C H A P T E R I

INTRODUCTION

C H A P T E R I

INTRODUCTION

It is now clear that the process of perceiving has been brought into relation to the entire personality of the perceiver. A hundred years of research in physiological optics has laid a sound foundation for the understanding of the main tools by which man makes contact with his environments. Earlier, perception has been understood as a response of living organisms to their environments by way of focused or integrative recognition of what the environment offers. In the meantime, personality study has been using the language and the concepts of the clinic. For developing tools many efforts were made by psychiatry of early days. With the advances of more and more sensitive instruments, such as projective tests, it has now become evident that experimental and even quantitative

procedures in personality evaluation are feasible and new research studies have begun to appear in books and journals(158). On glance at journals of psychology of last two decades one can find numerous researches published to study the relation between the two vastly developed fields, namely, perception and personality.

It has long been recognised that differences in perceptual capacities among lower animals are always related to differences in the procedures of adjustment. Some of the recent studies have recognized the role of perceptual capacities in the process of human adjustment. If perception is understood in this sense, i.e., in terms of its adaptational value, it can be the proper field of study for the establishment of a lawful relationship between two broad fields namely, perception and personality. Some suggestions or hints for this kind of study were given by early clinicians, but the systematic study of this sort has only recently been undertaken and a few investigators have opened a new way of studying personality through perception. Personality, it should be noted, is to be understood in terms of the overall psychological adjustment of the individual and perception

can be considered as forming a part of the overall psychological organisation. Because perceptual capacities enable the individual to come in terms with the environment by way of adjusting to it, perception can be studied in the context of personality(117),(3),(12),(158),(17).

The interconnection between these two vast regions, personality study and the psychology of perception, was at first a tiny filament represented in studies of the way in which individual differences in perception can be understood and measured, with the clinicians providing most of the suggestions. Even during the second world war the idea of looking at individuality in perceptual process was still something of a novelty; and such of these studies that were reported were concerned rather largely with short range practical issues. The broader problems of personality structure as a whole in its relation to the entire integrative process of making perceptual contact with the environment was just beginning to appear on the horizon(158).

1.2. Some Problems of Theory and Method

Comparative psychologists have long recognised that

the perceptual capacities of each species play a significant part in determining the characteristic manner in which its members adjust to their environment. For a number of lower forms, the specific ways in which the perceptual endowments of the organism contribute to the satisfaction of needs on an unlearned (instinctual) basis have been carefully worked out; and difference in adjustment procedures among species have been shown to be related, in part, to differences in perceptual capacities. (Maier and Schneirla, 1935). Although adjustment processes in man are vastly more complex than in any infrahuman form, man's present perceptual capacities have developed through a long evolution in which selection of these functions have been determined on the basis of their adaptational value.

This broad scheme of viewing perception in its adaptational aspect has been widely applied, particularly in the thinking of comparative psychologists. Now through the recent studies of perception-personality relationship(23), (25),(27),(91),(94),(102),(120),(147),(146), it is being extended to the more complex adjustments involved in the socialization process in man. Such studies have been attempting to establish, in a carefully controlled way,

some of the specific relations that exist between perception and the overall adjustment of the individual, relations that often have been noted in a more impressionistic way by clinical psychologists and even by laymen. Broadly stated, these studies have been demonstrating that an individual's perceptual capacities form the part of the fund of resources he utilizes in the development and maintenance of his techniques for coping;and moreover, that the pattern of adjustment worked out by a person helps to determine the nature of his perception, in the sense of producing characteristic ways of perceiving. Perception thus contributes to adjustment and in turn reflects that adjustment(117).

Although these recent studies have been 'person-centered' in their approach to perception, in the sense of seeking to relate particular features of perception to other psychological characteristics of the perceiver, they have used a diversity of approaches, as may be seen in two recent symposia(24)(12). Some have studied the influence of induced motivational states on the organisation of ambiguous perceptual materials(94). Others have been

concerned with relative speed of recognition of neutral and economically significant materials[124][102][92]. Still others have sought out broad features of perception, manifested in diverse situations, and have attempted to relate people's characteristics ways of perceiving to their established coping techniques[30][82]. Furthermore, some of these studies have started with well-worked out conceptions of personality, and have been concerned with the way in which needs, feelings and coping procedures are expressed in perception, whereas others have started with observations of perceptual process and sought the determinants of particular features of these processes in overall psychological structure.

The great variety of approaches to what is essentially the same problem has served, as always in any scientific efforts, to reveal many of its aspects in a very short time. Yet we must recognize that only a beginning has been made in working out the relation between personality and perception. For one thing, only a very limited number of perceptual situations have been submitted to experimental study. For another, some of the reported results, before they can be accepted as valid, must be checked under

conditions that are more carefully controlled than those under which they were obtained.

The recent work in perception is certainly important for what it is doing to provide a fuller picture of the nature of perceiving, but it is just as important for its contribution to an improved understanding of man's essential psychological organisation. In particular, it has pointed to the necessity of regarding the individual, in his psychological functioning, as a closely integrated system, the parts of which can be fully understood only within the setting of the whole. If we designate the overall psychological organisation of the individual as his 'personality', then personality is an essential context for considering perception, learning, thinking, reactivity and so forth. Moreover, full account of personality must include information about these processes. In describing the dynamics of a given individual's psychological functioning we of course take note of motivational and emotional characteristics. But information about his perception, his thinking and his social attitudes is also essential to an account of the nature and effectiveness of

his adjustment. Perception and personality are not separate processes of equal status in the organism; rather, personality subsumes perception - as well as thinking, learning, and so forth - so that an account of personality must in part be given in perceptual terms.(158)(117)

The nature of the individual's perception is influenced by personal factors as well as by aspects of the structure of the situation used. In the original Gestalt formulations about perception, the contribution of personal factors to the organisation of perceptual experiences received very little attention. Although Wertheimer(152) did include 'set and 'past experience' along with 'proximity', 'similarity', ' 'direction', and so forth in his list of organizing factors in perception. Most of the research done under Gestalt influence was almost exclusively concerned with the role of field factors. Field factors form one part of the important determinents of perception. Many investigators used field factors and carried out successful studies. Recent studies not only are providing these organizing factors to be more important than what was conceived by Wertheimer, but are pointing to the need for a broadened view of the perceptual act. Most significantly they are demonstrating that each person's pattern of adjustment

carries with it characteristic and enducing 'sets', which influence his particular way of organising the field. It is interesting that some Gestalt studies, such as Gottschaldt's investigation of embedded figure and Kleint's investigation of the E and A effects did show that transient, experimentally induced sets or attitudes could influence the subject's perception.

Witkin's result(158) supported that people's past experiences play a significant part in their present perceptions. In other words, Witkin's study points out to the importance of the individual's total available experience as it contributes to his present pattern of adjustment, rather than his specific set of experiences with particular situations. Further evidence of the same kind was obtained in the study recently conducted by Gruen, A.(57). He found that for the most part, the performances of a group of professional dancers on space orient tests were not significantly different from those of Witkin's college students, although there was a tendency toward somewhat greater independence of the field; and, moreover, that there was no relation between amount of dancing experience and nature of perceptual performance.

To summarize, we may say that the explanation of the organized character of perceptual experience lies neither in the structure of the field alone nor in personal characteristics of the perceiver alone, but in both. To understand perception we must study the act of perceiving itself, and therein discover how factors from each combine to determine a given perceptual outcome. Our approach to perception must be based on the fact that here, as in all psychological functioning, we are concerned with an active, integrated, purposeful agent - the person equipped with characteristic ways of coping in all situations to which he must adjust, and operating with relation to a field of a particular structure. What, and how, he perceives depends on his distinctive coping mechanisms - together with his current motivations - and also on the nature of the real world with which he must deal at the moment.

Some other considerations need to be kept in mind in current discussions of the parts played by field and personal factors in perception. Some studies that have claimed to provide for the roleof personal factors in perception have in point of fact shown how these factors operate in memory. These studies required the subject to reproduce in some way

materials that were presented to him earlier and were no longer in view. Moreover, the task of reproduction was made difficult by the use of relatively unstructured material, which provided a few clues for recall. It is not surprising that under such conditions experimentally induced cats should have played a decisive part in determining the nature of what was reproduced. Nor is it surprising that, as has been found in such studies, when the material to be reproduced remained in view, those sets or other subjective influences played little if any role in the reproduction. We may ask whether results of studies designed in this fashion may really be taken as convincing evidence that subjective factors are important determinants of perception. The study of Bluner, Postman and Rodrigues[29] is representative of this kind of effort.

Another point for discussion is that in evaluating the general importance of personal factors in perception, we must be sure to consider evidence from a variety of perceptual situations. Perception of 'physical' properties admits of less individual variation than perception of the more complex social features of a field. In social situations, there is wider scope for organization by the perceiver and greater range of individual variation in mode of perceiving.

Although the more complex nature of social situations and the perceiver's greater involvement in them cause personal factors to play a larger role in the way they are perceived, the degree of complexity of the presented stimulus material is surely important in both; and personal factors enter not only into the perception of complex social situations, but into that of the physical properties of a situation also.

These considerations are important in the current discussion of the role of personal factors in perception, because it is possible that a pre-occupation with one or another kind of perceptual situation may influence the theoretical position taken toward the role of these factors.

Some of the findings of recent studies of perception-personality inter-relations have important methodological implications. Two of these are especially significant - (1). It has been shown that an individual's perception is influenced by other aspects of his psychological make-up; and this is undoubtedly true also of his thinking, his learning, his pattern of intelligence, his social attributes, his reactivity and so forth. It follows that in designing studies of perception, these other aspects must be considered as relevant variables, and taken fully into account, if an adequate understanding of the process is to be achieved.

(2) Each person has characteristic modes of perceiving, which contribute to ego-enhancement and ego-defence, and which are also representative of his overall pattern of adjustment. Again, the same is undoubtedly true of each person's learning and thinking and social attitudes.

Besides this, other aspects of the individual's personality make-up plays a part in determining what is perceived. These other aspects should be brought under laboratory control. Perception is a process which is influenced by many variables, some of them are quite obvious, while others are very subtle. In order to study perception in the laboratory, both clinical psychologists and experimental psychologists should collaborate. Broadly speaking, experimental psychology represents a method which can be applied even to the field of clinical psychology. Experimental psychologists have always neglected problems which concern the clinician. Experimental psychology, as it is generally thought, is not restricted to studying a few problems which form the so-called field of experimental psychology. It should now be recognized by the experimental psychologists that their outlook must be broadened to study problems in other fields by applying the experimental method. The concepts developed by clinicians must be defined properly and then they shall be used in further study by applying the experimental method.

Sometimes the methods used for studying one specific problem are the ones which are widely used to study many others, and no consideration is given to the requirements of the present specific problem. The method to be used should always be decided upon by considering the requirements of the specific problem under study. Many studies have not been followed up not because general conclusions would be supported, but because of the fear that the new methods and new situations may alter the conclusions already obtained. A more flexible attitude towards selecting the method will definitely result in better knowledge. The experimental method, though it is more accurate because it permits the study of various factors under strictly controlled conditions, cannot be successfully applied to all situations. The fields of perception and personality often demand the use of the observational rather than the experimental method. The experimental method should be preferred, as far as possible, to the observational method as it permits the study very accurately and supplies information about each variable. Personality is a closely integrated system the aspects of which can be defined and hence can be subjected to experimental analysis. Moreover, the findings about a particular aspect can be generalised to other aspects as well, because the aspect studied forms a part of the

total system. It can be shown, for example, that a characteristic way of perceiving is related to certain needs and values.

Thus, the study of the personality - perception relationship requires that both should be measured by well standardized tests. Secondly, the stimulus situations must be carefully selected. It should also be remembered that ego-defensive factors largely determine what we perceive in some situations and not in others. As far as possible, the use of highly ambiguous situations should be avoided as the differences in perception in such situations do not correspond to differences in personality along a single dimension. As far as possible, the experimental method should be preferred to any other method as it permits to study the influence of each variable under controlled conditions. The field of the relationship between personality and perception is still unexplored; and hence, more and more experimental work remains to be done. This kind of investigation will definitely result in better understanding of the nature of personality through perception(117)(158)

1.3. Individual Differences in Perception

Two individuals are never equal in their physical and psychological capacity. It has been accepted by all that there are always individual differences in all the spheres. Person's perception is not an exception to this. There are bound to be differences in perception. Because perception means interpretation of sensation with past experience, naturally, people have different experiences; they will perceive the same object in different ways. For example, a hungry person perceives an object as food and another person may perceive the same object as stone. Similarly, when students attend a lecture, some will perceive it as good or stimulating and others may feel bored or bad. From this, we can say that what one perceives depends on subjective factors; but sometimes some external factors also influence, that is, the nature of object, size, intensity, novelty, similarity, proximity and so on. In short, we can say that there are always individual differences in perception. Perception differs from person to person.(10)

1.4. Individual Differences in Personality

Almost all persons have keen interest in studying personality. However, persons study personality not for one

purpose but for different purposes or reasons. Sometimes people study personality as an area of knowledge, the pursuit of which provides its own satisfaction in increasing their fund of knowledge and boundaries of thought. Sometimes they study personality because they seek information about themselves. They may seek reasons for their behaviour or advice that willreduce unhappiness about themselves, and still others have the same interests in a more generalized form, as an expression of their concern about the human condition and its nature. People also study personality to find the individual differences.

One hardly meets with one and the same type of personality in two persons. Though they may be equal in their physical appearance, their traits are not the same. One may be orthodox and another may be progressive; one may be introvert the other may be extrovert. In short, personality of individuals differs from person to person, society to society and it also differs from culture to culture. While going through psychological journals of the last two or three decades, we can find a number of researches studying individual differences in personality(56)(63).

1.5. Relationship between the Individual Differences in Perception and Personality

Perception is built up from experience and since experience varies, perception will also very. Two persons may have the same sense organs and they may be equally active, yet they seldom form the same impressions.They attend to different aspects, interpret them in their own way in the light of their own experience and observe different things. The child whose experience is very scant probably receives impressions quite different from what an adult gets.(9)(10).

It is clear that situations or ideas which are trumatic for one person may not be trumatic for others. That is to say, situation to which some of us react with great sensitivity may arise little or no sensitivity in others. The difference between two reactions is to be found in the difference in the life-history of the two individuals(129).

Floyed Allport states that personality traits may be considered as so many important dimensions in which people may be found differing(137). An individual's personality is his unique patterns of traits. It is this that makes individuals differ from each other(69).

The unique personality is subject to general laws of behaviour. Uniqueness derives in part from the particular combination of efforts wrapped up in one organism. Another source of uniqueness is the pattern of relation among the parts(137). Even though each person is whole, there is a relationship between some traits and differences in other traits. This type of combination of traits, in one person makes him differ from another group.

Perception determines responses. Response is the behaviour given to stimulus. Because perception varies in each person, the response or behaviour or personality varies. The development of personality will be represented as a source of developing distinctive ways of perceiving and dealing with objects. Such development of personality differs from person to person(129).

1.6. Relationship Between Personality and Perception

The personality and perceptual organisation are intimately related. The personality theory cannot be differentiated from perceptual theory. Both are inter-dependent. Personality is considered to be a term identifying an organised process including perceptual and response systems, which determine the perceived uniqueness

of a particular individual. Since perception determines response, it is held that the process of developing personality depends on perception. Perception determines what goal subjects are acceptable. We can treat the process of personality formation as a process of learning to perceive objects, persons and situations as attractive or threatening. The same physical object may have positive value for one person, negative for another.

1.7. Perceptual Process as Basic to an Understanding of Complex Behaviour

The study of perceptual activity provides a basic approach to an understanding of personality and interpersonal relations. Perceptual activity supplies the materials from which the individual constructs his own personally meaningful environment. The personality-perception relationship may be understood by the factors which influence the individual's perceptual activities, and also the role of perceptual constructs in unconscious processes, behaviour pathology and psychotherapy.

An individual's perceptual activity must be fabricated from his current organization of personally meaningful and significant experiences. Some investigators have studied identifying the traits underlying individual differences in

behaviour. Others have studied individual differences in perceiving.

Each individual begins with certain physical structures, including the receptor, central and effector nervous systems as well as the skeletal, respiratory, digestive and other systems. These several part systems in unitary organization constitute the more important structures involved in perception. The selective manner in which these part-systems are utilized in perception, however, is largely determined by the unique interaction between the individual and the cultural media which he has passed through and of which he is a part at present. Thus, the way one gets reality is contingent not only on the capacity of his given physical structure for detecting stimulus configurations and integrating information about stimuli, but also on modifications in the use of the structure which derive from the impact of experience(12).

1.8. Personality Dynamic and Interpersonal Perception

The interdependence of personality dynamics and perceptual process is a well established fact. Personality is the total of a person in his dynamic reciprocity with others. Interpersonal process, thus, constitutes an important dimension of the total personality organization, and is continuous and configuous with it. Personality organization has a directional

tendency, a rhythm, emanating from the patterns of motives, emotions and sentiments. Both motives and emotions mobilize the total personality organization and give it both form and flow. The form is not something permanently fixed, but rather, a process of forming. As Kelman remarks, form as a sequence of changing patternings is process. Process has attributions of being rhythmic and phasic and having direction. The pattern of process may be naturally described as integrating. The sequence is integrating, disintegrating and reintegrating. The patterns of interpersonal organizations also change. The different relationship represent different combinations of needs,motives, emotions, sentiments and values, which may vary in intensity and potensity. The hierarchic organization of the underlying factors is relative to time, place and persons involved. And as the interpersonal processes flow in time, they show different patterns of warming up, a slowing down, peaks, pauses and new themes and tunes(98).

1.9. The Personal World Through Perception

Perception is a key site for the study of individual organization. The work of Amer and Centril, which comes from the boldly conceived functionalism of Von Helmhaltz, the facts amassed by Hilgard, the pioneer efforts of Murphy, Bruner and

their associates and of E.Brunswik provide evidence enough that purposes, aims, intentions suffuse the very act of perceiving. All of thisw work challenges the idea of 'internal requiredness' or autochthony in the stimulus field of 'field structures', which are so compelling as to have a predestined and universal effect independent of personal intent. It has also helped to bury the older conception of an autonomous perceptual system which is capable of study apart from the larger context of the total system of the person, an idea born out of a myopia to personality theory. Clinical observation has certainly helped at this burial. Perception is the point of reality context, the door to reality appraisal. But to pile upon demonstration of purposiveness in perception is not enough, nor even to show the different qualities and distortions of percepts, or of 'hypotheses' and of 'subception' and to trace these needs or values. This gets us no nearer to a theory of personalities, for it speaks still of the nature of perception - how it is capable of being influenced, that it can serve purposes. Our sight must go beyond perception itself to the different requirements, demands, and claims of personality structures (egos)[82].

Requirements for a Personality Theory of Perception :

The touchstone of any personality theory is how well it accounts for differences among people. In meeting this test, it is not enough to note differences, to classify contents and responses. Another step is necessary, that is, the theory should give us principles-dimensions-which make variations meaningful and point to ego controls of which the one variation, is only an instance. If factors outside a person affect his responses, it is the dealing with them by his singular filtering processes, not the effects themselves, to which we should point.

.. Generalization about personality is always vertical; it contrasts with horizontal, cross-person, and system-absent generalization, so common to social psychological thinking. The horizontal approach levels people and considers only the uniform or 'general' effects of a situation. Its typical focus is upon what is seen - the content of a percept - rather than upon how it is seen - the personal which frames it. It ignores the 'vectors' of personality organization, which direct the response and reduce the authority of the stimulus field. This approach does not typify only the classical theories of autochthonous perception, but has carried over to most current functional theories. Even an outlook, so purposivistic as Amer's speaks of the 'purpose', is an act of perceiving as if it were inevitable to the particular situation and invariant

from person to person. For him, 'purposes' vary with the situation, not with the person. Amer's approach and most other functional theories of perception are as yet only starting point for theories of personality.

There are two questions which require to be answered well. For studying perception, what should be the structure of personality, and how can one best take systematic account of individual differences in perception so that they become data for a personality theory ?

Most personality theories treat the appraisal and mastery of reality. This function of reality testing mediates between inner demands and outer imperatives, the placating formula which a person develops - his equilibrating mechanisms - and his ego-control system. It is this that perception can tell us most about. All theories of adaptation assume in one way or another that functioning is directed to resolve tension and to reach an equilibrium between the inner and the outer, and perception helps to accomplish this. But it is not solely a perceptual affair, for all the part-systems of response-perception,motor-processes, thinking - are put to use in the effort to achieve equilibrium. If we take seriously the idea of the 'organism as a whole', then there should be consistency in how all of these functions work. This is something to be demonstrated, but it would be difficult to think of coherence in a person if it was not true. This crucial point is

required of any theory of personality which would encompass perceptual theory; it is the only basis for making the study of perception relevant to the theory. Equilibrium should not be thought as a fixed and inevitable state to which the person always returns and which takes similar forms in all people.

The concept of 'equilibrium' is useful only if we whole-heartedly recognize that the kind of balance and the means for reaching it are different for different people. Perhaps it would be better to substitute the word 'solution' for equilibrium. Our goal is to seek out in perceptual structures the matter of course avenues by which a person resolves disequilibrium and to infer from these his central controls.

The entire functionalist emphasis, as in the work of Amer, Bruner, and Brunswik, testifies to how the directedness and purposiveness of perception are in the very act of perceiving. Perceptual system has a number of properties which offer the possibility of control by the ego-system, properties such as thresholds, perceptual latency or recognition time, brightness and size constancy and so on and so forth. All these may be variants of a more basic property of 'hypothesis forming' as Bruner suggests, or the developing of scheme or adaptation levels, in Helson's terms. considered from the viewpoint of the perceiver they are tools or potentials which are used in any situation to which he adapts. People develop definitive modes of meeting the world (ego controls). These controls and the connections among them, both within the persons and among persons of the same type,

are the 'dimensions' of the ego-control system.

We have developed some perceptual attitudes. A perceptual attitude is a personal outlook on the world, embodying in perception one of the ego's adaptive requirements and a style of reality testing is expressed through it. The ego-control supplies the needed conceptual tool for making perception the focus of personality theory. It gives us a means of accounting for how and in what respects people differ; and in so doing, it makes generalizations about persons in perceptual terms, also in personality principles. There are three perceptual attitudes. They are as under : (1) Levelling vs sharpening, (2) Tolerance vs resistance and (3) Physiognomic vs literal dimensions.

The above mentioned three perceptual attitudes are important intervening variables. How will the gap between perceptual data and personality theory be bridged? They do so not by a jumping of levels in which perceptual variation is linked to clinical traits but by directing us to organizing principles in the perceptual sphere itself, which give it consistency. They focus upon the horizontal approaches usually overlooked, the self-consistent 'perceptual character' of the person.

Ego-control takes form in perception through perceptual attitudes. These are special ways, distinctive for the person

for coming to grips with reality. They are pervasive and are not only apparent in situations of stress or conflict. As formal mechanisms, they can be studied in the laboratory; and in they are demonstrable in quite neutral circumstances and various cognitive functions. I would like to call attention to some implications of the concept of attitudes for the psychoanalytic concept of defence. Psychoanalysis is perhaps the only theory of personality to give systematic recognition to formal, structural controls of functioning e.g. the defence mechanisms; and it is important to see how the formal controls we have described for perception fit with the psychoanalytic scheme of things.

Perceptual attitudes share certain of the properties usually assigned to 'defences'. With defences, they are coping mechanisms at the disposal of the ego, they are means of 'resolving' tensions and of bringing about stability. Like defences, they are of several kinds, because the requirements for tension reduction differ among people and among situations. The defences observed on the clinical level are counterparts of the controls we are looking for in perception.

A critical attention to the currently favoured method of linking individual differences in perceiving to 'personality traits' and diagnostic categories. A correlation is important for systematic theory if it does one of several

30

things; (a) if it points to a link between perceptual behaviours and thereby contributes to the induction of an organizing principles, i.e., perceptual attitudes; (b) if it illuminates concomitant aspects of a perceptual attitude, i.e., establishes a link between the formal organization of perceiving and that of other functional systems; or (c) if it indicates a relationship of integrative mechanisms within the person. The correlation implies a stable dimension having consequences beyond the perceptual sphere itself, but neither the organizing principle nor its consequences are in any way clarified by it.

Some important information emerging out of discussion may be noted: (i) We can say as yet practically nothing about the relationship among attitudes within any one person, which would make it possible for us to describe his ego-control system as a whole. A perceptual attitude is only one of the several, available to him for adjustment. (ii) Even more serious is the difficulty in distinguishing these attitudes. (iii) Entire functionalism considers perception as the vehicle of adaptation and reality appraisal. The difficulty is in accounting for synthetic, creative or other than adaptive activities of man. We sometimes speak as if reality appraisal and control were the essence of ego functioning. Perceptual attitudes are 'stabilized' modes of control, thus encasing in a static term what is really

a dynamically shifting process. Looking to coherence; in perception to find the central consistencies of a person, we have at least one basis for thinking that perception is personality (82).

1.10. Personality Dynamics and the Process of Perceiving

Here is a goal to show the interdependence of the dynamics of personality and the dynamics of perceiving. A theory of personality cannot be complete without a complementary theory of perception, and by the same logic, one cannot account for the full range of perceptual phenomena without broadening perceptual theory to a point where it contains personality variables. The perceptual processes are critical intervening variables for personality theory and the personality processes are indispensable intervening variables for perceptual theory. Perceptual researches can be divided into two groups according to Brunswik (21). namely, 'personality centered perceptual research and perception-centered perceptual research. The perception-centered approach takes as its primary focus of interest, the variables of perception and studies the way these are affected by various learnings, motivational states, personological structures, etc. A study of effect of hunger on the recognition of food objects is perception-centered. The personality-centered approach is characterized by a primary concern with variables of personality and their manifestation in the perceptual and other spheres. A preliminary study demonstrates first that personalities can be

categorized in terms of certain basic patterns which can best be described in short hand as the authoritarian, rigid personality, and at the opposite extreme, the flexible, tolerant personality. A variety of projective and life-history methods are used in classifying subjects. In another study the rigid, authoritarian personality is shown to be more prone to exhibit ethnocentric attitudes as measured by a questionnaire dealing with interracial attitudes. Rokeach's (130 study shows that those who are high in ethnocentric attitudes, are more rigid or less flexible in performing problem-solving tasks involving basically neutral materials.

There is no one way of thinking about perception when one is interested in personality and another way of thinking about it when one is interested in size consistancy. The two approaches must inevitably converge, so that the personality variables are useful in perceptual theory and vice versa. Personality theory and perceptual theory will themselves merge into a common theory of behaviour.

Outline of a Theory of Perception :

A scientific theory of perception should account systematically for individual differences in the perceptual process. Certain perceptual laws can be stated without regard to the principles which account for individual differences.

However, the theory must contain within it the possibility of handling the differences in perceiving, which characterize different personality constellations. Perception is to be regarded as an approach to personality. A personality-oriented perceptual theory precisely needs laws to account for the systematic judgment and perceptual tendencies of different groups of people displaying different personality patterns.

Hypothesis theory of perception is one which is adequate for dealing with both the laboratory experiment in perception and the observations of the clinician. Basically perceiving involves a three-step cycle, namely, (i) perceiving begins with an expectancy or hypothesis, (ii) perceiving process is the input of information from the environment and (iii) checking or confirmation procedure.

A specific hypothesis is not simply an isolated expectancy about the environment, but rather relates to more integrated systems of belief or expectancy about environmental events in general. A basic property of hypothesis is what we shall refer to as strength. There are three theorems that are contingent upon this conception of strength ; (i) The stronger a hypothesis, the greater its likelihood of arousal in a given situation, (ii) The greater the strength of the hypothesis, the less the amount of appropriate information necessary to confirm it, and

(iii) the greater the strength of the hypothesis, the more the amount of inappropriate or contradictory information necessary to weaken it.

There is need for defining more precisely how we infer the strength of a hypothesis and how we know the amount of appropriate information that has been necessary in confirming it. There are five determinants of hypothesis strength, namely:

(i) Frequency of Past Confirmation.- The more frequently a hypothesis has been confirmed in past, the greater will be its strength.

(ii) Monopoly.- The smaller the number of alternative hypothesis held by the person concerning his environment at a given movement, the greater will be the strength. A monopolistic hypothesis is stronger than duopolistic hypothesis.

(iii) Cognitive Consequences.- Any given hypothesis can be conceived of as inbedded in a larger system of supporting hypothesis and beliefs.The larger the number of supporting hypotheses or the more integrated the supporting system of hypotheses, the stronger the hypothesis with all that it implies for arousal, confirmation and information.

(iv) Motivational Consequences.- Hypothesis have varying consequences in aiding the organism to the fulfilment of needs.The more basic the confirmation of a hypothesis is to

the carrying out of goal-striving activity, the greater will be its strength.

(v) Social Consequences.- Where stimulus conditions are such that information for either confirming or infirming a hypothesis is minimal, the hypothesis may be strengthened by virtue of its agreement with the hypotheses of other observers to whom the perceiver may turn.

The Nature of Hypothesis

The concept hypothesis is best linked to such term as determining tendency, set, aufgabe, cognitive predisposition. It may be regarded as a highly generalized state of readiness to respond selectively to classes of events in the environment. An operational definition of hypothesis can be stated by reference to the specific selectivity of a given perception at a given time. In theory a hypothesis is inferred from the presence of certain antecedant and consequent events.

The Nature of Confirming and Informing Information

Let us distinguish first between the relevant cue, refers to stimulus input which can be used by the subject for confirming or infirming an expectancy about the environment. Certain information provides relevant and reliable cues, for confirming and informing hypothesis. The words 'relevant' and 'reliable' are defined not with respect to the perceiver's experience, but with reference to the experimenter's knowledge about how people

correctly attain object in their environment.

For confirming and informing hypothesis ambiguous stimuli are used. As Luchins, Dennis and others[21] have pointed out, much of the work in the field of perception and personality is done with ambiguous stimuli dimly illuminated pictures or words, rapidly exposed materials, ambiguous drawings and the like. The justification has been that by using less than optimal presentational methods the subject is thrown back on his own resources and that hypothesis arousal is more guided by motivational factors than by the characteristics of the stimulus immediately present. Many other investigators like McCelland and Liberman[97] Vandeplas and Blake[145], Bruner and Postman[27] have used the ambiguous stimulus for the study. Does what we have been saying imply that only under conditions of 'poor perception' do the effects of learning and personality show themselves ? Perhaps so, It might be better to say that there are limits imposed by stimulus factors which reduce the effects of past experience and present needs almost to zero when one works with rather simple stimuli.

Implications for Personality Theory

Our first insistence has been that a personality oriented theory of perception must have systematic means whereby it can account for individual differences in

perceiving. Two points must be mentioned in the theory outlined above at which articulation can be and is being made with personality theory and theories of social behaviour: (i) differences in the kind of hypotheses that different individuals habitually employ, reflecting differences in past history, personality structure, etc., (ii) differences in strength of hypotheses characterizing different individuals again reflecting divergent life histories of major personality trends. Bearing these points in mind, we turn to material drawn from the work of social psychologists and personality theorists on the functioning of personality.

Programmatic Implications for Further Research

Some investigators study perception-personality interdependence; and,in that, the introduction of personality variables into perceptual theory and vice versa. We have already made reference to studies involving the perception of more or less 'ambiguous stimuli' by subjects in varying states of need, with different past experiences, and so forth.There are many studies based on motivational states and stimulus materials. Personality centered group namely, Thouless, Duncker, Cramer, Klein, Witkin, Bruner and Postman, Tresselt, Anabucher and others(82) have studied size, movement and

brightness. Subjects show systematic 'errors' in judgment. These 'errors' may be related to past experiences, present motivation and other more or less personal factors. Investigations of motivational factors as determinants of apparent size, brightness, hue and shape and so forth have perhaps obscured a basic theoretical point. In the ϕ apparent size, a general principle of accentuation in size judgment apparent size is accentuated in judgments of variable or need relevant objects(23)(27). However, the results of the study of Klein, Meister and Schlesinger(84) are not in the same direction as it is achieved by Bruner,J.S. and Goodman, C.C.(23); and Bruner,J.S. and Postman,L.(27).

In personality originated research on perception, there must be some basic point to take into account. If we wish to work on personality factors in perceiving, we must concentrate upon the investigation of these environmental cues which are appropriate to the confirmation of hypotheses which reflect basic personality patterns.

The Selection of Personality Relevant Cues

There are two guides to the selection of personality relevant stimulus cues for investigation. One is theoretical. Various theories of personality contain implicit or explicit statements concerning the cues in the environment which guide

the individual in maintaining or advancing his personal adjustment. Thus, the psychoanalytic theory of ego defences contains some implicit suggestions for perceptual investigation. Another approach to the selection of adjustmentally relevant cues for study is frankly phenomenological. The perceived self provides the most highly relevant stimulus information for confirming adjustmentally relevant hypotheses.

From the above discussion, it is difficult to find out which factor is responsible, viz., pefception or personality, because we cannot distinguish the role of perceptual factors in personality functioning (82).

1.11 Theories of Perception

The present investigation is an attempt to study relationship between perception and personality. One must know the field of perception for understanding the relationship. We may ask two questions in this connection: Is there general agreement about the influence of past needs, events, and experience on contemporary perceptual events ? Are the projective techniques tests of perception ? To answer these questions, one must survey various theories of perception that have been proposed (157).

1. Core-Context Theory :

This theory grew out of a historical orientation in which

40

'awareness' and 'consciousness' were considered to be the basic subject matter of psychology and introspection was the chief methodological tool. These earlier researches study the relationship between reported perceptual experience and variations in stimulus energy, a parallelism which circumvented the question of brain processes and neurophysiological mechanisms. Corn-Context theorists assumed that 'something' was happening inside the organism which somehow or other ran 'parallel' to both stimulation and conscious experience.

An introspective, 'active' approach on the part of S was the essential means by which a perceptual event was analysed into its components (elements), later to be synthesized again. These elements were felt to be the essential aspects of the mind. Laws of attention and association were constructed to explain how these elements were combined. Sensation is basic element and it is an essential ingredient of mental activity.

This theory, as outlined by Titchner, consisted of the way in which meaning became fused with sensation and images. This was accomplished by the position of a context, which served as the background of meaning which 'surrounded' the 'core', and which was the focal group of sensation. Thus, the sensory core would be the same for individuals in similar situations, but context would differ, thus explaining individual differences.

The perceptual aggregate, then, was thought to be comprised of elements of sensations and images, combined in various ways into the core, the context of which provided the ultimate meaning.(2),(3).

2. Gestalt Theory :

Gestalt theory (Kohler(88),Koffka(87),Wortheimer,Ellis(43) offers a view of perception which is in direct opposition to association,atomist, and empiricist view of perception. The Gestalt theorists offer a 'point of view' as to how phenomena should be interpreted in a variety of psychological areas. Here will be mentioned only in brief some of the principles pertaining to perception.

The influence of Gestalt thinking has been profound and sweeping in almost all areas of psychology.Theorists such as Gibson and Hebb have been strongly influenced by the Gestalt orientation despite their ultimate departure from it. Moreover, the many ingenious, inventive, illustrative and perceptual experiments which form the nucleus of Gestalt demonstrations have not only contributed to clinical diagnosis,psychological testing, concepts and constructs in social psychology, but have served well to highlight the complex, many factored,puzzling nature of sensory and perceptual events.

Floyd Allport(2) noted that 114 laws of Gestalten theory have been formulated by various writers and that many attempts have

been made, including one by Boring[16] who reduced the list to 14 basic principles, to edit these laws into more parsimonious statements. Allport prepared six basic generalizations. These can be briefly summarized as follows:-

1. All experience, including perceptual experience, has form properties, i.e., Gestalten. The form qualities of a perceptual experience are independent of, and may persist independently of, the external stimulus, for they are a function of the perceiving organism, rather than the isolated parts of the stimulus.
2. The Gestalt qualities of experience are not based on a linking together of isolated parts, i.e., the whole quality of experience. The whole possesses unique qualities which must be viewed as a whole.
3. Field forces, and the concept of 'field' are essential ingredients to the Gestalt orientation. It maintains the equilibrium of 'whole', which operates in terms of both perceptual experience and the physiological state of the organism.
4. The pattern of stimuli received by the organism from an external stimulus does not bear a one-to-one relationship to the perceptual experiences of the organism.
5. Figures or configurations which are perceived tend to follow certain laws of 'good form'. The organism tends to organize his perceptions so that 'good form' is maintained in terms of balance, symmatry, simplicity, closure, articulation from the ground etc.

6. The organism tends to organise the field and the configuration into groups, combinations etc., that is, to give it 'structure', there are laws of organization which determine this structure, for example, similarity, good continuation, common fate and proximity.

Kohler and Koffker vehemently introduced the notion that perceptual experiences were irrelevant. Many perceptual phenomena such as the consistencies are innate. Gestalt school also invented trace theory. Traces are residuals in the brain or earlier stimulations and retain, isomorphically, some of the properties of the original perceptual events.

Wallach[150] used the gestalt trace concept to explain the relationship between cognition and perception. The influence of needs on perceptual events would be explained according to Wallach by the arousal of memory traces after simple perception occurs, which, in turn, may invoke a need which then affects the more complex perceptual events.

Kohler's[89] 'electro-chemical processes' hypothesis was confirmed by experimental findings. Postore N.[115, 116] carried out an experiment and he claimed that all the significant aspects of the perceived are unlearned, that is, the major features of perceeption are determined by the intrinsic properties of the nervous system.

The new look perceptionists have, however, criticised Gestalt view-point.

3. Topological Field Theory :

Topological field theory is devised essentially from the works of Lewin[96]; but has its roots in Gestalt psychology. Gestalt psychology has always stressed neuro-physiology, making an attempt to bridge the gap between so called sensation and perception in terms of what is going on in the organism. Lewinian thinking is concerned primarily with molar forces, fields and 'life space' constructs which are not rooted in neurophysiological processes.

Lewinian topology is concerned only with phenomenological data. As a descriptive system, his concepts have influenced the methodology, thinking, and hypothesis of many aspects of social psychology as well as the application of projective techniques. The problems of motivation and cognition have been approached using his methodology. Perception plays a key role in topology. Field theory is not a theory of perception per se

One way of conceptualizing the 'field' in field theory is to view the 'life space' of the individual as a spatial construct. The life space of the individual is seen as a region or field and it consists of goals of the person. It also contains subregions, barriers and boundaries.

Moreover, the concept of forces and vectors 'push' the individual with varying degrees of intensity towards his goals

Various 'tension systems' exist within a field, which seek to maintain equilibrium. Vectors and valences operate on S externally; but presumably, needs, internal motivation, etc. become conceptualized as external to the extent that they are part of the life space of the individual. Various regions of a field interact and affect each other until the field achieves equilibrium, that is, until field tensions subside and S has presumably reached the goal.

Lewin has fully recognized the importance of considering the phenomenological world of the organism itself, that is, his way of viewing things and his structure of the world around him.

4. Gibson's Psychophysics

Gibson differs from Gestalt view regarding perception. He believes that perception is a function of stimulation and there is always some variable in stimulation which can be related to the perceptual process. His contribution is remarkable and unique. His viewpoint is best illustrated by an early work[59] and a more recent one[60][58], in which severa essential elements in his approach are described. Following is the Gibson's approach:

1. The chief problem in visual perception is how to account for the fact that the complex world of objects has depth, solidity, distance and is three dimensional. Visual space is conceived of as a continuous or adjoining surface. Surfaces and edges are the simple, primary constituents of the visual world.

2. Even complex perceptual (phenomenological) experiences must have some correlate in stimulation. The basic point in Gibson's approach is that qualities of experience are in correspondence with physical stimulation. Gibson does not concern himself with so called 'inside' problems of neurophysiological nature. He is much more specifically oriented in a direction which implies that control and cortical processes are less important than previously believed.

3. Gibson distinguishes between the 'visual field' the 'visual world'. The former is the visual scene when we introspect and analyse what we see. The visual field has boundaries, a kind of flatness or certainly less depth than the visual world. The visual world is not distorted constantly by head and eye movements. He is primarily interested in studying the visual world, the experience of the world around us. He is interested in veridical perception, the ability of man to be aware of things as they really are, in which parallel lines do not converge, objects remain of the same shape despite the position of the observer.

4. The obscure and subtle variations of the retinal image become the chief concern of Gibson's experimental approach.

Gibson's thesis involves the translation of motion into energy arrays of the eye, that is, the projection of physical motion which is three-dimensional into a two dimensional arrays. His method is geometrical and involves an analysis of various types of perspective transformations of continuous nature. According to Gibson, our eyes are so constructed as to be sensitive to various types of optical transformation. We do not learn to associate certain types of motion in the world with retinal stimulation, nor does our brain organize sensory data; in this way our ability to perceive rigid, elastic or multiple-moving things is based on the fact that three-dimensional motion can correspond geometrically to retinal two-dimensional image through transformation in the energy array.

The Gibsonian viewpoint, thus, involves a kind of nativism as well as an isomorphism, but of a different nature from that of the Gestaltist. It is a kind of identity between the real, physical world, retinal images and the experiences to which they give rise. In Gibson's approach to veridical perception, there is a de-emphasis of central factors, learning and subjective need states, and a corresponding stress on stimulation, that is, on retinal stimulation, Gibson has some interesting views about the role of learning in perception. His views are anti-associationistic. Learning in perception is

of a different order than commonly believed. He does not deny the importance of memory, recall etc. which, not being a function of external stimulation, are for him outside the realm of perception. Moreover, he stresses the fact that the sensory equipment of an organism determines and limits the kind of perception, that can occur; set and attention are similarly significant.

The Gibsonian approach, then, stated quite simply, is that perception can be viewed as a function of the environment, since perception is a function of stimulation and stimulation is a function of the environment.

This general approach has stressed the importance of stimulation in perception, especially, veridical perception. Although limited in what perceptual phenomena it covers (illusions, perception of verbal meanings, attention, selective process etc. are not completely covered), its rich details as well as special focus provide lessons to be learnt and an approach to be considered in working with projective techniques

5. Sensory Tonic Field Theory :

Werner and Wapner[152,155] in the 1940's, introduced an approach to perceptual phenomena which they labelled the sensorytonic theory. Their dilemma was how to integrate within

a single approach the 'paradox of interaction'. How in a perceptual events, do the sensory process in the visual or tactual areas become fused or integrated with presumably alien elements such as emotion or motivation ? For Werner and Wapner, consideration of such 'broad' constructs as personality,attitudes and emotions was not the primary element in their theoretical approach.

They have gone 'inside' the individual, not from a neurological or even a physiological point of view, but for consideration of all motor events within the organism. Tonic states are broadly defined; they include motor activity, postural states, proprioceptive impulses, skeletal movements, and muscular activities. Emotional states, drives, motivational sets, and the like, presumably affect the organism's sensory tonic state.

The authors are opposed to the traditional separation of sensory and motor functions. They and their co-workers define perception as a total dynamic process that can be empirically broken up into contributing factors that are both tonic and sensory. Tonic and sensory factors are dynamically equivalent, and evidence is cited from the neurophysiological areas to support the notions of equivalence and interaction.

Following are some of the postulates and generalizations which emerged from the theory: (a) any stimulation, whether from exteroproprio, or intero-ceptors is sensory-tonic in nature, (b) the percept or property of an object is a resultant of stimulation from that object and its affect on the existing sensory-tonic state of the organism, (c) the organism always reacts to establish equilibrium between body and object, (d) there is functional equivalence between sensory and muscular (tonic) factors, and (e) from the preceding postulate, the notion of vicariousness emerges, that is, equivalent functions may serve as substitutes for each other with respect to an end product.

The inhibition of one aspect of the sensory tonic field has resulted in an increase of channellized energy into the other. They noted that in the light of the release or inhibition of motor activity and its consequent effect on movement perception, it was important to conclude that the Rorchach performance is strongly affected by other than basic characteristics of personality.

It might not be too bold to assume that attitudes and motivations affect the 'sensory-tonic' state of the organism, and it is through these basic mechanisms that attitudes or motivations may 'project' themselves into perceptual objects.

A large number of experimental evidences supported the different postulates. One can also explain the developmental changes in perceptual processes in terms of sensory tonic theory.

Werner and Wapner have failed to show how the interaction between sensory and tonic factors take place. Moreover, the notion of functional and dynamic equivalence of sensory-tonic factors is probably descriptive of events rather than a direct statement of neurophysiological happenings and processes. Yet the importance of this approach should not be minimized. The influence of motor states, intersensory affects, tonic state and set, on perceptual event, has been more than adequately demonstrated by these authors through a series of related, well-controlled, well-designed experiments with clear-cut terms, definitions and predictions.(154)

6. Adaptation Level Theory :

Helson's(2,72,73) adaptation level theory is concerned with a generally accepted notion that individuals, in their perceptions, tend to utilize some sort of subjective frame of reference by which they judge objects as to dimensionality-size, weight, value, etc. For him, this frame of reference is based not only on the experiences of S in the past, but on all stimuli affecting him in the present.

All individuals order their experiences on the basis of a neutral zone, which varies for each individual. This neutral

zone is called the adaptation level. Adaptation level is given the value of the stimulus to which S responds neutrally, when he is quantitatively or qualitatively rating stimuli. These judgments or ratings are bipolar. Adaptation levels change according to changes in the background, stimuli etc. and this neutral category is never at the center or the arithmetic mean of a series. He further indicates that preponderant stimuli, because of their intensity, emotional significance, impact and the like, should not be regarded as the sole determiners of adaptation level. He has given importance to all the stimuli.

Helson's view of crucial stimuli as determinant of S's response is rather broad. He feels that automatically acting forces as well as rational and cognitive factors determine adaptation level. The factors of like frequency, nearness, spacing etc. all enter into the picture. All these factors are pooled and the pooling is accomplished quantitatively. Pooling is not a conscious process and is physiological as well as psychological.

Helson is puzzled by how past experience influences contemporary behaviour. He has indicated that his concepts of pooling and adaptation level also are applicable to an understanding of how residual from past experience, needs, ego-involvement, and various cognitive states (e.g. personality)

enter into S's contemporary judgments and percepts.

There is much laboratory support to Helson's model. This evidence comes especially and essentially from experiments on sensory dimensionality. The extent to which Helson's concepts are applicable to broader aspects of perception and to the perception of complex patterns and figures is not clear. Moreover, just how pooling takes place, neurologically and physiologically speaking, that is, how all the elements in the background, residuals from the past, and in the stimuli to which S is responding combine and interact, is not within the scope of the theory.

7. Cell-Assembly Phase Sequence Theory :

Hebb, in his book, 'The Organization of Behaviour'(71) presented an approach to perception which is also concerned with past experience. His approach is more associationistic. He is specifically concerned with how behaviour patterns are built up. Even more important, his approach goes 'inside' the organism, for he has definite views on neurophysiological process.

Hebb feels that initially, perception is not a complete, 'given' event as the gestaltists have claimed. Perception is a learned affair. Eye movement and excitations from parts of the stimulus figures are important aspects of the learning process. After perceptions are learned, these become extremely rapid and unconscious. Whole, for Hebb, is built up from the

parts, through a process of learning, an associationistic process - a view which is in marked contrast to that of the gestaltist.

Hebb's major theoretical contribution is a model, in terms of brain processes, of how this learning takes place. He feels that a perceptual event is quite specific to the excitation of a particular cell, is a particular part of the central nervous system (CNS).

Specifically, the short-lived excitation of cells in the cortex activate the neighbouring cells; and this is repeated sufficiently in association between these cells as well as more distant cells, so that a long-lasting cell-assembly emerges. A cell assembly is a group of cortical neurons functionally connected to each other, not initially but through learning, in the sensory-sensory or sensory-motor context. As a unit of perception, the cell-assembly is defined by Hebb in specific neurological terms. As to the function, structure, and process, the cell assembly represents the neurophysiological basis for the most simple percepts. He explains with the help of cell-assembly and phase sequence, how the perception of various figures are built up.

Hebb's theoretical approach is designed to subsume much more than perception. Constructs such as attention, motivation, learning and emotion are also explained by Hebb

in terms of excitation, activation, disruption, etc. of cell-assembles and phase sequences.

Hebb's theory is connectionistic,involving specific cortical association. It stands in contrast to many beliefs of the gestaltists. He brings neurophysiology and the cortex into perception, not as an intervening variable, but as the primary and crucial aspect of the perception event.

8. Set : Freeman's Theory :

Freeman[54] has introduced the question of set and 'preparatory' variables in the perceptual event. Bruner supports this hypothesis, in his theory of perception. It is important in almost all phases of behaviour, memory, learning, motor behaviour and the like; special instructions are given to subjects while they are doing the experiment. There is much experimental evidence to show that the organism is 'turned' to react before it reacts and that this, in part, determines the reaction. Some of this literature has disclosed that preparatory set often facilitates the act it is accompanying, and may sometimes precede, or even outlast that act. Set acts, selectively in that other acts, will be excluded or inhibited. They involve the 'attentive' aspects of the organism and contain sensory as well as motor elements. Thus,Ss can be prepared or turned to expect a certain stimulus or turned to expect a certain stimulus or to react in a certain way. It seems likely that in perception both aspects are involved. There are many other principles of set, such as set can be

generalised. Getting set may either be voluntary or involuntary; and sets can be instituted in a variety of ways - through instructions, implicit expectations, needs and motivations. Sets may be one way of 'explaining' the influence of past needs and current motivational states on a contemporary perceptual event; and thus are important in the understanding of responses to projective techniques.

Freeman(54) outlined many of the principles governing 'set' and their applicability to perception. His point is that motor adjustments play a significant part in perception, especially meaning that the muscular reactions are involved in all perceptual responses. Motor adjustments which include not only generalized and diffused muscular tension but also specific muscular tensions, contribute to the final perceptual integration.

The similarity between sensory-tonic theory and Freeman's theory should be noted. Both stress the relevance of muscular tension, tonicity and 'backlash' in the final integration of the percept. However, Freeman's theory fails to show us how the motor and sensory aspects finally become fused and integrated. His work, nevertheless, is particularly important in highlighting the pervasiveness and importance of set in terms of behaviour - an area which many theorists have ignored or failed to account for adequately.

9. Cybernetic Theory :

Cybernetic theory is an attempt to draw further our understanding of central brain processes through the use of models derived essentially from machines involving steering or

regulatory feedback mechanisms. Engineers, physiologists, and mathematicians rather than psychologists have been largely responsible for developing this approach.

Cyberneticists, in their study of various systems, open and closed, have been struck with similarities to actual brain processes. They have stressed the importance of examining and studying various processes of the brain such as input, output, information, noise, decisions, choice, processing and transmission of information.

In terms of perceptual theory, an important contribution of the cyberneticists is the concept of feedback, both positive and negative. This concept stresses the interdependence and circularity of the parts of the perceptual process, although others have been aware of this aspect of perceptual functioning. Feedback further describes how a system can have internal controls and regulatory mechanisms, so that deviations from a desired goal are constantly being eliminated in the execution of a process.

Von Holst(149), illustrating with experiments and observations of lower and higher animals as well as man, outlined a theory of perception which makes used of 'feedback' from CNS activity. He noted that motor impulses from the CNS as well as from 'outside' affect sensory receptors; he termed the impulses arising from the CNS as re-afferences, the latter he called ex-afference. In other words, the same

receptor can serve both the re- and the ex-afference. The CNS must possess the ability to distinguish one from the other. This distinction is indispensable for every organism, since it must correctly perceive its environment at rest and in movement, and stimuli resulting from its own movements must not be interpreted as movements of the environment.

Cyberneticists have much to say on a microscopic, neurophysiological level about the operations and processes of the brain. According to F.Allport[2], much of this material is in agreement with known facts of neurophysiology. Yet, the contrast between the organism and the machine is great. They offer a contribution to the study of brain processes primarily, rather than of the organism and the interdependence of its parts. This is a serious limitation on the applicability of their work to the interest of most psychologists.

10. Allport's Theory of Event Structure :

Floyd Allport[2] not only wrote a remarkable and extensive review and critique of current perceptual theories, but on the basis of the common threads and findings cutting across all theoretical fields., he constructed a theory of his own. His theory is essentially a model which describes processes within the organism in terms of ongoing and events. It is nonquantitative, dynamic and yet quite concerned with structure, albeit complex. Processes are cyclical; there is attention to the motor adjustments, set and the state of organism at all

time of a perceptual event. Each ongoing consists of lower-order ongoing and they in turn of still lower-order ongoings. Events 'happen' when ongoings 'touch' each other.

Allport has attempted to account for set, native dispositions, the operations of personality and even society in his all-inclusive system of event structure. In his system, he has been influenced by cybernetic's advanced thinking in physics, as well as some of the biological sciences. It is too early to evaluate his system, and Allport himself has not proposed or even stated his theory in terms of testable hypothesis.

11. Perception and Behaviour Theory :

Behaviourism today is chiefly expounded by the learning theorist. As obvious as it may be, we might state at the risk of oversimplification, that one behaviourist view of perception is that it is a response and as such not different from other classes of responses. The laws and principles of learning apply equally well to this class of response as to the other, and should be applied. For the learning theorist, perceptual research, theory and explanatory constructs have been clouded with mysteries, vagueness, of terms and phenomenology; but this may have been the result of misplaced zeal in constructing 'separate' theories of perception; 'theories of perception', as such are deemed unnecessary by many behaviourists.

True verbal responses, motor responses, nuclear responses, etc. may be viewed by some Es as indicating the perceptual event, but in the last analysis the laws of behaviour and laws of responses and any inference about perception event may be invalid.

As a matter of fact, perception plays a secondary role in the behaviourist's theatre occupying at the very best only a small part of the stage. Along with perception goes the sensation-perception dichotomy.

Many contenporary behaviourists view the constancies, figure-ground perception, indeed the entire gemut of the classical perceptual domain as instances of learning, that is, as learned responses.

1.12. Perception and Projective Techniques

Bruner[20] noted the need for integration between the Rorchach techniques and a perceptual approach. He did not offer an adequate 'explanation' of how and why personality influences Rorchach 'perception' except in the most general terms by using principles such as perceptual defence.

Hermann Rorchach described his instrument as a test of perception: it has become increasingly popular to regard the Rorchach as a test of perception because of the new look approach in the late 1940's.

The perception-personality marriage yielded little clarification and few new concepts or promising leads. There was frequent reinteraction of principles such as perceptual defence, and of the relationship between perception and personality. In general, as a matter of fact, clinicians, attracted to the personality-perception, New look approach, were want to review again and again the research of Witkin F.Brunswik[30] ,McGinnies[102] etc. to confirm their own belief (and to convince others) that personality and perception are related; they were less successful (and convincing), however, with respect to demonstrating how their specific clinical instruments were related to these general principles.

Kenny's[159] work was remarkable and he was primarily concerned with the relationship of ambiguity of TAT stimuli with the 'level' or 'layer' of personality revealed by story content elicited by these stimuli. Kenny's thesis was that, changes in sensory input are assimilated into a scheme after a hypothetical process of differentiation or categorization of the stimulus has taken place. The perception of the picture stimuli is not passive reception, but is an active process of categorization or differentiation. He made a distinction between categorizations (perception) and schemata (fantasy story), the latter being more influenced by experience, set, drives etc. then the former.

Perceptual approaches to projective material flowing from a theoretical orientation antithetical to that of the new look movement have been more successful than those steming from the new look - largely because the former were primarily anchored in the gestalt framework which leads itself rather easily to an analysis of the stimulus properties of projective material. Actually, such an analysis is sometimes based only on an analogy involving a direct translation of gestalt principles of organization.

Wertheimer (156) discussed the Rorchach stimuli from the point of view of autochthonous principles - similarity, proximity, symmetry, good continuation, closure, counters, figure ground principles etc. He noted that since figure ground reversals are more likely with prolonged fixation; more anxious Ss, taking more time to stare at the blot, may actually produce more white space (s) responses. In general, Wertheimer raised the likelihood that certain types of responses have to do in large measure with the stimulus structure of the card. But he also argued that 'inside' the organism, other principles of organizational exist, such as set, motivation and past experience. His chief point is that despite individual distortions with respect to ambiguous situation, Rorchach stimuli are not without structure; and that this structure has not been sufficiently studied.

Gibson (61) would assume that the meaning carried by the patterns of Rorchach stimulation would vary depending on experiences, age, attention factors, recognition of familiar patterns, etc. Rorchach cards are pictures of 'low fidelity' carrying multiple ambiguous stimulus situations. In expressing meaning, individuals are not necessarily reporting their immediate and direct perception. The Rorchach, therefore, is a a perceptual test only in a limited sense.

Does personality influence perception ? We have seen that perceptionists themselves cannot come to some agreement, negative or affirmative; but they also differ even as to concepts, framework, theoretical viewpoint, methodology, and the manner in which they select and define crucial variables for study. We do know that even the staunchest defenders of the directive state viewpoint concede the importance of set, attitude, memory, judgments and cognitive variables in the final verbalization of a perceptual event. Just where cognitive factors end, perceptio begins in a difficult boundary to define. Nevertheless, there seems to be some agreement that a direct relationship between perception and personality is difficult to demonstrate.

Are projective techniques tests perception ? Even if they are, we would be hard set to defend a viewpoint which suggests that since these techniques are tests of perception, they automatically measure personality. Our approach to projective

techniques should at least begin with a systematic analysis of their stimulus characteristics.

Is the way we perceive in the Rorchach or other projective situations determined by our personality ? Very little is known about our 'perceptions' in the Rorchach and other projective situations. Let us, however, develop a model which may help to guide us, and see how far we can get. The first model that suggests itself is the model provided by the following equation adapted from Grahman (68)

$$R = f (S, T, O, E, ... X_1, X_2 .... X_n),$$

where R the response, is regarded as a function of S, (the properties of the presented stimulus), T, (the time of exposure), O (the state of the organism) including set, motivation, tonicity, degree of fatigue etc.), E (the past experience of the person), and X_1 X_2(Personality characteristics).

1.13. Perceptual 'Types' and Their Relation to Personality

The effect of motivational factors on perception often seemed to vary with type of personality, and in particular with individual tendencies towards repression and inhibition on the one hand, and expressiveness and over action on the other hand. In fact, a considerable number of experiments has been devoted to studying individual differences in perception. These differences have often been attributed to certain persistent methods of

perceiving which are supposed to operate in different situations and with different types of material. These methods may be classified in two types, i.e., 'synthetic' and 'analytic'. Again, these and other typical ways of perceiving have been related to inherent characteristics of personality, which again have been classified into two opposed types, such as the 'introvert' and the 'extrovert'. In so far as perceptual characteristics are concerned, there seems little doubt that some of these differences are well established, clearly defined, and persistent as their protagonists represent them to be. But the evidence as to the association between perceptual differences and personality typologies is far less obvious. Even if personalities can validly and usefully be classified into two contrasting types, which is as yet unproven, the relation to those of typical modes of perceiving is by no means clear nor well established.

Nevertheless, there appears to be a persistent fascination in the postulation of 'personality types' and the result of the great majority of the experiments which have been carried out to demonstrate characteristic methods of perceiving have been classified in this manner. Such experiments have long history. Though it is scarcely worthwhile to detail them all, some of the earlier experiments are worth comment. It should be noted that not all experiments have assumed that such methods of perceiving

appear in every situation. They have recognized that observers may vary in their manner of perceiving according to circumstances.

Perhaps the most popular and best known classification is into the 'synthetic' and 'analytic' methods of perceiving. As the names indicate, the observer who adopts the first method tends to see the perceptual field as an integrated whole, whereas the observer who adopts the second, breaks up the field into its constituent parts or details, studying each one separately and perhaps overlooking the effects of the whole. In the synthetic method visual illusions appear more compulsively, apparent movement and causality are readily seen, size, shape and colour constancy are high. The analytic method is more appropriate when small details must be attended to and certain qualities isolated from the whole, for instance, in judging the brightness or colour of a surface independently of its other qualities, or those of the remainder of the field. Also it must be utilized in making judgment of perspective size. But though these two methods of perceiving can be clearly distinguished from each other, it is more doubtful to what extent they are consistently adopted through out a single experiment, or a series of experiments. It has been claimed that in the estimation of brightness consistency, some observers tend constantly to be more synthetic in their approach, others more analytic. When instructions are given to adopt either the synthetic or the analytic procedure in size constancy

experiments, some observers find the former easier, others the latter.

Closely related to the distinction between analytic and synthetic methods of perception is the contrast of objective and subjective types, first propounded in connection with reading, particularly the reading of words and short sentences presented tachistoscopically. The objective type of reading was accurate but limited in scope; in the subjective type, more was read but less accurately because the reader filled the gaps in what he saw by means of inference as to what he thought might be there. Again, there is some doubt as to whether these methods were consistently maintained, though they did operate fairly persistently in the techistoscopic perception of real object.

Bartlett (7) in his experiments on perceiving, distinguished between those who tried to perceive the whole of a complex figure at a single glance, who were confident that they had seen the whole, and often thought it contained more detail than was in fact the case, and the cautious, hesitating observers, taking one thing at a time, who tended to decrease the amount of detail. Now though at first sight this dichotomy appears to resemble the synthetic-analytic, it does not correspond exactly. Moreover, temperamental factors seem to have been associated

with the confident and cautions method. A recent experiment on the perception of ambiguous material, blurred pictures,indicated that when the observers made incorrect guesses as to what this represented, some did tentatively and hesitantly, and others rapidly and confidently. These types of procedures were consistent throughout the experiment, with different types of material.

There has often been a tendency to link the method or procedure used in perceiving with some basic attribute of personality. In recent years, this tendency has reappeared in experiments in which observers are classified into the 'introvert' 'extrovert' types, usually on the basis of a questionnaire or inventory. The perceptual performances of the two types are then compared. It was found that extroverted individuals tended to show a high degree of size constancy than did the introverts, but this may have been because the former responded more easily to 'synthetic' instructions, the latter to analytic. With analytic instructions, the difference between judgments of introverts and extroverts was greater than with synthetic instructions. Shape constancy was also lower for introverts than for extroverts, when the instructions were analytic in bias. Presumably therefore, the analytic method of procedure is more difficult than the synthetic for the extroverts to adopt. The differences in measured judgments are always small, and it is probably that there is a large class of people who can adopt either the synthetic or the analytic

approaches equally well.

A number of experiments were carried out by Klein[82] on the classification of different types of procedures of perception; and these were also related to types of personality. The first classification was into 'sharpners' and 'levellers'. Observers were shown successively sets of squares of varying sizes which they were asked to estimate. At such successive projection of a set of squares, the smallest square was replaced by one larger than any in the previous set. Though some observers- the sharpeners - made accurate size judgments throughout, others - the 'levellers' - lagged behind the change in size and made estimates which became increasingly too small. The 'levellers' also perceived less clearly than the 'sharpeners' the contrast between grey squares surrounded by countour lines and placed on a background of a different grey. Reports on the personalities of these observers were obtained from psychotherapists, and it appeared that in general the sharpeners were active, energetic, competitive and sometimes aggressive, whereas the 'levellers' were more passive and dependent, and tended to drift and to retreat inwards into themselves. Vernon's[147] experimental results differed from that of Kline. In his experiment, dots and length of lines were used. Some individuals tended to make narrowly limited classifications of responses, excluding doubtful cases, others to make broader categories of a more inclusive type. The former adopted their responses to

changes in the stimulus materials more adequately than did the latter. But neither type was essentially more accurate than the other. These two types corresponded roughly to Klein's 'sharpeners' and 'levellers'. But it was clear from the experimental results that the actual percepts varied with nature of the situation and the stimulus materials.

Witkin and his co-worker[158] carried out investigation on perceptual tendencies and personality qualities. It was found by Witkin and Asch, that there were characteristic differences in the procedure of observers shown a tilted luminous framework in an otherwise dark room, and asked to set a rod in the vertical position. Some observers tended to rely on their bodily sensations of gravitational forces, whereas others were more influenced by their visual sensations and tended after a while to judge the tilted framework as being vertical.The latter observers were also found to have some difficulty in extracting 'hidden figures'. In personality tests such as the Rorchach and TAT, these observers showed passivity, readiness to submit to authority, little self-esteem, and a tendency to anxiety. The first group of observers, on the other hand, were much more active, independent, self-reliant and self confident. Witkin hypothesized that the passivity of the one group of observers was displayed in their 'field-dependent' tendency to cling to

the external environmental framework of the visual fields, whereas the self-reliance of the other. 'Field-independent' group was demonstrated by their ability to rely on their own bodily sensations. However, these two groups formed the polar extremers of a continuous distribution, the majority of adults lying in the middle ranges.

Recently Gardner and his collaborators(148) have made further extensive studies of certain general methods of perceiving and have subsumed their results under a number of principles of 'cognitive control'. These are four main principles more or less independent of each other, which are related to types of approach to complex perceptual tasks,and these Gardner considers to be associated with certain personality qualities and especially to method of 'ego-defence'. They are :

(i) Levelling and sharpening : The levelling relates to the tendency to assimilates percepts to the memory traces of previous percepts. These tendencies are demonstrated in the various experiments that is, judging the size of the squares, comparison of pairs of light, sound etc. in which the judgment of the second pair may be affected by the interpolation of a more or less intense light, sound etc. The levelling tendency is considered to be related to ego-defence through repression.

(ii) Field articulation, covering Witkin's 'field-dependence' and 'field-independence': This type of control relates to the selectiveness of attention, the capacity to direct attention actively and appropriately to the significant features of the field, disregarding

irrelevant ones, as against the passive acceptance of what is given.

(iii) Scanning control, relating to a tendency to deploy attention over a wide field, as against concentrating it narrowly upon a small area : This type of control is produced by individual differences in the extent to which numerous visual illussions are perceived. It has been claimed that wide scanning is related to the ability to isolate knowledge and ideas from any emotional connotations, and thus to preserve the accuracy of these from emotional influence.

(iv) Tolerance of unrealistic experiences, which replaces 'tolerance of perceptual ambiguity' and the 'form labile' and 'form-founded' classification: This control is exercised when individuals continue to perceive the surroundings normally while viewing them through distorting lenses. It is considered to be related to the ability to maintain the balance between objective reality and subjective ideas based on motivation.

Gardner and his collaborators have not yet fully established the existence of these control, still less their relationships to personality. Yet this work provides a more hopeful approach to these problems than any other work of this nature.

1.14. Personality Traits in Perception and Judgment

One of the most hopeful places to find valid measures of personality traits is in terms of individual differences in laboratory investigations of perception and judgment. Of course,

such studies have a long tradition in experimental psychology; but it has been only since the last twenty years that individual differences in those situations have been related to personality.

The evidence so far for measuring personality traits in terms of perception and judgment is only suggestive. In contrast to rating methods and projective techniques, measure of judgment and perception are not dependent on the subjective processes of observers and test examiners. In contrast to self-inventories, measures of perception and judgment are not dependent on what the individual knows about himself and is willing to relate.

Visual Acuity :

There is suggestive evidence that some aspects of visual acuity are related to personality traits. The most significant findings to date concern correlations between dark vision and self-inventory measures of neuroticism. In one study, Eysenck[112] found a correlation of 60 between the two variables. It is hard to believe that correlations of that magnitude will generally be found between aspects of visual acuity and personality traits; but the evidence so far does suggest that, whereas visual acuity has been considered a passive perceptual function, it may be, if any, dynamically related to personality.

Field Dependence :

One of the most encouraging lines of evidence for the measurement of personality variables with task concerning

perception and judgment come from studies of field dependence. The rod-and-frame test and embedded figures test were used as a measures of field dependence. In the rod and frame test, a subject sits in a darkened room and looks at a luminous, square, wooden frame. The frame can be rotated to the left or to the right by the experimenter. In the center of the frame is a luminous rod which can be rotated with remote controls by the subject with the frame tilted to the left or right at various angles, the subject tries to adjust the rod so that it is placed in vertical position. This is difficult for the subject to do without being influenced by the frame. The frame is spoken of as the field and to the extent that the subject places the rod vertical with respect to the frame rather than the room, he is said to be field-dependent. Another test is embedded figures test. On each item of test, the subject tries to locate a simple geometrical form embedded in a complex form. The total figure institutes the perceptual field, from which the subject must differentiate the embedded figure. Suggestive correlations have been found between these measures and conventional measures of personality. The evidence is that the individual who appears 'dependence' in tests of field dependence also appears to be dependent in his social behaviour.

Eye Movements :

There is suggestive evidence that eye movements relate to personality variables. It has been found that eye movements or subjects tend to 'approach' objects that are pleasant and to 'avoid' objects that are neutral or negative. Since so much of personality concerns individual differences in what people 'approach and avoid', it is logical to think that eye movements in looking at visual displays of different kinds could provide information relating to personality traits(84). The present investigation has been undertaken to study relationship between personality traits and some perception characteristics.

1.15. Terms defined for Present Investigation

Perception :

James Driver(79) defines perception as follows : Perception is the process of becoming immediately aware of something, usually employed of sense perception. According to Norman L.Munn(111), 'Perceiving is a process comparable with discriminating, differentiating, and observing'. The term is customarily used to refer to relatively complex receptor and neural processes which underline our awareness of ourselves, and our world. This awareness is referred to as perception. Although the term perception is usually restricted to aspects of experience, it has certain behavioural implications.

Perception of objects, situations and relationships is often correlated with particular overt reactions. C.T. Morgan(106) defines perception as the process of discriminating among stimuli and of interpreting their meanings. It is not a photographic copy of a stimulus situation; rather it leaves out certain aspects of the situation and adds meanings derived from past experience. From the above definition one can interpret perception as nothing but an interpretation of sensation with past experience. Abraham Sperling (1) in his book, 'Psychology Made Simple', defines perception as follows : " It is the act of interpreting a stimulus registered in the brain by one or more sense mechanism. It represents our apprehension of a present situation in terms of our past experiences. What we perceive at any given time, therefore, will depend not only on the nature of the actual stimulus, but also on the background or setting in which it exists our feelings of the movement, our general prejudices, desires, attitudes and goals." Similarly, Osgood(113) in his book 'Method and Theory in Experimental Psychology' defines perception thus : " The term 'perception' refers to a set of variables that intervene between sensory stimulation and awareness".

Personality :

Personality is one of the most abstract words in our language, and like any other abstract word suffering from excessive use, its connotative significance is very broad. The terms 'personality' in English, 'personnalite' in French and 'Personlichkeit' in German closely resemble the personalities of medieval Latin. Personality, as a psychological concept, is derived from the Latin word 'persona'. In ancient Greece and Rome, actors wore masks which symbolised, for the audience, social stereotypes of particular stage roles(3).

The definitions of personality are to be considered from many viewpoints, e.g., non-psychological, viewpoint, socio-cultural viewpoint, and psychological viewpoint. Here we will consider psychological interpretation, because of the many definitions by the various psychologists who have written on the subject(114) . In spite of the multiplicity of definitions, it is possible to assort them into five basic categories: omnibus, integrative and configurational, bierachical, adjustive, and distinctiveness. Allport studied fifty definitions of personality, included into the above mentioned categories, and he suggested an integrative definition of personality. First we consider the definitions given by Kempf, Guthrie, McClelland D. and Allport.

Kempf(114) has defined personality as "the habitual mode of adjustment which the organism effects between its own ego-centric

drives and exigencies of the environment. As phrased, this would include particularly all of human behaviour, since the vast majority of our responses do consist of just such habitual ways of adjusting."

Guthrie(114) has defined personality as " those habits and habit-systems of social importance that are stable and resistant to change."

McClelland,D.(63) defined personality as under : "Personality consists of the specific contents and consequences of behaviour and the processes responsible for these contents and consequences."

According to Allport(3), "Personality is the dynamic organisation within the individual of those psycho-physical systems that determine his unique adjustment to his environment."

This definition represents a synthesis of contemporary psychological usages; and it covers almost all the definition of personality. It recognises the changing nature of personality (a dynamic organization), and focusses on the aspects rather than on superficial manifestations; but it establishes the basis for the social stimulus value of personality (unique adjustment to the environment). While it is not possible to study directly a 'dynamic organization within the individual', this definition is compatible with a thorough - going scientific approach based upon appropriate research techniques. The present investigator considers this definition as a base line for the study, which

takes into account the individual's unique adjustment to the environment, as indicated by his personality traits in different situations. The present study follows trait approach to assess personality by using the personality assessment scale (PAS).

1.16. Aim of the Present Investigation

It is perhaps a mark of the maturity of a science that discontinuity between its various bodies of data ceases to exist. The process of maturation is moving at a rapid rate in the field of psychology. The sub-fields within psychology are beginning, at long last, to lose their identity.Theory and research in social psychology have a determinate reference to work on personality, on psychophysics and on the development of the child. Common principles gradually emerge. Common principles emerge because different approaches and different perspectives are brought to bear on a common segment of behaviour.Perception-personality study is the prediction of behaviour, particularly complex behaviour. It is cripplingly incomplete without an account of the perceptual field of the predictee, and so many of the controlling principles of behaviour manifest themselves in changes in the perceptual field. The last two decades have witnessed a shift in the status of perception within psychology as a whole.This shift is primarily due to the growing recognition of what one might call the projective nature of

perception. The expansion of the problem of perception from the splendidly isolation area of classical psychophysics to the areas of social and personality dynamics necessitates a reformulation of the theoretical framework within which perception is to be conceived; and many researches have been published in journals and in books regarding the relationship between perception and personality. The works of Witkin(158), M.D. Vernon(147), E.S.Brunswik(30), Bruner,J.S. and Postman,L.(25), and Vernon Hamilton(146) and Lazarus, R.S., Eriksen,C.S. and Fonda,C.P.(91) and others suggested that there is relation between perception and personality. The present investigation is one more attempt to study the relationship with some perceptual tests and personality inventory.

Before describing the present investigation, it would be more appropriate to get acquainted with the studies that have already been made to examine the relationship between personality and perception. This would provide a good background to the present problem and the next chapter is devoted to the review of such relevant studies.