus, 162.
Phaleas, 74.
Pherecydes, 24, 34.
Philip, or Philippus, of Opus, 103, 123.
Philo of Larissa, 103, 161 f.
Philo of Alexandria, 214, 216, 220 ff., 227, 231, 237, 240 ff., 290, 319.
Philodemus, 162, 198, 342.
Philolaus, 29, 31, 45, 60 f., 63, 129, 215.
Philosophy, various conceptions of, 1 ff.; relation to other sciences, 5; to civilisation, 6, 13; external position, 7; share of different peoples in, 8; division of, 18 ff.; sources of, among the Greeks, 23 ff., 27 ff.; at first cosmological, 27 f.; then anthropological, and practical, 68 ff.; Aristotle's division of, 153; separating of special sciences from, 156; as wisdom for life, 157 ff.; fused with religion, 210 ff.; relation to Christianity, 224 ff.; to theology with Scholastics, 321; separation from theology, 354, 375, 389; relation of modern to religion, 399 ff.; under control of natural science, 378 ff.; as world-wisdom in Enlightenment, 437 ff.; as psychology, 447 ff.; as criticism, 532 ff.; Fichte's conception of, 579; Hegel's conception of, 611, 616; of this century, 623 ff.
Philosophy, history of, defined, 9; Hegel's view of, 10 f., 12 f.; Fischer's view of, 13; three factors in, 11–14; tasks of, 15; sources for, 15 ff.; and see also each of the periods and writers treated; division of, 21 f.
Philostratus, 215.
Phurnutus, see Cornutus.
Physico-theology, with Stoics, 195–197; Enlightenment, 489 ff.; criticised by Hume, 494 f.; Kant's early, 490; his later criticism on, 550 f.
Pico, 354, 372 f.
Pierre d'Ailly, 315, 332, 345.
Pietism, 445, 487, 583.
Pinel, 626.
Pittacus, 24.

Platner, 445.
Plato, as authority for Socrates, 71, 77, 97; as systematiser, 99; general character of philos., 101; life and writings, 102 f.; grounds metaphysics anew, 105–109; Ideas, 116 ff.; doctrine of recollection, 118; logic and dialectic, 119 f.; Idea of Good, 122; his psychology, 123 f.; ethics, 125; politics, 126 f.; on education, 127; teleology, 128; doctrine of space, 129; philos. of Nature, 129 f.; relation to Aristotle, 133, 139 ff.; on freedom, 191; influence of his dualism, 211; regarded as starting-point for natural science, 303; influence on More's *Utopia*, 428 f.; on Bacon's New Atlantis, 429; on Cambridge Platonists (see Neo-Platonists, English); on Schelling through Neo-Platonism, 610. Cf. also 184, 229, 242, 255, 420, 546.
Pleroma, of Gnostics, 239.
Pletho, 354, 358.
Plotinus, 214 f., 218, 228, 233 ff., 237 f., 244 ff., 290, 335, 367, 510.
Ploucquet, 444.
Plutarch of Chær., 175, 213, 216, 221, 231 f., 234, 239.
Plutarch of Athens, 215, 225.
Pneuma, Stoic doctrine of, 186 f.
Poiret, 381, 395.
Polemo, 103.
Politics, see State.
Polus, 75.
Polybius, 176.
Pomponatius, 359.
Pomponazzi, 355.
Pope, 447, 508.
Porphyry, 31, 215, 218, 250 f., 288.
Porta, 355.
Porter, 627.
Posidonius, 161 f., 230.
Positivism, of Epicureans, 205; influential in Renaissance, 361; of Hume, 477; of Bayle and the Ideologists, 477 ff.; of Comte, 638 f.
Presdestination, with Augustine, 284 f.; maintained by Thomas, and rejected by Scotus, 334.
Prévost, 626.
Price, 440, 503.
Priestley, 440, 455, 480, 513.
Principium individuationis, 337, 341, 595.
Principle of Contradiction, Zeno, 61; Protagoras, 88; Aristotle, 138; Leibniz, 398.
Principle of Identity, Sophists, 89 f.
Principle of Sufficient Reason, 399.
Principles, pure, of the Understanding, 545 f.
Probabilism of Sceptics, 207.
Proclus, 215, 218, 220, 222, 226, 228, 237, 250 f.
Prodicus, 69, 71, 73, 76, 88, 96.
Protagoras, 30, 60, 69 f., 74, 76, 86, 88, 91 ff., 104 f., 107, 117.
Psychology, at first materialistic, 65; advanced by the Sophists, 69; of the Cyrenaics, 86; of Protagoras, 81 ff.; of Democritus, 113–115; of Plato, 123 f.; of Aristotle, 149 f.; of Stoics, 168, 187 f., 202–204; of Epicureans, 202; of Plutarch, Origen, etc., 232; of Neo-Platonism, 234; of Augustine, 280–283; studied in the Middle Ages, 303 ff.; associational, founded by John of Salisbury, 307; metaphysical psych. of Thomas, Scotus, and Occam, 324 f.; empirical psych. of later Scholastics, 344 f.; mechanical, of Descartes and Spinoza, 413, 414; associational, of Hobbes, 413; empirical, made authority for epistemology, 446 ff.; of Locke, 450 f., 467 f.; of Berkeley, 452, 469; of Hume, 453, 472 ff.; materialistic, of Descartes' disciples, 454; of Hartley, 455; of Priestley, 455; of Lamettrie, 455 f.; sensualistic and associational, of Condillac and Ideologists, 456–459; as philosophy with Scottish School, 459 f.; rational and empirical of Wolff, 460; Lambert, 461; Leibniz, 462–464; new division of faculties, 512; rational, criticised by Kant, 549; "faculty" theory, criticised by Schulze and Herbart, 577; Herbart's, 586 f.; as a central subject in this century, 625, 627, 630; of Ideologists of this century, 631 f.; "without a soul," 635; social or comparative, 638.
Puffendorf, 382, 397, 432.
Pyrrho, 160, 163, 165 ff., 200.
Pythagoras, 24, 30 f., 215, 372.
Pythagoreans, 29 ff., 45 ff., 56 f., 60 f., 72, 106 f., 120, 131, 147, 212 f.
Pythagoreanism, 215, 402.

Qualities, primary *vs.* secondary, 117; all qualitative reduced to quantitative by Democritus, 111; this opposed by Aristotle, 148; occult displaced, 372, 402; intellectuality of, 403; primary and secondary, with Descartes and Locke, 404, 467 f.; distinction denied by Berkeley, 469.
Quantitative, the only determinations recognised by Democritus, 111; this, shifted to cosmic processes and re-asserted by Galileo, 389; and by Hobbes and Descartes, 389, 393, 404; opposed by Schelling and Goethe, 598 f.
Quesnay, 443.

Rabanus Maurus, 273.
Ramundus Lullus, see Lullus.
Ramundus of Sabunde, 316, 322.
Ramus, 355, 361.
Rationalism of Cosmologists, 60; of Plato and Democritus, 105, 108, 110; of Abelard, 300; of Descartes, 392; of Spinoza, 396, 418 f.; of Wolff, 482; of Clarke in Ethics, 504; of Bayle, 504 f.; of Kant, 540.
Realism, mediæval, 271 f.; of John Scotus, 289; tends to pantheism, 295; modified, 297; criticised by Abelard, 298; of Scotus, 341; persists in Descartes, 405; in Spinoza, 408, 419.
Reals of Herbart, 584 f.
Reason as motive-matter with Anaxagoras, 41 f.; active and passive with Aristotle, 149; Stoic doctrine of, 171 f., 175–180, 187 f., 223; opposed to revelation by Tatian, Tertullian, and others, 224 f.; Philo's doctrine, 241 f.; and faith with Abelard, 300 f.; with Albert and Thomas, 321 f.; with Scotus and Occam, 322 f.; active and passive with Averroës, 339; God as, with Malebranche, 407; Kant's criticism of, 532 ff.; in narrow sense as a faculty, 549; practical, of Kant, 551 ff.; as immediate feeling of reality of supersensuous, Jacobi, 574; system of, as subject of philos., 581; general character of, 590 f.; Fichte's portrayal of, 593–596, 605 f.; objective system of, Schelling, 597–599; æsthetic, 607 f.; Schiller's æsthetic, 600 f.; Hegel's system of, 611–615.
Recollection, Plato's doctrine of, 118 f.
Reflection, as source of ideas with Locke, 451.
Reid, 442, 459, 482, 537.
Reimarus, 445, 489, 496 f.
Reinhold, 570, 575 ff.
Relativity of knowledge, Protagorean, 92 f.; of Aristippus, 93 f.; with Sceptics, 200 ff.
Religion, relation to philos. among Cyrenaics, 86; in Hellenistic thought, 158, 210 ff.; Epicurus' attitude toward, 188; Stoics', 189; attitude of Galileo, Bacon, Hobbes, Descartes, Leibniz, 400; natural, Herbert of Cherbury, 434; Locke on toleration in, 487; natural religion in 18th century (see Deism); as postulate for morality, 496; history of, by Hume, 497; as education of human race, Lessing, 498 f.; Kant's philos. of, 556 f.; based on feeling of absolute dependence, Schleiermacher, 582; Herbart's philos. of, 585; as *Vorstellung*, Hegel, 613; as *motif* in Schelling's philos., 616; as organon for philos., 619.
Remigius, 273.
Renaissance, 349 ff.
Representation, in Leibniz's system, 422 ff.
Reuchlin, 357, 372 f.
Revelation as source of truth, 219 ff.; opposed to reason, 224 ff.; above reason, 324.
Richard of St. Victor, 275, 305.
Richard of Middletown, 314, 331, 333.
Right or law, philos. of, in Renaissance, 426–436; Macchiavelli, 426; Protestant and Catholic, 426; More, 427 f.; Grotius, 431; Hobbes, 431–435; Thomasius, 520; Kant, 557 f.; Fichte, 595 f.; Hegel, 613.
Robert Pulleyn, 275.
Robinet, 442, 481, 489.
Romagnosi, 629.
Romanes, 628.
Romantic School, 571, 603, 605, 609, 611.
Roscellinus, 274, 296 f., 298.
Rosenkranz, 629.
Rosenkrantz, 630.
Rosmini, 624, 629.
Rousseau, 432, 439, 443, 458 f., 502, 510, 519, 521, 525 f., 559.
Royce, 628.
Royer-Collard, 626.
Rüdiger, 444, 461, 484.
Ruge, 630, 634.

Saadjah Fajjumi, 318.
Sallust, 218.
St. Lambert, 443, 522, 527.
St. Martin, 459, 528, 618, 637.
St. Simon, 627, 638.
Sanchez, 355, 362, 376, 383, 403.
Saturninus, 214, 217, 239, 258.
Satyrus, 161.
Scaliger, 355.
Sceptics and Scepticism, ancient, 160, 163, 165, 170, 202, 205 f.; of Renaissance, 361, 373; in Cartesianism, 394 f.; of Enlightenment, 403, 478; Hume's so-called, 476; Schulze's, 577.
Schelling, life and writings, 571; Philos. of Nature, 597–599; Transcendental Idealism, 607; System of Identity, 608; Neo-Platonic Idealism, 609 f.; irrationalism and theosophy, 616–620. Cf. also 432, 638.
Schiller, as factor in German idealism, 530, 568; life and writings, 570; doctrine, 600–602, 604 f.; influence on Hegel, 613. Cf. also 484, 489, 507, 528.
Schlegel, 571, 591, 603, 605, 617.
Schleiermacher, 569, 572, 582 f., 603.

Schmid, Erh., 570.
Schmidt, Lor., 445.
Scholastics, -cism, 229, 266 ff.
Schopenhauer, 569, 572, 588–590, 600, 620–622.
Schoppe, 355.
Schubert, 571, 599.
Schulze (Ænesidemus), 569, 577 f.
Schwenckfeld, 356, 365.
Science, as equivalent to philosophy, 2; created by Greeks, 23; its essential nature, 95; see Philosophy, Natural Science.
Scotism, see Duns Scotus.
Scottish School, 442, 459, 482, 510, 627 f.
Scotus Erigena, see Erigena.
Search, 440.
Seelye, 628.
Self, a "bundle of perceptions," Hume, 474; contradiction involved in conception of, Herbart, 584; as presupposition for consciousness, Ulrici, 633.
Semler, 445, 498, 523.
Seneca, 213, 215, 230.
Sennert, 355, 371, 406.
Sensation, view of Cosmologists, 64 f.; of Sophists, 91; of Democritus, 112 f.; of Aristotle, 149 f.; Descartes on, 414; Fichte, 593; see also Sensibility, Sensualism, Perception, Psychology.
Sensibility, Leibniz' view of, 463; space and time as Forms of, with Kant, 463 f.; faculty of receptivity, 481; separation of from understanding opposed, 576.
Sensualism, of Protagoras, 95; of Cynics, 96; of Stoics and Epicureans, 202 f.; basis for orthodoxy, 225; as a consequence of Nominalism, 297; Campanella's, 377; of Hobbes, 413, 449; of the Enlightenment, 439, 456 ff.; in ethics, 514 f.; "supranatural," of Jacobi, 575.
Sermonism, 272, 298.
Servetus, 402.
Seven Wise Men, 24.
Sextians, 161, 163.
Shaftesbury, 441, 488 f., 501, 508 f.; 510, 515, 523, 537.
Sidgwick, 627.
Sidney, 433.
Simon of Tournay, 320.
Simplicius, 31 f., 219, 339.
Smith, 441, 517 f., 524.
Socialism, 627; see also State.
Socinianism, 487.
Socrates, general character of his teaching, 69 f.; life, 71; ethical doctrine, 76–82; theory of knowledge, 94–98; influence on Plato, 101 f., 107 f., 116, 118 f.; doctrine of freedom, 191. Cf. also Socratic Schools.
Socratic Schools, 70 ff., 82 ff.
Solger, 571, 611.
Solipsism, 471.
Solon, 24, 34.
Sophists, 25 f., 67 ff., 73 ff., 88 ff., 221.
Sophocles, 74.
Sorbière, 355.
Sotion, 161, 163, 215.
Soul (see also Psychology, Self), first conceived as moving force, 62 ff.; with Democritus, consists of atoms, 113; its twofold aspect with Plato, 123 f.; immortality of, with Plato, 124; three souls with Aristotle, 149 f.; Stoic view of, 187 f.; Epicurean, 188; conception analysed by Alexandrian thought, 232; contrasted with spirit and vital force, 232 f.; divided into higher and lower by Plotinus, 246; unity of, with Augustine, 278; as monad, Leibniz, 424; a blank tablet, Locke, 451; with Berkeley, see Spirit; with Hume, see "Self"; substantiality of, criticised by Kant, 549; immortality of, in Hegelian School, 633.
Sozzini (Lelio and Fausti), 356.
Space, with Parmenides = Non-being, 37; exists, Leucippus, 42; with Plato = Non-being, 129; accessory cause of world, 129, 130; mode of ideation with Hobbes, 404; space-filling quality or extension, one of the two attributes of reality, Descartes, 405; and Spinoza, 410; a product of substance or order of co-existence, Leibniz, 421 f.; pure Form of sensibility with Kant, 463 f., 539–541; product of psychical mechanism, Herbart, 585; as *principium individuationis*, Schopenhauer, 589.
Species (logical), with Plato, see Ideas; with Aristotle, 142; in Middle Ages, see Universals.
Spencer, 627, 640.
Spener, 445, 487, 583.
Speusippus, 103, 123, 164, 243.
Spinola, 486.
Spinoza, 379; life, writings, 381; geometrical method, 396; attitude toward religion, 400, 428, 433, 495; toward teleology, 401; doctrine of substance, 407 f.; mysticism and pantheism, 409; modes, 409; causality, 418; parallelism of attributes, 419; on the emotions, 412; determinism, 413; ethics, 414, 434 f.; as one centre of German idealism, 568 f., 580, 582, 587, 597; esp. of Schelling's, 608 f. Cf. also 391, 403, 410 f., 422, 453, 480, 498, 548, 586.
Spirit, not equivalent to immaterial with Plato, 118; pure Form with Aristotle, 145; opposed to matter by later Stoics, 230; by Apologists, 231 f.; by Alexandrian thought, 231–235; made equivalent to immaterial, 231; contrasted with soul, 232 f.; the only substance with Berkeley, 470; Hegel's objective, 613; absolute, 615.
Spurzheim, 626.
State: Cynic attitude toward, 84 f.; Cyrenaic, 86; Plato's doctrine of, 126; Aristotle's, 152 f.; Epicurean doctrine of, 173 f.; Stoics, 173–177; Thomas on, 326 f.; Dante, 327; Occam, 328; Macchiavelli, 426; Protestant and Catholic theories, 426 f., 433 f.; Spinoza, 426, 434 f.; More, 427–429; Bacon, 429; socialistic, of Campanella, 430; contract theory of, Hobbes and others, 432 f., 434, 518 f.; Rousseau, 519; Enlightenment theory of, 520 ff.; Kant, 558; Fichte, 596, 606; Hegel, 613.
Steffens, 571, 599.
Steinthal, 629, 638.
Stewart, 442.
Stilpo, 71, 90.
Stoics and Stoicism, general, 157, 159; personality and writings, 162; ethics, 164 ff., 167 ff., 171 ff.; view of society, 175; view of Nature, 180 ff.; theory of knowledge, 202 ff., 207 ff. Cf. also 210 f., 221, 223, 230, 394, 402.
Strato, 159, 161, 179, 180, 199, 338.
Strauss, 630, 635.
Strümpell, 629.
Sturm, Joh., 361.
Sturm, J. Chr., 397.
Suarez, 355, 363.
Sublime, Burke on, 511; Kant, 563 f.
Substance, two elements in first conception of, 35 f.; Aristotle's conception, 143; Stoic, matter, 199; category of, not applicable to God, Augustine, 279 f.; acquires a new content in Renaissance, 399 ff.; Cartesian dualism of, 404 ff.; God as sole, 405, 410 f.; finite substances become modes, 404; unchangeable existence with Spinoza, 408 f., 418; substance becomes force with Leibniz, 421; unknowable, Locke, 468; no corporeal substances, spirit the sole, Berkeley, 469 f.; idea of, due to association, Hume, 473 f.; category of, given a new meaning by Fichte, 595.
Sulzer, 475, 511 f.
Summists, 275, 313.
Suso, 314.
Suspense, of judgment, among Sceptics, 167, 202. Cf. 394.
Süssmilch, 527.
Swift, 515.
Syllogism, Aristotle's doctrine of, 135; criticised by Sceptics, 201; regarded as unfruitful in the Renaissance, 360.
Sympathy, with Hume and Smith, 517 f.; Schopenhauer, 621.
Synteresis, 333.
Synthesis, Neo-Platonist doctrine of, 234; Kant's conception of, 538 and note 3; his logic of, 543; his practical synthesis, 551; of the pure and practical reason, 561.
Synthetism, of Krug, 581.
Syrianus, 218.
Système de la Nature, 443, 458, 481, 493.

Tapparelli, 629.
Tatian, 214, 217, 224.
Tauler, 314.
Taurellus, 356, 374.
Teleology, of Anaxagoras, 42, 54; of Socrates, 98; Plato, 128; Aristotle, 144 ff., 178; rejected by Strato, 179; maintained by Stoics, 181 f., 195 ff.; opposed by Epicureans, 182 f.; of history, among Christian thinkers, 260 ff.; of Nature and history with Thomas, 327; rejected by Descartes, Bacon, and Spinoza, 401; of Leibniz, 420–425, 491 f.; æsthetic of Shaftesbury, 489; utilitarian of Reimarus and Wolff, 496; rejected by Bayle and Holbach, 493 f.; early, of Kant, 490; later, 559 ff.; as principle in idealism, 590.
Teles, 216.
Telesio, 356, 376, 383.
Terminism, of Occam, 325, 342; of Renaissance, 360 f., 376; influence on Descartes, Locke, and Bacon, 403 f., 448; of Hobbes, 448; of Locke, 468; see also Nominalism.
Tertullian, 214, 217, 221 f., 224 f.
Tetens, 445, 512.
Thales, 24, 27, 29, 32 f., 48 f.
Themistius, 218.
Theodicy, of Stoics, 196 f.; of Plotinus, 247; Patristic, 252 f.; of Augustine, 280, 283 f.; of Leibniz, 491 f.; see also Teleology.
Theodoric of Chartres, 294, 302.
Theodorus, 70, 86 f.
Theology, natural and revealed, 321 f.; theol., separated from philosophy as "practical," by Scotus, 333; separation completed in Renaissance, 354, 375, 389; same task as philosophy, 616.
Theophilus, 217.
Theophrastus, 103, 159, 161, 164, 178 f., 198.

Thing-in-itself, with Kant, 547; criticised by Jacobi, 573; by Reinhold, 575 f.; by Schulze, 577; conception of, modified by Maimon, 578; replaced by Beck, with "consciousness" in general, 579; coincides with Spinoza's God, Schleiermacher, 582; idealistically resolved by Fichte, 579; re-shaped pluratistically by Herbart, 583 ff.; found in the will by Schopenhauer, 588 f.
Thomæus, 359.
Thomas Aquinas and Thomism, as systematiser, 311; life and writings, 313; on faith and reason, 321; psychology, 324; doctrine of the state, 326 f.; on relation between will and intellect, 328 ff.; determinism, 330; God and the good, 332; ethics, 333; on problem of individuality, 340 f.; opposed by empiricism, 344 f., 402; by Cartesians, 416; by Crusius, 485. Cf. also 299, 487, 492.
Thomasius, 432, 444, 506, 520 f.
Thought, opposed to perception by Cosmologists, 58 ff.; by Plato and Democritus, 105; as "attribute" with Spinoza, see Consciousness.
Thrasyllus, 162, 216.
Thrasymachus, 75 f.
Thurot, 626.
Tiedemann, 10, 444.
Timon, 160, 167, 200.
Tindal, 441, 496.
Toland, 441, 488, 493, 523.
Tooke, 440.
Tracy, Destutt de, 442, 457, 631.
Traditionalism, French, 626, 637.
Trendelenburg, 629.
Tropes of Ænesidemus, 200; of Agrippa, 201.
Truth (see Epistemology), twofold, 320 ff., 494.
Truths, Leibniz on necessary and contingent, 398 f., 425.
Tschirnhausen, 382, 391.
Tucker, 440.
Turgot, 443.
Twofold truth, doctrine of, 320 ff., 494.

Ulrici, 629, 633.
Understanding, differs from sensibility by distinctness of its ideas with Leibniz, 463; faculty of spontaneity with Kant, 486; Forms of synthesis of, 542; prescribes laws to Nature, 542; intuitive, 567; separation of from sensibility, opposed by Kant's critics, 576; principles of the, opposed by Fichte, Hegel, *et al.*, 591 f.
Universals (see alse Realism, Nominalism and Conceptionalism), Aristotle's view, 133; mediæval controversy over, 287 ff.; Abelard's view, 299; Nizolius, 360 f.
Universe (see World and Nature), recognised as homogeneous, 402.
Utilitarianism, 501, 513, 627.
Utility as criterion for state, history, etc., 207.
Utopia, More's, 427–429.

Valentinus, 214, 217, 239, 243, 254.
Valla, 355, 360.
Van Helmont, 403.
Vanini, 369.
Varro, 161, 163.
Vayer, 355.
Veitch, 628.
Ventura, 629.
Vernais, Nicoletto, 355.
Vico, 526, 528.
Victorines, 275, 323, 414.
Vincent of Beauvais, 313, 344.
Vinci, Leonardo da, 387, 401.
Virtualism of Bouterwek, 588.
Virtue, ambiguity of the term, 78; consists in knowledge, Socrates, 78 ff.; necessarily results in happiness, 81; the sole good, Antisthenes, 83; is ability for enjoyment, Aristippus, 85; is knowledge, 164; is suspense of judgment, Sceptics, 167; is sole good for Stoics, 168; arises only through the *logos*, Philo, 227; as stimulated by beauty, Plotinus, 250; relation to happiness, Kant, 555 f.; see also Ethics.
Virtues, the four cardinal, of Plato, 125 f.; ethical and dianoëtic of Aristotle, 151, 154; these subordinated to the Christian by Augustine, 287; dianoëtic above the practical with Thomas, 333. Cf. Ethics.
Vischer, 629.
Vives, 355, 360 f., 376, 383.
Vogt, 630, 634.
Void (see also Space), with Parmenides, 38; with Gnostics, 239.
Völkerpsychologie, 629, 638.
Volney, 443, 521.
Voltaire, 439, 442, 456, 480, 489, 493, 495 f., 505, 521, 523.

Wagner, 630, 634.
Walter of Montagne, 274.
Ward, 628.
Wedgwood, 628.
Weigel, Erhard, 397.
Weigel, Valentine, 356, 366, 370, 374, 397.
Weiss, 445, 513.
Weisse, 629.
Whewell, 628.
Will (see also Freedom) with Augustine, 281 f.; relation to intellect, 328 ff.; recognised as factor in judgment by Descartes, 394; the only absolute good, 551; Bouterwek on, 587; as thing-in-itself and source of misery, Schopenhauer, 588 f., 620 ff.; as first principle, Maine de Biran, 632.
William of Auvergne, 313, 332, 340.
William of Champeaux, 272, 274, 294, 298.
William of Conches, 274, 302 f., 357.
William Durandus, 315.
William de la Marre, 314.
William of Occam, 312, 315, 322 f., 325, 328, 330, 342 ff., 376, 427, 432.
Winkler, 382.
Wise man, Stoic ideal of, 169, 171 ff.; Epicurean, 166, 170 f.
Wolff, Chr., life and writings, 444; aims to systematise the thought of Leibniz, 460 f.; method and metaphysics, 482; attacked, 478, 484 f.; attitude toward religion, 487; teleology, 490; ethics, 505 ff.; on the state, 519 f. Cf. also 397, 432, 439, 478, 520, 522.
Wolff, P., 454.
Wollaston, 441, 496, 504.
Wordsworth, 628.
World, early Greek views of, 31 ff.; two worlds of Pythagoreans, 47; origin of, according to early Greeks, 48 ff.; plurality of, 49; a process, Heraclitus, 50; incorporeal, of Plato, 117 f.; origin of, with Plato, 130; Aristotle's view of, 147 f.; Epicurus, 184; as macrocosm, Stoics, 187; Bruno and Boehme, 366 ff.; product of spirit, 235; relation of to God, 235 ff.; eternal, of Origen, 254; intelligible, 290; Copernican theory of, 369; intelligible in God, Malebranche, 417; the best, Leibniz, 491 f.; as Idea with Kant, 549 f.
Worth, conceptions of, introduced into theoretical consideration by Anaxagoras, 42; by Anaximander, 49; by Pythagoreans, 57; by Plato and Democritus, 106; anthropomorphism of, rejected by Spinoza, 401; by *Système de la Nature*, 493; see also Teleology.

Xeniades, 84.
Xenocrates, 103, 123, 164, 243.
Xenophanes, 28, 30, 34 ff., 46, 146.
Xenophon, 71, 77 ff., 88, 97, 182.

Zabarella, 355.
Zeller, 629.
Zeno of Sidon, 162.
Zeno the Stoic, 28, 30, 44, 55 f., 61, 89 ff., 159, 162, 168, 175.
Zimara, 355.
Zimmermann, 629.
Zorzi, 357.
Zwingli, 356.

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