Chapter V. INTERPRETATION

V. 1. Introduction

In this chapter, I have dealt with the concept and scope of museum interpretation, interrelationship between interpretation and other museum activities such as designing and exhibition planning, various exhibition methods, evaluation of exhibition effectiveness, the audience and museum education, various educational programmes for ethnographic museums, researches on the Dangi ethos and world view, transition of Dangi self-image and identity, and furthermore Dangi cultural-ecological adaptation to the circumstances of the Dangs forest.

At the outset, I have discussed the interrelationship between interpretation and other functions of museums, and also I have given sufficient number of examples where any disharmony among these functions causes avoidable difficulties to museums, to museum staff, to the museum authorities and to museum users. I, therefore, tried to examine relationships among museum functions like exhibition, education, and research work. Unrelated functions such as profit-making and religious mission are not good for the image of a museum as an institution for members of a community. They do not promote museums' image as "people friendly" or as an agency for the development and welfare of the society. Ultimately, they may also reduce opportunities for obtaining people's direct support. Consequently, they may cause less participation in museum activities by members of the community.

Practically, there is no uniformity of use in concepts of museum interpretation. I analysed the professional opinions and attitudes to the task of museum interpretation. I have given examples how some of the current ideas are extremely advanced evolutionary. Furthermore, I have examined backgrounds of such views, concepts, notions, suppositions and presuppositions without blaming anyone. Actually my aim of research is not to find fault with anyone, thus it is purely academic and positive. Therefore, I have attempted to suggest how different assumptions about museum work lead to various kinds of museum practice such as museum education, exhibitions and researches.

Moreover, I have attempted to analyse the Dangi ethos and world view. What the Dangis are thinking about Dangi themselves and their identity will be dug out through analysis of field data. Finally, the phenomenon of cultural-ecological

adaptation of the Dangis will be elaborated through research on the relationships between the Dangi traditional life style and their surrounding environments.

V. 2. Museum Interpretation

A. Concept and Objectives of Museum Interpretation

What is museum interpretation ? Is it research, exhibition or such other activity which provides explanations? The dictionary definition of the word to interpret is to explain something in the concrete or to translate something for the audience orally. Any interpretation which confines to research only will not be enough. Also, any interpretation which confines to exhibition only may not be justified. It is not enough to state that museum interpretation is the same as research or exhibition. According to Freeman Tilden (1967), interpretation is "An educational activity which aims to reveal meanings and relationships through the use of original objects, by first hand experience, and by illustration media, rather than simply to communicate factual information".[1]

Some of museum professionals, particularly, M.L. Nigam (1966) believe that "A good museum interprets its objects in two ways i.e. by research and by exhibition."[2] His statement is not wrong but only partly correct because museum interpretation is not a simple matter. In this connection, G.E. Burcaw (1975) mentioned that "Some of interpretation, as the result of research, reaches the public indirectly in the form of publications," and "Other interpretation is direct -- through exhibits, through guides, through lectures, and otherwise".[3] To the contrary, R.Y. Edwards (1965) describes interpretation as a combination of six different factors such as information service, guiding service, educational service, entertainment

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1. Tilden, Freeman, *Interpreting Our Heritage* (2nd), Chapel Hill, The University of North Carolina Press, 1967, p. 8.

2. Nigam, M.L., *Fundamentals of Museology*, Hyderabad, Navanit Prkashan, 1966, p. 85.

3. Burcaw, G.E., *Introduction to Museum Work*, Nashville, The American Assocation for State and Local History, 1975, p. 135.

service, propaganda service, and inspirational service.[1] Under the circumstance of open-air museums, G.W. Sharpe (1982) in brief summarized that "Interpretation is a service for visitors to parks, forest, refuges, and similar recreation areas", and the communication link between the visitor and the area's natural and cultural resources.[2]

Till today museum interpretation has been described mainly in the context of open-air museums. The main emphasis of the museum interpretation is placed on the communication link between the visitor and the museum material. However, it may not neglect that the museum interpretation is "communication between museum staff and the public " (Burcaw, 1975: 135), and it requires "a better communication between the museums and their audiences"[3] (Borhegyi, 1963: 46). Thus, museum interpretation cannot be complete unless discussing, at least, museum exhibition, educational activities, and research work. In this respect, M.L. Nigam's assertion (1966) is positive in the context of smaller indoor museums such as the "Tribal Museums" of the Tribal Research and Training Institutes, but such a generalization is not true of all museums because some of conventional museums have neither the expertise nor the required infrastructural facilities to undertake serious research. However, G.E. Burcaw (1975) asserted that "All museums must do research, for each museum has things that no other museum has; and each museum is unique, also being concerned with a region, subject matter, or public with which no other museum is concerned in just the same way."[4] They do justice to their collections only by organising good exhibitions by depending on what is already documented or known about their collections. In any case, it is certain that most interpretation is one-sidedly conceived because of those scholarly curators who wish to pursue academic work at the cost of professional museum work.

In practice, very big museums might be expected to carry on research work as one of their essential functions. There is also a special category of museums in which research appears to be a

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1. Edwards, R.Y., "Park Interpretation", *Park News*, Vol. I, No. 1, Toronto, National and Provincial Parks Association of Canada, 1965, p.p. 11-16.

2. Sharpe, G.W., "An Overview of Interpretation", in Sharpe, G.W. (ed), *Interpreting the Environment* (2nd), New York, John Wiley & Sons, 1982, p. 3.

3. Borhegyi, S.F. de, "Visual Communication in the Science Museum", *Curator*, Vol. 6, No. 1, p. 46.

4. op cit., Burcaw, G.E., 1975, p. 110.

central occupation. The museums of the various learned societies, universities and the Surveys of India also have been primarily preoccupied with promotion of research work. In this connection, Hiroshi Daifuku (1960) summarized that "the most vigorous research programmes are to be found among the larger museums and those affiliated with or belong to educational institutions."[1] In the course of the development of museums, there was a stage that research was the common denominator of museum work. G.E. Burcaw (1975) also asserted that "The museum's input is research based on the objects that it has acquired; its output is the public education."[2] Therefore, he defined the museum's mission as "the study of its collections for the edification of mankind".[3] Particularly, this kind of a museum service was appropriate when the museums were used more frequently by the specialists or by those who came to museums for information only.

However, during the last few decades the proportion of such persons as museum users is less though still many look to a museum as a place for non-formal education. Therefore, there is a progressive concern in most of contemporary museums to attract visitors' attention, create a wide range of appropriate interests in museum materials in their possession and also enthusiasm to use their special resources. Especially, modern museums are not places for pedantic work with exclusive emphasis on information and nothing on recreation, enjoyment or entertainment. Therefore, not having an interpreter in a museum may not be called as an advanced modern museum because without interpreters the museum cannot give its best quality service for the visitors. In this connection, W.H. Carr commented that "Not having an interpreter in a park is like inviting a guest to your house, opening the door, and then disappearing."[4]

Indeed, the museum interpretation emphasizes on giving visitors new understanding, new experience, new insight, new interests, etc. Thus a good interpreter having knowledge, enthusiasm, and a bit of the common touch can lead visitors easily into new and fascinating world that their senses never really penetrated before. Practically, a good museum interpreter should help visitors to understand new facts, to see

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1. Daifuku, Hiroshi, "Museums and Research", *The Organization of Museums: Practical Advice*, Paris, UNESCO, 1960, p. 68.

2. op cit., Burcaw, G.E., 1975, p. 110.

3. ibid.

4. cited in Sharpe, G.W., 1982, p. 1.

new things, to enjoy fresh experiences in the museum. So it is very important that modern museums appreciate with the role of interpreters and establish their own interpretive policy.

So far as interpretive policy is concerned, the statement of policy may be very general or so detailed according to the museum situations. A large organization, such as the United States National Park Service, has too diversified a programme to cover all activities, and the policy statements are broad based. In case of a small organization such as municipal park service, the policy statement spell out exactly what can or cannot be done. Here, an example of policy statements of National Parks of Canada, House of Commons, 1964 is given as: (i) Educating the public in the purpose of national parks and how to use, know and enjoy them is recognized as one of our basic purposes. (ii) Interpretive services and qualified naturalists are essential to encourage and assist the public to understand, appreciate and enjoy all forms of nature which are preserved in these sanctuaries. (iii) Education and interpretation will involve planned and coordinated use of various aids, such as publications, photographs, special structures, etc. and the assistance of wardens and others. (iv) Museums, where desirable, should exemplify and illustrate natural history and historical values directly related to the park and its purposes. Museums should be provided and administered by the Department.[1]

But in my opinion, the above-mentioned statement can give rise to confusion between concepts of a museum and a park. According to ICOM definition of a museum, the concept of a museum is broader than that of a park. Thus, we would accept the term "museums" as "traditional museums" in narrow sense.

Under the circumstances of open-air museums, G.W. Sharpe (1982) pointed out three objectives of interpretation: (i) To assist the visitor in developing a keener awareness, appreciation, and understanding of the area concerned. (ii) To accomplish management goals in two ways, i.e. to encourage thoughtful use of the recreation resource on the part of the visitor, helping reinforce the idea that parks are special places requiring special behaviour, and to minimize human impact on the resource in a variety of ways. (iii) To promote public understanding of an agency's goals and objectives.[2] In fact, these all objectives are mainly based on four factors such as recreation benefits, resource protection, visitor protection and law enforcement.

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1. ibid., p. 6.

2. ibid., p. 4.

Today the key words in use for describing museum interpretation are "learning by discovery", "open-ended environmental education", "audience participation and self-awareness", etc. All museums are expected to consider these ways of interpretation because of better understanding of the psychology of learning. One more important development is in the matter of holistic approach to museum interpretation. In the past, the preoccupation was with the information about the academic areas which became the basis for museum sections and galleries. Progressively, the accent is not on division of academic fields. It is more on synthesis, on comparisons and on looking at things as manifestations of the common and universal phenomena or principles. This is reflected in the environmental interpretations in which arts, sciences, socio-cultural and historical insights come together in order to interpret a territory in relation to a community. Indeed very comprehensive research on all aspects of "man-nature" relationship is the backbone of every environmental interpretation. So far as the museum is concerned, its contribution is in the success of integrated communication which is effectively adapted to the specific situation.

To describe a museum today, a concept of that is based on a "learning situation" or an "educational resource". The new approach is to explore the potentialities of a museum. This is different from the past dogmatic notions that a visit to a museum is an educational experience. But the professional expectation and endeavours are directed to see that a maximum number of museum visitors have educational experiences. In fact, the progress of museology is very encouraging in this respect. The key word is now "experience". It makes clear distinction between what one only knows in abstract sense and what one understands in personalized manner. For this reason, one valid way of discussing museum interpretation is to find out how much "experience" is involved. If a medium of museum communication has to appear different from a book and should be close to quest or discovery, the users of museums should appreciate and enjoy their personal experiences in, and of museums. "Experience" adds a new dimension to the conventional museum interpretation.

B. Principle and Scope of Museum Interpretation

It is certain that museum interpretation cannot be completed without mentioning about "first hand experience" and "illustrative media" based on cultural and natural resources. In this connection, Freeman Tilden (1967) pointed out six principles[1] of museum interpretation as: (i) "Any interpretation

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1. op cit., Tilden, Freeman, 1967, p. 9.

that does not somehow relate what is being displayed or described to something within the personality or experience of the visitor will be sterile." (ii) All interpretation should be based upon information. (iii) "Interpretation is an art, which combines many arts, whether the materials presented are scientific, historical or architectural. Any art is in some degree teachable." (iv) Interpretation should not be instruction but provocation as much as possible. (v) Interpretation should present a whole aspect rather than a part, and address itself to the whole not a specific phase. (vi) Interpretation should be separately arranged for different group of people. Particularly, school children should be differentiated up to twelve year old and more senior age-group (according to education system, generally below or over the age of primary school children).

Under the circumstances of museums, interpretation has unique or special meaning as elaborated very ably by Freeman Tilden (1967: 9) and G.W Sharpe (1982: 4). In fact, the museum interpretation is quite different from research work even though it is based on well directed and discriminating research. Research is necessary to get facts and without facts no interpretation can be valid. But true interpretation begins after research and goes beyond research as such. It is necessary to clarify this distinction between research and interpretation and also the relationship between the two basic functions in any museum context.

Interpretation in the context of museums is an educational activity which aims at revealing meanings and relationships through the use of original objects, by first hand experience and by illustrative media rather than simply to communicate factual information. Also, in the context of museums, any good interpretation must relate what is being displayed or described to the personality of the visitor. For this reason information, as such, is not interpretation. Interpretation is based on information. Every interpretation includes information. It is also true that the main aim of interpretation in the museum context is not instruction but provocation. It is equally important to understand in the museum context that the aim of interpretation is not primarily concerned with part but the whole of heritage. The basis for interpretation is information. Thus it is possible that a researcher himself may become a good interpreter. But it is to be clearly understood that the primary roles of researcher and interpreter are different. If someone can play both roles it is a happy coincidence but to be one is not the same as to be another.

In case of interpretation of cultural heritage or natural environment there is a possibility of controversies. Specialists in certain areas of knowledge may not agree with certain conclusions even if anyone can see the evidence. Under such circumstances, a researcher has very difficult task to perform

if he also wished to interpret. That is not a problem with an interpreter who can present both sides of a controversy in relation to the common evidence which is on display. Or he may confess that the evidence is not enough to come to definite conclusion and till then we have to wait for more research. The true interpretation need not be suspended in the absence of conclusive complete evidence because still visitors can be taken into confidence about the efforts by specialists. Even the visitors can be provoked to think about the situation illustrated or represented by the objects on display in a museum.

Without research work by specialists no interpretation is possible. But specialists should not get impatient if the non-specialists fail to take sufficient interest in their respective area of research. The reasons why non-specialists do not take sufficient interest are their own priorities. Non-specialists usually find the research unintelligible because the specialists were not successful in using a language to communicate what they know to others.

Research is considered as a museum's almost hidden agenda because the heart of a museum is its collections then those collections must be arranged meaningfully through continual research work. But the lay public are usually not aware of the serious research which carries out by the museum professional. The public usually can estimate a museum by its exhibitions and educational programmes. The public is interested in only what it finds in the public galleries primarily and secondarily in the popular publications like simple informative sheets, handbooks and exhibition catalogues. Thus, all museum researches should be integrated into their public presentations and activities.

It is now widely appreciated that the scholars, whether in the museum or outside, have developed their own specialized language. The challenge before museum staff is to translate the specialized language of the ethnographers into terms which will promote public understanding and appreciation. The so-called museum interpretation consists of development of a variety of exhibitions and educational programmes of many kinds which will attract and satisfy categories of people in their search for the understanding of themselves and the world around. When exhibition designers work in cooperation of educators the result is visual interpretation based on original objects, texts and other educational aids.

Interpretation is an activity by which the museums can bridge the communication gap between the scholarly researchers and the non-specialist lay men. Interpretation will succeed if it deals with the available information and conclusion of the specialists based on evidence not in parts but holistically. Such holistic interpretation is like story telling which captivates attention of common people or non-specialists. For

this reason, museum interpretation has to deal with both facts and things imaginatively. Usually, interpreting skill is compared with the skill of telling a story. In a good story form, an able story teller does not tell lies but edits the facts in his own way, he does not hesitate to do away with all the material which is not vital or relevant to his story. Special skill is required to succeed in the presentation of ideas in the context of a given real situation.

Interpretation is contrasted with instruction where the primary purpose is education. In interpretation the main aim is not instruction but provocation or stimulation so that a desire is created for personal experience. An instructive activity aims at communicating information whereas interpretation aims at creating a personal involvement in understanding independently. Interpretation makes a visitor to want to discover things for himself and to see and to understand the things at which he may be looking voluntarily. So, either research or instruction is not equally corresponded with interpretation, which is provocation for the sake of personal experience.

The work of interpretation should take into consideration both the subject matter and the audience but in the reverse order.It is said that the most common error in interpretive exercise is the priority given to what an exhibit should communicate. But the more important issue is what the visitor wishes to receive out of the communication. So, before thinking about what museum wishes to express, more serious study may be made of the reasons behind people coming to museums. Unless this is done, there will be no enthusiasm on the part of visitors to take any initial interest in exhibitions or other forms of interpretation. There are all kinds of possible difficulties in communicating with the visitors through the medium of exhibits. None can predict about the manner in which exhibitions may attract visitors attention and fancy. Therefore, demonstrations and participatory programmes are constituted of important parts of museum interpretation. Both represent physical events which enhance the provocation of personal experience.

When visitors come to museums, mostly they are not experts and have no knowledge or have very vague knowledge of the things. They come to see in museums or to have experience and idle curiosity or to spend free leisure time. It is for the interpreter to understand not visitors ignorance but the reasons for the ignorance. Subsequently, he has to design his presentation to suit the requirements of the particular group who have no access to the right information in the part because of their other occupations. Once the interpreter understands the basis of the ignorance of his visitors, he will be able to deal with what the visitors know. That knowledge of the visitors by the interpreter can serve as the starting point of interpretation. Therefore, museum interpretation does not aim to

change the visitors but to provoke the visitors to change themselves.

So far as Freeman Tilden's suggestions (1967) are concerned, museum interpretation can be determined by three main factors: (i) the character of materials holding in a museum, (ii) the group of people concerned, and (iii) the use of illustrative media by a museum. It is said that interpretive activities in a museum can be affected by these factors. In this respect, various illustrative media are very important, and also they perform an important role of the museum interpretation.

Interpretive media can be described as the means, methods, devices, or instruments by which the interpretive message is delivered to audience. Selection of interpretive media depends on mainly six factors: (i) "by whom" -- interpreter, artist, craftsman, curator, educator, etc., (ii) "to whom" -- illiterate or high educated, school children, youth group, aged group, physically or mentally handicapped, minority ethnic group, foreigners, etc., (iii) "for what" -- visible and touchable material, or invisible and/or untouchable one, (iv) "where" -- an open-air site or an indoor museum, (v) "when" -- time and duration, and (vi) "variety of media" that a museum can provide. Additionally, four factors of that should be taken into consideration such as: (i) availability and cost of interpretive aids, and people who carries on interpreting activities, (ii) effectiveness of activities, (iii) problems of maintenance, and (iv) season and weather, in particular, in open-air museums.

Interpretive media can be divided into two categories: personal (attended) services and non-personal (unattended) services.[1] In case of the personal or attended services, the visitor comes into direct contact with the interpretive specialist through the medium of (i) information duty, (ii) conducted activities, (iii) talks to groups, or (iv) living interpretation and cultural demonstration. On the contrary, the non-personal or unattended services should be considered not as a replacement for personal contact but as a means of expanding various interpretive programmes beyond the capabilities of individual interpreters. Non-personal services need and may utilize the following media: (i) audio-visual devices, (ii) signage and publication (signs, labels, and publications), (iii) self-guided activities (self-guided trails and self guided-vehicle tour), and (iv) exhibits (indoor and outdoor). For obtaining effective results of non-personal services, a museum should provide and utilize various museum facilities for visitors such as auditorium, galleries, lobbies, resting places, and drinking fountains where visitors frequently

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1. op cit., Sharpe, G.W., 1982, p. 112.

stop and enter. Furthermore, a museum should develop off-site and off-season media through T.V., radio, newspapers, or sending a newsletter through mailing to the public or a specific group for dissemination of knowledge and experience.

Hereafter, different media and system of museum interpretation will be elaborated through various exhibitions, education activities and research on the Dangi culture. While discussing different methods of museum interpretation, interrelationships among them also will be brought to light one after another.

V. 3. Through Exhibitions

A. Designing and Planning Exhibition of Ethnography

(1) Exhibitions as Media of Interpretation

The subject of museum exhibition has received serious attention in different parts of the museum world. A great deal of discussion is centred around the ways and means of increasing the effectiveness of museum exhibitions. There are several reasons for such increased attention to exhibitions. Firstly, they are considered as the most popular ways of communication to the different groups of people who are ever enthusiastic about visits to exhibitions of all kinds. Secondly, there is an increase in the cost of preparing exhibitions. Therefore, the concerned people want to know how much is gained by means of exhibitions specially to discover better ways of organising them. Thirdly, exhibitions are seen as the best ways of involving the public in the conservation and appreciation of heritage of the local communities, the regions, the nation and the world.

The value of exhibition as the chief medium of interpretation is widely accepted. Such an interpretation is achieved by making use of the material in museum collections in endless ways. It is astonishing how similar material is put to use in museum exhibitions to lead to different interpretations because the curators have their own ideas, assumptions, theories and even prejudices or predetermined notions. For this reason, experts have concluded that the exhibition is a powerful tool of interpretation and what is interpreted depends as much on the original objects as on the curators who wish to use them to illustrate their own concepts.In the context of tribal material like that of the Dangs, this dependence on original material as well as concepts assumes special significance.In fact, it is a critical issue which will make or mar the credibility or success of museum exhibition as a trustworthy source of information about the tribal life.

Exhibitions based on tribal ethnographic materials are the most effective ways of presenting to the public a first hand, tangible evidence of cultural heritage of tribal communities. If properly utilized, such materials can explain, illustrate and demonstrate the unique character of each community and differentiate it from others. It is important to remember that "The ideal exhibit program of a history museum should demonstrate the living role that history can play in the life of the community by linking together the remembered yesterdays, the interesting todays, and the inevitable tomorrows."[1]

But, in terms of each discipline, there are some different targets of each exhibition between the ethnographical and historical materials. In my opinion, the ethnographic material should not be treated as an ordinary historical material. Of course, it cannot be neglected that each ethnographic material has its own phase of the times. In fact, the purpose of exhibit of historical objects is to tell historical facts, and to reconstruct the past, then what is the purpose of exhibit of ethnographic collections? Different types of ethnographical exhibitions give us an idea of great diversity of people's concerns. We may also find out that the available ethnographic resources are put to the best use in increasing experience and knowledge about man and his environments. This is true where the ethnographic exhibit is analytical and based on scientific approach included a field-collection and participant observations on different ways of life and traditions. It is certain that the main purpose of an ethnographic exhibit is to show everyday life from the past to even today. Therefore, "in the most anthropology museums the display is largely a-historical and ethnographic".[2]

However, the sense of history which the tribal possess is not comparable to the "historicity" as understood by the urbanities who have good formal introduction to the subject of history as the study of past events of life based on objective evidence. To fulfill the obligations of interpretation the museums dealing with tribal ethnography need special methodology to plan their exhibitions. In general, ethnographic exhibitions require more labourious and time-consuming than other exhibitions such as fine arts or science, because they are more or less bound to comprise "a total presentation of a society, both in

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1. Guthe, C.E., *The Management of Small History Museums*, Nashville, The American Association for State and Local History, 1969, p. 57.

2. Frese, H.H., *Anthropology and the Public: The Role of Museums*, Leiden, E.J. Brill, 1960, p. 137.

contemporary configuration and in its historical formation".[1] Ideally, advanced ethnographical museums may reflect contemporary theoretical directions and trends within cultural and social anthropology, and they may take their share in dissemination of these theoretical insights, and hopefully also, further theoretical developments, by expressing them in another medium than the usual one.[2] Nevertheless, such experimental attempts and practice have helped museum professionals in establishing and even codifying certain general principles and techniques of progressive ethnographic exhibitions which are widely accepted in the museum world. Of course, they should be adopted and amended to meet the special requirements of local ethnographic museums.

Much of what is applicable to the material culture approach to historical collections in museums is also applicable to the tribal ethnographic collections. The tribal ethnographic materials are also artifacts which need to be presented to the museum visitors. But to do that scientifically a lot of research is necessary on the tribal communities to which the ethnographic materials belong. It is the mission for museums to take care of such materials so that it is interpreted as a part of also the intangible world and vision of the tribal communities. Not to do so is to commit the error of displaying the ethnographic materials for their physical appreciation. But when there is a concern for the context of the intangible world then the display is made to offer the right perspective which helps in showing cultural relationships. The functional aspects of ethnographic materials can be shown only in relation to the cultural context. This approach deals with the "man" first and not the objects which makes very basic difference in communication strategy. It is expected that the other museum activities for the public are also supplementary to the displays in interpreting the "man" behind the ethnographic materials i.e., "man-made" objects.

According to the modern museum approach, the presentations must have the "man" as the focal point. The emphasis should be less on the objects and more on human achievements. The advanced ethnographic exhibitions deal with the multi-sided relationships of the man with his environments both in the past and the present, individually and collectively, in physical, utilitarian

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1. Ferdinand, Klaus, "The Afghanistan and the Nigeria Exhibition at the Moesgaard Museum, Demark, as Examples of Theoretical Concepts in Anthropology", in Morley, Grace (ed.), *Visualisation of Theoretical Concepts in Anthropology in Museums of Ethnography*, (Proceedings of the Symposium of ICME, New Delhi, December 8-9, 1978), New Delhi, National Museum of Natural History, 1978, p. 52.

2. ibid.

or functional sense and also in symbolic, cultural sense. This approach becomes very popular because of the central place given to the human behaviour, human ways of working at the nature and life. This is not easy to make in terms of actual displays because relationship between the objects collected by museums and the human beings who made or used them cannot be easily illustrated in static displays. Therefore, pictorial means must be supplemented with dioramas, videos, projection of slides along with audio records or any such projections of images which can make the objects quite meaningful. The ethnographic displays suffer because they are wrongly expected to glorify the tribal ways of life or show them only what happened in the tribal past. But in the modern museums the emphasis is on the changing ways. The Tropenmuseum (The Tropical Museum) at Amsterdam, *Rijksmuseum Voor Volkenkunde* (The Rijks Ethnographic Museum) at Leiden, in the Netherlands, and the Ubersee Museen (The Ubersee Museum) at Bremen, in Germany are shining examples of the success of such a contemporary approach to the task of ethnographical exhibitions.[1] They keep the public continuously interested in knowing how the tribal cultures are either changing or responding to new technological situations. In contrast, the traditional displays pretend to give a final picture of tribal culture which is misleading.

From the viewpoint of the ethnographic interpretation there is a need to understand the various appropriate options of using technological applications which are available at least in theory. Hopefully their use can be made in the national level institutions like Indira Gandhi Rashtriya Manav Sangrahalaya at Bhopal and the tribal research and training institution museums which have ample opportunities to make new experiments. Many progressive thinkers want museums to study the future uses of technology so that they can become a part of technology as it grows instead of just reading about it. This may sound very ambitious but looking at the pace of technological development of media in communication, even in India, there is no reason why museums cannot become a part of contemporary technological scene. The museums which are organised by the National Council of Science Museum (NCSM) in India have given good demonstration of how they can become a part of technology. Even in the non-urban

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1. Ave', J.B., "Ethnographic Museums in a Changing World", in Van Gulik, W.R., et al. (eds.), *From Field-Case to Show-Case*, Amsterdam, J.C. Giben, Publisher, 1980, p.p. 11-28., and Luderwaldt, Andreas, "Anthropology and the Natural Sciences in the Museum", in Morley, Grace (ed), *Visualisation of Theorectical Concepts in Anthropoloy in Museums of Ethnography* (Proccedings of the Syposium of ICME, New Delhi, December 8-9, 1978), New Delhi, National Museum of Natural History, 1978, p. 36.

place like Dharampur, Gujarat, 1984, the District Science Centre was established by the NCSM, which has used very selectively but also effectively technical methods and equipments in order to explain scientific laws and technological developments for the predominantly tribal population. However, the Lady Wilson Museum which is situated next door of the District Science Centre has dependence on the conventional static methodology for its interpretation work. That contrast is the subject of a continuous debate and discussion in the All Indian Museums Conference organised Museums Association of India during the last decade. Most of the progressive museologists wish that museums must facilitate current technology and facilities for better museum work.

There were significant changes in the technical aspects of museum presentation after the Second World War. Indeed overcrowded show-cases of the past were avoided and gradually disappeared. Things were selected for their visual attractions. Space was kept between two exhibitions so that each can get attention. Also plain backgrounds became popular to bring objects into prominence by contrast. To give emphasis on objects, the show cases became popular. This was done to make objects visually stimulating. It is relevant to know how this change was connected with the success of the ethnographic exhibitions. It is true that it helps in making ethnographic objects more attractive and eye catching because of the new techniques. But it must also be remembered that such techniques can isolate the individual objects from the other objects of the sequence or group and the context. Therefore, making ethnographic objects exciting and attracting should be done carefully so that the final effect is not wrong in terms of meaningfulness.

It is rightly assumed that the main principles and techniques applicable to the designing and planning of ethnographic exhibitions are based on the understanding and general knowledge of the visitors such as common people, multifarious public or heterogeneous group. It is certain that the main purpose of the museum exhibition is to create initial interest in individual visitors and then to inform, to stimulate and to encourage them to use the original museum material as a source of knowledge and special experience. This special experience is direct as it is in the presence of original objects of fine arts, history, sciences, etc. which have the capacity to illustrate and represent certain reality. In this respect, even the most dramatic films or video recordings have no equal status as evidence of objective reality. Mostly people know that films and video recordings are already edited and these edited audio-visual materials may be shown to the concerned users only.

In most of the museums in India the original material is placed behind glass and, therefore, it can be seen visually but not held, touched, smelt, tested by other human sense organs.

Actually, these limitations are the result of the acceptance by the museum of the responsibility of protection and conservation. The underlying idea is that so precious an evidence of reality cannot be used only by a few persons for a short time. The material if it is valuable enough to be collected in a museum must be held in public trust for all generations to come in future. It is no doubt that a museum exhibition is a far superior source of authentic information which can be used directly by any and all individuals than many other media.

It is, therefore, obligatory on the part of museums to create their exhibitions as objective and truthful, and to use the original material for telling story of man and his cultural and natural environments without any bias or distortion. Those who come to see exhibitions in museums assume that what they see for themselves is accurate, authentic and trustworthy. A curator who acts like communicator must imagine that he is always under oath as if in a court of law, under an obligation to tell the truth, only the truth and nothing but the truth. Of course, there is no such court but the charm of the museum profession lies in the understanding of the code of ethics for the museum profession and in following such a code both in the letter and spirit.

(2) Designing and Planning of Ethnographic Exhibitions

Practically, designing and planning of an ethnographic exhibition depends on the quantity and quality of original materials, the size of exhibition space, the duration of preparation and exhibition, the available human resources, and probable finances available for the project. Ideally, the exhibition planner(s), such as the curator, the designer, and the exhibition officer should know in advance the nature of the exhibition and usable financial support, original objects which will be displayed, infrastructural facilities and human resources and for whom the exhibition is meant. And furthermore, they must take into consideration of the level of target visitors' knowledge and a standard of education, and furthermore, their cultural background. It has,therefore, been rightly emphasized that "an exhibition plan must be a team work, particular, in a medium-sized and large museums."[1] In my opinion, even if in a smaller museum, the curator should plan an exhibition through collaboration with other museum's experts or, at least, he should consult the matter to the concerned museum professionals such as the designer, electro-mechanical engineer, conservator, educator, security specialist and other technical staff. Otherwise, unexpectedly his planning of an exhibition can be fallen into an defective exhibition due to various technical problems.

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1. Bedekar, V.H., *So You Want Good Museum Exhibitions*, Baroda, Department of Museology, Faculty of Fine Arts, The M.S. University of Baroda, 1978, p. 27.

A good approach to the task of planning an ethnographic exhibition should be a combination of many functions: The first function is to inform the nature and the special characteristics of museum objects to the visitors. The second function is to point out the existing relationships among the various kinds of objects and the establishment of new relationships among them based on the research. The third function is to illustrate the system to which the individual objects belong. This aim is linked up with academic disciplines connected with museum collections. Hence the third function is very important because exhibitions have to deal with theories and hypotheses which influence classification and grouping of museum materials.

There is no doubt that each of the above functions is important in itself. But their combinations can be fruitful in serving different groups of visitors or different interests which people can show. As, a single person may show different interests even during one visit, the aim of the museum displays should be to identify different interests rather than different groups. But, it is also true that well recognized groups like children, students, collegians, teachers, craftsmen, professionals, academicians, industrial workers, rural people, urban citizens, tribal, etc. may show common interests on collective basis. For this kind of multi-purpose display strategy, several units in the popular or public galleries can be planned to make museums popular as well as educational places. Not only that but such presentations will continuously attract the public for one reason or another. Ethnographic displays created on these lines will revolutionize public appreciation of the Dangi cultural heritage.

A competent curator or designer should be concerned with the success of exhibitions in the matters of both attracting the attention of the largest number of visitors and establishing communication with them. Commonly, a curator is occasionally over-enthusiastic about the opportunity to show maximum number of original objects and to express as many ideas and give as much information as possible to visitors. Therefore, a competent curator should reflect the opinions of other experts who are dealing with the same matter. Practically many curators have committed the mistake of suppressing, the frank and outspoken view of talented designers working under them. If designer's voice is not heard he will be discouraged from making sincere efforts in designing and displays which will both attract and inform the curator's messages. Once a designer is frustrated, he will not be able to demonstrate his creative talent which cannot be forced externally but must operate voluntarily.

A good approach to the task of planning an ethnographic exhibition should be a combination of many functions. One of them is the function of informing the museum visitors about the nature

and the special characteristics of objects after attracting attention. Second function is to point out the existing relationships amongst the various objects and also establishing new relationships based on research. The third function is to illustrate the system to which the individual objects belong. This aim is linked up with academic disciplines connected with museum collections. Hence, the third function is important because displays have to deal with theories and hypotheses which influence classification and grouping of tribal materials.

There is no doubt that each of the above functions is important in itself. But their combinations can be fruitful in serving different groups of visitors or different interests which people can show. As, a single person may show different interests even during one visit, the aim of the museum displays should be to identify different interests rather than different groups. But, it is also true that well recognized groups like children, students, collegians, teachers, craftsmen, professionals, academicians, industrial workers, rural people, urban citizens, tribal, etc. may show common interests on collective basis. For this kind of multi-purpose display strategy, several units in the popular or public galleries can be planned to make museums popular as well as educational places. Not only that but such presentations will continuously attract the public for one reason or another. Ethnographic displays created on these lines will revolutionize public appreciation of the Dangi cultural heritage.

A competent curator or designer is very much concerned about the success of a display in the matters of both attracting the attention of the largest number of visitors and establishing communication with them. Commonly, a curator is very often over-enthusiastic about the opportunity to show maximum number of original objects and to express as many ideas and give as much information as possible to visitors. Therefore, a competent curator should reflect the opinions of other experts who are dealing with the same matter. Practically many curators have committed the mistake of suppressing, the frank and outspoken view of talented designers working under them. If designer's voice is not heard he will be discouraged from making sincere efforts in designing and displays which will both attract and inform the curator's messages. Once a designer is frustrated, he will not be able to demonstrate his creative talent which cannot be forced externally but must operate voluntarily.

Indeed, the designing of the museum exhibition has become a subject of crucial significance because of the new concept of "social accountability". This "social accountability" is different from the auditing which is limited to the manner of maintaining accounts of the sanctioned grants according to the rules and regulations. A museum may keep good accounts of its grants but may not achieve the objectives for which exhibitions

are organised. Designing has become important because there is a professional awareness that exhibitions must achieve predetermined objectives. Success or failure of the exhibitions is determined by the results. This awareness was the consequence of increasing professionalism and developments in the field of museology.

It was recently that ethnographic museums faced with more severe tests of their presentation because of professional pressures. Terms such as "old fashioned", "static", "object-oriented", "passive", "conventional" are now in use for those displays which have no power to attract or to tell a story. The opposite term is "modern" which stands for better illuminated, less crowded, colourful, attractive displays. To make such displays as a part of modernization, museums asked for grants. To prepare such displays more elaborate organisation became necessary. The museum literature on exhibitions began recommending more complex methods as can be seen in the journals and bulletins of national and international organisations. Not to adopt or adapt them became embarrassing to museum personnel concerned with exhibition work. To cope up with the growing complexity, they started comparing their work with other technological occupation. Slowly they realized the importance of analysis of all tasks in exhibition making followed by costing and scheduling in the interest of better management. This makes great contrast to the old ways of preparing exhibitions without too much concern for predetermined written objectives and built in procedures for evaluations. Due to advancement of design and display, the museum professionals also can utilize the advance techniques to museum presentation.

In the progressive museums such a record help, in planning new exhibitions to a great extent. Even if the success of a new exhibition cannot be predicted fully, some objective data should be available to guide its initial planning. It should also be understood that to succeed, a museum exhibition must precede and a company strong planned publicity and public relation drives to inform, attract, motivate and prepare the groups of public to use the educational and recreational opportunities in the form of exhibitions. This is applicable to all kinds of exhibitions, a permanent, temporary, special, travelling, etc. A museum exhibition will succeed to the extent to which it will be received enthusiastically by the target audiences. So there is a close link between several tasks. Firstly museums must create public enthusiasm. Secondly, they must satisfy the enthusiastic public when it actually responds by visits and participation. And thirdly, they must do the follow up by finding out how far the target audience were benefited so that in future there will be better exhibitions. Actually this is an ongoing task. A museum exhibition may not succeed hundred percent but any disappointment should be considered as an opportunity for improvement in the future.

There is no standard methodology of designing museum exhibitions which will be effective and which will be followed in all museums. Even if ideally there should be such a common methodology which all institutions can share it is not possible because of the variability factors as follows:

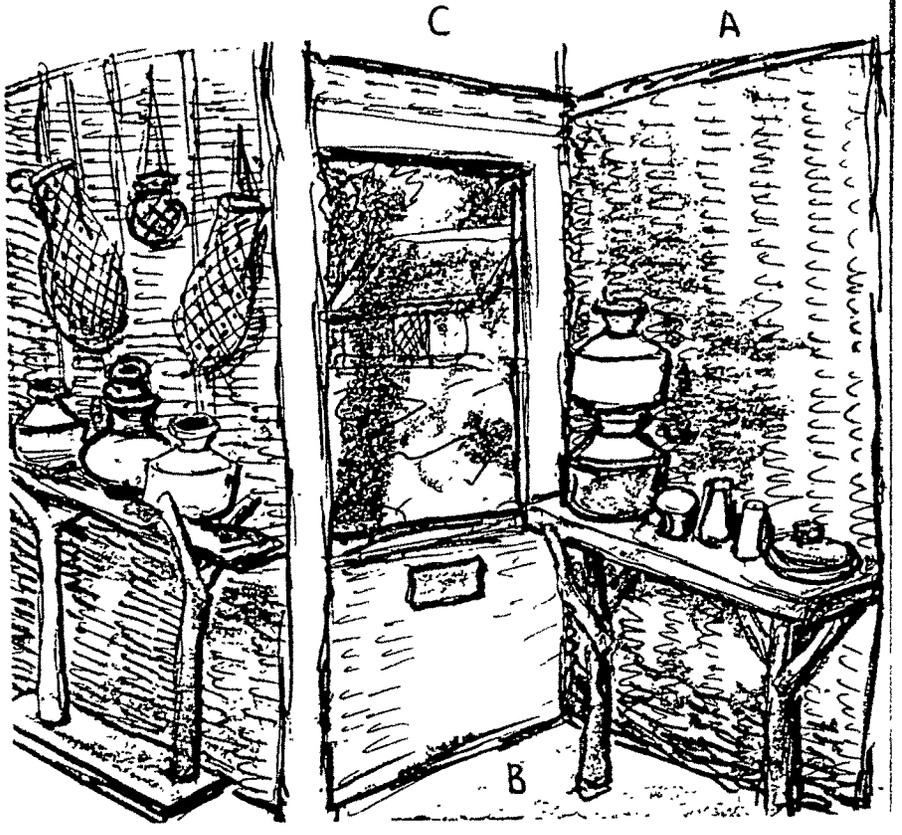
(i) The objectives of museum exhibitions differ,
(ii) The infrastructural facilities differ,
(iii) The available space differs,
(iv) The contents of exhibitions both in term of story or theme and the required original objects as basis for presentation, differ,
(v) The perception of the curators regarding the requirement of interpretive aids like audio-visual aids, differs,
(vi) The consideration to the durability of the material use in installation including showcases, accessories, etc. differ depending on the proposed length of time or duration of the exhibitions,
(vii) The safety, security, and conservation needs of exhibitions differ, because of the nature of the material,
(viii) The composition of the visiting public differs,
(ix) The target audiences for each exhibit even in the same museum may differ,
(x) Every exhibit is expected to be an integral part of the overall educational objectives of a museum or of an interpretive master plan. Such a plan may differ from institution to institution,
(xi) Funds and expertise required for exhibitions may differ,
(xii) Time available for planning and execution of an exhibit also affects and imposes certain constraints on the process of designing. Therefore, no universal methodology can become applicable to all institutions,
(xiii)Amount of data available for use in the exhibitions may also influence the designing power,
(xiv)The image and reputation of the museum based on past exhibition events will differ,
(xv) The extent of intensity of achieving success by the fullest utilization of all means and overcoming all possible problems or difficulties by all means may differ from time to time even in a single museum. These factors positively shape the scope of designing process.

In view of the above, designing cannot be discussed in isolation of a specific museum situation at a specific item. Yet after observing the working of many museums during the period of field work and having serious discussion with the concerned professionals, it is possible to indicate certain processes of designing exhibitions which are held as desirable patterns for successful work.

One approach to designing consists of taking several sequential steps as follows:

(i) Selection of a theme, (ii) Search for materials suitable to illustrate it, (iii) Research on the theme, if necessary, (iv) Research on the original materials, if necessary, (v) Consultation with experts, for updating the knowledge of the theme so that the quality and accuracy of the labels, catalogues, etc. are fully satisfactory, (vi) Preparation of an outline of the contents and an exhibition script, (vii) Visualizing all the tasks involved in preparing exhibitions, (viii) Estimating the time for all the above tasks, (ix) Fixing time frame for all tasks, (x) Estimating the expenditure for the exhibitions, (xi) Estimating the manpower requirements and making provision for them, (xii) Procuring materials, (xiii) Conceptual development of the exhibition followed by detailed designing and art work and detailed drawings, (xiv) Finalization of the layout, (xv) Decision regarding security, and lighting, (xvi) Preparation of labels, captions, posters, guides, catalogues and other educational and publicity materials, (xvii) Mechanical, electrical, electronic components, art work and furniture, (xviii) Assembly of separate parts as per the approved design, (xix) Final check and trials to ensure the effectiveness of systems for the proposed period, (xx) Audience testing and monitoring to keep the exhibition going as well as to maintain it. So far as designing of exhibitions is concerned, it is very important to visualize all the tasks on paper or on the screen through computer programmes, in particular, making scale model, preparation of exhibition scripts, labels and drawings, displaying objects and arrangement of show-cases in galleries (See, Pl. 5-1 to 5-9, Fg. 1-17, 10-13 to 10-20, 15-1 to 15-3, 16-1 to 16-3, Vol. II).

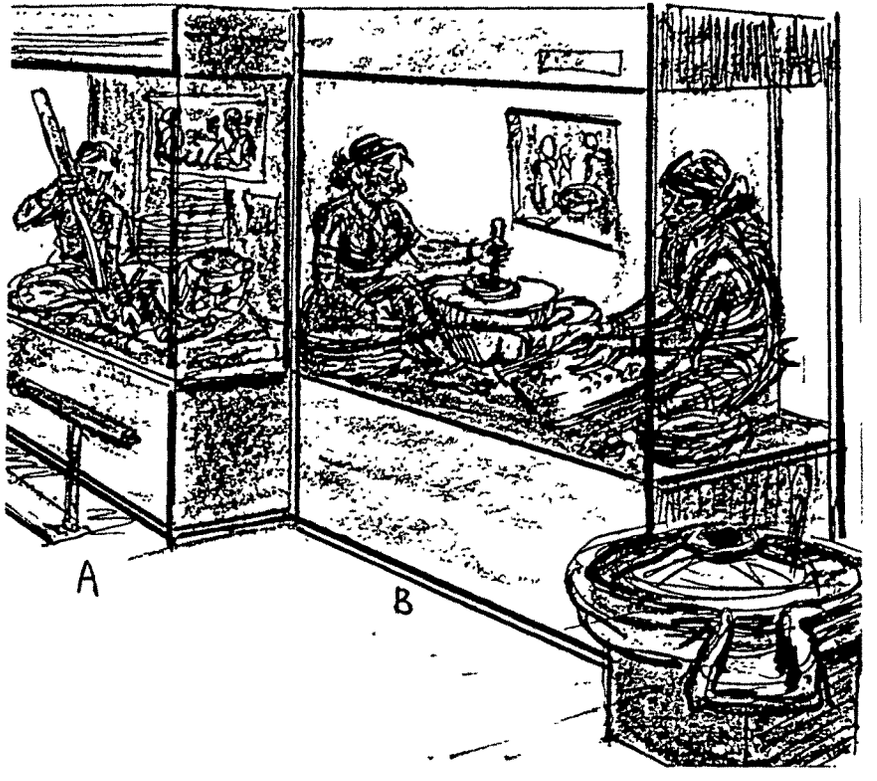
In large museums where there is a specialized section or department for exhibition work, the process of planning or designing will be more formal and complex. At times, special exhibition committees are appointed to initiate supervise or coordinate the work. Yet the curator of the concerned section is given the responsibility for writing a basic outline of the exhibition of the theme chosen by the committee. The curator is assigned the work of collecting required information selecting objects, illustrations, slides, photographs and other interpretive aids, suggesting appropriate techniques, etc. The exhibition coordination consists of checking the suitability of the objects, their state of conservation, the data about original materials, the data for labels, scripts, guides, deciding traffic flow of visitors as a part of designing layout. Coordination also involves supervision of different tasks carried out by specialists and technicians at different places like construction of stands, cases, pedestals, labels, photographic aids, background, visual aids and gadgets, lighting and sound units, preparation of individual objects before they are installed.



Pl. 5-1

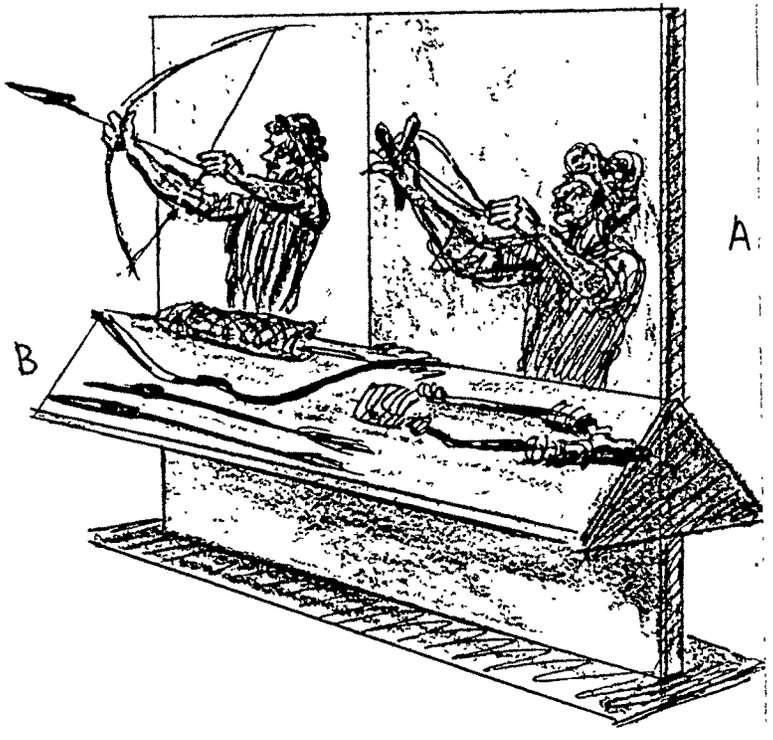
1. Water Stands

A - 6"x 4", vertical panels, each covered with typical simulated Dangi domestic wall, made out of bamboo strips covered with cowdung-mud plaster. B - Water stands. Over them are shown a variety of vessels and earthen pots for storing water. C - An opening into which a painting of Dangi milieu is framed to suggest the context.



2. Grinding & Pounding Grains

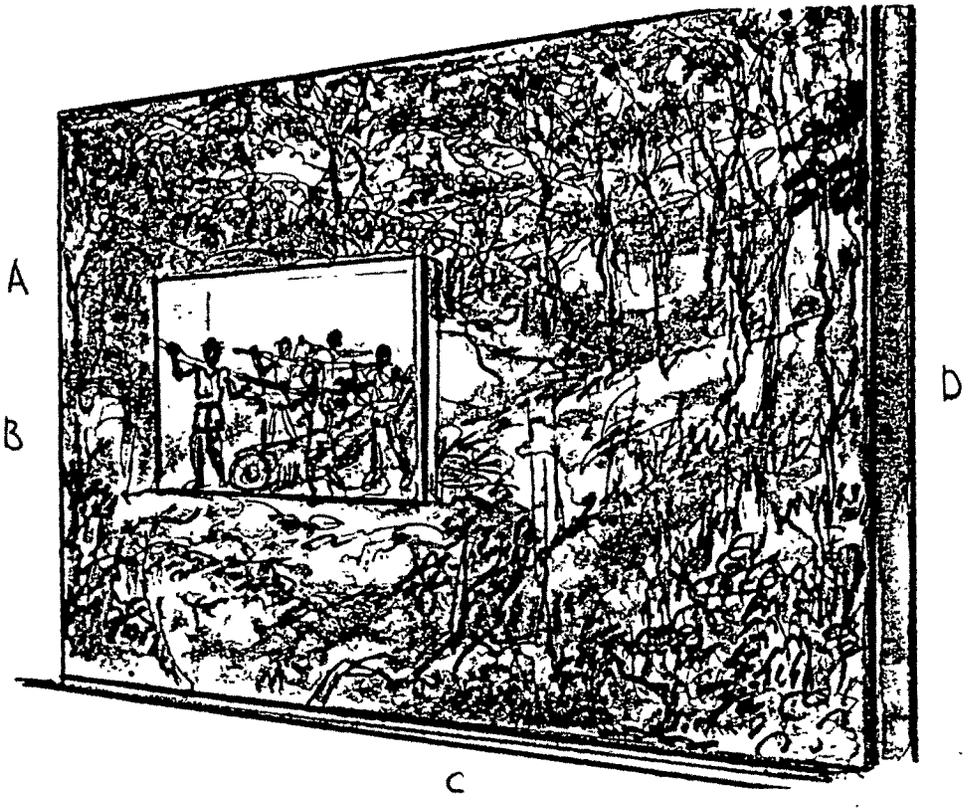
A - Group of cases in which manikins show women figures in domestic work-photographs at the back. B - Things like mace for pounding rice, grinding mill-stone, etc. are to be displayed in open, nearby so that visitors can operate them for participatory experience.



Pl. 5-2

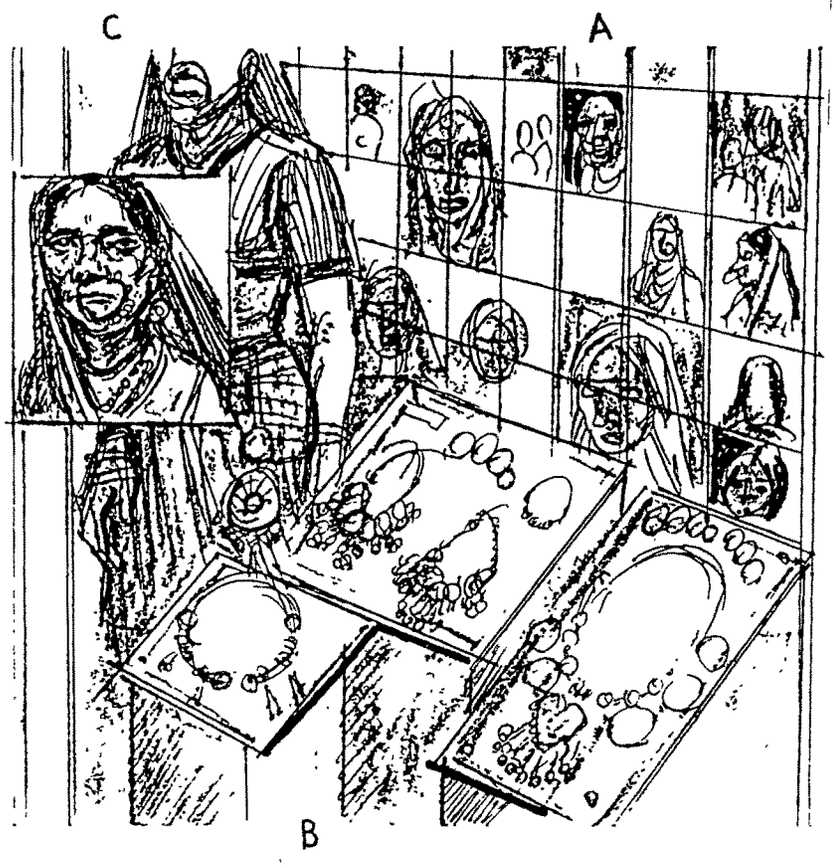
1. Archery & Slingshot

A - Simple display of cut-outs showing the use of bow and arrow and slingshot to throw stones to kill birds. B - Inclined surface to show examples of bow, arrows, quiver carrying case, made of bamboo for arrows. The structure can be used on both sides.

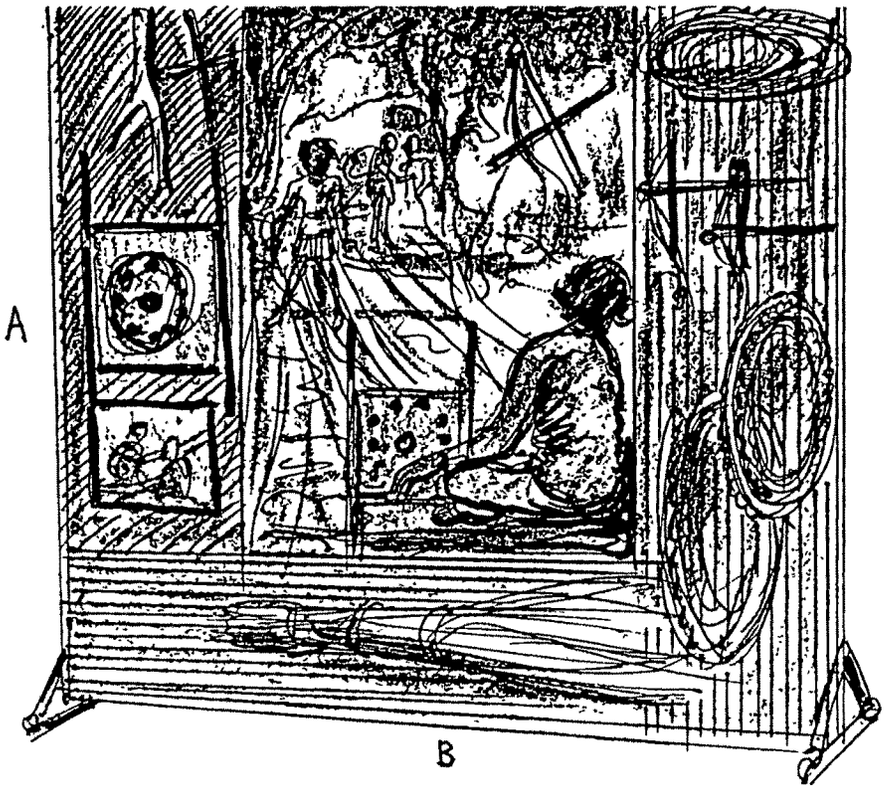


2. Carrying Wood

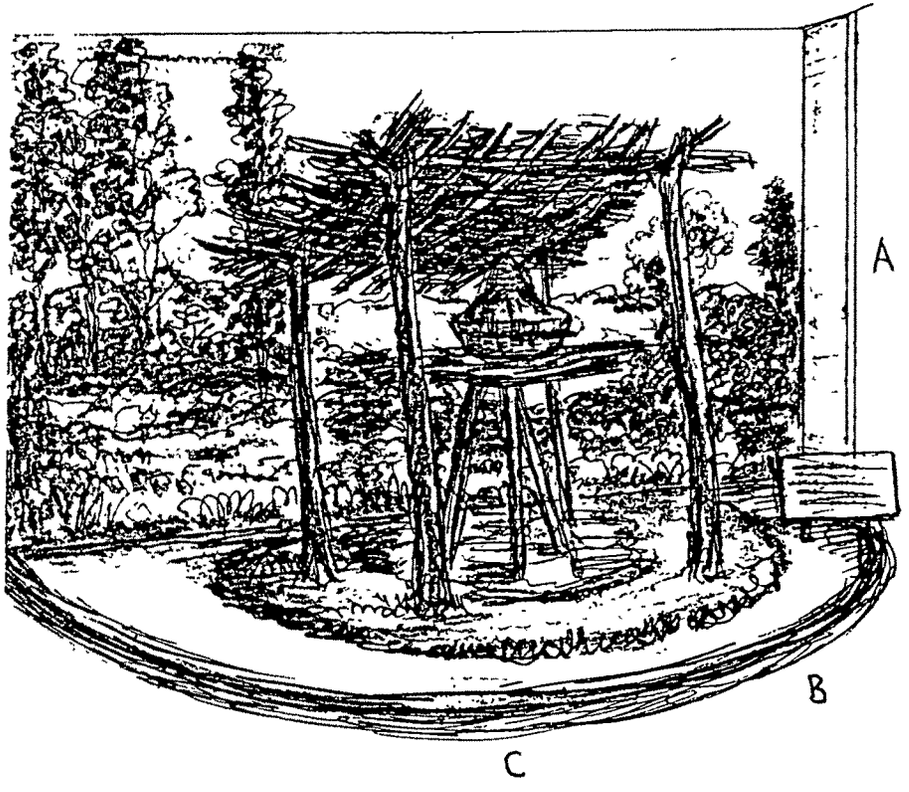
A - Vertical block into which B - 20"x 30" shallow window is made to show scale models of Dangi forest workers carrying a huge tree trunk by collective efforts so that logs, cut deep into forests, can be loaded into trucks on motorable roads. C - Whole surface approximately 6"x 8" is painted to show the thick Dangi forest. D - The back of this structure can also be used by having another view from other side or for flat displays.

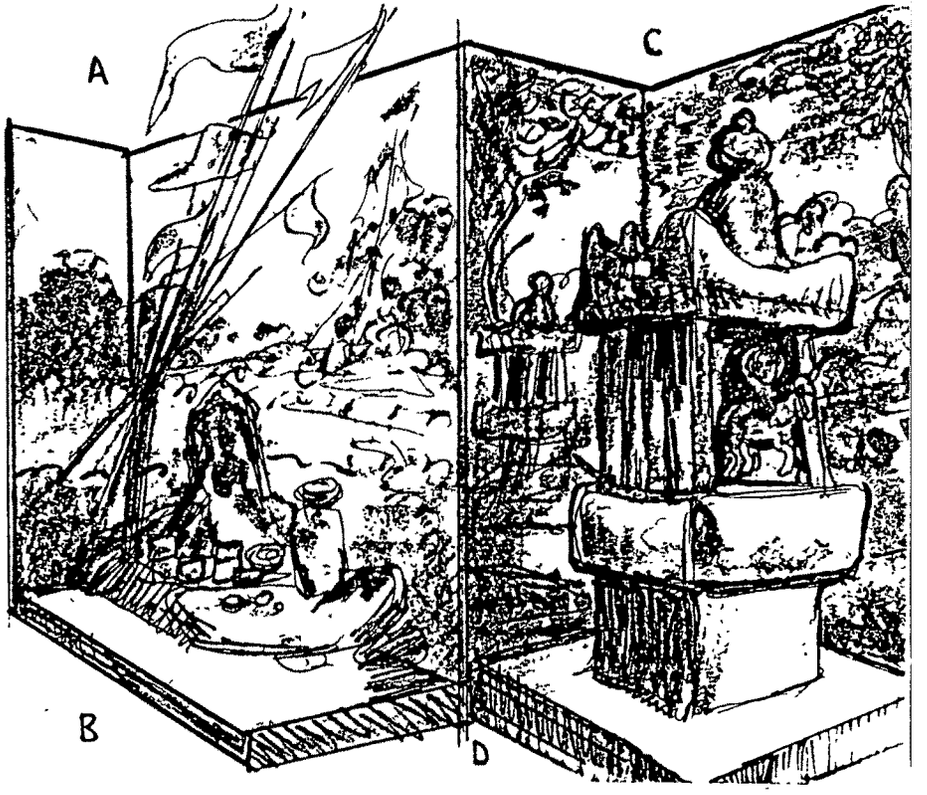


Pl. 5-3
1. Ornaments
A - Composite display of prints and for transparencies put together in metal lattice-work-frame, showing different ways in which ornaments of Dangs are designed and used. B - Actual ornaments shown in inverted shallow boxes supported by pedestals with inclined tops. C - Enlargements suspended. They show more detailed views of ornaments.



2. Rope-Making
A - Display of rope-making on vertical panel covered with bamboo sections. B - A large picture showing actual rope making in open. The equipment and samples of raw material are also shown.





Pl. 5-4

1. Ancestor Shrine (*Devshi Padar*)

A - 10"x 6" background panel on which landscape is painted to provide context. B - Reproduction of grass greenery and soil on the floor of the gallery. C - Middle structure reproducing faithfully the shade made for ritually placed object in basket in the field as an ancestor shrine.

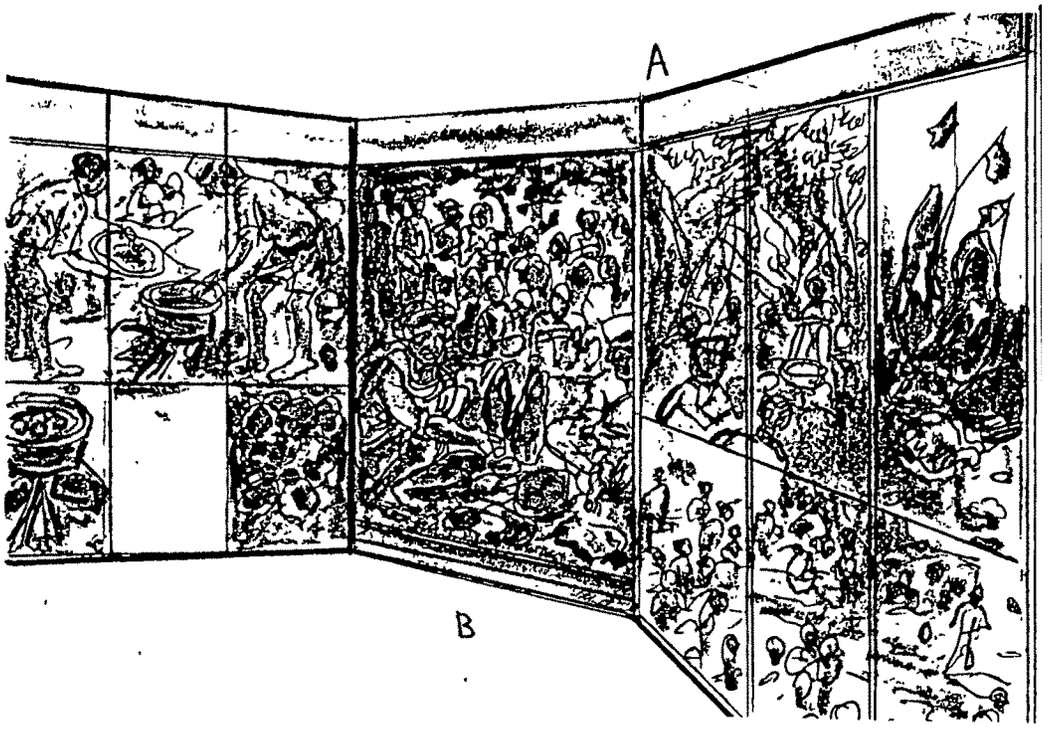
2. *Maha Dev* & Memorial Statue

A - Self supporting vertical panel 6" in height and varying in length from 2" to 3". B - Road-side *Maha Dev* of Dangs. C - Paintings to show surroundings. D - Low platforms with stone-like memorial statue.

Pl. 5-5

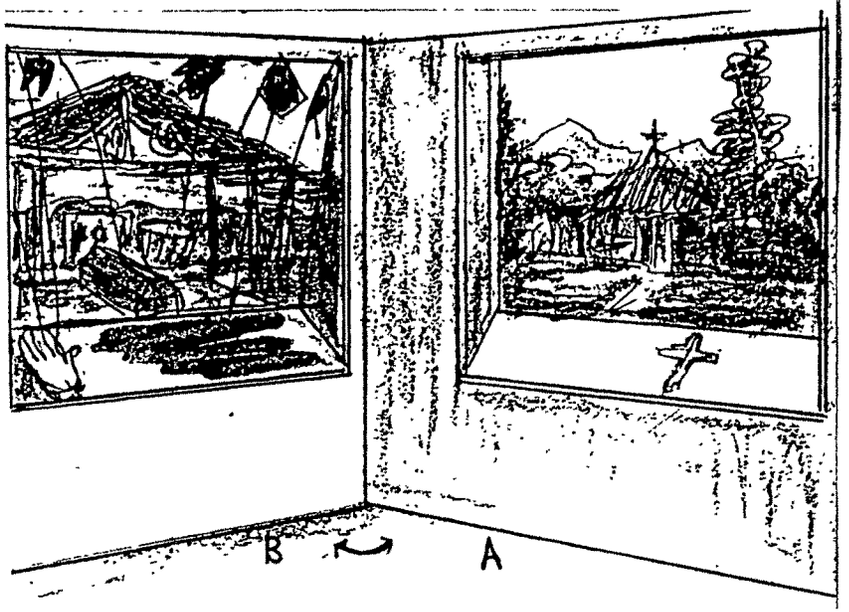
1. Totem Pole

A - Display of original or copy of stone figures found in Dangi landscape as a part of their religion. B - Each may be given a visual aid to show the locality in which it is found. On the back of the panel may be text and map etc.



2. *Devgam* Festival

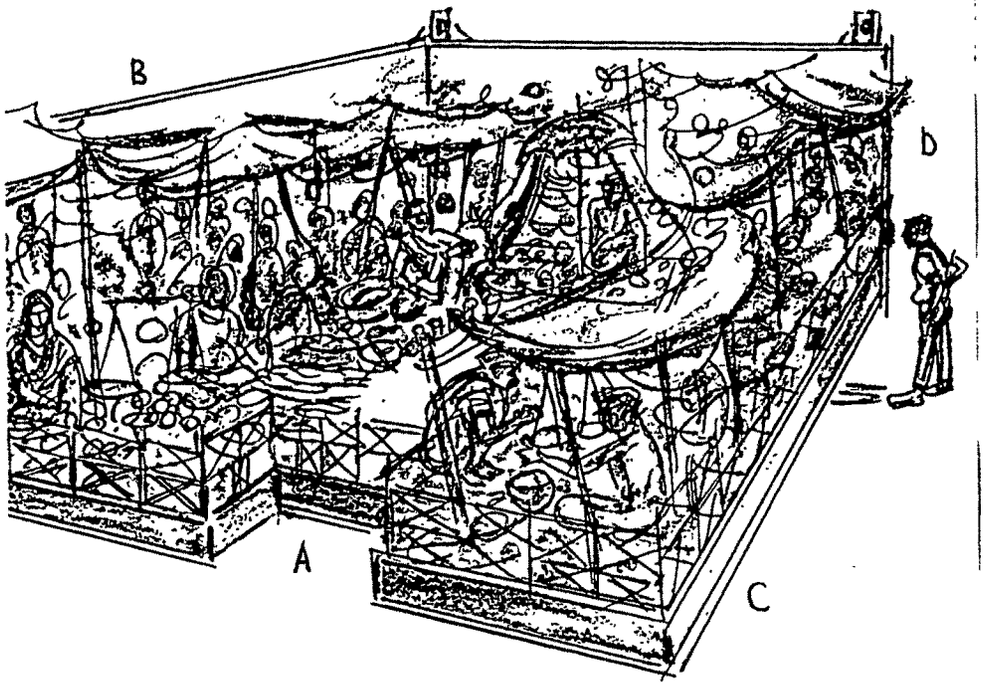
A - A diorama based on cut-outs of figures worshiping. Stone is under trees on *Devgam* in monsoon, covered with vermillion. The priest is directing the worship. Or alternatively, there can be a lifesize diorama with figures in round and the on-lookers parted on the background. B - Paintings or colour transparencies, enlargements, illustrating the important highlights of the ceremonial visit of the group to the gods. Silk screen effect is suggested. Also suggested the dimension of 4" x 6" middle part and 5" x "6 for the sides. The purpose is to give an idea of the collective participation in a village ritual.



Pl. 5-6

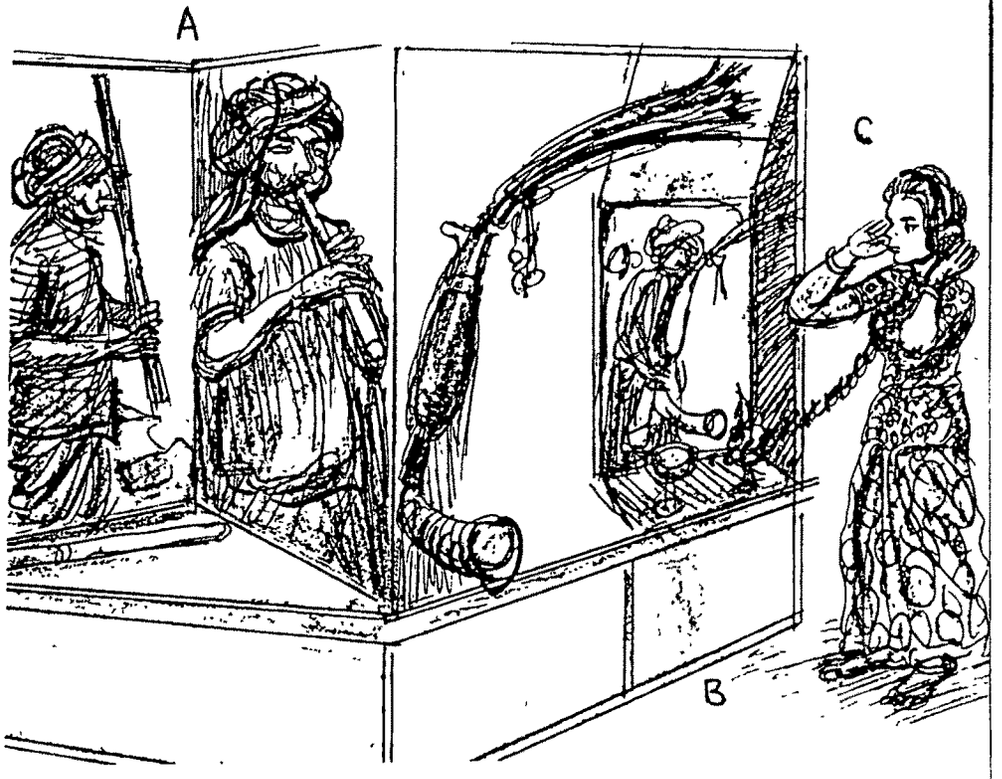
1. Saint Tomb (*Pir Sangjer*) & Church

A - Pair of show cases standing at a convenient angle larger than 90^0 preferably 135^0. Size approximately 4"x 6". B - Cut-out dioramas or scale models showing a Muslim saint tomb and a Christian church. On the inclined front side of the frame can be placed some symbolic objects associated with the two religions.



2. Bazaar

A - Raised platform in gallery, basically rectangular, 20"x 30", or with a cut into side for a visitor to enter into reproduced tribal bazaar in Dangs. Manikins to be used to show shopkeepers with reproduced merchandise or things for sale and the customers. The typical corners of cloth as temporary sunshades can be erected with the help of bamboo poles. The platform will have railings. B - A straight vertical supports of 6" height on which extension of what is shown on the platform is painted. C - These painting will supplement in two dimension, what is shown in three dimension in the middle. D - Speakers for audio tape played, to give an idea of the associated tribal dialects.



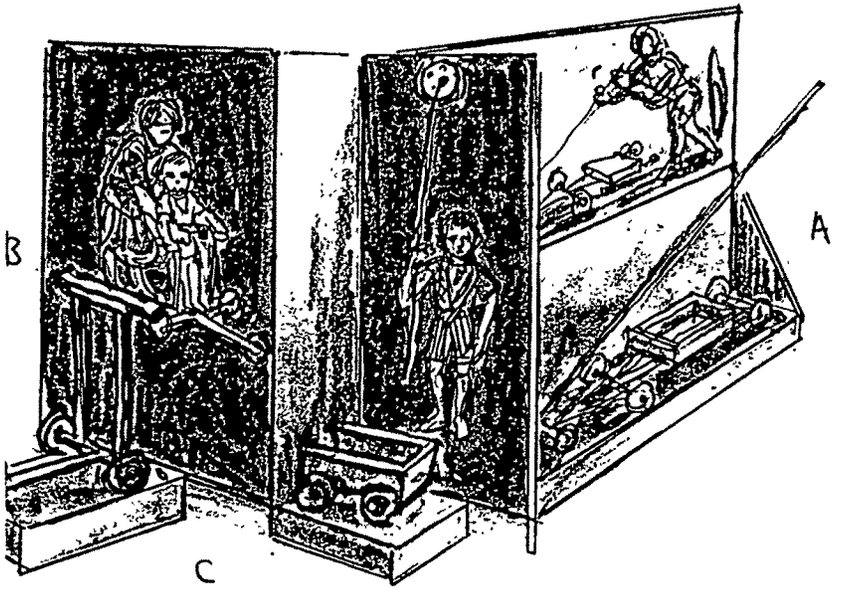
Pl. 5-7

1. Music

A - Musical instruments.

B - Video display. Automatic slide projector.

C - Headphones for audio cassettes.



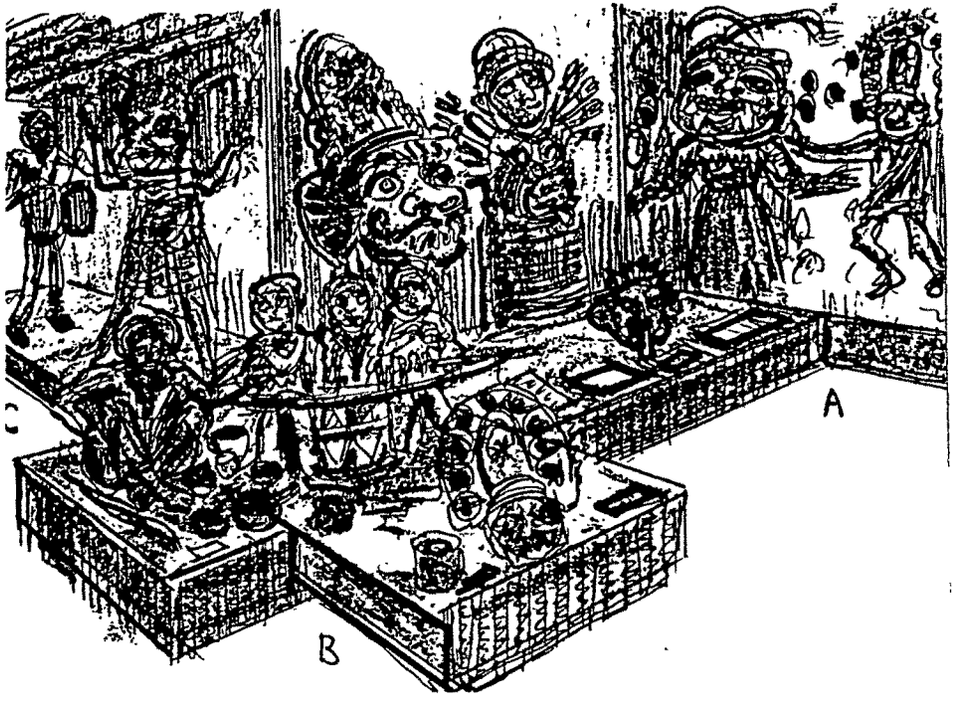
2. Toys

A - Low blocks to support Dangi play things. B - Vertical panels on which children are shown playing with the things which are shown in the exhibition. C - Area where child visitors can make use of the models specially for visitor participation.

Pl. 5-8

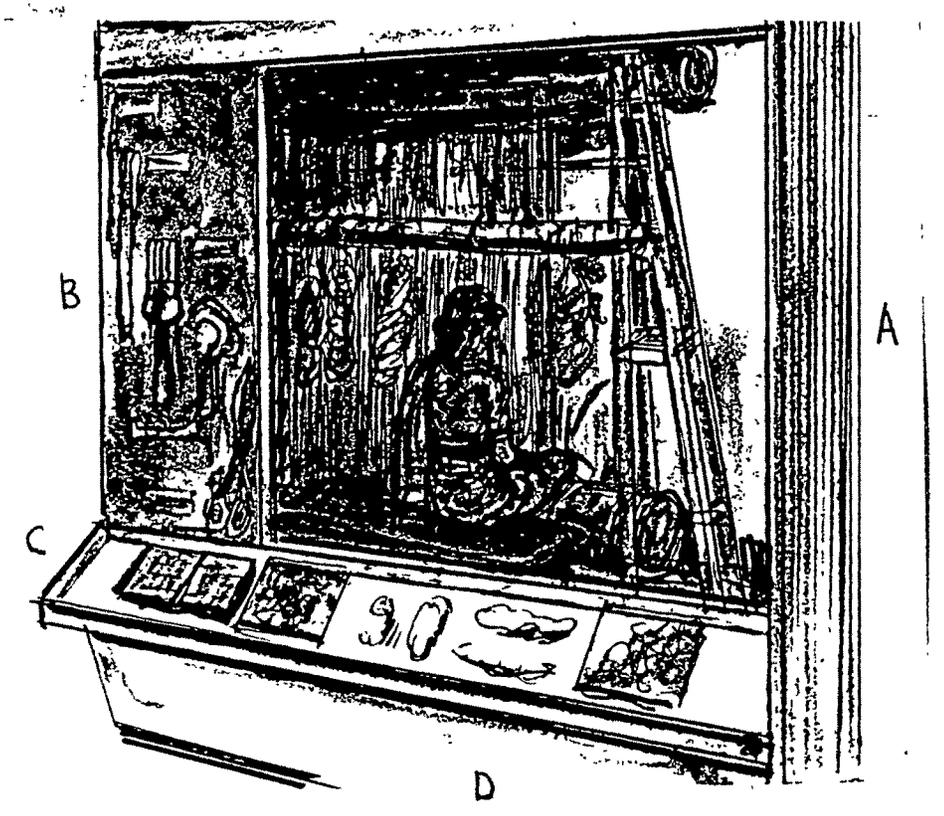
1. Musical Instruments

A - Dangi musical instrument installed on a pedestal with specially designed wire structure for light effect. B - Vertical panel 6"x 4" on which a painting of the player of *Thali* may give an idea of 'who' uses it and 'how'. If the gallery is well guarded, the musical instrument may not be behind glass. Otherwise some protection is necessary.



2. Masks

A - Panels showing masks and how they are taken out and for use in the community ritual dances. B - Manikin of the traditional mask-maker along with half finished marks and his equipments, tools, raw material. C - A platform in the gallery for live demonstrations.



Pl. 5-9

1. Carpet-Weaving

A - A diorama of carpet-making either life-size, in scale 3-dimensional or made out of cut-outs. B - Display of instruments used in carpet making installed on vertical panel. C - Desk like, inclined, shallow case to show samples of material and weaving process. D - Also samples of carpet designs can be kept in plastic albums.

In some museums, elaborate planning process takes place. They emphasize even pre-production planning in which various tasks are included. They finalize the concept of the exhibition in relation to the over-all institutional master plan, specific exhibition goals and objectives, relating them with the available or projected resources. These museums insist on having clearly written objectives of the exhibitions because intelligent planning or designing is impossible in the absence of such predetermined objectives. They should not be in the minds of a few staff members but should be on record for future guidance including for the purpose of evaluation.

Only after the objectives are found worthwhile, the progressive museums prepare for estimates; then get them approved; and begin the scheduling of various tasks. Particular attention is paid to the resources needed in terms of time, money, original objects, staff, space, etc. Also attention is paid to the contents and form of message and the projected audience. Much work is patiently done to identify all these factors before they are properly sequenced. A written list of activities based on the exhibitions should be defined and provision should be made for them in the plans. From the concept to the final production, many intermediate steps can be visualized. They are: (i) making proposal, (ii) story line, (iii) concept sketches, (iv) layouts, (v) visitors flow charts, (vi) detailed drawing, (vii) working drawings for mechanical, electrical and illumination work, (viii) purchase of materials according to the specification, etc., (ix) and research, labelings, catalogue writing, in addition to graphic materials, exhibition construction, etc. The total process can be called designing because it is translation in physical terms of specific concepts.

It is possible to summarize the basic features of a good ethnographic exhibitions. It must be safe and secure because even if most of ethnographic materials are not made of expensive materials like gold or ivory, they are invaluable evidences of human story. If lost, there can be gaps in our knowledge of cultural heritage which can be very rare and unique. Many times, things on display cannot be seen carefully and comprehensively. So good display must allow interested visitors to observe as much in detail as desired, the physical objects and their special characteristics like shapes decorations, etc. Therefore, there should be proper lighting and the distance between the object and the visitor should not be too long. Monotonous arrangements should be avoided. Good displays should be attractive so that more people would be attempted to watch them for longer time till the message is clear. Different people will have different motivations to stop longer before ethnographic displays. All should be welcome. Curators should not predetermine what is the best and ideal motivation.

So far as the designing of Dangi ethnographic exhibitions is concerned, there are a few broad methodologies which influence the designing work consciously or unconsciously. As much as possible information about the Dangi culture should be collected during the fieldwork in the Dangs. In this respect, there is no evidence of the practice of keeping sufficient records of the process of planning in the concerned museums from the Saputara Museum to the Western Zone Cultural Centre. In some institutions, for administrative purposes of getting budgeting grants, some noting might be made of the physical measurements in respect of length, breadth, height, etc. No evidence was available of the preparation of any special scale model to show to the authorities the outcome of the display project. It is very unfortunate because the practice of getting a scale model would serve many purposes beyond convincing the higher executive authorities. The leaders of the public and the public itself can be taken into confidence about the seriousness of exhibition plans by installing such a scale model in the museum long before the actual organisation of exhibitions begins. By this way, the public will be convinced that museum is using its funds carefully. It will be a very effective demonstration of the democratic approach because in the final analysis it is the public which invests in the museum schemes.

To make good scale models, a curator should identify his requirements with cooperation of a designer or an expert of the subject. He should also determine the number and nature of the original objects around which exhibitions will be developed. This is not only a listing of things. It amounts to the sequence or order in which materials will find place in the exhibitions. The curator needs to inform the designer the proportion of importance of each object in a group and of each group in the total exhibitions. This is necessary to give correct visual importance to all objects. If this part is neglected, the display may turn out beautiful and attractive but may endanger the life of valuable museum objects. The designer should know the educational activities which may take place inside an exhibit like demonstration. The curator needs to do much homework before a scale model is made, which may also help in knowing the problems of ethnographic presentational needs.

Exhibitions can be classified according to their purposes like aesthetic or entertaining so that people enjoy looking at original materials or conceptual idea and/or factual information to convey facts, idea or experiences. They are also classified according to the structuring of the materials. For example, in systematic displays all objects are organised to show their similarity and their interrelationships. They may be ecological displays when exhibitions deal with specific areas, or habitats, or living interrelationships within an ecosystem.

The first kind of display is called the "open-storage" type in which similar objects are installed together. The basis of such similarity may be found in respect of shape, size, colour on superficial level but on the basis of material, function, region, find-spot or provenance, period, style, conceptual association etc. which can justify their display at the same place in the public gallery. There is no special selection or rejection of materials because any newly acquired object is added to the group which is already on display. In other words, in the "open-storage" method, the things are on display because they are not in stores or out of the public sight. In a sense, this is not a bad idea because the visitors can see everything in the possession of a museum. In terms of such universal accessibility this kind of "open-storage" method is truly a democratic recognition of the rights of the public and the obligations of the museum professionals. But there is a risk that a museum with limited display space may get overcrowded and the visitors will be tired of looking at rows after rows of similar or identical objects.

In ethnographic museums, unedited, undirected or unselected installation of every acquired materials may create problems of overcrowding and monotony which will not help in popular education. The second method of exhibition is called "object-approach". Here, the emphasis is on good careful selection, elaborate research, labelling, lighting but still the concentration is on objects. Only the third method is the "idea-approach". The main emphasis of that is on the idea, the message, the theme, the story which is illustrated by the objects on display. The success of such an idea-oriented approach depends on technical expertise necessary to translate ideas into three dimensional presentation. Good use of audio-visual aids is very important because curators cannot depend only upon written words. The idea-exhibit should not resemble a page from a text-book even if it has illustrations. The information, instructive contents and the original objects must be fused or combined in right proportion. "Idea-exhibit" is superior to "object-exhibit" and "open-storage" methods in view of educational aspect.

All the above categories of exhibitions are of use for proper presentation of ethnographical materials like the tribal toys games, pastimes or very commonplace ornaments or body decorations which might arouse curiosity in many visitors. Museums should take into consideration the fact that majority of visitors come to museums for having have good time. They are not interested in complicated facts and things. In many cases, what common people expect from museums is not the same as what museum specialists wish to concentrate upon. Therefore, museums serve the visitors as much as possible in a simple way and also they may sometimes arrange complicated exhibitions for the students and high educated visitors like a group of school teachers.

(3) Problems of Under- and Misinterpretive Exhibitions

Considering museum interpretation through exhibitions, it will be relevant to discuss the subject of under-interpretation and misinterpretation. What is correctly termed as interpretation can easily understood by referring to exhibitions which are under-interpretive and misinterpretive. The former are very commonly seen in many institutions. The reason for this is to be traced to the appointment of untrained curatorial staff who have no grasp of the real potentiality of media of museum exhibitions. They think of designing and planning of exhibitions as a routine work of putting objects behind glass, in showcases or on pedestals, and labelling them minimally. These curators might have no vision to see the original materials as tools, means or steps in telling a story or conveying a message.

Needless to say, the curators of such under-interpretive display are either careless or ignorant. They should be enthusiastic to make the most effective use of the museum materials, very often they work out of public view that the visitors have no clear image of their personality. This does not happen in case of other professionals like doctors, railway station masters or bankers. If they do not attend their duties scrupulously, there will be public sufferings, even disasters. But no such calamities are associated with museums unless the public carefully observe the museum materials for a long time. The public is not at all aware that if the curators do not work well, there will be as bad disasters as loss of educational opportunities or destruction of cultural and natural heritage. The under-interpretive exhibitions in museums are very common.

A typical example of under-interpretive exhibit is found in the installation of stray objects like memorial wooden pillars or icons without any cultural context or accessory. The knowledge about these two can fill books. A memorial pillar has rich associations with the common intangible cultural legacy which a whole tribal community shares and which is passed on from one generation to another. Under the circumstances of modern ethnographic museums, a memorial pillar is not an aesthetic or art object. Of course, it may have its own beauty of shape and texture. But what is represented over its surface and what it means to the community is the essential feature and real justification for acquiring such material by an ethnographic museum. Sometimes museologists are advised to ask such questions to themselves as what will be missed if this object is lost forever. An honest answer to such questions provides the right key to locate the basis for interpretation. The difference between having an object and not having it at all is to be pinpointed in those attributes or characteristics which were the original motivations for creation of all ethnographic materials.

Very often indifferent curators dealing with such material are not ready for observing it carefully. Careful and scientific observation will pave way to meaningful study. When a competent curator finds such object he will try to observe and remember it. Then he shall close his eyes and shall try to recall it exactly as it is, he will become aware of the significant features. If he fails to visualize the object in his mind, he may open his eyes and observe it as long as required and as many times as needed till nothing escapes his attention. If a curator makes such meaningful study, he will never be indifferent. The awareness of the significance is the origin of the desire to share the excitement with others. If a curator himself is not excited there is no motivation to put in efforts in making exhibitions interesting to others. Any how, it will take time for a curator to know the value of a concerned object. It is always sad to see how the Dangi ethnographic materials were not given such patient attention at the hands of many museum workers. It will be worth discussing if an insider's perception of significant cultural materials will alone lead to fully interpretive displays. Such a notion is highly speculative and hypothetical.

There is no objective way of comparing the knowledge of a member of a cultural group with that of an outsider. So if an outsider, curator can possess the same knowledge as the insider he is as good as the other in the matter of preparing an interpretive exhibition. In respect of emotional excitement also if an outsider has genuine involvement with cultural manifestations, he will share all the excitement in his personal experience which insiders are expected to do. For preparing museum exhibitions the capacity of an insider or outsider should be considered as at par. The real test will lie in the degree of perception, insights, participation, involvement and commitment to the objective of communication and interpretation.

The problem of misinterpretive exhibitions is really very grave. Such exhibitions do not hesitate to tell what may be demonstratively wrong. There can be factual errors because the information may be old, obsolete or time-barred. That is not good but what might be worse is the wrong conclusions that a visitor may reach after watching such exhibitions. The curator may be not ready to accept blame for such misinterpretive exhibitions in legal terms. It is often said that "Buyer beware", meaning that whosoever makes purchases should examine what he is purchasing before he pays for it. Can the same rule be applied to museum visitors? No, it can't. Should he hold himself responsible if he misunderstands the message of an exhibit? No, he should not. Should he know which is perfect and then accept its message? No, he should not. Definitely, these all are not fair in the museum context.

In practice, misinterpretation in an exhibit may be found in various ways. It may be in the labels and texts, in the headings or titles, in the focus on a few selected facts at the expense of others which are equally valid, or in the use of accessories. Even wrong sequence in the arrangement of ethnographic material can be a cause of misinterpretation. For example, statements about the generalizations often may cause misinterpretation even if they are factually correct when applied to specific instances. If a book on the Dangi ethnographic exhibitions makes any categorical statement like "The Dangis never sing but they dance",[1] "A Dangi may do without food but deprived of his dance he may sicken",[2] "All Dangi art is in a sense a craft and all their craft is an expression of their art",[3] it is a case of oversimplification or prejudice. Such statement on the Dangi culture may be true in some or most cases but not in all.

Indeed, several writings on the Dangi life and culture are full of such generalizations which may enter gradually into exhibitions. Popularization may be an appropriate objective of museum presentation but that does not justify exaggeration. Instead of using words like "all", "always", "every", the curator may prefer terms like "most", "most of the time", "in almost all cases", etc. This is necessary because the tribal ways of life are undergoing basic changes due to internal and external factors. Therefore, making universal statements will only create "stereotypes." The key words of modern museum interpretation discourages replacement of old stereotypes by new ones. Hence, interpretative exhibitions may turn into misinterpretive exhibitions if generalizations are made when they are not exactly borne out of proven facts.

Misinterpretation may also result when audio-visual components are chosen in order to please the visitor rather than to reproduce the original environment or the ethos. This is evident in the prominence given to specific persons whose facial features are handsome or whose physical proportions correspond to those found in popular models. Usually, such models are not typical but exceptional and rare. They may not serve as representative examples and, hence, may be misleading in every sense. Similarly the urban influence may be penetrated into the deep areas where tribals are living in relative isolation. The tribal communities also have evolved their own norms, models or

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1. Koppar, D.H., *Tribal Art of Dangs*, Vadodara, Department of Museum, Gujarat, 1971, p. 125.

2. ibid., p. 132.

3. ibid., p. 142.

criteria. unexpectedly, ethnographic exhibitions may sometimes prove dangerously misinterpretive if alien standards are thrusted on the tribal communities. Half-baked knowledge of curators may invite such alien influence especially because of the deeper penetration or infiltration of mass media, and films in tribal and fringe areas. Some of them are evident in the visual aids prepared as accessories or backgrounds in the tribal displays because the painters had taken fancy for so-called popular models.

In fact, misinterpretation is very often the result of the desire to please the biased authorities which have considered an ethnographic exhibition as a portrayer or rosy picture of the tribal life in the past and present. It is said that man lives on hopes. Tribals also should hope for better tomorrow. Yet a museum exhibition is a scientific statement in visual language. There is no scope in it to paint a picture of tribal life rosier than it is. If so done, the attempt will be misinterpretation. A museum curator cannot tamper with factual aspects. He should not take upon himself the authority to edit, to select and to judge what is best for the tribals. His task is to communicate the reality within the limitation of museum language and leave it to the visitors to judge for themselves. In this connection, D.F. Cameron (1971) has pointed that "the language of the museum depends upon the object as noun, the relationships between objects as verbs, the groupings or displays of objects as cohesive statements (patterns rather than sentences or paragraphs), and in all of this the supplementary media of print, graphic, photograph, film, and the line, colour and form of the object environment are the adjectives and adverbs."[1] Hence, a museum curator is advised to formulate his messages and strategies on sound knowledge of reality. In that sense, exhibitions of ethnographic materials should primarily "illustrate", furthermore, they should interpret what has been already illustrated.

Any one who is interested and stimulated should have access to the material and data to convince himself about the truth of what is presented, represented, illustrated, explained and, in other words, interpreted in museum exhibitions. Not to do so or not to provide for such validation will not be in harmony with the ideals of contemporary museology which offers freedom to all to involve in continuing education. This is important because

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1. Cameron, D.F., "Problems in the Language of Museum Interpretation", in *The Museum in the Service of Man Today and Tomorrow* (Proceedings of the 9th ICOM General Conference), Grenoble, ICOM, 1971, p. 91.

museums now prefer "socially-oriented" exhibitions rather than "object-oriented" exhibitions. What was suitable in the colonial period of ethnographical museum will not serve the purpose of modern museums which are geared to the emancipation of the tribal communities out of colonial and neo-colonial stranglehold in terms of power and money.

Museums are primarily "collection-oriented" institutions yet mere presence or possession of material objects does not make them museums in the true sense. To become more than storehouses, the museums must have feasible programmes for putting their collections to use. In modern society, they should be "socially-oriented" institutions to carry out the requirements of the community. Such programmes will have to be consistent with the short-term and long-term objectives of the museums. It is now commonly observed that museum collections are at once great assets and also great liability. This is true of museums having Dangi material culture. The solution to the problem is to make the maximum use of the collections of Dangi material so that the inputs in acquiring and maintaining them are worthwhile in view of the outcome benefits. Exhibitions and the educational programmes are the most effective ways of using the collections for the public benefits. These programmes must guarantee increase in the cultural value of the collections to justify the continuous investment in their maintenance, further research work, etc. As the investment in their maintenance and others requires considerable amount, it will be continually increased due to inflation. The solution is not in reducing the extent of collections but in making more dramatic use of them. This is highly creative work with which conventional approach cannot cope up.

In fact, there is no other choice but to make the most productive use of the collections to justify investment on them. Such productive effort must go beyond mere storage and care of the Dangi ethnographic materials. We must encourage their study by as many kinds of groups of the people as possible having their own special interests. Exhibit of Dangi ethnographic materials is the most direct way of identifying and developing such interests as a first step in attracting diverse groups for their participatory support. It is true that museums having ethnographic collections are already specialized to a great extent. They need not to overspecialize in the matter of interests and objectives of public education. They can put their specialized collections to a wide range of uses according to the special interests of various groups.

But the real challenge to interpretive exhibition work comes when an ethnographic museum attempts to balance the three interests of visitors. According to P.H. Pott (1963), there

are three categories of main motives which are interrelated and play a role in the decision to pay a visit to an anthropological museum: (i) visitors who come to the museum for esthetic reasons, (ii) visitors who are motivated by a "romantic approach" and (iii) visitors who come for intellectual reasons, to satisfy "a certain thirst for knowledge".[1] In this connection, R.J. Munneke (1980) commented that "In an anthropological museum esthetic exhibits must by definition be elucidated intellectually -- an anthropological museum is after all not an art museum -- and, moreover, the evocation of experiences out side every day life is not one of the predictable possibilities for either an esthetic or an intellectual approach."[2] On the contrary, V.H. Bedekar (1978) paradoxically mentioned that "The visiting public will judge a museum service by the character of its presentation of materials for evocation, recreation and communication."[3]

In any case, an overall plan of giving information to the visitors through exhibitions should be prepared well in advance. This may be reviewed and changed from time to time, later, in response to the actual visitor survey over a reasonable period. If there are difficulties in communication of information it is necessary to find out the source of the problems. If it is in the physical arrangement of exhibitions it can be corrected by suitable changes in installation including the sequencing of the materials. One of the objectives of museum exhibitions is to educate visitors about right observation. People see what is around but seeing is not always looking carefully or observing to understand what is significant. A museum exhibit which is designed to teach how to observe is different form ordinary exhibitions. One is passive display. The other is deliberate attempt to provoke visitors into active participation. It is true that in the conventional museums such deliberate provocative attempts are missing. To succeed in this respect, museums must take help of expert in different areas like perception, psychology and sociology because motivation is important in directing attention.

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1. Pott, P.H., "The Role of Museums of History and Folklore in a Changeing World", *Curator*, Vol. 6, 1963, p. 158.

2. Munneke, R.J., "The Bazar in Market-Towns in Nothern Afganistan -- Methods of Presentation" in Gulik, W.R. van et al.(eds.), *From Field-Case to Show-Case*, Amsterdam, J.C. Giben Publisher, 1980, p. 86.

3. op cit., Bedekar, V.H., 1978, p. 52.

(4) Scientific Considerations of Ethnographic Exhibitions

There are several alternative ways in which Dangi cultural materials can be interpreted in museums. All the alternatives can be justified theoretically, practically and, therefore, professionally. Many of them will be presented to demonstrate the analytical ability as well as the great potentiality of the Dangi material culture, as an expression of Indian heritage. The main emphasis is given on the museological implications of the various alternative strategies of the museum interpretation.

In one sense, interpretation may be considered as the identification of the Dangi objects by the museum experts for the benefit of the users of museum resources. Such interpretation cannot be only an announcement or statement but sufficient reasons and evidence should be offered for the museum judgment. In the democratic environment the identification-statements cannot be accepted passively. Museums are expected to inform authoritatively but cannot be dogmatic in that respect. In fact one of the interpretative objectives of the museum should be to encourage people to use their own thinking power in understanding the collections without putting blind faith in others. In this respect good museum exhibitions followed by educational programmes should provide visual evidence and arguments in support of identifications so that if people see such cultural materials they would be able to make their own judgments on sound grounds. The interpretation should teach the public how to recognize similar material in future, outside the museum and appreciate its true worth.

Identification of an object cannot be equated with its full interpretation. Of course, identification is not interpretation. Identification may be only in respect of what it is it can also inform about the date or age, about the material, the technique the function and the community to which the object belongs. All information which will answer these basic questions of what, why, where, for whom, etc. is a part of interpretive work in the conventional museum context. But interpretation goes far beyond such identification. The true interpretation makes significance of the concerned material very clear. It is in this sense that interpretation originates in what is known as "collection research" but does not end at that stage. The fruits of such collection research can be delivered to the public through publications such as scholarly catalogues, reports, memoirs monographs, and bulletins. This is what learned societies, university departments, and similar specialized research centres are expected to do. But museums have different obligations. They must communicate to the public in a language which will be understood by them. This meaningful communication is a everlasting challenge which all museums cannot avoid. The medium of communication available to museums are exhibitions in the first place and educational programmes which either increase

the effectiveness of exhibitions or complements them in conveying the messages underlying them.

It is also important that every visitor in a museum becomes aware of the current research or ethnographic collections of the Dangs through some dramatic displays or programmes so that he would want to know what difference it makes in making things more meaningful than before. Here the interactive or participatory method of museum presentation will be more effective than the conventional method of authoritarian pronouncements. The possibility of recreational presentation will be more effective in attracting the public attention to the Dangi collections. Even if a collection of tribal material is placed on display research on the collection is necessary. Research on museum collections can never stop. Firstly, if it is decided that complete data should be collected before any ethnographic material is exhibited otherwise there would be very long delay in the work of presentation. It is impossible for anyone to give a guarantee that an acquired material is perfectly documented.

All documentation has to be provisional in the sense that if and when new information is available it will be included. Hence, research is an ongoing work in any museum and particularly in relation to ethnography. But museums cannot easily cope up with diverse demands on their limited funds and infrastructural facilities. Authorities have no patience in waiting for long-term research outcome. They would prefer such schemes which will be time bound and such as will contribute to the immediate needs of the museums and the public. Such result-oriented thinking is natural. Therefore, museums must combine the research activities for short-term gains and for the long-term achievements. Also museums should treat continuous research even on displayed objects as one form of investment for increasing the value of its holding of cultural heritage. By explaining such advantages to the public, authorities and academicians, it should be possible to obtain financial support needed for continuous research.

The history of the research work in the Dangs also can provide a good example of how the demands of museums were not strong enough to sustain a continuous research programme oriented towards museum needs. The gap between the two was unfortunate because not only much valuable time was lost when things could have been acquired for the museum but also because the related data were unrecorded. Perhaps the main reason was the wrong idea that once the objects of the Dangs were put in showcases nothing more could be added to their labelling or interpretation by other means. Also many superficial generalizations got currency about the Dangi culture in the absence of continuous checking, rechecking and objective, systematic surveys under the guidance and supervision of the specialists.

The roles of the university departments, the Tribal Research and Training Institutions and the national, regional agencies in collection-based research of the Dangi cultural materials needs to be analyzed so that what happened in the past or is happening now will help in visualizing the future possibilities. If it is appreciated that fullest use of the available resources must be made then these diverse institutions and agencies must show better coordination in their collection-based research and documentation which will go a long way in increasing the effectiveness of their displays. It seems that so far in the past and now, the information with the concerned agencies is not readily accessible to outsiders. In a country where the tradition of ethnographic research and collection is more than hundred years old, it is high time that all agencies become aware about the common needs of the museums. An inter-institutional review may be undertaken of the recorded, labelled and published interpretation of ethnographic collections to find out the accuracy and quality of the statements made about the Dangi culture.

Those who are concerned about the role of museums in public education appear to suffer from some kind of inferiority complex. It is commonly held that the real process of education of the public takes place outside museums. What museums can do is only to supplement or complement what other bona fide educational agencies are doing. It is, therefore, very necessary to recognize the special place which museums have in the field of general, non-formal education independently of what other educational institutions are claiming to do. In fact, if a good look is taken at the educational scene, it is easy to know that the educational achievements of all societies fall short of what should have been done to make ideal citizens out of students. Therefore, alternatives to formal education are required everywhere. Museums are an alternative medium and has great potentiality because it has rare, original collections of real objects, a documentation of data concerning those objects and a promise of life-long education which can be gained voluntarily and with recreation. So there need not be any competition between museums and non-museum agencies.

A museum is considered to be a good learning environment and educational resource. In a museum a large number of facts can be communicated to a very large number of visitors so that they can learn in less time than possible outside a museum. Also, in a museum things can be seen both individually or in isolation and also together or holistically. In other words, a visitor can take analytical interest or can see things in larger perspective. Museums can also use new techniques of audio-visual presentations to recreate different kinds of environments to which the original objects belonged before they were brought into museum collections. Therefore, if creatively used, all museums have

the potentiality of contributing to general and specialized education. Ethnographical materials removed from their associated cultural settings appear odd and give wrong impressions. But they sometimes become charming and meaningful after placing them in a proper context. A reference to the original atmosphere is a pre-requisite to bring life into ethnographic display but this is not easy in terms of limited space, funds and infrastructural facilities. Where exhibitions are indoor and also where the collections are multi-cultural, there are more difficulties in contextual techniques.

Actually, one of activities of the tribal ethnographic museum is to bring to visitors a fresh visual knowledge about its own culture. But to be successful in terms of educational value ethnographic materials must be shown in their cultural context which is not always easy in practice. The traditional approach is object-oriented because less attention is given to the visitors who have their own problems in understanding holistically the cultural context which is usually shown as if each can tell its full story to every one. New ideas in museums are helping in appreciating the capacities and limitations of average visitors. Their limitations are both physical and intellectual.

The success of museum presentation is very much linked up with the level of general knowledge of the visitors. Therefore, before planning exhibitions, a close study should be made of the general knowledge of the visitors. This is very important in relation to the exhibitions of ethnographical collections. People have either no idea of the significance of such material or very vague and very distorted notions. Different strategies are required to deal with pure ignorance and with distorted notions. Some detailed discussion about the two different problems will be necessary. But it can be understood easily that where only ignorance exists the solution is easier than where people have distorted or wrong concepts or ideas. To remove them becomes the first priority even before new information is communicated.

It is also important to remember that the tribal groups have their own ignorance and distorted ideas about non-tribal matters and materials. The museums have to serve both the tribal and non-tribal groups of people. Therefore, problems faced by both parties will have to be taken into consideration before museums plan their displays. When the general knowledge level is high, people can easily fit in with new experiences which they get in museums into what they already know. But when such a level is not sufficient then people find it difficult to understand things meaningfully. As most of ethnographical objects have non-material displaying them cannot be undertaken mechanically. There are special problems which museum visitors face in knowing unfamiliar

objects beyond their physical characteristics. As a result, there are more chances of distortion, misunderstanding and prejudices. Therefore, museums dealing with ethnographic materials must study or monitor the level of general knowledge of various sections of the public and make appropriate efforts to compensate for what each of them lack in terms of ideas and information. Cooperation of experts, sociologists and social workers can be taken in planning continuous work of orienting different classes of visitors before they start their museum visits. Such a task cannot be taken lightly and cannot be done in unplanned manner.

(5) Special Suggestions on Interpretive Ethnographic Exhibitions

There are some advantages in community museums in planning and preparing ethnographic displays which are missing in general museums. Most of ethnographic materials are rich in association of ideas, myths, symbols and special meaning to the particular groups. Therefore, it is easy to display them to specific insiders who are familiar with the materials. To each of them, the displayed object conveys more than the physical features. The nature of community museum work is more participatory and interactive. Therefore, in the community museums, displays can be harmoniously combined with activities and actions in which nobody remains passive. Each visitor knows what the museum display is about and how he should respond. No help of an outsider, expert or curator is necessary to know what museum can teach to a member of community. But when a museum has to serve a mixed public, there are different considerations. It needs more realistic goals to achieve through displays of ethnographic materials when heterogeneous people are invited to use museum resources. But this is a good challenge which must be accepted.

Recently, there is a change in the attitudes of museum professionals. Now the emphasis on the museum collections is shifted from the increasing of the quantity of collections to the improving the quality and utility of the collections in terms of social accountability. This is a good news for the lay public because he can feel free to make use of the collections which are in the public institutions like museums. The main problem is to make common people conscious of his rights and obligations or duties towards using cultural heritage. Ethnographic collections are not significant unless the museums make them efforts to protect heritage and identity of cultural groups. Unfortunately, many museums are not certain how far they should be totally committed to this urgent problem of cultural awareness.

It is rightly said that mere physical admission of common people to museum exhibitions does not mean an admission of the minds of visitors. Public education through special exhibitions is based on this knowledge that minds of the lay public must be directed to the significance of museum materials on display.

This is the challenge before the museums dealing with the ethnographic materials. A question should be asked: What will common people get out of museum exhibitions? Museums will not succeed if they try to overwhelm visitors by a large number of objects to impress visitors about the richness of museum collections. They will succeed if visitors find them meaningful. What people see in museums should be connected with what they see in their own lives. But at the same time what they see in museums should give them new experiences and ideas.

A theme which will be attractive to all people interested in ethnography today in India and elsewhere is the need for development in harmony with protection of cultural heritage. Many of the tribal groups cannot avoid the influence of the projects like building of roads or communication networks, expansion of markets, dams and canals units to produce energy, etc. All know that these projects will affect tribal way of life. Non-tribals are also very much aware of the changing situation. So the museums can make use of the widest possible awareness of the changing situation to make good exhibitions. Here the idea should not be to present technical achievements of the various projects in isolation of their possible impact on population which are directly or indirectly influenced.

The aim should be to give a balanced picture of what is happening in the environment and to prepare the people to adapt to the changing situation and to get the maximum benefit out of the new projects. The message of such exhibits should be analysed carefully for picking the effective techniques of visual communication. This needs pre-exhibition surveys of what the target audience know or feel about the changing situation. Each idea in an exhibit should be understandable. An exhibit is a powerful medium of communication but it also is not available ready-made because it is not abstract like words of a language. Exhibitions involve ideas and images in proper relationship. So that one must lead to the other component.

There are some special problems in exhibiting cultural heritage of tribal communities which are on the verge of biological or cultural extinction. Fortunately, these are not the case with the communities of the Dangs yet. The museums will have to make serious efforts to display the potential dangers to the cultures of the Dangi communities which are required to cope up with fast changes. These influences arrive slowly and imperceptibly which make them more dangerous. It may need special efforts to identify the influences as well their effects, also document them so that the evidence is available when required. Without such documentation it is impossible to know what is happening to the culture of tribal community.

A basic assumption underlying ethnographic museum work dealing with cultural materials is that the exact meaning of the

community heritage will be intelligible in museum situation to both the insiders and the outsiders. But some serious thought should be given to what is possible and what is intended or wished. Will the outsiders of a community be able to see things as they are to the insiders is a big question? If it is not, then we must assume that outsiders will see the tribal culture adapted or modified acccording to their own interests and insights. A legitimate part of professional work is to find out what the visitors want to know or do in museums having tribal ethnographic materials. One is surprised to find out how little they know about the Dangi culture and the specialists are also not absolutely clear about how to arouse the public interest in their research and then satisfy their curiosity. Therefore, exhibit-oriented survey work must go on side by side with the conception and visualization of exhibit preparation. Such a task will also help in the development of methodology to suit its own composition of the public on one hand and the overall instructional objectives on the other. Hence, exhibitions are steps in fulfilling museums overall educational responsibilities. Such obligations are not imported from outside. They evolve institutionally during the course of a museum's career. Hence, it is necessary to maintain a clear record of all past exhibitions especially the public responses as understood by the museum staff directly in touch with the visiting public.

It will be a good idea to have an orientation section in a gallery exhibiting tribal ethnographic collections. One of the displays in this may be devoted to explaining visually to the public the sequence of activities undertaken by the museum professionals towards public education. Particularly, in such an exhibit every attempt should be made to explain how the displayed material was collected, documented and identified. This will provide a good test to the professionals in sharing their knowledge and methodology based on their experience. On the other hand the public will also be encouraged to use the hints given in such display to explore on their own such ethnographical materials as they can encounter or come across in their lives. It is true that just one museum visit may not make a lay visitor an expert or enthusiastic explorer. But such a possibility cannot be totally ruled out. Especially when school children and the group visitors join "guided tours" the interpreter can use the above exhibit to create interest in his audiences and impress on them the need for all citizens to understand the tribal culture as an integral part of the national cultural heritage.

Information or orientation centres in a museum situation can help to educational activities in different interpretive ways (See, Fg. 1-2 & 102, Vol. II). Through information or orientations the museum provides the museum visitors with the overall educational objectives immediately at the beginning of their visit. The orientation centres direct visitors to exhibit areas of their own interests so the visitors can make the maximum

use of their time. Yet the centre gives a general idea of what is available for a visitor to discover for himself if he wishes to go beyond his own favourite themes. An orientation centre is situated at the main entrance so that when visitors enter they will not miss it and they will get a holistic idea of the museum. It is expected to deal not with specific objects on show. It should tell the motivations behind the establishment of the museum and the formation of its collections. It should also offer the various services to the public and scholars. The orientation centre should foster an awareness of the museum as a centre for both research and its interpretation through exhibits and educational programmes.

In the context of the Dangi culture, an orientation centre will help visitors with increasing understanding on the entire Dangi material culture. One of the aims of the orientation centre is to motivate the lay visitor in paying more attention to the theme of the Dangi culture as a part of the regional and national heritage or identity. To succeed in this objective, every visitor must be able to spend sufficient time to look and study exhibitions and also contemplate on their meaning. By that way alone, the heritage material will speak to a visitor and tell its story. There is a general tendency on the part of a lay visitor to compare what is displayed with what he already knows about it or have heard about it. This is good but there is a problem when instead of observing with full concentration the specific material in a museum presentation, visitors will be only thinking of the images in their mind. In that event, the visitors can not benefit from the museum presentation and their visit is not worthwhile. Therefore, a visitor should pay special attention to what is unique and different in the nature of displayed materials. Only after becoming aware of that, he may also recall what he already knows about such objects. Museums are also responsible for giving such a guideline to the visitors.

In a learning process, it is a good principle to take a learner from the known to the unknown or from the familiar to the unfamiliar such a process helps in establishing required relationship between the visitor and the displayed material. The fullest advantage should be taken of the educational principle of leading from known to unknown provided the visitor also becomes aware of what was still unknown to him but now presented before him. The emphasis can be placed on the elements which are new and rare. The search for the novelty is also a common human motivation. The orientation section may even make people see unfamiliar aspects in the so-called familiar or commonplace things. Dangi culture has a large number of examples which may appear very commonplace, till a museum expert indicates their peculiarities, both physical and non-physical.

How to select a message as the basis for an ethnographical display is an important skill. Only with the experience of actual

work that such a skill will be perfected in practice. It will be sufficient to mention that such a message will not be a long narrative essay. The message must be brief and selective of facts in relation to the available original material. Also message in one display must be a part of the exhibition. Each display has its own specific purpose. So the message must be in line with the specific or given purpose of the display. It is not true that one theme will be conveyed by means of a single display in all exhibitions. Sometimes if a curator has much original materials to illustrate a theme and also he has many valuable ideas to elaborate that theme then he may need to plan many displays to interpret his theme. .Besides the available original materials and idea, the curator also will require space, funds, infrastructure and time to make a good job of creating many displays on a single theme. When this cannot be done in the normal course of time, then special exhibitions exclusively on such important themes can be prepared to deal with the subject matter comprehensively. A good museum curator who is himself a scholar and specialist will bring honour, glory and reputation to himself and his museum by organising at least one major special exhibition on a significant ethnographical theme every year.

A very large number of generalizations are made about the ethnological panorama or perspective in India which also must figure prominently in any serious exhibition of the Dangi culture. Let us see what those generalizations can be and how can they be related to the museum exhibitions of the Dangi cultural materials.

(i) India is a subcontinent because of her large geographical area, approximately 3, 270, 000 sq. kms, which amounts to 2.4% to 3% of the world's total land area is an important fact and can be presented through a special relief model. The past representing Indian subcontinent can be lifted above the rest of the world map. Or, alternatively, only the part showing India can be in relief and it can be installed into a two dimension world map. It is also possible to hinge the relief to the map in such a way that the visitors can lift it and see the details given below about the percentage of Indian land area in relation to the world's total land area. "It stretches 3220 km. from the foot of the Himalayas in the north to Cape Camorine in the South, and 2977 km. from the Patkoi ranges in the extreme east to the sea-shore Saurashtra in the west."[1] On the contrary, the

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1. Das, A.K., "Visualisation of Anthropological Concepts in Indian Situation", Morley, Grace (ed.), *Visualisation of Theoretical Concepts in Anthropology in Museums of Ethnography* (Proceedings of the Syposium of ICME, New Delhi, Decemember 7-8, 1978), New Delhi, National Museum of Natural History, 1978, p. 18.

total area of the Dangs District[1] is 1,778 sq. kms. which is almost equal to the size of a Taluka. Nearly 95 percentage of its total area is covered with forest. The location of the Dangs District lies in between the parallels of north latitude 20°33'40"and 21°5'10" and the meridians of east longitude 73°27'58" and 73°56'36".[2] The extreme length from the northern part of Nishana Village (Village Code No. 14) to the southern part of Mota Malunga (300) of the District is about 59 kms. while the extreme width from the eastern part of Moti Dabhas (223) to the western part of Lahan Dabhas (197) is about 50 kms. (See, Map 1-1 & 1-2).

(ii) India has approximately the total 827,100,000 persons claiming approximately 15% of the world population, it holds the second place in the world in the matter of density of population. This statement can be illustrated by fixing a dozen three dimensional bars in lengths which will correspond with the ten most populated countries of the world. Photographic enlargements showing crowded people of India can be used to cover these ten bars. On the contrary, the total population of the Dangs District was 143, 490 persons during the 1991 Census, which was the smallest population size amongst districts of the Gujarat State.[3] The density of the population of the Dangs District as in 1991 was 81 persons per sq. kms. as against 210 for the Gujarat State.[4]

(iii) Out of the total population of India, approximately 19.87% people live in urban areas and about 80.13% live in rural area. It is easy to translate this information into visual image by a pie-chart. The two parts of the urban and rural populations can be differentiated by suitable photographic enlargements cut to proportional areas of the pie chart of reasonable size. On the contrary, the Dangs District is totally rural area except Ahwa

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1. Patel, G.D.(ed.), *Dangs District Gazetteer*, Ahmedabad, Gujarat State, 1971, p. 2., and the total reporting area of the Dangs in the year 1979-1980 was 1,72,400 hectares, source from *Census of India 1981, The Dangs District Census Handbook*, 1984, p. iv., and furthermore, recently that of 1991 Census was 1,71,723.18 hectares, source from *The Dangs District Village / Town Primary Census Abstract*, Ahwa, National Information Cetre, 3rd March 1993, p. 9.

2. See, op cit., Patel, G.D. (ed.), 1971, p. 1.

3. Bose, Ashish, *Demographic Diversity of India*, 1991 Census, *State and District Level Data -- A Reference Book*, Delhi, B.R. Publishing Corporation, 1991, p. 164.

4. See, op cit., Bose, Ashis, 1991, p. 159.

(162) and Waghai (149) town area.

(iv) The total population of the scheduled tribes in India occupies approximately 15% of the total population. This can be also shown by another enlarged pie-chart with the 15% part cut and moved away from the main circular shape representing 85% of non-tribal population. The total population of the scheduled tribes was 135,386 persons comprising 93.96% of the total population of the Dangs during the 1991 Census.

(v) India has a great number of regional languages and dialects. The Government of India formally recognizes the fifteen different languages of which the Hindi is the national language and the English is the recognized official language. It has twenty five States and seven Union Territories. The Dangs District has three hundred and eleven villages. It officially recognizes Gujarati, Hindi and English, but Hindi communication is very rare, in particular, no official document is in Hindi. However, most of Dangis daily speak in Dangi only.

(vi) In the diverse ecological zones of India cultural life thrived from the pre-historic times. The wide-spread, distribution of pre-historic, proto-historic and historical sites provide ample evidence of a continuous cultural life in India. This fact can be illustrated by a static display of photographs of the cultural sites located on an enlarged map on a wall or connected by strings or ribbon with prominently identified sites on a medium size map of about 120 x 90cms. Such a map will give an idea that the whole of the country was accessible by the early man for migrations. Similarly the Dangs territory also has good number of prehistoric sites (See, Map 2-3). Moreover, there is a historical site known as Rupgadh Castle near Bardipada (6).

(vii) Regional peculiarities were always maintained by the various groups who coexisted in different periods and places. Therefore, the Indian civilization is a mosaic of a complex pattern of diversified cultural tradition. This multiplicity can be represented by a tree-like structure in which photographs of different communities engaged in their special rituals and activities. These can be fixed on a central vertical support by means of radiating bars. Alternatively, a budget might be used to project slides showing the diversified cultural tradition on a suspended screen or can be back-projected on a built in screen.

In this connection, the Dangs also has peculiarity in history as well as tribal communities (See, Map, 2-1 & 2-4). Moreover simple dioramas can be made and installed over large murals showing well known incidents from the *Ramayana*, the *Mahabharata*, etc. Visitors may also get an idea of the old names of the different geographical regions referred to in the concerned literature. In the Dangs there are a few sites which are associated with the *Ramayana*, e.g., Pandva Cave and Sitavan.

(viii) The nomadic and semi-nomadic communities of India are called the tribal or *Adivasi* of divergent ethnic origin. Except Africa and Australia, the largest population of the tribal are living in India. Each tribal group possesses slightly different socio-cultural traditions from those of cast bound Hindu society. Under the circumstances of the Indian culture, the tribal culture occupies a significant position. Although the Dangis are the Scheduled Tribes, at the present time, they are agricultural settlers due to enforcement of Indian Forest Act, 1878. In any case, the above observation can also be illustrated by means of photographic enlargements or colour transparencies of the tribals within the outline maps of India or the Dangs.

(ix) The attitude of people in India towards the *Adivasi* has changed greatly but yet there are still some who look upon them as members of an inferior group. This cannot be changed by romantic sentiments or by reference to the principles enshrined in the Indian constitution. Only proper knowledge and understanding of the tribal ways of life can create respect for the *Adivasi* in the public. Here a three-dimensional model of the constitution of India in a book form may be made with a page opened on which references are made to the *Adivasi* cultural heritage. Pictures of their joining mainstream of Indian life may be so made as if coming out of the model of book.

(x) The tribal museum is a mirror which gives knowledge of themselves to various communities. The museum which collects tribal material like that of the Dangs must serve as a mirror to what is happening to the communities of the Dangs. This statement should be illustrated by photographs of those Indian museums which are known to have the Dangi ethnographic materials in states and on display. If possible, enlarged views of the important Dangi exhibitions should be installed which visitors can turn like revolving pages of a book.

It has been repeatedly observed that the museum professionals are so enthusiastic about their favourite subjects and themes that they wish to tell as much as possible to as many people as possible in as little time and space as possible. This is like "force feeding" to a child who has no inner hunger for it. This is specially important in the case of ethnography because there is usually a big gap between what the public knows or wants to know about tribal, cultures and what tribal ethnographers are enthusiastic to inform. As a result, the gallery displays do not carry the common visitors from the physical objects to the messages which the curators wish to convey through them. This can be tested from even informal talk with visitors. If formative and "summative" evaluation methods of testing ethnographic displays are used, the exact communication gap can be found. We in the Korean Folk Village Museum have paid special attention to monitor public responses to our ethnographic

presentations. By that way our curatorial staff has a realistic idea of the success of the displays. In this connection it may be stated that there is no absolute guarantee that visitors to museums will behave according to the expectations of the curators. Human beings are always free to change their minds. Their decisions in museum situations are always voluntary. Even when museum guides try to direct the visitors' attention, it depends on individuals to concentrate on what they actually see. Hence the task of planning interpretive displays is difficult.

Only by the method of trial and error that the museum curatorial staff and the display designers can understand many alternative ways of successful visual communication. They cannot depend on one single method to communicate with many groups which have different interests and backgrounds. Such an unilinear approach is all right in formal school instruction when the teacher is familiar with the general level of students' understanding of a subject and where there is a strong motivation to compete for success in examinations. In museum situation when the public is not homogeneous and they have no common motivation to compete with one another for specific achievements, this poses special problems or challenges before museums of ethnography in India. A lot of study and experiments are required to know how many ways are available to museums to convey ethnographical materials. Also photographs of the designing and display may be displayed as a part of the introductory exhibit in which the methodology of the planning and execution of the exhibitions can be shown step by step. Similarly, such appreciation of the designing and display staff may find place in the published annual reports of the museums, preferably with photographs.

The interpretive signage and publications is also significant in general and in case of ethnographic exhibition. A number of museums are famous for their well planned and well illustrated publications both popular and scholarly. Following examples convey clearly that what such publications can do in informing the target audiences is more reliable than what normal exhibitions can do because publications can be taken out of museums and seen and studied again and again according to the convenience of each visitor who can purchase it. The number of grants available for good publications is more than money available for exhibitions in view of the quantity of information which can be accommodated in printed medium. To illustrate as many ideas and facts, many times more displays are required. But this is only one side of the matter. A three dimensional display can be more effective in creating new interests and personal experiences of enduring value then printed words and illustrations.

Another problem with printed literature in museums is the general lack of interest in visitors to buy them even if made

available at low cost. Under the circumstances of Indian museums, the sale of museum publications is unsatisfactory. This can be increased by improving the quality of publications and by better salesmanship, marketing techniques and all round publicity. It is possible to state that museum publications and museums displays can be complementary as they have their own advantages. The problem is in the transfer of information through labels, information sheets, audio-visual scripts, gallery guides, briefs prepared for the purpose of museum education.

The labels and signs is to help for the visitor to recognize and understand museum facilities and exhibitions. It can help to save time for the visitor. In general, the curator tries to make up what he cannot properly convey his message to the visitor through objects by presenting his idea in verbal or written labels. Indeed, a label is valuable to the extent to which it helps a visitor in seeing the object on display, or knowing the object. There are mainly two types of signages: One is for interpretive signages such as (i) object labels; name tag or descriptive labels, (ii) group or case-wise labels; mainly informative labels, (iii) sectional or gallery labels; mostly introductory labels (See, Fg. 5-1, 9-1, 9-4, 10-11, 10-13 to 10-20, 15-3 & 16-1, Vol. II). Another is adminstrative signages such as entrance, orientation, and directional signboards (See, Fg. 6-1 & 10-1, Vol. II). For example, exhibition halls and display areas, public service areas such as hire facilities, ammenities, transport, communication, and security.

Signage in most ethnographical museums are commonly written in two languages ; one is for the native public in their mother language, another is for the outsiders in English. Apart from science museums, the informative labels of ethnographical museums are relatively too long because of containing a detailed description of the objects. In my opinion, informative labels should contain brief information and attractive illustration. Otherwise, the common visitors do not like to read difficult labels and informative sheets of which are usually so small size and unattractive, because they are extremely accustomed to modern audio-visual media such as T.V., radio, and screen.

The most legible type form for interpretive signs is lower-angle and boldface. The best legible interpretive signs should be oriented $90^{\circ} \pm$ as little as 15° to the line of sight of the average visitor. Letters should be selected in proper ways, i.e., writing totally in capitals or italics should be avoided because common people are not accustomed to read unfamiliar writing. But, writing totally in capitals or italics may be used only to give special emphasis to a word, phrase, or sentence. Lettering can be done by machine, press-on letters, stencils, or ready-made three-dimensional letters in a wide variety of materials. According to my working experience at the Korean Folk Village Museum, a well-written signboard in

calligraphy is very much effective because traditional writing does never disturb any visitor in falling into authentic atmosphere in the 19th century.

While designing signages, the curator and the designer must consider the primary function of different signs, target message of each signboard, shape of signboard-frame and colour combination in terms of aesthetic and functional point of view, and proposed location of signboard. In respect of texture of the message, P.A. McIntosh (1982) suggested that "In a short message, these functions must be performed by the headline and possibly one paragraph", and "In longer message, they are performed by the headline, lead paragraph, interior paragraph(s), and closing paragraph."[1]

In case of colour combinations, there is no major controversy in connection with perception of individual colours. The problems can occur in colour schemes or colour harmonies. Theoretically, for name and informative labels, the best legibility are that dark black letters on a light yellow background. But no one can give guarantee the success of colour scheme or colour harmonies before colouring actual materials for labels because actual colour comes out after drying. In my opinion, the best selection of background colour for not only labels but others objects or furniture also depends on the individual colour value and harmony. A colour combinations between the object and the background should not be extremely contrast. In case of colour combinations of the signboard-frame, the curator and the designer may consider those with different subjects and surroundings.

In selecting materials for signage, durability of that with respect to local weather, decay, insects, wildlife, theft, and vandalism should be considered. It is believed that as far as possible the natural materials such as wood and stone may be selected for the signage in the open-air museum or display areas. The use of local materials for the signage and its supports can make more aesthetically acceptable and will help promote the theme of the area. The Indira Gandhi Rashtriya Manav Sangrahalaya, Bhopal and the Shilpgram, Udaipur present the stone-signboards (See, Fg. 16-1, Vol. II). In case of wooden materials, the maintenance is more serious problem than others. In terms of environmental education purpose, the utility of the natural materials is the best and gives a good impression to the visitor. In practice, not only natural materials but also synthetic or metal materials require to be painted periodically.

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1. McIntosh, P.A., "Signs and Labels", in Sharpe, G.W.(ed.), *Interpreting the Environment*(2nd), New York, John Wiley & Sons, 1982, p. 266.

Besides, financial requirements for making signboards and maintenance expenses should be considered by the curator and the designer.

B. Various Exhibition Methods for Ethnography

(1) Permanent and Temporary Exhibitions

There are different kinds of museum exhibitions to fulfill the overall educational objectives of the different institutions. There are exhibitions which are called as permanent because they are installed for an unspecified duration. They remain basically unchanged to more or less extent, over a long period of years. We know of examples in India where such permanent exhibition have remained the same for 30-40 years, if not more. Often these are termed as public galleries devoted to specific subjects like Archaeology, Natural History, Paintings, Sculpture, Decorative Arts, etc. very often when buildings are designed, whole galleries for such subjects are planned taking into consideration their requirements. In view of conventional museology museums were identified with buildings, such specific galleries were equated with the permanent exhibitions to different subjects, assuming that they would continue to exist forever (See, Fg. 1-1 to 1-16, 3-1 to 3-6, 4-1, 5-1 to 5-2, 6-1 to 6-6, 7-3 to 7-6, 9-1 to 9-4, 10-1 to 10-11, 11-1 to 11-4, 12-1 to 12-4 and 13-1 to 13-2, Vol. II).

The permanent exhibitions are organised when a museum is established and enough collections are made to cover a subject area. Usually, these subject areas correspond with the academic disciplines on which research is conducted in the universities. It is for this reason that many museums have galleries to house permanent exhibitions on similar subjects. It is usually impossible to cancel permanent exhibitions in the form of galleries. But new permanent exhibitions are organised when sufficient good collections on the subject are made and other infrastructure and specialists are available.

In contrast, there are other types of exhibitions which are called temporary exhibitions because they are installed for a specified time duration. Generally, temporary exhibitions exist only for a few weeks or months but not more than three months. In exceptional cases of temporary exhibitions, the so-called special exhibitions can last for even six months depending on their importance (See, Fg. 1-17, Vol. II). The term "temporary" is applicable to portable, circulating, travelling or mobile exhibitions. Actually, all such exhibitions are semi-permanent because they function for considerable duration. It is only in contrast to the so-called "permanent" exhibitions that the so-called "temporary" exhibitions are "temporary". There are instances where temporary exhibitions planned for limited duration, continue to remain open to the public because of their

popular appeal or because the museums have no funds to dismantle or replace them. This happens when some museum buildings have an area specially planned for temporary exhibitions. Professionally speaking, temporary exhibitions should be as well planned with special attention to security and conservation as the permanent exhibitions. But some badly organised temporary exhibitions are lacking in such high standards. Due to the vast difference between the objectives of temporary and permanent exhibitions, there is considerable contrast in the matter of exhibition methods and techniques. Combined permanent and special exhibitions in a museum are attractive and desirable. Therefore, each museum must decide the right proportion of temporary exhibitions to the permanent exhibitions. The former and the latter have special benefits but their fitness will depend on the place of the museum in a community. Ideal planning and designing permanent exhibitions will depend on the survey of the needs and expectations of the members of the community and the relationship with the educational and cultural institutions that will patronize both permanent and temporary exhibitions.

The permanent and temporary exhibitions in the context of ethnography need very special consideration. For example, in the Indira Gandhi Rashtriya Manav Sangrahalaya, Bhopal or in the Shilpgram, Udaipur, it is not easy to differentiate between the above mentioned museums' open-air exhibitions. In case of the Tribal Habitat of the IGRMS, many structures are semi-permanent and get renewed because they are exposed to the rain, storm and sunshine. Such seasonal or annual renovations are made by the tribals with traditional roofing materials and techniques. In fact, such renovations have become part of the museum activity towards popular education. The same can be said about the change in the interior of the tribal habitation, like wall paintings which are renovated periodically according to the seasonal customs. In some cases the tribals are encouraged to carry on their daily life such as farming, weaving, singing, dancing, wooden carving and iron smelting. So the over-all impression which a visitor may get is in the Tribal Habitat which represents and reflects traditional life style and their material culture. The similar is found in the most popular open-air ethnographic museums such as the Skansen Museum in Stokholm, Sweden, the Jensen Living Historical Farm in Utah, U.S.A. and the Korean Folk Village near Seoul, Korea. Most of ecomuseums of European countries are unique combinations of permanent and temporary presentations because they always attempt to present the traditional life-style as faithfully as possible.

Under the circumstances of conventional museums, both temporary and permanent types of exhibitions are required to make a broad-based interpretation of ethnographical materials. There are space constraints in organising lifesize reconstruction of tribal habitat inside the public galleries though a few cross sections and facades can be prepared as has been done in the

Tribal Museum of the M.L.V. Tribal Research and Training Institute, Udaipur. What cannot be erected physically, in three dimension, is simulated or represented by using large photographic enlargements and transparencies. Instead of constructing whole houses, only parts of those are restored for economical and interpretive reasons but so as to give a graphic and visual idea about their cultural significance.

(2) Extension and Travelling Exhibitions

The subject of outreach has become very important in the context of museum interpretation. The old idea of offering services only to those visitors who come to museums put several limitations on the institutions in gaining wide popularity. In democracy, all public institutions are required to demonstrate their utility to the masses. They cannot claim the government and public support based on service on selective basis. It is also well known that the majority of the museum visitors who come from the urban areas and from urban educated communities. It is also well known that all important museums are situated in the bigger cities and towns. They may welcome visitors from everywhere but not all can travel to the cities only to see museums and take benefit of their services or resources. For this reason, the heritage preserved in the museums is not accessible to the majority of the people easily.

On the other hand, the people who are away from the main urban centres are those who really need museum services to be able to understand their traditions, culture, history, science and technology and how they can face the changes taking place in their environments. Museums are ideally equipped to offer non-formal, audio-visual, open-ended, multi-disciplinary and continuing education to those who can visit the museums periodically and repeatedly. It is for these reasons that a new technology and methodology in museum interpretation has been evolved or developed by the progressive museums. To prepare extension and travelling exhibitions, these consist of several types ranging from full-fledged, independent, mobile exhibitions on vehicles or museo-buses. They are self-contained exhibitions in specially designed vehicles or trailers. They can move from place to place on a predetermined route so that communities residing in the area away from parent museums can enjoy and learn various subjects.

The museums of the National Council of Science Museums (NCSM) have successfully launched and operated such mobile exhibitions covering vast rural areas. All mobile exhibitions are on wheels. Once in India a special train was in use for the travelling exhibition organised by the Geological Survey of India for the its centenary celebration. It was very attractive and popular because of travelling and guided interpretation at the

railway stations. It was also reported that some museums of rural areas of India facilitated travelling exhibitions in the bullock-carts. Besides, travelling exhibitions in small aircrafts and ships are available to the remote areas and islands in the U.S.A. and European countries. It is notable that Australia has trains to move country-wide as museum extension programmes.

There are also available portable exhibitions. They are so designed as to allow repeated dismantling, transportation and reassembling or recreating. A special technology is necessary for portable exhibitions, so that they last for the intended period or duration. To make it easier for carrying them, the portable exhibitions have to use light and yet strong materials for construction. The systems of illuminations have also to be specially designed and created to adapt to the changing situations where the portable exhibitions may move. Similarly the glass, plastic or acrylic sheets are introduced wherever necessary to protect original materials but in a manner that they will survive in transit. Their maintenance has to be specially planned so that damaged elements are replaced and repaired easily at any place where such portable exhibition is taken. Usually, very elaborate instructions are circulated for their proper use, upkeep and repair. Also modular units are designed so that they can be transported economically. At one end of the range of such portable exhibitions are very prestigious exhibitions of original art materials heavily insured and where objects of art of national importance are involved. But at the other end it can be very simple portable exhibitions for schools, community centres, hospitals, etc. on a smaller scale.

In the Dangi cultural context, all forms of extension and travelling exhibitions have potentiality of reaching many target groups both urban and rural areas. This is specially required to popularize Dangi cultural heritage as widely as possible. Portable exhibitions have special significance many interior places in the Dangs because many interior places are accessible by only path or narrow road. A small mobile vans are preferable for that purpose. For the extension programme, if the Dangi skills in basketry is presented to the villagers who are living in remote forests, many specially designed containers must be effective for educational purpose. These specially designed basket can provide skills for the villagers who are interested in a well designed container (See, Fg. 50-3 & 50-4, Vol. II). Needless to say, the audiences in isolated hamlets or villages can benefit if such containers can be taken to their doorsteps. It is not a question of using this medium of fancy subjects but of self-contained exhibitions which will help them in their day to day life and development of better skills and awareness of alternative ways of doing things. These exhibitions will encourage use of local raw materials and local traditional

skills. The exhibitions will open their eyes to new possibilities also those who will carry such exhibitions will be well trained to explain their meaning and uses.

(3) Indoor and Outdoor Exhibitions

Indoor and outdoor exhibitions have their own objectives and they correspond with the permanent and temporary exhibitions. Indoor exhibitions are easier to make and conserve. They can be better managed because strict twenty four hours supervision or guarding is possible. Lighting for the indoor exhibitions can be fully predetermined. Many of ethnographical materials are of organic origin and can decay fast if exposed to excessive sunlight. This may not be a problem where ethnographic materials in the indoor exhibitions is easily replaceable. But when specimens have historical value or are rare, then their incorporation into outdoor exhibitions is not desirable. Indoor exhibitions are convenient from the viewpoint of services to visitors where their flow of traffic can be well regulated according to a good sequence (See, Fg. 10-2, 12-1 & 12-4, Vol. II). In the open-air exhibition, it is not easy to control visitors movements. On the other hand, there are some definite advantages in the outdoor exhibitions because visitors can see things in proper perspective and in life-like contexts (See, Fg. 1-19, 1-20, 4-1, 7-3, 11-1 & 11-2, Vol. II). However,in some museums as in the Tropenmuseum in Amsterdam, the Netherlands, a very large quadrangle inside the building is enclosed with glass roofing for the presenting open-air and life-like context.

(4) Ecological versus Systematic Exhibitions

Much discussion in museology is focused on ecological exhibition in contrast to the traditional systematic exhibition. In the context of museums, the term `systematic' has a special meaning. It refers to an exhibition which is evolved around a specific system of classification. This kind of exhibition is also considered as an extension of classified museum collections. All incoming objects are entered in the order or chronological sequence of their addition to the collections. But acquired collections should be classified and here a scheme or system of classification is a prerequisite for the systematic exhibitions.

In a systematic exhibition, what is done in the cataloguing is also done in the public galleries namely objects are installed in the specific sequence in which they get catalogued (See, Fg. 13-1, Vol. II). There are no universally acceptable systems of classification. For example sculptures may be classified according to material, region, chronology, religion as well as iconography, or styles. Depending on the predetermined system a gallery of sculpture may present the sculptures in a systematic exhibition. An exhibition in which several systems of classification of the materials are followed will not become a

systematic exhibition. The final sequence of exhibited materials should strictly follow a single system of classification to be called a systematic exhibition.

In the ecological exhibitions, the primary importance is given not to individual objects howsoever attractive or rare they might be. Ecology underlines interrelation of all kinds of things and living beings which share as well as contribute to an ecosystem (See, Fg. 15-1 & 15-2, Vol. II). The overall unity of the ecosystem is justification for an ecological presentation. If a visitor fails to appreciate the ecosystem as a total experience then there is no ecological exhibition for him. Hence, the approach is definitely holistic, not analytical or concentrated on details. Ecological displays are very difficult to plan and prepare because not only very comprehensive understanding of ecosystem is required before it is exhibited but much technical skill is necessary to recreate the network of web of relationships of all members of the system both animate and inanimate. Here, the land, the soil, the topography, the climate, the attitude are also relevant to the geological, botanical, zoological and ethnological aspects. The relationship of the man with the environment is an important subject of contemporary museum presentation. In that context, ethnographic materials, especially, tribal cultural and natural heritage ought to be dealt with from the ecological point of view.

Habitats are popular subjects of ethnographical exhibitions. In the past the most popular method was of making dioramas and habitat cases (See, Fg. 1-9, 3-1, 6-3, 6-4, 10-6, 10-8, 15-1 & 15-2, Vol. II). Many famous museums of cultural anthropology have given places of pride to very elaborately prepared habitats based on extensive research and fieldwork. Even in the developing countries many museums have used such means to interpret tribal ways of life and their material culture. But this form is quite expensive and needs considerable infrastructure. There are now many alternative methods available to create ecological exhibitions. Graphics, paintings, photographic enlargements, back slide projections and video tape player are helpful in bringing out the living unity of ecosystems. Electronic technology can help to interpret the overall unity of such a system and also allow visitors to study the individual components by their own participation.

Such ecological displays are interactive exhibitions because they depend on their effects on the visitor's contribution or participation. But there can be ecological exhibits which change gradually or occasionally. These may be called "animated" or "active". There are still other kinds of sophisticated ecological displays which may respond to the physical presence of visitors. They may be called "responsive-interactive" kinds

of ecological displays. Some examples of such ecological exhibitions can be found in the National Museum of Natural History, New Delhi, wherein, some movements take place in "walk-in-dioramas" to correspond with the change in the level of illumination. As a result, when the "day-scene-in-diorama" is turned into night, a number of night-birds or nocturnal birds appear while earlier they were hidden and their bird calls and other characteristic sounds begin because of electronic sensor system which is very useful for ethno-ecological exhibition.

(5) Thematic versus Integral Exhibitions

As discussed earlier, museum interpretation is more like story-telling rather than formal education or passing of factual information. This comparison may help us in understanding the term thematic. A theme is a kind of story which can be narrated with the help of original objects, supported by written/spoken words, static or moving images (See, 5-6-2). In such kind of exhibition, every element is subordinated to illustrating a theme. In the context of ethnography many such themes deserve to be presented in museum exhibitions. Myth, legends, world view of the tribal offer a wide range of subjects. Rituals are also challenging themes (See, Pl. 5-1-1 to 5-6-1). Similarly, themes can be found in other aspects of tribal life which can be narrated like migration. The significant difference is that such displays are in the "story" forms in which step by step a theme is unfolded. As the Dangi popular story[1] begins "once upon a time there was a king whose name is Kayisan, ...", so also the thematic exhibition begins with the origin of some aspects of tribal life and gradually explains what events took place. So, thematic exhibits can be about the tribal concept of "origin of tribal life", "origin of agriculture" or "life-style" (See, Pl. 5-1-1 to 5-2-2). It is also possible to have thematic exhibitions on the tribal architecture, tribal crafts or ornaments (See, Pl. 2-17 to 2-29, 5-3-1, 5-3-2 & 5-9). Underlying all such and other thematic exhibitions are well conceived stories which take shape in terms of space and time. The idea is a one-way development of a narrative which must go on further and further never to return to the original. When this is translated in terms of a museum exhibition, the visitor also should go from the beginning to the end in one way. All the intermediate steps, in the form of units, must be so ordered that the sequence of narration will not be reverse even temporarily.

As against thematic exhibition, there are integral exhibitions which are synoptic, holistic so that no part becomes

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1. Kulkarni, S.B., *Bhili of Dangs*, Poona, Deccan College, 1976, p. 85.

meaningful in itself. Also a visitor can go on relating one part with another in any direction. Going backward and forward does not lead to any loss of the interpretation of things on show. The contrary, multiple view-points as represented in the units of integral exhibition contribute to a deeper understanding of the subject. This is in contrast to the thematic exhibition which depends for its impact or total effect on sequential viewing of the parts from the beginning of "story" to its end.

(6) Geographical versus Chronological Exhibitions

Geographical versus chronological or historical types of exhibitions are also effective devices in visual education in museums. The space and time are the two dimensions which help in understanding life and reality. The heritage, with which museums deal, is meaningful only when the two questions "where" and "when" are answered in exhibitions. All things are not possible all the time and all over the universe. There are special situations which provide ideal circumstances for natural and human creations (See, Pl. 5-2-2, Fg. 48-1 to 48-6, Vol. II). The environmental factors play a decisive role in shaping of things. The natural products, water, soil, rock, climate and landscape differ from place to place. The museum presentation must explain how the environmental circumstances provided both limitations and opportunities which shaped the destiny of communities. Also a reference to life-time is equally significant because life is dynamic, it has been changing. The transformation of situation in the successive periods of history must be shown chronologically as the second dimension of the dynamism of life. For the sake of education, some kinds of exhibitions will concentrate on the peculiarities of territories. Others will emphasize the different stages in the past so that special attention is given to significant process of change.

The chronological displays are helpful in understanding the strength of various forces in nature and society which influenced the formation of the material culture (See, Fg. 42-1 to 42-2, 44-6, Vol. II). Museums must illustrate the periodisation of history of community in ethnographic exhibitions by specific reference to objects and associated ideas. This is important in showing cultural influences, their acceptance, and rejection for some very specific reasons. If chronological exhibitions are not arranged the visitors will get a wrong idea that a community was static in using identical material from very beginning. The visitor will be thrilled if in the chronological exhibitions, he will notice very significant differences because the culture is never static. It is the task of museums to explain how the changes were not accidental and arbitrary but were appropriate human responses with a difference that in tribal ethos such responses are impersonal and wholly collective.

Geographical exhibitions have special significance in the new concepts of museology in which community culture are interpreted in terms of their unique relationship with their territories. A community belongs to a territory in more ways than one in the development of its identity. Therefore, geographical associations are very much related to the modern displays in the ethnographical museums. The only difference is that geographical displays are not dealing with inert or inanimate physical aspect of the land. In the "identity-oriented" exhibitions, the emphasis is given on those special features of the territory which have become a part of the "collective-memory" of the human groups. Many of such geographical exhibitions also depict how the man is changing his environment and vice versa.

(7) Comparative Exhibitions

An innovation of extraordinary effectiveness in exhibition planning was the comparative type of display. This often came under the general caption "juxtaposition" meaning placing pairs of objects which have some similarities or difference. An example can be found in display of the images of "mother" in different media, belonging to different regions and also to periods. Here the main idea is to make visitors appreciate the variations in artistic expressions by many artists who have dealt with a common subject matter. This is not strictly speaking a story in well defined sequence in historical terms of the manifestation of mother or about a cult of mother. Comparative displays are not cluttered with too many things which will prove detracting from the main objective of examination of pairs. This device can be used in ethnological as well as ethnographical exhibitions. For example, if combs used by different tribal communities are shown together, it will be easier for the visitor to compare them for knowing how they differ and what is common to them. This can also be done to compare necklaces, earrings, bows and arrows, huts, kitchens, kitchen utensils, religious places, etc (See, Pl. 5-3 & 5-6, Fg. 28-1 to 28-12, 17-1 to 23-4, Vol. II).

In case of Dangi cultural materials it will be appropriate to follow this way of presentation to compare objects belonging to the three majority communities such as the Bhils, the Konkanas and the Warlis, and other smaller communities such as the Gamits, the Dhodias, the Kathodis and Kotwalias. Or, it is also an effective way to bring out the similarities and differences in the material culture of the different sub-divisions of Konkanas, like those from the north-eastern Maharashtra, north-western Maharashtra, and other parts of Gujarat. By this approach it will be possible to do justice to the variations in the cultural heritage of the communities in relation to the environmental, sociological and economic factors. Not only comparative displays should be applied to objects individually and groups, but also to cultural phenomena as seen in the ways of life.

(8) Authentic Atmosphere or Natural Setting Exhibitions

Natural setting or authentic atmosphere in which original objects were found is an important factor in the interpretation of the Dangi cultural materials in museum exhibitions. One must imagine the ecology of the Dangs in terms of vegetation and topographical features like hilly terrain and presence of rocky slopes partially hidden by tall trees and bamboo, and other various trees and under growth like bushes which fully hide the lower parts of woods (See, Pl. 5-2-2, Fg. 27-5, 34-4, 34-9, 36-4 & 37-12, Vol. II). It was for these reasons that many Dangi objects displayed in museums loose much of their charm to those persons who have enjoyed them in the original settings or atmosphere. When museums want to give back that special charm to objects on display, some effective techniques are required.

There is a range of alternative methods available for the above purpose from least expensive to very sophisticated and therefore, very costly to buy and maintain them. As illustrated here such methods can suggest, represent or simulate natural setting or atmosphere of the Dangs in the following ways:

(i) Suggestive methods; sketches, drawings by hand or their enlargements.
(ii) Representative methods; paintings, photo enlargement in life-like proportions either on straight or curved vertical support with well directed illumination for easy observation of all realistic details. Also colour transparencies and their projection. Video films or motion films projection from front and near.
(iii) Simulation techniques; habitat cases, "walk-in" exhibitions in which the visitor is given an illusion of reality by the combination of image, sound and height. It is possible for the visitor to listen to the recordings of the rustling sounds heard in the Dangs forests, sounds of oral literature, persons working, hunting or dancing or busy in other occupation which are shown in three dimensional volumes in front of the visitor. The same can be used for simulating experience by better design more accessories and introduction of appropriate lighting to create afternoons, evenings, twilight, at night, in different seasons of summer, monsoon, or winter in a special "walk-in" kind of exhibition by means of lighting manipulation and sounds from different directions. For example, there are many cases of natural setting exhibitions such as a diorama showing marriage ceremony in the Lady Wilson Museum, Dharampur, a reconstruction of a Warli hut in the Tribal Museum of the Tribal Research and Training Institute, Ahmedabad, a reconstruction of a Bhil hut and a temple (*mandir*) in the Tribal Museum of the M.L.V. Tribal Research and Training Institute, Udaipur, many rural houses and huts of the Shilpgram, Udaipur and the Tribal Habitat of the Indira Gandhi Rashtriya Manav Sangrahalaya, Bhopal (See, Fg. 3-1 to 3-3, 6-3, 6-4, 7- 3 to 7-6 & 11-1 to 11-4, Vol. II).

The Vishala Village and the Utensils Museum, Ahmedabad, and the Village Complex and the Crafts Museum, New Delhi have good natural setting exhibitions. But in my view, most of the open-air ethnographic museums in India have not properly managed authentic atmosphere in the context of ethnographic museums, especially, inappropriate vegetations and no control of skyline. In this connection with no control of skyline, there is an example of an ill-matched things between traditional Tribal Habitat of the IGRMS and an advanced technological transmitting tower near by the Tribal Habitat of the IGRMS. The IGRMS should control the skyline from the inside of the Tribal Habitat by means of planting the over wood or top canopy and the under wood or the middle canopy.

(9) Stylistic Exhibitions

Style exhibitions are more popular in the museums of Fine Arts. In them, museums are required to show how the artists have been giving expressions to their ideas in visual forms. In such objects of art, the main aim is not to explain their functions. All artistic objects have to satisfy the love for beauty even if such beauty is found in useful things. The consideration of a unique way of making becomes the primary justification for art objects. This is also understood by the art critics in terms of personal styles of artists because each one creates things in his own distinct manner. The style is found in the work of individual artists whether known by their original names or not. But styles are also associated with groups of people, communities, areas and even historical periods. The main reason for this is that every individual artist does not invent a new style but shares characteristics with many others, to a small or great extent. A person may follow style and also contribute to it.

The exhibitions of Fine Arts objects have to deal with styles and sub-styles so that the visitors can understand and appreciate the artistic achievements of individuals and groups more meaningfully. As styles exhibitions can also examine how such influences take place for a variety of reasons. In the context of ethnographic exhibitions also the stylistic approach is justified because it can explain the preferences of groups to suit their temperament. Dangi cultural materials cannot be called Fine Arts materials because the objects having artistic merits were originally created to serve rituals or other functions. Many are symbolic and their decorative elements are also suggestive of the belief systems of the Dangi tribal communities. The presence and absence of certain motifs on objects are not a matter of personal choice. They may indicate taboos, phobias, and world views which might escape laymen's attention. Therefore, stylistic displays of the Dangi cultural materials will not be imitation of the stylistic exhibitions in

the museums or sections of Fine Arts (See. Fg. 26-23, 26-24, 43-13 to 43-15, Vol. II). However, the visitors should be encouraged to appreciate the styles and sub-styles found by critics in Dangi cultural materials without forgetting to remind them that the primary motivations were not purely aesthetic but expressive of their love for life.

(10) Demonstration

Demonstration is usually treated as an educational method. But in the contemporary museology, demonstration has become a form of presentation of objects with attendants such as artists or craftsmen in the public galleries or in any other areas in which outdoor or semi-outdoor exhibitions are organised (See, Pl. 5-8-1 & 5-8-2, Fg. 4-2, 4-3, 7-1, 7-2, 14-1 & 14-2, Vol. II). For that reason, demonstration combines different methods of museum, interpretation very effectively. It is true that continuous demonstration is only an ideal because of the limitations of the museums in obtaining services of able demonstrators in required number. It is more difficult than engaging staff for guiding visitors amidst displays. Such guides only depend on speech to communicate ideas and to point out special features of displayed material. They may encourage visitors to ask questions which they can reply. But not much of guiding is more complicated than that. On the other hand, demonstration as a part of presentation is very elaborate because it is to be integrated in a museum visit of casual visitors or school children.

Yet many museums of ethnology or ethnography find demonstration to be very stimulating component of public exhibitions. There are some subjects in which even simple demonstration can go a long way in interpretation as in showing the uses or functions of many ethnographic materials like tools, or objects of day to day uses.

The strangeness of many ethnographic objects will disappear if their use is demonstrated. Usually photographs, sketches or dioramas can equally be useful but when museums wish to explain or illustrate a sequence of activities based on the same material and where movements of hand of the users are very subtle, then live demonstrations are the most effective. Such a method can repeat the actions as often as required if the group of visitors show more interest and wish to observe the demonstration again and again for understanding the subject. Demonstrations of skills and rituals are also very effective in physical association in the exhibitions of the relevant material culture. For example, a simple behaviour of bending a tribal bow and fixing an arrow and releasing it after aiming at a specific target can become thrilling experience only when demonstrated "live" as no static photograph or even video can make comparative impact. Often such demonstrations of ethnographic objects may

turn into visitor participation which according to the modern museology is the ultimate ideal in museum interpretation. Demonstrations of kitchen activity, food preparing, decoration activities of walls and human body, basketry, behaviour pattern in tribal markets can become a source of information and recreation if well organised as a part of exhibition. If the demonstrators wear typical tribal dresses, their work will be more readily appreciated. "Live" demonstration has great potential as a kind of interpretation through and in associated with ethnographical display. They are very thrilling in period rooms or reconstructions of tribal habits as seen in the Indira Gandhi Rashtriya Manav Sangrahalaya (IGRMS) at Bhopal, and the Shilpgram at Udaipur in India. It is certain that even in indoor galleries, demonstrations are very effective.

C. Evaluation of Exhibition Effectiveness

(1) Effectiveness of Exhibitions

As stated above, the modern exhibition is more oriented to the society. This is quite different and also in contrast to the earlier displays which can be grouped under a common descriptive term as "object-oriented". It is in the evolution of museology that we should trace the origin of the universal shift from the "object-oriented to "socially-oriented" exhibitions in museums. There are still institutions which prefer "object-oriented" exhibitions but their number is going down. Similarly, exclusive emphasis on "socially-oriented" exhibits is still an ideal. It may, therefore, safely stated that both kinds are combined in the belief that each has its own advantages.

A lot of research work has been done on the effectiveness of museum exhibitions in order to find out which factors help and hinder the interpretation work. The data available are in two forms. Firstly, general observations by the experts on the effectiveness and secondly, the conclusions of specific experiments and surveys. This growing data on the subject is a part of the increasing professionalism found in museums. The aim is to make the most economical use of the resources which are never unlimited in any museum of the world. Arranging exhibition was a simple affair in the past when the question of accountability was not applicable to museum work. But, lately, the question is asked "is it necessary to spend so much money on modernizing museum exhibitions? What specific advantages or benefit will result from the investments of public money?" It is not possible to give only speculative or vague reasons for investments in museum exhibitions which are becoming costlier and costlier every year.

To satisfy the authorities, the public leaders and themselves, many progressive museum people have undertaken

special studies. Some of them are in the form of general surveys of the population to know about their attitudes and their patronage of museums and uses of museum services. Other are the studies of the successes of specific exhibitions in terms of what they want to achieve. These evaluative studies are also of several kinds known as summative, formative, naturalistic. Very elaborate methodologies are developed for these evaluations. Unfortunately, it is not yet clear how much advantage has been taken of the conclusions and data collected out of, and based on, such surveys and evaluative projects.

Perhaps, concerned museums might have benefited but there is no published works available on the subject. It is, therefore, of more academic interest to discuss here the broad generalizations on the effectiveness of museum exhibitions which should form the basis for planning new displays and also for designing future experiments and surveys. It is now a commonplace knowledge that conclusion drawn from one survey or experiment should not be accepted as equally applicable in another museum situation. Even the same visitor may behave differently during his next visit and still more differently in his succeeding encounters with museum presentation. A study of many such behavioural patterns may develop curatorial insights into visitors motivations or problems faced by them in museum exhibitions. With such clear understanding of the limitations museums make use of the available data on visitors.

Towards this aim, many museologists have classified visitors into separate groups like children, school children, students, adolescents, youth, adult, aged. Other classes are of male and female. Still one more valid classification of visitors is in terms of specialists or scholars and non-specialists. Some have even distinguished rural public from the urban. For some special reasons, it is also useful to consider the common needs of handicapped of several kinds like partially or fully visually impaired or blind, or mentally retarded. It is true that all such classes have their own requirements. But it is also true that these overlap to less or more extent.

As earlier P.H. Pott (1963) pointed out, there are three main motives which are responsible or which lead to actual visits to anthropological museums. The first motive is "aesthetic", the second is "romantic", and the third is "intellectual".[1] The "romantic" motive equally corresponds with "evocative" one. Though these three motives are interrelated, each has its own unique requirements. On the same logical sequence, R.J. Munneke (1980) analysed the interrelation among aesthetic, evocative and

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1. op cit., Pott, P.H., 1963, p. 158.

intellectual approaches in museum exhibitions. It is believed that intellectual considerations must influence both aesthetic and evocative presentation.[1] Aesthetic considerations must be incorporated into both intellectual and evocative designs, and an evocative approach is self-contained and cannot be introduced into either an intellectual or an an aesthetic approach.[2]

In general, it can be said that an evocative presentation in an anthropological museum represents an attempt to convey -- via objects usually collected for the purpose -- part of the reality of another culture in museum presentation. But an evocative presentation alone will not suffice to inform the visitor about different life style and artifacts in another part of the world. However, an evocative presentation is a highly effective to convey an aspect of the reality of another culture. It is important that an evocative presentation essentially requires photographs in which continuing action is `frozen'[3]. In practical aspect of an evocative presentation, a package information consisting mainly of photos and texts aims at helping the visitor to interpret the arrested activities, i.e. the reality of an unfamiliar culture. In fact, the value of combination of an evocative and an intellectual presentation is to provide a bridge between different cultural contexts. Thus, an evocative presentation must deal with various kinds of interest, both general and specific. However, the interest in enjoying beauty can be fulfilled only by aesthetically satisfying creations as found in objects of arts, crafts and others where visual charm is easily found.

Museums are popularly associated with treasure houses full of things of beauty. No one would think of even a possibility of a museum which intends to collect ugly things. For that reason, museums attract people who are interested in beautiful objects. Sometimes, they will be greatly disappointed to find things lacking in aesthetic qualities. Aesthetic and intellectual interests may not be alike and often operate in contrasting directions. For example, too many questions about the content of works of fine arts may divert the visitor's attention from the artistic features or stylistic characteristics. It is certain that the former is mainly concerned with `what' of the object, and the latter is focused on the "how" regarding mainly aesthetic aspects.

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1. op cit., Munneke, R.J., 1980, p. 86.

2. ibid.

3. ibid.

(2) Aesthetic Exhibitions

There are still many people who associate museums with the collections of beautiful objects both natural and man-made. This appears to be a commonplace opinion. In the history of museum development, also we see that earlier museums had bias toward collection and exhibitions of beautiful objects. Perhaps this aesthetic interest due to the instinct of human sense. The early museums were expected to be a source of aesthetic experience. The term display was also understood as the art and process of bringing out the beauty of objects and also making objects appear more beautiful than they are. The show cases, coloured backgrounds, illuminations, fixtures and accessories like mannequins, etc. are some of the means of increasing the power of attracting visitors' attention. Even oridnary, commonplace and fragmentary objects are presented with a view to impressing the visitor about their uniqueness. For this reason aesthetic effectineness of museums exhibitions was always a major concern in museum planning everywhere in the world.

Aesthetic is concerned with beauty which cannot be defined objectively without reference to personal moods of those who find beauty in outside world. Ideas of beauty change from community to community, individual to individual, place to place and period to period. This is very clear from the ethnographical material. There are special reasons why aesthetic consideration in exhibitions of ethnographical materials can create distortions and unscientific attitudes. For this reason, museums should be more concerned with the showing of significane of ethnographic exhibitions. It is good if such an exhibit succeeds in showing significance as well as beauty but if there is any conflict between them, then aesthetic criterion should be sacrificed. Also visitors who come to see ethnographic collections should not be given a wrong idea that the beauty is the principal feature and motivation of the displays. Too much emphasis on beauty may divert the minds of visitors away from the true significance of ethnographical materials. It is a universal problem of how far exhibitions of ethnography cater to the aesthetic interest of visitors. This does not mean that such displays should be ugly. The emphasis on aesthetic exhibition is to present the beauty of the objects on diplay.

(3) Pleasurable Exhibitions

No museum exhibition is created to give pain. All museum exhibitions are designed to be pleasurable. If visitors feel happy and pleased with what they find, then they will continue to use museum services and facilities. So, becoming as much pleasant as possible is very important for successful museum exhibitions. The only difficulty is in the matter of what is pleasurable to different kinds of visitors and how it will help in the main functions of museum activities such as exhibition, education and interpretation.

Pleasure is a mental state, which keeps a person doing what he is doing. Pain also is a mental state which makes a person stop doing what is painful and to avoid similar activity in future. So, in the context of museum exhibitions, pleasure is very important condition for visitors to continue walking or moving through open-air site or museum galleries, halting at points where plesurable experience is possible and pay attention to those things which are exciting. When this happens for a considerable time, the visitor can absorb the messages of the exhibitions.

Another aspect of pleasure is the encouragement to the visitor to make responses to what is displayed. Interpretation is more when such responses are appropriate to what is shown. But visitors may respond by entering into the world of memories and fancies. In which case, they are not paying full attention to what is offered to them in museum exhibitions but they are going away from it. When this happens in a special way the display serves as a reason for escapism. In escapism, the visitors are not seriously concentrating on the objective reality. They are entering into a private world of fantasy of imagination. This is also called "romanticism" because it involves wishful thinking. According to some museologists there is nothing fundamentally wrong if visitors get such escapist or romantic experiences as responses to museum exhibits created for interpretation. On the other hand according to others, this is not proper because museums are centres of visual education of objective reality and not places for fantasizing.

In the context of ethnographical displays, in particular, of the Dangi cultural heritage, it is possible to make good use of escapist or romantic interest of visitors provided it helps them in projecting themselves into the charming world of the Dangis. Escapism is a natural tendency of human beings in going beyond their individual limited world. At least for some time they can forget their day to day life and think of Dangi ways of life. This is very necessary to make them take more and more interest in the Dangi cultural and physical environments..

(4) Didactic Exhibitions

The term "didactic" has a special meaning, "instructive". A didactic exhibition is that which is meant to teach and to be learnt something by the visitor. Effectiveness of a didactic exhibition is measurable in terms of what was intended to be taught through it and what the target audience has actually learnt, through it only. Hence, out of all kinds of exhibitions, those which are didactic are comparatively easier to evaluate in regard to their effectiveness. For these reasons, a large number of research projects have been undertaken on the subject of didactive effectiveness of museum exhibitions. But the crucial

feature of all didactic exhibitions is the ability on the part of their organisers to project institutional objectives. The performance or effectiveness of the didactic exhibitions cannot be decided on the basis of their aesthetic qualities, the pleasure which they may give or general awareness of any historical, cultural, scientific or environmental subject. General objectives may give satisfaction to the museum staff that their intentions in arranging exhibits were good but unspecified objectives are as good as wishful thinking.

There are some special difficulties in determining didactive effectiveness of museum exhibitions. Firstly, it is easier to conduct examinations in the institutions of formal education like schools, colleges to assess how much students have learnt because the terminal examinations are a part of the structured organisation of learning arrangements or academic courses. But museums have no such arrangements. To prove to be didactic they must find out the benefits received by the intended visitors, exclusively from it. Therefore, to do this what such visitor knows before his exposure to the didactic exhibition and what he learnt after such exposure becomes indispensable for assessing the didactic effectiveness. In the normal circumstances, such pre- and post-visit evaluation is not easily and conveniently measurable. But by the use of sampling methods of the representatives of the target audiences, museums can get reasonably reliable idea or insights about the ability of their exhibitions to teach. Such sampling is supplemented by observation of behaviour of the target audiences and also by arranging personal interviews. This is also known as the process of validation of museum exhibitions. It is now commonly accepted that the techniques and methodology of determining didactic effectiveness of museum exhibitions is in their infancy and more work in this area is required.

(5) Methods of Evaluations

The effectiveness of exhibitions can be assessed or evaluated by a methodological approach based on modern experiments and surveys. Every year a new crop of good literature is available on recent development in museology. Even a brief summary of that literature will be very long to include here. So it is proposed to concentrate on the possibility of the application of the acceptable methods of evaluation to the interpretation of the Dangi cultural heritage.

So far there has been no published or authentic evaluation of museums exhibitions of the Dangi cultural materials to the best of available information. Therefore during the period of research, opportunities were taken to discuss this aspect with both museologists and researchers in the Dangi culture. They were unanimous in agreeing that evaluation of exhibitions is

desirable to convince ourselves that the limited resources at the disposal of museums which deal with the Dangi culture, are put to the maximum use. Especially, because the Dangi culture is a neglected area in academic and museological disciplines, a long-term planning is needed to educate people at all levels about the significance of the Dangi heritage and its contribution to the regional and national heritage. Fortunately, both the Central and the State governments are ready to invest funds in efforts to create awareness about the tribal heritage. It is not necessary to go into all reasons why the available grants for the above purpose was not fully utilized. There is, perhaps, no use in analysing the past causes and in finding out who failed and why. But, one can be optimistic in thinking that opportunities still exist to make up for the lost time. What is necessary is to understand the effective methods of evaluation of museum exhibitions in the light of the new awareness of the unique significance of minority communities to give them pride in their past and present achievements.

V. 4. Through Education

A. Audience and Museum Education

Museums have a great potentiality as centres for education. Comparing to potentialities of other educational institutions, the potentiality of museums is high but practically low. Still many people regard museum education as nothing more than guiding visitors to galleries or providing them with film shows and lectures in relation to museum collections. But, this is not adequate because museums have a much greater potentiality to be useful to the community. Of course, not all museums can fulfill educational demands of the community but every museum must attempt to fulfill them. In this connection, Rene'e Marcouse' (1973) mentioned that "even in the United Kingdom and other Western countries, education is only now being accepted as an integral part of the museum's responsibilities to its public."[1]

In practice, there have been changes in the attitude of the museums towards the public. In worldwide, the needs and

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1. Marcouse', Rene'e, "Changing Museums in a Changing World", *Museums, Imagination and Education*, UNESCO, Paris, 1973, p. 17.

demands of the public strongly affect to change the general policy to publicize, popularize and integrate museums more fully into everyday life by means of the educational and cultural activities, which change the role of museums in a community. In the past, museums have served the public with showing their collections and preserving their cultural and natural heritage. Mostly museum collections were simply presented with labels and explanations. This can be named as "take-it-or-leave-it" exhibit, which is not "educationally-oriented" because there is no pre-visit interest. Things have changed much in the last few decades. Artistic, mechanical and electronic means are pressed into service to relate the displayed materials with the different kinds of visitors. Therefore, the objectives of museum education are clearly marked as the basis of museums' function.

In the past, the sole objective of education was to disseminate knowledge. There are some controversies, as Molly Harrison (1960) pointed out. "To some people education means merely instruction", on the contrary, to others, "education means a training in the use of mental powers."[1] In conclusion, he asserted that the goal of museum education is "the fullest development of the whole human being."[2] To add to this, museum education "must neglect neither the factual evidence of real, tangible objects nor the evocative, imaginative impact of things of beauty and worth".[3] However, museum education was mostly in the form of lectures or film shows to suit and satisfy those who were interested in museum collections or in the subjects covered by museum collections. Nowadays, museum education emphasizes on museum potentiality for stimulating new interests even in those who had no previous exposure. Therefore, museums are sometimes called "stimulative institutions" if they are run by specialists who know how to motivate people of different kinds. The emphasis on museum education today can be brought out better in museum experiences than in textbooks or lectures. It is believed that museums today can rectify the tendency to rely too much on the written word rather than presenting original objects.

A new concept of education aims at a comprehensive development of a person. Each person has to prepare himself to know and adapt to his environment. In practice, his education can

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1. Harrison, Molly, "Education in Museums", *The Organization of Museums : Practical Advice*, Paris, UNESCO, 1960, p. 81.

2. ibid.

3. ibid.

never be complete. He must continually learn and adapt to the changes taking place today and the problems which are created by these changes. Thus, the formal education which a person gets in his school or college should be followed by continuing education. Such education covers all aspects of life. It is true today that what a person should learn cannot be found in textbooks. The modern education does not aim at training of memory to hold maximum number of facts. It aims at fostering various abilities like curiosity, imagination, power to create, invent and discover, power to search, power to move ahead, power to adapt to environment without losing identity. No one neglects that museums have the potentiality of stimulating human faculties of observation, reasoning, judgment and discovery.

Fortunately, there is a growing awareness of the need for museum audience research which is one of the ways of getting feedback to determine the success of museum communication system. In the past, museums depended mostly on the subjective opinions of the museum staff in planning educational programmes without finding out the needs and capabilities of the target audiences. There was no way to know in the past, if public got what they wanted. The modern museums recognize the obligation to give the public what they want. This is not easy in practice. In fact, this target is comparable to all commercial market research or surveys in which the aim is to find out what the client can accept. But it must be noted that no information regarding visitors as well as museum materials is permanently relevant because situations are always changing. Therefore, each museum has to update and review the "actionable information".

So far as museum visitors are concerned, there are the two main categories of museum visitors who are individually coming to museums without prior planning or preparation, and those who are visiting the museum not alone but as a group. Educational requirements and suitable planning for the above two categories are different. It is also reported universally that educational work for the casual visitors is most challenging and full of uncertainties because such individuals have hardly anything in common. They differ from each other according to their interest in educational, social, economical backgrounds, and they have no clear motivations to make their visits participatory. But the work for groups can be better planned and managed because they can have some common features or they are more likely to participate in special programmes. Usually, group visitors would like to learn something in relation to museum materials and to participate with educational programmes rather than individual visitors.

Many people believe that a museum visit is essentially a leisure time activity. In this connection, R.E. Morris (1962) has

pointed out four factors of motivations for museum visitors as : (i) curiosity; this is a very vague stimulus. Curiosity can stimulate on various levels; on the lowest it can be equated to sensationalism; on a higher one it may be intellectual eagerness which may result in most productive effects. (ii) wish for social ambition and greater prestige. (iii) objective interest as one form of the general desire to become an "educated person"; Often it may be too intellectual but can also broaden into (iv) enthusiasm; one of the strongest stimuli for gaining intimate contact with art.[1]

Recently, a review of museological literature and of sociology, psychology and consumer behaviour has pointed out six different reasons behind their choice of their use of leisure time. Those six reasons are: (i) A person's desire to be in company of other people, (ii) His intention to do something worthwhile with his own time, (iii) His need to be comfortable in his surrounding, (iv) His search for a challenge to gain experience, (v) His desire to learn, (vi) A person's wish to actively participate. All of these factors may motivate a person to visit a museum during his leisure time.

From the viewpoints of adult interests and expectations toward leisure choices, there are three different audience classes such as frequent, occasional and non-participants. Each group has different expectations from its museum experiences. Non-participants feel that they do not get any of the above six experiences in museums. The occasional visitors may get some but not all. Only those who visit very often and regularly think that museums can satisfy them on all six grounds. From such surveys it is possible to get some ideas about the motivations which underlie users choice of spending their time in museums. In this case, educational services will get good responses if the public can be attempted to use museums for as many or all six reasons.

It is also relevant to refer to the important tenet of developmental psychology according to which all human experiences have their basis in their own past. Every individual has a different history. Thus, each looks at the world differently. No two individuals even of the same age, family or socioeconomic backgrounds may have same perceptions. It is, therefore, very difficult to imagine the perspective of the child in his museum

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1. Morris R.E., " Leisure Time and the Museum", *Museum News*, Vol. 41, No. 4, 1962., in Borhegyi, S.F. de and Hanson, I.A. (eds.), *The Museum Visitor*, Wisconsin, Milwaukee Public Museum, 1968, p. 55.

visit. Each child brings his own experiences and conceptions of the world with him in the museum. What is seen in a museum is conditioned by the child's own perceptions. Children, for example, have no idea about how things get into museums or why there are museums. It is difficult for a child to know that different objects found together in a museum actually belong to vastly unrelated contexts of time and space. It is truly said that learning in a museum is a continuous process of accommodating earlier expectations and beliefs to new realities learned in response to museum presentations.

Children have to constantly accommodate new experiences and they have to restructure their ideas about the world. This dynamic process between a visitor and his experiences is the basis of museum education. Children are told what to do in museums which leads to loss of initiative. Therefore, it is recommended that children should be allowed to choose whatever they want to concentrate upon. By this way, educators give them a confidence in their ability to control their responses. This effect is more pronounced when children have not to see too many things but concentrate on a selected group at a time. Once a child's attention is caught in a museum a number of programmes can be organised so that progressively a museum will be seen as an environment which can reward every active response to rich museum resources. A child as well as an adult should look at the museum environment as a place for wonder and exploration which will provide insights into each one's identity.

It has been widely recognized today by museologists that the museum and its audience must be understood as three factors in a museum communication system. The system can be analysed in terms of the "source", the "medium", and the "receiver". The collections along with the documented data as well as expertise of the staff, constitute the "source". The museum educational staffs, exhibits, publications and audio-visual aids together form the "medium". The users of the museum services, chiefly the visitors form the "receivers" in the communication system. It is also essential to recognize that mostly a museum communication is a "one-way" system. This is a serious limitation in all museum education programmes. Therefore, it is difficult to know reliably if museum message is actually conveyed to the target audiences, or how much of it is conveyed, and if there are distortions in receiving of the original messages. Moreover, to convey museum message to the target audience accurately, it requires to establish the helpful environment and freedom from extraneous interference. In relation to the cultural heritage of the Dangs, this limitation should be recognized by the relevant ethnographic museums in terms of museum communication.

The concept of modern education refers to passing on the cultural heritage from one generation to another. Commonly, the

cultural heritage means traditional ways of life and the relevant material culture in a community. Every community has its own characteristics. Most of the ethnographic museums evaluate the relevant communities in the past and the present in relation to their cultural and natural environment. It has been accepted in modern museology that the museum is not concerned primarily and exclusively with object. In general, museums deal with special experience which people can get in response to situations in which original objects figure prominently. Hence, museums collect objects not for the sake of themselves as happened in the history of museum. Since all artifacts were actually made for serving specific purposes, mostly museums collect them for reusing them in order to be experienced. This is possible if people find them meaningful.

The audience who come to museums should look at the objects with some purpose and concentration. Generally, the public does not bother about this way of concentrating. It is a special way of looking at things for their innate qualities and in the light of information available about them. Also there are barriers which prevent the general public from concentrating on the significant qualities and associations rather they look at them as isolated things perhaps rare or costly. Researches have proved that all groups of people have the capacity to concentrate on museum materials but most of them are not using them for a variety of reasons. It is also a matter of attitude. Once a visitor is explained how to see things meaningfully for experiencing them, he will make voluntary efforts in future. All educational activities should be geared to this fundamental task of museums.

(1) General Principle of Museum Education

The educational services are directed and carried out by the curator in a small museum or the educator in a large museum, with educational staffs like gallery attendants, guide lecturers, and/or museum interpreters. The educational staffs know very well the exhibited museum collections. They also are familiar with the principles and methods of teaching. They always organise educational programmes according to the needs of schools and appropriately within the source constraints of the museum. In India, there is not much emphasis on securing voluntary help for educational activities but in many developed countries such as North America and North European countries, a systematic campaign is launched to secure such help so that maximum possible number of visitors can benefit from museums.

Only a few of museums in India such as the Indian Museum, Calcutta, the National Museum, New Delhi, the National Museum of Natural History, New Delhi, and the Prince of Wales Museum of Western India, Bombay, etc. set apart a special department or

section for educational activities. Film and slide projectors, films, slides, screen, video and audio tape- record players, video and audio tapes, photographs, some selected museum collections, many replicas and reproduces, folding stools, drawing board, easels, drawing and modelling materials, educational kits, information sheet, etc. are provided to the educational department or section for educational purpose. By and large, the main activities of these services are related to extension exhibitions, school visits, outreach programmes, workshops, gallery talks, popular lectures, film and video shows, etc. In India, there are many museums, particularly, open-air museums such as archaeological and historical sites in which educational work is done mainly by outsiders such as school teachers, professional guides or interpreters. Fortunately, specilized staff is gradually assigned this work. Yet, there are many small museums in India which have no educational staff to arrange special programmes for school children. It is left to teachers to take their pupils.

According to experts, there is justification for museum education because people need help in understanding unfamiliar things and most things in museum are unfamiliar to most of the lay public. Education promotes in learning the art of observing life. Museum education helps in transferring that skill to know the unfamiliar objects in museums which are out of context. It explains things to visitors in familiar terms. It also helps people in understanding the purpose and themes of the museums so that people participate in the national task of preservation of cultural and natural heritage. The traditional goal of museum is to disseminate knowledge of the museum collections in terms of facts and concepts.

Education in museums has to be enjoyable so that people will try to get it voluntarily. Such education has to be accessible to people of all ages, incomes, levels of interest, ability etc. so that the whole community can benefit. Museums should not concentrate on serving only one section of the public or only tourists. As educational programmes are usually free to those who are interested in museum collections mostly museums want to share their knowledge and understanding with the masses. The first principle of museum education is that it is voluntary so that people have options to learn from museums what they specially like. Museum educational programmes are expected to bring to people's attention certain specific ideas, concepts, stories, facts and meaningful original materials which are difficult to be found elsewhere.

Some of basic principles of museum education provide the visitors with appropriate understanding in cultural heritage by means of non-formal education. A child learns only when it

wants to learn. Otherwise it will ignore what is around him. As the child grows older, it may be compelled by the parents grown-ups and formal schooling agencies to accept education even if it does not like to accept. This suffocates the children's innate desire to learn voluntarily. The compulsory education usually kills the joy in learning about the world which is natural to every healthy child. But, in museums, this process can be renewed. Therefore, the ways of museum education should not appear to be like those of the schools. Deliberately, school-like methods should be avoided. For example, when a school child goes to a museum, it should not be asked to depend on words to express its responses. It may be encouraged to make sketches or it may be asked to recreate that object or adapt that object to make another version. In practice, a child must add something of itself to what it will see in understanding that object. This is the essence of building visitors' identity. What is seen in a museum should be treated as the starting point for individual expression. It is not the destination. Museums education must revive the natural curiosity in every visitor.

In the context of museum education, it is very important to understand the fact of "information explosion". In the past, some people would like to acquire various information whatever they were interested in. But the pace or rate was comparatively slow. Even the knowledge about the tribal culture which was gained in the past was gained very slowly because the number of persons with specialized interests was small. Today, the pace is accelerated. Not only the number of specialists has gone up but there is a better coordination amongst, the agencies working in the same field. As a result, the data are more easily available to users. This pushes the research further. And also more information is available now than in the past. This has great impact on educational activities in the museum world.

Collection of authentic materials is the best means of disseminating available ethnographic knowledge and experiences. These collections convey knowledge of the tribal culture and their environments. A written article on that subject is no doubt informative. A picture is more informative and effective. But an original object in a museum context can activate visitors imagination. A museum urges the visitor to discover the reality for himself, which can be called a real museum education. A museum teaches a visitor the technique of discovery by assisting him to organise his knowledge and apply it to his own life.

What a museum offers is not mere cold abstract knowledge of only theoretical or academic interest, in a general way in the best tradition of education of the past. Now we can aspire to get very usable understanding of the human cultures and heritage which actually helps in knowing ourselves far more fundamentally.

No museum can want to educate unless there is a clear promise of making the education immediately relevant to everybody's life. For this reason, modern museology recommends to set up study areas in the galleries and the activity places elsewhere so that visitors can use their hands by practising some crafts. There is a danger of making visitors purely impersonal inactive onlookers on museum premises. Without practical involvement, a visitor cannot profit much. Hence, even if in the first visit a visitor may only look at things passively, that should not be the case in subsequent contacts. Education presupposes more than a single and casual museum visit. Real museum education presupposes more frequent encounters or meetings or contacts between visitors and museum collections, supported by data and interpreted by museum staffs.

Museums dealing with ethnography can became places of permanent interest because they can establish contacts with whole communities. They have particular responsibility for the interpretation of the past and for the mutual appreciation of different cultures. In this connection, a Symposium on the Educational and Cultural Role of Museums organised under the auspices of the ICOM held at Paris, 23-27th November 1964 concluded that "museums of history and ethnography should help to combat racial prejudices and fanaticism"[1]. Needless to say, communication in ethnographic museums is more "human-oriented" not "object-oriented". The communication will constantly expand a visitors image of himself as a universal man who can see what he would not have seen in the absence of museum services.

The main purpose of educational work in ethnographic museums is to help the museum visitors to participate in the cultural life of the community. To be able to achieve this, the museum cannot remain a mere treasure house for the enjoyment of only an elite class. The challenge is in making it as broad based as possible. If people are reluctant to come to the museum, then which can reach out into the community so that people realize the worth of that to widen their horizons. Museums today are not satisfied with the traditional custodial function. They wish to diversify their activities and turn them into new opportunities. The educational work of any museum has to help people in interpreting their cultural heritage. By and large, common people look at museums as an ideal institutions to cultivate a wide range of scientific, cultural and artistic interests which contribute greatly to the general education of

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1. cited from Zetterberg, H.L., *Museums and Adult Education* (sponsored by ICOM), London, Evelyn, Adams & Mackay, 1968, p. 47.

the public. It is true that through such interest, people can appreciate different cultural traditions of different regions, periods and societies.

There is an increasing recognition of the complex demands on museums in the matter of educational programmes. What museums wish to do and what different communities or groups expect from them may differ. It becomes essential for the museum educators to define their educational philosophy. They ought to decide what special role they can play in the society. It is recommended that museums must insure the integrity of their own institutions. For example, museums may be willing to respond to demands from the formal education institutions. But they must not lose their identity by becoming only a tool for other educational institutions to be manipulated only for fulfilling the one sided needs. They have to maintain their unique qualities. All museum programmes must be educationally sound but must be consistent with the museum goals. They should be based on proper use of the collections and the relevant information. The main difference between museums and other educational institutions is the emphasis on the use of objects rather than words for communication of concepts. For this reason, museums may not imitate other mass media, but they may create their own strategies of interpretation.

Museums may concern holistic approach in connection with various educational work. In that all, the relevant studies of ethnography and history partly corresponds with other subjects such as sociology, fine arts, ecology, etc. Museums have to stop treating objects in isolation and accept interdisciplinary approach. In them, anthropology, ecology, geography, geology, history, crafts, decorative arts, biology, etc. are brought together in the interest of interpretation. Museum education should make people aware of the world as a whole and educate people in the relationship amongst the living beings.

Educational staffs of a museum should not behave like specialists even if they are good scholars. They should not have a false sense of dignity as if they are elite and exclusive. In practice, an educational staff should have showmanship, good imagination, enthusiasm for his subject but also desire to share what he knows with others. He should know the rudiments of dramatic presentation. He should love humour so that he will entertain his listeners and make them feel at ease or at home. Generally, education in a museum is equated with a few isolated and alternative activities or programmes. The most common of them is to take care of groups in the form of museum tours. The other is the activities for school visits.

Nowadays, many ethnographic museums attempt to play a new role in museum education. In mordern society, many people are

interested in various subjects and extensive knowledge about man and his environment but no society or community has sufficient agencies to satisfy these interests. In general, most of the schools have limited educational facilities, funds and teachers. Similarly museums also have similar problems such as limited educational facilities, funds and education staff. However museums have different objectives of non-formal education for the members of the concerned community or society. Museums have different approach and capacity of non-formal education for the public. In any case, the danger is to treat a museum as a school away from school. So far museum education is concerned, the primary objectives are almost same as formal education. But educational media of museums are totally different.

A school visit to a museum is an important beginning but should not be an isolated incident. School children are occupied with curriculum. Therefore, their primary and short-term interest is in relation to what they see in museum with what they are learning in the classroom. If museums fail to offer any such relationship between what children find in museums and what museums help them academically, no incentive is given to real education in and by means of museum. Unfortunately, what an average and common museum offers to school children is fragmentary vision of history, art, nature, etc. A bad school visit to museum may do more harm than good to a sensitive child. But in a well organised and educationally oriented museum visit, the child can establish new contacts with bounty of mother nature and with the past records of human achievements. The examples of human intelligence, skills and problem-solving capacity, even the tribal's can inspire a school child to do better than what he has done in daily life. This competition with others and with himself can provide incentive to look at museum materials as new opportunities for progress. Once this process starts, each new visit will involve the visiting child into more extensive use of museum collections and resources.

(2) Museum Classes for Adults

Museums are already caught in the movement for adult education, and they intend to get more deeply involved. There is a difficult problem that adult education is to teach and learn whatever adults want to know and experience in the museum. But this requirement cannot be solved by the museums. In the past, labelling and guiding museum collections would help adult to appreciate museums. Interactions with the adult group lead to recognition that they have special needs. When activities are arranged for children they can look at them as preparation for their future lives. In contrast, adults come to museum for educational activities with a conscious interest in applying what they learn in their lives as early as possible or immediately. Also adult educational programmes can be oriented toward same gainful occupation. This is important because adults can take serious interest to the extent to which the educational

activities contribute directly to some specific educational objectives. Hence adults will take interest more easily if what they get in museums is connected with their own occupations.

There are other motivations in museum education to adults. Adults may participate in programmes not for certificates but for serving their families, friends because they are interested in cultural activities, the arts, hobbies, film or art appreciation, home decoration, regional and local history. Very popular adult educations are the studio classes in museums or studio courses, painting, modelling, miniature or scale model making. It is also noticed that adults are attracted to museum educational programmes almost through their friends and acquaintances and not media publicity. Those who were already satisfied recommend the museum courses to others who may otherwise have resistance to such an idea.

Adults are secondly ready to take interest in museum classes on the subject of environmental education. They have reached a stage in life when a more comprehensive sense of themselves as human beings with identities become a basis for taking genuine interest in museum activities. Also they are often searching for their cultural roots and also their relation with the community. The activities for adults who belong to a permanent community are of one kind. But there should be special programmes for adults who have migrated to new situations for their own reasons. Museums can be extremely useful in bridging the gap between the old and the new generations so they have harmonious approach to civic issues. It has been the experience of museums that people who move to a new community can use the local museums as a way not only to get a sense of local history and traditions but also join groups of similar interests which will make them socially accepted. Only few migrated adults seek or get sufficient opportunities to become acquainted with the local community. It is certain that museum classes for adults for specific orientation to knowing local traditions will go a long way in avoiding the process of alienation.

Another popular activity for the adults is classes conducted in museums or in the relevant situation in nature or local craft workshops or artists' studios. Adults have the means at their disposal to move to the places where museums can organise such classes at predetermined timings. It is also important to remember that adults will be tired of attending classes where lecturing is the main feature. Adults tend to enjoy demonstrations combined with personalized discussions with experts.

The educated groups of public are ready to take advantage of museum facilities or classes. This will help museums in directing

their publicity and in planning their classes or courses. On the other hand, the museums must accept the challenge in attracting the adults who had unfortunately no formal education or very little of it. In relation to interpretation of the Dangi culture, this becomes truly a great challenge because museums are required to influence less educated public to make them remove their prejudices and to help them appreciate traditional Dangi ways of life. For this reason, those who are involved in planning and conducting adult education programmes should have a missionary spirit. They should try to compensate the less privileged people by facilitating their access to museum resources. They should study the difficulties of such adults so that part-time classes or short-term course can be arranged for them at mutually convenient places and times.

Museum classes for adults will succeed if the location of the museum and time of the classes are convenient, in other words, educational programmes are held near residential or official area and during off-working times, i.e., in the evenings and on weekends. There are instances in which museums situated in zoological or botanical gardens can attract adults more easily because the accompanying family members can enjoy themselves nearby while adults are busy with the educational programmes. Needless to add that those museums which enjoy great prestige or reputation can attract many adults because it is always a matter of pride to associate with such institutions. In fact, reputation brings popularity which, in turn, enhances reputation.

Some museums organise adult classes in history or popular subjects such as reading of old poetry and myth. Very often adults who attended museum courses also serve as teachers. Adult educational programmes should be based on new findings that adults are not stereotypes. Such a myth is now exploded by observing the appreciable changes in adult personalities. Development, growth and change during adulthood are substantial and even sudden. The main change is in the attitude or outlook of the adults. It is a stage in life when individuals achieve their own goals. Museums can enter into their lives by offering them ways to enjoy and make use of their time.

Museum classes held in conveniently located places can be popular and effective in attracting target audience groups. That is a kind of museum "outreach programme". It is generalized that people with higher educational level tend to rely on media and experts to get authoritative information for participating in adult museum programmes. But those who have less formal education tend to rely mainly on the spoken opinion of their family and friends whom they trust more readily than media. So both kinds of publicity will be necessary to reach out the adult

group. In this connection, a reference is always made to "opinion leaders". It is a term which sociologists use to refer to the people who do not work for media like newspaper but are individuals who serve as sources of information about various topics to their circles of friends and acquaintances. They are interested in new developments on some topics and they love to pass on information to other members of the circles. Museums ought to identify such opinion leaders of adults to whom museums would like to reach.

Some popular museum classes or programmes for the adults are: (i) Introduction to museum resources which can be done by means of slides, objects, printed materials like information sheet about museum activities and services. (ii) The Museum and the Community in which all possible ways of relating the two are discussed and demonstrated. (iii) Cultural heritage which can be understood by an interpretive series shows the adults in the classes. (iv) Landmarks of the city in which museum specialists take the adult participants to various important sites and explain what happened and is happening at those places, culturally, environmentally and historically. (v) Training the adults to organise museum-based activities as volunteers. The special programmes help adults to explain to laymen how museums discharge their duties towards the collections and communities.

(3) Special Activities for School Children and Teachers

A number of museums are known to organise several art activities both for children and teachers. Their objective is to promote interest in, and develop an understanding of pictorial and aesthetic awareness and applied art among children and adolescent groups. Museums can make special travelling exhibitions, slide shows, holding summer classes and courses for teachers in art and issue publications on art and teaching of art. Great importance is attached to the teachers in art and students of teachers' training institutions. For this purpose, a sufficient number of original works of art are made accessible to the school children and teachers in art. Museums can get donations from public-spirited families for such original objects for the exclusive educational use. The underlying philosophy is that everyone has a right to learn art and crafts, and that children should develop their ability to be good citizens of tomorrow. Museums can take special troubles to distribute good quality of reproductions to the local teachers so that they can be in touch with the museums as resources agent for education. They also act as intermediaries between schools and local artists for acquiring original works of contemporary arts. Also museums can arrange meetings and interviews with local artists for school groups.

The Bal Bhavan and National Children's Museum, New Delhi have "study-kits" specially prepared for school children.

These can be used as visual aids by teachers in a classroom to enhance the understanding of pupils. Each kit contains 40 to 50 mounted plates measuring 10 x 15 cms. They can be conveniently displayed in classrooms, on bulletin boards or in the school library. Each kit is very handy and can be obtained from the museum by depositing Rs.30 as safety which is refundable after its safe return. The approximate cost of each study-kit is Rs.500 and in case of loss or damaged the cost is realized from the borrowing institution. The subjects of these kits are: (i) Shri Lanka, (ii) Our Nervous System, (iii) Our Digestive System, (iv) Early Days of the World, (v) Ancient India, (vi) Travellers in the Space, (vii) Our Earth, (viii) The Story of Paper, (ix) People of India, (x) Folk Dances of India, (xi) Light, (xii) Moon, (xiii) Minerals of India, (xiv) Jewellery of Rajasthan, and xv) Others.

The Bal Bhavan and the National Children's Museum have also circulating exhibitions. Each can be obtained on loan by depositing Rs.100 as security which is refundable. The borrowing institution has to make arrangement for transport to and fro. Each exhibition costs Rs.5,000 and has to be compensated by the borrower if lost or damaged. The subjects of the circulating exhibitions are: (i) Our Digestive System, (ii) Blood Circulation, (iii) Contemporary Architecture of Delhi, (iv) Ancient India, (v) Our Earth, (vi) Our Heritage, (vii) Energy, and viii) Others. The Museums have sets of slides on the themes of travelling exhibition which can also be borrowed.

Kits are small teaching packages or portable exhibits. A kit is not a unique object. It is supposed to be reproducible so that the duplicates are available for hire or sale. Each such kit is expected to stimulate some activity which an individual can undertake or a group can carry out. Each kit has elements which are created to deal with a clearly defined theme. A kit may comprise of some original materials, some reproductions, replicas, models, audio-visual aids such as audio and video tapes, slides, and films, supplementary materials such as maps, diagrams, drawings and photographs, expandable materials such as worksheets for use by the target audiences of children, and instructions on how to use the materials in kits. Each kit is packed in a handy, protective case which itself can be used as a stand for exhibition.

Museum visits by school children is the popular form of education but, to be successful, close cooperation between the school teachers and the museum staff is indispensable. Museum workers sincerely do not like conventional type of school-visits. In them, a teacher takes a part of thirty to forty children to see the whole museum. Mostly they have no idea about what they might see. Children wander about in the galleries aimlessly.

They do not concentrate on any specific significant objects but see what takes their fancy. Such visits are useless. Therefore, some basic recommendations are now made so that school visits become well-organised. Groups should be small i.e., not more than fifteen children in each group. Visits should be connected with the school syllabus. Advance discussion with children is a prerequisite. The purpose of the visit should be made clear. In museums, a special separate place should be reserved to welcome children, and to prepare them and to meet again after the visit to galleries for some follow-up discussion or demonstration. Use of slides for introduction to galleries is very effective and an example of that has been found in the Indian Museum, Calcutta.

Some museologists favour the idea of setting up a special children's room in the museum. In case of a smaller museum, especially, a multi-functional room is good for school children. It is equipped with desks and a black board as are found in a school classroom. This is expected to produce a familiar atmosphere to which children are accustomed. Children also can see a situation in the museum which is associated with the process of learning. Some popular lessons are organised in museum class rooms with the help of a few selected museum collections including faithful copies or reproductions which school teachers may pass on to all students and encourage them to handle them freely. Such a classroom in the museum has been reportedly successful in terms of education but it is possible only if schools and museums have inter-dependable relationship preferably under the auspices of the local Education Department which may subsidize its expenses.

There are some objections against the above arrangement. They are critical of any impression which museums might create in the minds of children which will make museums look like schools. They want to be absolutely certain that museum may provide nonformal education. Educational aids such as desks, blackboard, etc will not be helpful in creating informal situation. Besides, classrooms are always associated in the minds of children with lectures which they have to attend passively. Therefore, opposite effect should be created in which museums will be understood as treasure houses in which everybody can search for exciting things and facts, and they may examine museum materials as long as and as often as each wants to do.

It is said that the above two contrasting approaches are based on very different concepts of museum education. In one, museum education is considered to be only supplementary to school work so that information not available in schools is obtainable in the museums. In the other, the main educational function of the museum is found in its capacity to produce experiences in children which are qualitatively different from those associated

with school classrooms. A combination of both can be thought. Anyhow, in the initial visit to museum, school children should not be burdened with academic information. They should be encouraged to freely wander about in the galleries and search for excitement. A few such visits will produce valuable and wonderful experiences in them which will widen their horizons about museum and its collections. Later, museum visits for school classes may be oriented to specific themes on which museum galleries are organised. Indeed their own interests, already aroused in schools and in museums, can be developed by additional visual information. Since museums are full of examples of history, art, crafts, way of life, technologies, etc. children will be led deeper and deeper into layered understanding of man and his environments. By this way, museum objects will not be seen as visual aids to what classroom teacher teaches. They are expected to serve as starting points for more personalized inquiries about the story of man and nature.

An educational programme in museums would be guidance to school children in collecting objects and specimens in order to set up school museums or museum corners in classrooms. These experiences of collecting things provide valuable opportunities to children in deciding what is significant in their environment. They should be able to decide which things are capable of telling an interesting story of a art or craft, or a history or culture, etc. Such activity can teach children methods of dating the age of objects and identifying the styles or the periods. School teachers may give specific assignments in such activity of collection under the guidance of museum staff. After collecting materials, the children should be able to make labels, visual aids and proper but simple displays. Some very special publications are available on how to make a good exhibition or display. Similar inexpensive cyclostyled handbooks may be prepared for the use of children in making ethnographic collections.

What a good and progressive museum can do in the field of education can be seen in the work of the National Children Museum, New Delhi. It is a recreation-education centre for children. It tries to stimulate children's growth creatively. To accomplish this aim, special activities are organised for children, teachers, parents and the general public. The aim is to provide real experiences. Discovering facts is a vital experience for every child. It satisfies its curiosity. It also leads to a personalized use of inborn ability of vision and action towards solving problems of identification, comparison and comprehension. Children are encouraged to ask questions and seek answers under guidance if necessary. Towards this end, the Bal Bhavan, New Delhi arranges regular science fairs in collaboration with local schools and arranges visits to places of scientific

interests. Some of the popular games for children are suitably adapted so that they play and learn about their environment.

The children are allowed to handle different media and materials. By manipulating them, children can explore new possibilities of expression. This self-expression is a step towards development of child's individuality in concrete terms and a sense of spontaneity. These activities are very well adjusted to the levels of growing children in the age groups of 6-11 and 12-16. Together they go through all kinds of aesthetic explorations of painting, "collage", construction, clay-work, puppet and creative stitching, picture making, batik, textile designing, work with wire, wooded carving, modelling, pottery, ceramics, woodcraft, toy making, carpentry, leather work, cardboard work, three-dimensional design, book binding appreciation of music -- classical and folk, playing musical instruments -- Indian and non Indian, listening to records of vocal and instrumental music, using children's own voices to express feelings and emotions, folk songs, national anthem, songs in different Indian languages, appreciation of rhythm, simple orchestration with instruments, both traditional and improvised and their combinations, some dance activities to discover rhythm in movements, dramatization of stories, improvising dialogues, building up characters, workshops of different kinds of creative art, photography, design and display, graphics, handicrafts, etc.

So far as children are concerned, United Nations International Children's Emergency Fund (UNICEF) is very active in the special activities for the welfare of children all over the world. UNICEF International Children Art Exhibitions are held annually. There are several museums are art galleries which are known to participate in the national level work for UNICEF. For example, special exhibitions of Children's Creations are arranged by such museums in order to make primary selection of children's work. By more such national level exhibitions final selection is made to send things to the UNICEF international exhibitions. By doing that these museums create a better awareness of the international united efforts to serve children every where. Museums which are involved with tribal cultural materials should make united efforts to participate in UNICEF activities for children. This can be done by arranging special exhibitions and competitions for tribal children to show their creativity. Tribal children are also quite imaginative in their artistic work. During my fieldwork, I have joyfully seen a Dangi tribal artist's painting work, in Chankhal village. The Dangi also will get encouragement if special competitions are held to make them compete for UNICEF exhibitions. Already greeting cards produced by UNICEF have become popular. But emphasis can be increased on the search of talent of the tribal children. Tribal museums can play their role every year, in this discovery of tribal children's abilities.

(4) Consideration for the Handicapped

No doubt, what museums can do for the ordinary or average child is important. But what it can do for exceptional child has become more important because society has less specialized institutions to help them. On one hand, the museums have to serve the less privileged or handicapped children in different meanings of the term. Museums can help more handicapped children than other educational institutions. Generally, the society gives preference to educational system for all children. But that system is not suitable for offering instruction to those who will suffer if they sit in the same school classes which average children attend. This is not good for the average children who are in majority or handicapped children who are in minority. What is called "adjustment" classes in special schools have evolved many new technical and infrastructural facilities to cope up with the challenges.

There are good examples where museums have enlisted the services of volunteers who are ready to serve the unusual children. Not only there are physical factors but also emotional difficulties in dealing with the handicapped children both mentally and physically. The museum-based volunteers or paid educational staff must be able to offer an image of friendly warm personality. The staff must be sympathetic without open reference to the defects in the children. The success of museum programme will lie in confidence building activities and exercises in relation to museum collections.

As the attention span of such children is more limited than those of the normal children, special care should be taken to make their visits easy. For those whose vision is damaged museums should make use of their other senses like hearing and touch. It is important to keep theoretical talking to the minimum and the emphasis should be on personal experience. Initial "walk through" of the museum is essential so that such children can satisfy their curiosity before they concentrate on their favour things. It is advisable to remove the natural passivity and inferiority complex by asking many questions to children about what they see, understand and like. No pressure should be exerted on handicapped children because if they get tired in the first visit they may never try to come again. However, Sunjay Jain (1990) pointed out that "Drawing can be very useful media particularly for blind children for self expression."[1]

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1. Jain, Sunjay, "Role of Touch in Museum Education", *Journal of Indian Museums*, Vol. XLVI, New Delhi, Museums Association of India, 1990, p. 54.

Sufficient arrangements may be made to provide them with hand rests and seats in front of exhibits which they would like to watch for longer period. In this connection, A.C. Bhowmick (1980) recommended that ideally museums may provide low stools or mats to squat, and easily available specimens or materials should be given to them which will be passed round for view, handle and feel.[1] Regarding this matter, the National Museum of Natural History (NMNH), New Delhi, organises touch, feel, listen, and learn programmes for the blind and deaf. Though the programme is sporadic, and serves a section of the handicapped society yet this pioneer programme attempted by the NMNH, New Delhi, will encourage to develop and organise these kinds of specialized educational programmes for the handicapped.

Each handicapped child should be given opportunity to compensate for his natural disability by means of developing special interest in his cultural environment. Before visiting the museum, he may feel some isolation from his family or neighbourhood because of the difference between him and others in normal abilities. Museums of culture should rehabilitate a handicapped child into its environment by telling him how he can contribute to its identity by learning and sharing the culture of the community.

B. Various Types of Educational Programmes

(1) Conducted Activities

(i) Guided tours

Museum tours are extremely useful educational services to interpret cultural and natural heritage. This is the most common educational service in the conventional museums. The educational staff usually guide the visitors to the galleries or public service areas. They help the visitors to understand museum activities and work properly, and they especially guide them to the museum collections on display and demonstration. In practice, there are different methods for arranging "guided tours" or "conducted tours" but in most of them notice is given to the public in advance, from when and where guiding may begin. Frequently, such services are indicated at the museum entrance so that visitors interested in this service may know when the next tour will begin. Such a museum tour to be really successful requires an orientation before a group is led to the exhibition areas or galleries. This group orientation can take place in a

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1. Bhowmick, A.C., "How a Museum Serves the Handicapped Person", *Journal of Indian Museums*, Vol. XXXVI, New Delhi, Museums Association of India, 1980, p. 54.

separate space reserved for it outside public galleries. But if such orientation is not available, this work may begin in a gallery itself. There is no fixed formula which is common to all museums. What is essential is a relative isolation in which the members of group can pay some attention to a guide's introductory remarks.

In India, museum tours are usually arranged with the help of paid staff known and appointed as the guides or guide lecturers. This imposes severe limitations because only a few casual or individual visitors can take full advantage of this service. In contrast, the groups which come after prior appointment can take maximum advantage. School groups which come after such appointments are given preference in this respect. The so-called very important persons (VIPs) are not served by the guides or guide lecturers in normal situations. Those important visitors are received and taken round by the Director or the senior curatorial staff. Such visitors are to be shown the museum exhibitions on selective bases because they usually have limited time. Also such visitors are to be explained the highlights of museum policies, resources and future projects in order to get their support. Thus, the daily diary of the curatorial or educational staff is very important and should be checked and discussed by supervising staff. Not to do so is to waste a golden opportunity to get valuable feed back about public responses and to ensure internal and institutional evaluation in respect of adequacy of the service.

The purpose of guided tours is to introduce the visitors to key objects in the museum collections. Guided tours are also called guided visits. But not all such tours lead to real learning if the guide lecturers are not trained in depth. If guide lecturers continue to offer stereotyped information as predetermined by the museum superiors, the visitors may not be really benefited. Guide lecturers are not expected to take common visitors in "reference sections" except on special occasion like during museum weeks when the public is welcome or rather encouraged to see "behind the scene" activities of the museum. This is a good idea because people have no understanding or the great difficulties faced in the conservation or documentation of the museum collections. Hence, special guided tours to technical sections, at least, sometimes in a year, will help museums in getting public respect and support.

Guide lecturers are usually required to take select routes through the exhibitions. They are expected to offer description of what is there for any normal person to see. This is not the same as to explain it or interpret it. A museum guide lecturer ought to learn museum collections and perform demonstration both. He should be able to describe a thing on display in very clear words which will be understandable to the group. This is

specially needed because not all visitors know or remember to see the most significant features of museum objects. Even if visitors may use their eyes they may not see minutely the special features of each object on display. Also it is necessary to tell visitors the relationships amongst the different physical features found in the objects. That includes the designs, decorative elements, motifs, surface peculiarities, choice of material, the identification of the processes used in making or manufacturing of things, etc.

Museum guide lecturers play a very important role of museum interpretation as well as museum services. They are the vital links among the museum, its workers, its collections and the public in all its diversity. A museum guide is more than a "talking label". Labels cannot smile and answer questions about information beyond what is written. Museum guide lecturers do both smiling and providing additional information. But museum guide lecturers if they are not sincere may not smile, may look tired and disinterested, may behave rudely or with in-difference, may give wrong information which will make them worse than labels. Good guide lecturers offer humanistic touch to museums visits. They can ensure informing about other museums events, future plans, exhibitions and services. Museum guide lecturers are the best agents of public relation. It should be remembered that museum guide lecturers have to do more than giving information. They have to provide answers to the most likely questions such as what, when, for whom, why, and how. But guide lecturers have also to serve as "catalysts to experience", meaning agents for involving visitors in establishing direct visual contacts with objects.

Guided tours for school children take place during school hours, and in some countries, they are a regular part of the school curriculum. There are instances where children are taken to museums ten to twelve times every year. Usually, these visits are arranged well in advance in consultation with the museum staff. Circulars are sent to schools which give a list of topics on which exhibits might be organised to coincide with the visits. Teachers are expected to prepare their classes according to the details of the yearling schedule. That helps children in following explanations in museums. Special introductory talks are arranged for each group. It is mostly `live' give by the museum staff but where the number is large, taped introductions, accompanied with illustration are also used. Children are expected to learn the art of observing original materials methodically both for information and excitement in aesthetic terms. These services also deal with different kinds of courses, demonstrations, "outreach programmes", etc.

Unguided school visits take place outside school hours. Groups of students come to the museum to complete certain

assignments given to them by school teachers but which can be done only by studying museum exhibitions. There are also visits which are partly guided and partly unguided. The first half of the visit is spent as a guided visit. This is followed in the second half in which children are given freedom. They may get split into smaller groups and make group enquiries on specific subtopics. The groups continue to do the work on that day and also on subsequent days in the form of taking notes, making sketches, making models, etc.

School group visits are effective if the museum well organised a specific educational programmes. The pre-visit preparation is very helpful but it is very rare in India. The reason is that teachers are not ready to take extra troubles to make advance planning. Good museums issue pre-visit maps guide lecturers and other informative or audio-visual materials which helps teachers to prepare school visits. The idea is to acquaint the teachers with what museums can offer or what is special in the local museum of which teachers can take advantage for their own benefits. A large number of brief but very informative folders are issued on specific classes of things which can attract children to museum galleries. Those are about the tribal ways of life, tribal musical instruments, fire making, tribal dances, tribal huts, tattooing, ancestor worship, seasonal customs, etc. School children love to know wonders of man and his environments. The main purpose of that is not to create sensation but to bring into focus the identity of various cultural communities. Tribal practices of totems and taboos may sound strange to school children of urban areas yet explaining them will remove grounds for prejudices or misunderstandings. Museums also can provide primary references for teachers so that they can equip themselves adequately to conduct a class in museums.

(ii) Conducted Tours

Of all types of education work in the museum, the most common is the conducted tour which takes place in the museum galleries and never outside except where open-air sites are attached to the museums such as the Indira Gandhi Rashtriya Manav Sangrahalaya, Bhopal, India. A few of museums in India arrange special conducted tour even in the private service zone in relation to activities of administration, documentation, preservation, etc. during the museum week or the museum anniversary day each year. But this is not common because it is not easy to take a group of outsiders into working areas where museum staff may get disturbed or where many museum objects may be lying in wait for some processing.

A good conducted tour of a gallery or galleries will succeed if advance preparations are made outside the galleries, in schools or in the educational areas. Once a group is brought into

an exhibition, its members begin their own search for whatever is attractive to them and may pay little or no attention to what guide lecturers have to say by way of introduction. Such an introduction should be short. It should be followed by explanations of exhibitions and then the group may be given time to move freely because they would learn much by viewing things once again to which they were attracted during the early explanations.

In case of conducted school visits, some suitable activities like "walkabouts"[1] or "work sheet"[2], sketches, story writing or at least some discussion of what was shown or seen must take place before returning to schools. Such discussion can take place later in schools also. But if some brief discussion takes place in museum galleries the children may more readily recall what they have seen only a few minutes or hours earlier. They may also re-visit some exhibits to check their own opinions. Ideally, children can re-visit the relevant galleries individually in their leisure time, outside school hours because that way they may become museum minded.

A guide lecturer who conducts a museum tour ought to remember names of some curious listeners and suggest to them to come again and meet him for further information. Out of such contacts, museum clubs can be formed. A conducted tour should not be too long because it can be physically tiring even if good guide lecturers make pleasant efforts to communicate. It is recommended that the maximum length should be 45 minutes for the tour itself. Half an hour may be reserved for follow up activity. It is important to inquire from where the group has come and its background and composition before communication strategy is evolved. In this connection, P.H. Risk (1982) made statements for museum interpreters as : (i) Arrive early, (ii) Start on time, (iii) Describe what you plan to do, (iv) Do it, and (v) End it.[3] Besides, he added to some general comments on the conducted activities such as (i) Stay in the lead, (ii) Face your group, (iii) Provide visibility, (iv)Speak loudly enough, v)

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1. An example of "walkabout" is "Let Me Your Ears" (No. 160) regarding animals, which is provided by the Australian Museum, Sydney, Australia, 1980.

2. An example of "worksheet" is "How animals protect themselves" (No. 2), which published by the National Museum of Natural History, New Delhi, India.

3. Risk, P.H., "Conducted Activities", Sharpe, G.W.(ed.), *Interpreting the Environment* (2nd), New York, John Wiley & Sons, 1982, p. 176.

Know when to be still, (vi) Use teachable moments, (vii) Use all the senses, (viii) Set a reasonable pace, (ix) Keep a head count and (x) Consider emergencies and children.[1]

(iii) Roving Guide

Another form of educational service is called a "roving guide". In general, there are regular guides or guide lecturers who meet groups at a predetermined and notified places and timings. But the same can serve as "roving guides" when they move in the museum galleries and offer explanations especially to those who appear to be in need of them. "Roving guides" may not be constantly on move. But they are also not fully stationary. In some museums of the National Council of Science Museums (NCSM), in particular, the Birla Industrial and Technological Museum (BITM), Calcutta, there are guides who are confined to specific sections because of their specializations in areas like physics, chemistry, electronics, mechanics, mining, applied sciences, etc. Very often these members of educational services combine guidance with some demonstrations which are more elaborate than merely pressing buttons or operating mechanics by their special keys. Very delicate mechanisms may get ruined by rough handling by casual visitors. So, the staff is expected to operate them by themselves as part of the guidance. This form can also be called "spot talks". A short talk at specific location in a gallery, "spot talk" for visitors is given by the "roving guides".

In my working experience, "spot talks" by a roving guide are very effective. Unexpectedly when a visitor who had a question about museum objects met a roving guide on the way, he might be very happy because a roving guide could solve his question on the spot. In my opinion, museums, especially, open-air ethnographic museums must have a roving guide who will help the visitors to interpret cultural materials whether on display or not. In many cases, through a roving guide, a museum can improve its image sound and it can obtain good fame from the public.

(2) Self Guides

So far as self-guides are concerned, there are two types; with auxiliary devices and without auxiliary devices. In case of the using auxiliary devices, especially, "multi-tone radio guides", are popular among the well-known open-air museums like the Palace Museum, Peking, China and other science and technology museums in worldwide. Most of the museums in developed countries find it very expensive to appoint sufficient number of guide lecturers for individual interpretation. Therefore, various devices such as "guide-phones" and "radio-guides" are useful for

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1. ibid., p.p. 180-186.

the same purpose. These devices can be rented at the main museum counter for very small fee. Needless to say, human guides are the best. No machine can replace them because human guides can always adopt themselves to the special needs of the situation. But some think that "radio guides" have advantage over human guides because the user-visitor can control the use of the mechanical device. He can press on and off button to switch it on and off to suit his own pace of understanding. This is necessary because ideally a visitor should not only hear the taped comments on objects but also watch them as long as it takes to understands the significance of what he has heard and what he can see for himself.

Especially, "multi-tone radio-guides" are specially devised by electronic experts to provided good guidance to visitors. They can see exhibitions and listen to commentaries simultaneously without disturbing other visitors who are not interesting in a specific things. Such service is highly personal because it is controlled by an individual. It is done by means of a light transistorized device which is held in hand and held to visitors ear. It is called a audio receiver. It is tuned to a small, compact, sturdy transmitter located centrally in a museum gallery which broadcasts a pre-taped commentary. Individual audio receivers in hand ensure perfect privacy.

Some museologists criticize such equipments as gimmicks for entertainment or expensive toys. But others consider them as application of available modern technology to reinforce educational services. The criticism of such gadgets is often because of poor selection of the equipments, inappropriate use and lack of maintenance. These will never displace live guide lecturers. But knowing the problems of appointing sufficient number of good museum guide lecturers, it is perhaps necessary to have electronic devices for routine educational tasks in the galleries. In case of the interpretation of the Dangi cultural materials, such devices will be useful for the illiterate Dangis taped the interpretation recorded by specialists. Those for the Dangis may be recorded in Dangi dialects. They should not be heavy, scholarly discourse which are inappropriate for the Dangis.

But the electronic devices are better used for the orientation of visitors in the introductory section or in the educational service area. If they are used in small enclosed spaces, walls should be sound absorbent to avoid noise. Many museums in developed countries have their own video studios where children are involved in video tape editing, viewing and video camera shooting inside and outside. Such facilities are available in the National Council of Science Museums (NCSM), Calcutta. These facilities should be introduced by every ethnographic museums for the better service to the public, particularly, those who come from outside. In this respect pioneering work has been

done by the Indira Gandhi Rashtriya Manav Sangrahalaya, Bhopal, which has a comprehensive facilities for audio-visual materials.

(3) Walking Tours

One of the popular educational services of the advanced museums in the world is a "walking tour". They are part of educational activities both indoor and open-air museums. In fact, an open-air combined indoor museum can offer visitors experience, information and pleasure. Of course, they may also be held in by the indoor museums like the Metropolitan Museum of Art and the Bruce Museum, New York. Fundamentally, this kind of educational services originates in giving correct and analytical information and sound satisfaction to the visitors on the spot. These educational services can be conducted daily by the volunteer guide lecturers trained by the museum. They should be properly announced so that those who want to take advantage can join the walking tour. At predeterminate time, the walking tour start from a particular place usually from the entrance of the museum. According to the place, the guide lecturers can give proper information and experience in terms of touch, handling, making etc. to the participants. Depending on available staff of the museum, it can arrange for different educational media.

Ethnographic museums also can frequently arrange for the walking tour according to the season, number of visitors etc. But it is important that the museum must properly provide all available facilities for the guide lecturers who can do their best and carry on their duties properly. In order to succeed in this programme, the guide lecturers must give proper information as well as good experience to the participants. Besides, the museum also must properly advertise their programmes to the public including school children, old age, specialized group, etc. through mass media and actively encourage all staff to cooperate with the guide lecturers who carry on the programme of walking tour. Walking tour is essentially a guided tour but the movement from exhibit to exhibit is the key factor. Fundamentally it is more thematic than a guide lecture and it prepares for more detailed study of the concerned exhibit. Further, each tour deals with a different theme so that such tours cannot become tiresome or monotonous to the participants.

In practice, the Division of Educational Services of the Metropolitan Museum of Art, New York, arranges such walking tours regularly. Good publicity is made in advance of the different themes which walking tours may cover or show. In my opinion, such walking tours are very much useful for the concerned visitors in any ethnographic museum either an indoor, an open-air or a combination of both. While visitors join such tour, they will not get tired even if they move from one place to another place. If an ethnographic museum which combines indoor galleries and open-air sites operates walking tours it will gain both educational effect and public favour. During walking tour, a

museum guide can highlight various precious collections, demonstrations, performances, etc. organised by the museum.

At present many ethnographical museums in India included the Indira Gandhi Rashtriya Manav Sangrahalaya, Bhopal, the Shilpgram of the Western Zonal Cultural Centre, Udaipur, the Crafts Museum and Village Complex, New Delhi, have no such educational programmes. However, there is good scope for walking tour programme to introduce to ethnographic museums dealing with the Dangi cultural materials. Such a scheme will be very useful and will help to increase the popularity of the ethnographic presentation and will make them more pleasing and educational.

So, the suggested schedule of "Walking Tour" for the ethnographic museums is given below:

Table 5-1 The Suggested Schedule of Walking Tour

-------WALKING TOUR-------

The Dangi Ethnographic Museum

Free with Museum Admission
Walking Tour schedule, 1994.

No.	Time	Topics	Remarks
1)	11:00 16:00	Introduction of the Dangi Ethnographic Museum	All Days
2)	11:15	Settlement and Dwelling	Monday
3)	16:15	Vegetable, Grains & Herbs	Monday
4)	11:15	*Devta* & *Mandir*	Tuesday
5)	16:15	Performing Arts & Oral Literature	Tuesday
6)	11:15	Dangis & Forests	Wednesday
7)	16:15	Foods & Drink	Wednesday
8)	11:15	Dress & Adornments	Thursday
9)	16:15	Occupation & Implements	Thursday
10)	11:15	Rites of Passage	Friday
11)	16:15	Seasonal Customs & *Bazaar*	Friday
12)	11:15	Religious Beliefs & Ritual	Saturday
13)	16:15	Recreation & Games	Saturday
14)	11:15	Art & Crafts	Sunday
15)	16:15	Communication & Transportation	Sunday

* All Walking Tours start from Museum Entrance.
* Walking Tours are always conducted by volunteer guide lecturers trained by the Dangi Ethnographic Museum.
* According to special request from the group of visitors, the guide lecturers can select a language for the proper communication with the participants.
* Available languages: English, Hindi, Gujarati, Marathi and Dangi.
* After we receive reservation request from a school, we must send a Walking Tour guide.

------WALKING TOUR GUIDE---------

Dt._____

The Dangi Ethnographic Museum

Dear_____

We look forward to seeing you and your class on _____at _____.

Your programme at the Museum will be the Dangi Culture.

* Visiting school classes must provide one adult to accompany and be responsible for every 25 children.
* The fee for your programme will be Rs. 1__ per head including adults. Payment will be accepted upon arrival at the museum.
* Our Museum shop will be open for your group, featuring gifts and educational items from Rs.5— and up.
* There are no luncheon facilities inside the Museum, though picnic mats are available on the Museum grounds and lawn in good weather.
* Every effort will be made to accommodate your group if you are late. If you are more than half hour late, however, your programme may be shortened. If you are more than one hour late, your programme reservation may be forfeited.
* Please call the Museum, (02631) 631, if you have to cancel your time slot.

Before Your Visit

Most of students will want to take advantage of the opportunity to touch and handle Dangi cultutal materials. Please be sure that children have reasonably clean hands since we do not want to deteriorate our collections. Please, leave all your luggage at the Depository before you enter the Galleries. No toys and noisy implements should enter the Galleries.

Vocabulary

Try to introduce your students to the following words: Tribe, Dangi, Ethnographic Museum, Culture, Environment, Konkana, Bhil, Walri, Gamit, Dhodia, Kotwalia, Kathodi, Mang, Hut, Herb, *Devta*, *Mandir*, *Mahala*, Performing Arts, Forest, Ornament, Seasonal Customs, Stone Tool, Rite of Passage, Communication, Transportation, *Bazaar*, Craft, etc.

Thank you for joining us in the Dangi Culture guided Programme.

Sincerely yours,
Director

After Your Visit

To ensure a greater appreciation of the tour and to encourage a continued interest in the Dangi Culture, a few "After-Your-Visit" activities may be conducted.

We recommend trying some of these:

1. Show and tell: Ask students to bring in objects they have collected from the Dangs.
2. Make a shoebox diorama containing model of the Dangi life.
3. Draw and colour an all-class mural of the Dangi life.
4. Read poetry about tribal life. Try writing some of your own: The Dangi Ways of life
5. Role play: Ask each student to choose a different tribesman they really like and have them pantomime the characteristics of that tribe while the class tries to identify it.
6. Create an Alphabet Directory of the Dangi and illustrate it.
7. Gather pictures of the Dangi life.
8. Write a play about the Dangi life and act it out.
9. Invent imaginary the Dangi cultural materials with construction paper, sand and crayons.
10. And now, if you are really brave, set up a model of tribal hut in your classroom to observe and study your own tribal hut.

(4) Field Trips and Study Tours

The term field or field trip describes an educational experience involving (i) focused preparation, (ii) clear goals in the minds of participants, and (iii) an anticipated follow up. In the context of ethnographic museum education, the purposeful field trips and study tours are the most powerful methods of interpretation. They bridge a gap between the urban museum audiences and the tribal communities. Such a gap is not just physical. The world of tribals is so remote from the world of common public, especially, the non-tribal. It should be clearly understood that field trips and study tours are supplementary and complementary to indoor exhibitions. What a person may see in a real tribal situation becomes more meaningful when its significant features are adequately explained in indoor exhibitions. A field trip in itself may not give comprehensive total concept to a lay visitor who is not familiar with the historical background, traditions, interdependence with the environment and the developmental needs. Ethnographic museum exhibitions may provide just such orientation to someone who afterwards may derive maximum benefit of visiting tribal scenes (See, Fg. 2-1 & 2-2, Vol. II). In practice, ethnographic museum collections are sometimes not in full sequence or do not representing all possible variations because they are often out of context.

Field trips in an ethnographic museum situation should be a regular educational service. This may be true, even where reconstructed open-air tribal habitats are outdoor components. This is so because open-air examples of tribal huts may arouse interest and give introduction to the specific life styles but not offer complete range of variations. In fact, a selected example in isolation may create a mental stereotype which is not

good for satisfactory museum education which should aim not at fixed ideas but better understanding of the reality of Dangi life and culture.

Field trips as sponsored by museums have to be different from picnic-like visits. Prior to a field trip, giving orientation of the concerned area is necessary for the participants. Not only such a theoretical background should be given but some kind of informal testing may be made at random to confirm that the participants in field trips will have no distorted or exaggerated notions about the tribal. If unchecked, any prejudices or mistaken views are very likely to be retained even after field trips because human beings tend to see what they like to see. Also the participants should be warned not to make quick generalizations on the basis of a single field trip. Understanding is accumulative process and it takes considerable experience to know the reality of tribal situation.

It will be useful to keep a good record of the educational experiences of past field trips. That will enable the museum staff to avoid wasteful efforts and time in the light of past experience. Interviews with the earlier participants may help much. Field trips are not exclusively for pleasure. But they need not be drab or monotonous. If participants do not enjoy their field trips they will not join in future such outdoor activities. To make field trips exciting experiences, very able representatives of museums should be sent out to coordinate them. It will be their duty to safeguard the participants from mishaps in the fields like accidents, conflict or clashes with the local people. For this reason, a code of conduct should be evolved for all participants so that they will behave appropriately. The field trips should bring good name to museums. Therefore, participants should be committed to the overall museum mission of building a mutually beneficial relationship between the museum community with the tribal community towards which field trips are oriented.

Study tours can be called study visits to specific places famous or associated with natural and cultural heritage. A typical study tour may include a number of sites which together can cover a particular area of knowledge (See, Fg. 8-1 to 8-4, Vol. II). The dictionary definition of a tour is "a journey in which many places are visited". Museum study tours are conducted tours to places which together offer opportunities to broaden a participants' horizon and knowledge of an aspect of life. Study tour can be conducted by museums dealing with tribal ethnography for a very comprehensive understanding. For example, a study tour of various places in the Dangs. Unless some of the key places are visited as a part of ethnographic study tour, a student of the Dangi heritage may not get a total picture of the

Dangi life. Places near the border of Maharashtra and Rajasthan, places deep into the forests, places amidst agricultural lands provide many variations which have influenced the Dangi ways of life. The legends, myths, associated with different areas are related to the ecological character. So, by visiting a single place like Ahwa or Saputara, a beginner or student of cultural anthropology may not get a whole view of the Dangi culture.

A museum which has specialization in the Dangi heritage will be in correct position to guide, to supervise and to conduct extensive study tours. If those can be managed in co-operation of the Department of Tourism or Development Officer, round the year then a series of study tours of the Dangs can be made possible. That will enable students of culture to see seasonal variations in Dangi activity. The monsoon is usually a very difficult time to organise study tours in the interior of the Dangs for the general public but specialists would go there fully equipped to satisfy their academic interests. What is essential is planning and scheduling such activities on yearly basis so that advance publicity can be made at different institutions of ethnographic research and training.

There are some museums where the primary purpose is teaching or providing explanations with the help of objects and exhibits based on them. Sufficient explanatory materials are included or integrated into all exhibitions so that even without other agencies the museum presentation becomes meaningful. But even there one finds very imaginative activities, programmes which may include gallery talks, special lectures, slide show, films, demonstration by staff and with the help of radio or television and video facilities, museum clubs, workshops, hobby-shops and field expeditions.

But there are some museums of arts and ethnography which contain more or less rare objects which cannot be duplicated. Those objects form part of irreplaceable heritage. They deserve to be seen in original to be fully appreciated and understood. Many of them are personal expressions of creative artists or of whole communities. Such materials require very good guidance to people to be able to understand adequately. The objects themselves are rarely self-explanatory because their real value is hidden from those who have no introduction to the underlying message. So the museums have to perform the task of attracting visitors attention to the physical object but not to stop at that level. It is necessary to make visitors see the intrinsic qualities and know the relationship between the original object and its original cultural setting. For this reason, the overall objective of every museum is to provide whatever guidance, information or interpretation which will enable the visiting public in making use of the museum collections as a human heritage.

Educational programme may encourage contact between visitors and objects. But it should also lead to a planned sequence of learning. There cannot be any standardization of museum educational services. They may take advantage of experience of others but each has to decide its own policy. The factors which may shape such an educational policy are (i) the size of the museum, (ii) the available staff that can be spared for such a work, (iii) the nature of the collections and (iv) the population which is to be served. The cooperation of the civic authorities plays very crucial role. Similarly, museums should enjoy the goodwill of local school principals and teachers. Not only museum staff should be free to work for schools but infrastructure and space should be available for such services. Also, there should be sufficient grant for the purpose. Lending educational materials to schools is a very popular way of integrating museums into school education. But it needs both space and staff.

It is believed that a museum is not a formal educational institution. In general, a visitor does not come with a conscious desire to learn. He may not learn at all. But, undoubtedly museums offer him opportunities to get unique educational experiences. For that reason, the traditional teaching or educational methods are not appropriate under circumstances of museums. Unfortunately, even if museums accept their responsibility to educate the visitors, they are not clear about how they can do it and how they can be sure that they have done it. The main emphasis on modern museum education is to establish a climate for learning. In this direction, the first priority is to make information available with the curators easily accessible to the interested public. It is now studied in depth that average visitor faces barriers to learning in the form of insufficient information on the purpose or exhibits and how to use them. The underlying plan of the exhibits is not clear to most of the visitors. As a result, they get a very fragmented vision of museum message. In the absence of clear plan, an average visitor either loses enthusiasm to use exhibitions for his own understanding or uses his own distorted concepts. By that way, he really does not benefit from museum visits.

Experts have acknowledged that learning in museums through objects is very different from other forms of learning. But that does not mean objects in themselves can speak to the observer. Therefore, much learning support technique is needed to direct visitors attention. Visitors also need some clear basis for understanding what they see.

(5) Gallery Talks

Gallery talks are different from guided tour. Gallery talks are lectures in the museum galleries in which concentration is on

a specific exhibition. Guided tours, on the other hand, do not focus on any such specific exhibition but try to expose the group of visitors to as many displays as possible. The idea behind guided tours is familiarizing public to the wealth of museum treasures. Gallery talks are given by museum educational or curatorial staff. But outside specialists may also be invited to do that. University professors, scientists, art historians, art educators, art critics artists, engineers, professionals, experts are known to have associated with museum programmes of gallery lectures or gallery talks which are given amidst real exhibits and not away from them.

It is recommended that a typical gallery lecture may be of one hour duration so that it is not tiring or boring. But, invariably, it should be followed by discussions based on questions from the audience. Gallery talk should be well publicized in advance in newspaper or posters or by circular to educational institutions. It will damage museum reputation if such well publicized gallery lectures do not take place. Replacement at a short notice will not bring a very happy publicity about reliability of museums.

Gallery lectures or talks are not like classroom lectures or auditorium lectures. Gallery talks should make references to specific group of collections which are in the sight or presence of the listeners. Audience should be able to see the materials while they can hear explanations and comments. It is said that gallery lecturer has a hard task of drawing attraction of the audience because they are surrounded by visually interesting original objects about which equally interesting remarks are being made by the speaker. Usually the gallery in which such a talk is held is not completely closed to non-attending visitors. Therefore, such a gallery talk has several distractions from the visitors who may be passing nearby. Also, the listeners of gallery lectures have to stand on their feet for a long time. In some museums they lend folding seats but those are also not very comfortable to sit for a long time. Hence it is not easy to hold the attention of audience during gallery lectures and only very competent and resourceful person can be really successful. The gallery speaker has to complete his presentation in one sitting as the audience may not come again for his second lecture. He cannot read from a prepared manuscript. Therefore, a gallery lecturer must prepare for his lecture, a summary in advance.

(6) Special Lectures and Illustrated Lectures

All lectures in museums should be treated as special lectures. Museums are not colleges where lecturing is a routine work. Therefore, special lectures are a part of educational service because they deal with museum collections and researches

conducted by museum staff on specific subjects. Special lectures can bridge the gap between scholars and the general public or the groups who are interested in specific subjects, like Warli paintings, tribal religion, rites of passage, oral folklore, etc. of local, regional or national heritage. These special lectures are best attended by the target audiences when their frequency is regular as a "lecture of the month" or a "lecture of the week". But there can be special Sunday morning lectures for those who may not get time to attend others kept on week days. In several metropolitan museums of Europe there are also "lunch hour" lectures. These can be attended by office-goers who can spare that much time to listen to some experts on their own favourite themes like Egyptian Mummies or Mughal arms.

Special lectures by different scholars on a single theme, may attract very specialized groups who wish to know a subject very comprehensively or from different viewpoints. Good selection of the chairman for such lectures may help because knowledgeable persons can give good introduction as well as good summary. Special lectures on controversial topics may also attract people with critical outlook to museum. It is considered to be a part of continuing education.

Museum lectures should not be drab. Their main attraction should be the illustrations, either slides or even a small exhibition of prints or photographs or video cassettes. Projecting of slides etc. will help but references to the actual objects in the museum will increase the educational significance of the special lectures. A series of special lectures may be on the specific subjects. These may be organised in cooperation with the local institutions of higher learning.

Even if special lectures are important, and demonstrations are also equally important separately. Their combinations are more effective. Lecture-demonstrations can arouse interest of more permanent nature. In them, information is not only theoretical or abstract. It is shown to be related to a specific process or activity. Lecture-demonstrations should make use of objects in museum collections which can be spared for the purpose. Tribal cultural materials may be acquired in sets for exhibitions and for regular use in lecture-demonstrations. Dangi culture may provide ethnographic museums with many themes for lecture-demonstrations.

The Victoria and Albert Museum, London, is very famous for its multi-level educational service. Lectures form an important feature of this service. All lectures are of one hour duration and take place in lecture theatre. But there are public lectures in galleries also. Some lectures are called "Day Lectures" which are given in the Victoria and Albert Museum at one to three

in the afternoon on Tuesdays, Wednesday, and Fridays. Other are at three in the afternoon on Saturdays to suit office-goers or working people. Their range can be seen in the topics announced in advance. On the contrary, there are "Evening Lectures", which are given on Thursday evenings at six thirty. Each lecture lasts for one hour. Admission is free and late comers are admitted only upto fifteen minutes after the start of the lecture. Some of these lectures are related to the temporary exhibitions organised by the Museum.

Illustrated lectures are different from gallery lectures. Gallery lectures concentrate on museum collections of a gallery in which such talks are given. Illustrated lectures are held not in the museum galleries but in a separate area like auditorium. These are accompanied by slide projections or video introductions. Therefore, the illustrated lectures can cover wider area of a subject and refer to a large number of examples. The speaker has the advantage of dark hall in which, on a bright screen, colour slides are projected so audience can concentrate on the examples which is not possible in gallery talks in which exhibited objects compete with speakers own words. When required, slides can show very large enlargements of the details of certain objects which may be overlooked by ordinary visitors when these things are seen on display. This is not possible in gallery talks but can be managed in illustrated lectures in auditoria where specially made slides of the details can be projected. Similarly, a set of slides can be projected in a sequence to show the processes by which final products are created and which are shown as finished products in museum exhibitions. Also, comparative materials can be shown by slides one after another so that similarity can be understood easily like in many ways of tribal life, basketry, ornaments or decorating their habitation.

(7) Study Day

Another interesting feature of the Educational Service of the Victoria and Albert Museum, London, is "study days". These "study days" are adjusted to the curriculum and time table of students of art history, social history, English literature. They also deal with architecture, painting, sculpture, decorative arts, literature and music of a specific period. Each "study day" has twice one-hour lectures at the beginning and end. One hour is set aside for supervised work in the galleries. This is an ideal service for young men and supplements what they learn in formal courses. These lectures and working parties in the galleries are not specifically taken from any one syllabus but they will assist in forming a visual background to a broad cross-section of examination studies.

The suggested schedule of Study Days for ethnographic museums is given in the next page:

Table 5-2 The Suggested Schedule of Study Days

-----Each Study Day------ Dt.----------1994

The Dangi Ethnographic Museum

Time	Lectures & Practices
10.15-11.15	First Lecture
11.15-11.30	Course break
11.30-12.30	Supervised work in the Galleries
12.30-13.30	Lunch
13.30-14.30	Second Lecture

Free Tickets are available for each complete Study Day individuals and school parties should write for tickets stating number required to Education Services, the Dangi Ethnographic Museum, Telephone No. (02631)-631.

Date	Subject	Time
6th Nov. 1994	Structure of Dangi Hut	Morning
	Settlement Pattern, Dangs	Afternoon
13th,	Memorial Stones, Dangs	Morning
	Wooden Pillars, Dangs	Afternoon
20th,	Warli Paintings, Dangs	Morning
	Bamboo Crafts, Dangs	Afternoon
27th,	Dangi Dance & Music	Morning
	Dangi Musical instruments	Afternoon

(8) Discovery Room

Discovery room is a modern educational service. Its appearance is associated with museums of natural history. In India, the National Museum of Natural History, New Delhi organised a Discovery Room for children in 1979.[1] Under staff supervision and in well designed enclosed areas, visitors, especially children can explore selected museum materials. The essence of discovery room is in the "hand-on" experience which a participant can get. It is supposed to be informal and unstructured to a maximum extent but that does not allow chaos in discovery room. Planning of what can be handled will be required to be done but in such a way that visitors feel that they are discovering information themselves. What is important is not information alone but the `feel' of the object or the familiarity

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1. Nair, S.M., "New Dimension in Museum Education", *Journal of Indian Museums*, Vol. XXXXII, New Delhi, Museums Asssociation of India, 1986, p. 7.

with real specimens or reproductions. The National Museum of National History, New Delhi incorporated a live animal corner, a mini library, facilities for creative activity such as nature painting and animal modelling and a quiz exhibit apart from providing discovery boxes and objects to be handled. This facilities can be modified for museums of tribal ethnography. In them, sets of real objects can be specially acquired and kept in boxes or on shelves which can give information or demonstration of the use of objects like flints for making fire, racing toy cars or archery games, etc. which tribal children play.

(9) Demonstration

Some of the examples of demonstrations as educational programmes are found in the museums of science and technology in India. The museums started school demonstration lectures in 1965. The initiative came from schools when science teachers of local schools approached them to develop some demonstrations-exhibits which will explain principles of science as taught in schools. The teachers felt that such subjects were difficult to explain in classrooms with the help of only blackboards or charts. They felt that three-dimensional exhibits would ideally communicate with students. That was the beginning of school demonstrations. Some museum staffs were trained in demonstration of the exhibits specially made for schools. The idea was not to use exhibits alone or to demonstrate with the help of abstract charts and diagrams. These demonstration lectures are more like discussion seminar. They are not like classroom lectures which represent a one-way communication. In these demonstrations, a lot of questions are put to students even from the beginning. They are made aware of the accent on observation of processes and to formulate their own judgments. Therefore, these demonstrations create lasting impressions on the school children.

Demonstration of other subjects are very popular forms of museum activities because, in them, processes are presented without hiding any steps. They take out the mystery of many things which, when exhibited in static manner, create more questions and offer less solutions. Demonstrations can be organised on regular basis if staff is well trained and sequential stories are made out with the help of related accessories. Nowadays video tape recording player can also be used as components of live demonstrations to shorten their respective duration as in case of iron-smelting or bronze-casting techniques. Demonstration of crafts may continue for days or weeks if special arrangements are made for the craftsmen to come to museum for that purpose. These demonstrations are very popular as seen in the Crafts Museum and Village Complex, New Delhi, the Shilpgram, Udaipur and Vishala Village and the Utensils Museum, Ahmedabad (See, Fg. 4-2, 7-1, 7-2, 13-2 & 13-3, Vol. II).

Demonstration is a really powerful method of museum interpretation when held on related subjects. Museums can take help of other professional organizations in arranging meaningful demonstrations round the year. An example of this can be found in the demonstrations by the Central Handicrafts Development Centre in the Visvervaraya Industrial and Technological Museum, Bangalore. They demonstrate methods like the Chemical Etching which are very popular with contemporary sculptures. Art teachers in local schools can take full advantage of such demonstrations to make their work effective. Demonstration is a very common form of educational service in all kinds of museums. But, they have a special place in museums of ethnography. They are the most popular as well as effective ways of explaining the Dangi cultural materials.

Demonstrations are not talks. They, therefore, require special facilities including equipments, accessories, lighting and raised platforms or such enclosures by ropes in which the demonstrator can perform without disturbance. But all demonstrations are not passive. In practice, things and themes can be made interesting by encouraging visitors to touch or operate a particular material under expert's supervision. The important function of demonstration is to show chosen things or facts to the visitors for the educational purpose. If there is not any clear idea about this then such demonstrations are not well integrated with other educational services and exhibits. Demonstrations are more effective for group visitors.

(10) Concert and Plays

In general, concerts of classical music are organised by the museums of fine arts or the performing arts centres. In the museums of tribal ethnography, the tribal music has an important meaning. India is very famous for a large diversity of ethnic music. It is not sometimes easy to separate folk music from the tribal music because both have been influenced each other. However, many ethnograhic museums possess various musical instruments representing well their cultural life well. So far as Dangi life is concerned, their musical instruments are mostly indigenous, and they are made of locally available materials. The decoration and structure of those are mostly indigenous. The Dangi tribal music is essentially to support dances, and therefore, emphasis of that is on rhythm. Museums having Dangi cultural materials may arrange for performing the Dangi tribal music as well as their traditional dance. It is now possible to invite "Dangi Music and Dance troupes" from different part of the Dangs to give such demonstrations. The Department of Culture, Gujarat State is very helpful in this respect. Anyhow, it is desirable to invite a knowledgeable person like local ethnographic historian or researchers in Dangi ethnography, who may explain the highlights and peculiarities of Dangi dance and

music. By this way, entertainment may lead to appreciation of music and dance as part of cultural activities.

"Ethno-drama" is an important subject of interpretation of tribal life. In this respect, specially written plays deal with the most characteristic ways of tribal life. School children can learn and study those plays in museums. Each child is asked to play the role of a tribal character. By imagining the life of the character the child succeeds in understanding the tribal ethos. Role-playing compels a participating child to project himself in the place of such a person in his environment. This is different from only a passive theoretical interest because by role playing a child imagines the actions, expressions, appearances of a real character. In this connection, good examples of "ethno-drama" are performed by the Bharat Bhavan, Bhopal, and the Bhartiya Lok Kala Mandal (Folklore Museum and Folk Theature), Udaipur. Strictly speaking, these institutions organise and play mostly folk dramas not tribal dramas which I have seen. However, the West Zone Cultural Centre, Udaipur, has organised the Tribal Repertory since 1987.[1] The tribal repertory productions are also directed towards educating audiences by demonstrating the importance of unity, literacy and issues pertaining to ecology and environment. In my view, Dangi ethno-drama has also its own peculiarity, which is valid to be shown to the museum visitors.

(11) Participation in Special Events and Celebrations

Opening of an exhibition, new building or new additions to old buildings are fit occasions to organise popular activities. Museums authorities must plan round the year, special events to coincide with important historical developments. A calender for this should be systematically prepared. In a museum of ethnography these special events may coincide with the traditional festivals of the communities beginning from the Diwali, Simga-Holi, Akhatij, Tera, Wagh Baras, Dashra and Pitra (Muslim).

Festivals of Folk Arts at the level of nation-wide are arranged annually in the Crafts Museum and Village Complex, New Delhi and the Shilpgram, Udaipur. They show various rural crafts and folk arts how the artists and craftsmen have transmitted and maintained their arts, and traditional skills despite of adverse circumstances. The rural artists and craftsmen are invited to give demonstrations for a specific period. In particular, the Shilpgram and the Western Zone Cultural Centre, Udaipur has

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1. West Zone Cultural Centre, *In Restrospect 1988 West Zone Cultural Centre Udaipur*, Udaipur, The West Zone Cultural Centre, 1988, p. 15.

organised its Festival Programme, *Yatra* -- a cultural odyssey from one end of the West Zone Centre to another, bring with various kinds of *melas*, fairs, festivals and workshops such as *Dussehra Mela*, *Balotsavs*, Tribal Dance Festival, and *Mehndi* & *Mandana* Workshop.

(12) School Loan Services

Owing to the difficulties of communication and transport, most of the museum loan services are found in the larger cities or urban areas. But as a matter of necessity such services should be extended to other areas more urgently. Most of the museum collections are original but incomplete in terms of documentation and even sometimes physically also. There are some different views of museum materials and visitors. Some of the educated visitors may understand the significance of the cultural materials in the light of their subject knowledge. But such original materials may not be suitable for loan services. Educational displays as a part of loan services should have generous proportion of photographs, films, models and all other items which will illustrate ideas to children at their own levels.

Some of the components of effective school loan services are as following:

(i) Ready-made guidebooks which will help children in introducing interesting themes which they can relate to their curricular work but also help them to know the contents of museum galleries.
(ii) Loose sheets of information which children can take home. This again should deal with museum loans but in such a way that ultimately children will be tempted to go to museums.
(iii) Portable lecture tours which are synchronized with projection of slides in proper sequence. The slides may illustrate a subject by reference to the original examples found in museums as well as other public collections or outdoor.

(13) Special Exhibition and Publication

One of the powerful educational media is a "didactic exhibition", which may attempt to explain a specific theory or phenomenon in which objects serve as visible steps in a chain of arguments or evidences to support these concepts. It may also interrelate objects through their stylistic qualities, their historical context, or their functions, materials, processes, and techniques, ethnographic classifications, etc. The possibilities are limitless, but the common denominator of all exhibits of this type is didactic purpose.[1]

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1. Folds, T.M., "Educational Personnel in Museums", *Training of Museum Personnel*, London, ICOM, 1970, p. 52.

One of the popular educational exhibitions is a circulating exhibition which is an important outreach programme. Museums have to identify what original materials they can lend out and which institutions can take care of them as well as use them. But museums can join hands in organising and circulating such exhibitions by finding out which institution can contribute to that service. Some may lend original, some, reproductions, some portable case, some audio-visual aids, some can spare members of staff, some can offer transport, and some can look after maintenance.

School class visits for lessons in museum classrooms are far more effective than getting children for only museum tours in the exhibition galleries. But the museums lessons should be done equally well in the school classroom, otherwise it is not worthwhile. To avoid confusion, such school visits for museum classroom lessons should be arranged in advance. In India, the transport from schools to museums is always a problem. Very few museums in India can afford to spend on this. Only very prosperous schools, especially, those run by rich educational trusts can make more extensive and regular use of museum lessons, if any, which is not fair for underprivileged school children. No realistic solution is in sight for this problems. Public transport authorities may be approached to help children to reach schools for such lessons. In the context of India, some of army troupes, especially, E.M.E. School[1], Vadodara, can help to transport school children from the schools to the Museums by army transportation facilities. In any case only an extraordinary flexible cooperation between local transportation authorities or public institutions and the local schools may help in this respect.

Some museums make use of their exhibition halls themselves for organizing their educational programmes. This is different than conducting of museum tours in the permanent exhibitions. Many museums have courses for non-formal teaching spread over certain period in specific number of lessons like 16 one-hour museum lessons or 10 one-hour museum lessons. To facilitate many people to participate in them such lessons are repeated twice a week. So even if a person misses one, he can attend another on another day. There are no rigid principles but the idea is to offer several options. When lessons are taught, they are arranged in front of actual museum exhibits otherwise there is no justification in having the educational programmes in museum galleries. The presence of well displayed original materials, makes it easy to stimulate curiosity and refer to other related

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1. The E.M.E. School, Vadodara has helped to transport school children from their house to their school and vice versa by army transporation facilities.

subjects and interpretations. But, many museums arrange to bring in special group of objects models, etc. at the time of lessons for additional explanations and for student-audience participation or for "hand-on" experiences. It is also possible to accommodate such supplementary materials near or below the exhibitions as in pull-out drawers or frames.

But museums should organise such lessons in the exhibition galleries during such time when there will be less general public or when special hours are set aside for such lessons. To conduct lessons and also to allow general public into exhibitions may give rise to problems in museums which attract large crowds. It is also possible to plan exhibitions in such a way that small units can be closed for one hour lesson even while the rest of the gallery is open to the public. But this can happen only if education in galleries is a permanent feature. Flexible, space-dividers can be used to enclose the areas within public galleries for short durations where lessons are conducted.

Some museums have introduced Saturday morning class scheme, of which they take different forms. One of them is called "find the object" where children are given clues to encourage them to search for individual specimens in the exhibitions. Sometimes there are courses on local archaeology or on film appreciation, puppetry, or art classes. The idea is not to turn those who join into professional but to encourage interest and enjoyment.

Museums can reach out a wide audience by means of a large number of publications. The most popular of them are portfolios of prints with suitable simple texts. Then there are folders, gallery guides, exhibition catalogues, bulletins, handbooks on subjects covered by museum collections, popular picture-books, etc. Very ingenious publications are prepared by museums which can guide children in preparing models, dioramas, aquaria, etc. Those dealing with period furniture, occupations, fashions, crafts are extremely useful in making children museum minded. A large number of such publications can be designed in relation to the interpretation of the Dangi culture. For example, drawings on thick mounts and a series of them may be made on tribal ways of life. Such activity-oriented materials designed by museums can be distributed through the specialized private dealers in children books, toys and games. Help of teachers can be taken by museums while designing such materials. Quizzes, games based on Dangi cultural materials can be subsidized by museum authorities out of their educational grants.

Many visitors would love to use cards based on the Dangi crafts and their lifestyle as greeting cards provided, which may be made by the Dangi children. *Ashramshalas* or schools specially opened for tribal children are the best places to get such greeting cards made by children who may earn a small money for preparing them preferably out of the locally available

materials. But tribal products should not compete with those manufactured by highly sophisticated technique after very high financial investments. Life size reproductions in high fidelity colour of Warli paintings will fetch good money from visitors because of the great reputation they enjoy.

Museums may issue, at least, a cyclostyled list of "lessons available" to school teachers. It may comprise of at least a dozen subjects which will suit each standard of school. Needless to say, all these lessons in museums will be illustrated by the use of the actual museum materials. The objects for each lesson may be set out on a display table in the museum classroom and the same can be supplemented by slides on related materials which cannot be taken out of showcases in permanent exhibitions or from other collections. Before a general circular is sent, some trials should be taken on children from schools near the museum. Such museum lessons become very attractive because children can enjoy handling actual specimens and see the related slides. A series of wall charts on subjects make these museum lessons extremely memorable. The reports about such museum lessons show that they become very popular and museums have difficulties in fulfilling teachers' expectations.

(14) Creative Workshop and Organised Competition

Workshops on living traditions provide rare educational opportunities. Workshops become creative when they are not attended by passive people. Good workshops encourage participation by individuals who have something special to express or do. Workshops are synonymous with activities, with techniques, with processes and with doing things rather than talking about them. Learning by doing is cent percent instructive. Such workshops are not easy to organise because museums are not commonly considered to be places for experimentations. Museums should be "visitor-friendly" in their communication. Hence, creative workshops are the most effective ways of involving groups in looking at museums as learning environments.

Creative workshops should lead to activities which can be managed in short span of time. Participants cannot spend much time over months to learn processes. A few meetings should be so planned that the essence of activities can be taught in museum for contexts. Good workshops may be organised during weekends for two to three days for public convenience. Pre-workshop literature and references help the participants in getting ready to join and benefit from such workshops.

The workshops should be conducted by museums staff or by invited honorary experts. Their main qualification will be their expertise. But they should also have an urge to share their enthusiasm and knowledge. Those experts who wish to avoid competition may not disclose what they know. On the other hand,

the experts who love their specializations have genuine love to develop the themes to which they have devoted their years. Creative workshops can succeed when they are run by experts who have good vision. Also, they must have patience to guide others who are beginners or amateurs. It is not wise to expect much from beginners who are most likely to join creative workshops. In fact, museum workshops are not only for professional museum worker but also other users like students and researchers.

Museums have to play the role in popularization of creative work which may encourage non-professional participation. The freedom given to participants during such workshops will bring many friends to museums because they can get opportunities. Orientation is necessary before such workshops are under way. Workshops should not be very complex. It may take a few hours of introductory session and group activities to overcome their diffidence or their hesitation. Once right and sound attitude is developed each participant will try to learn from others.

There are some problems of organisation of creative workshop in government-run museums because of audit objections to spending museum funds on raw materials which participants need for creative work. It is not easy to ask participants to bring their own material because it is not easy to estimate the needs in advance. Therefore, museum clubs or museum societies can be set up as subsidized agencies to carry out creative workshops within museum premises and on museum-related themes. Creative workshops cannot be run for very large groups such as of fifty or hundred persons. Hence, smaller groups of twenty persons should be formed. Small groups can encourage participation by activity in contest, larger groups generate passivity.

Competitions in museums are also very popular educational activities. "On the spot drawing and painting competition" for children in different age-groups have become very commonplace. Those on specific theme like environment are held in museums all over India. Competitions can attract many groups and individuals. The winning of prizes is important but people are attracted because they want to be part of an important cultural institution. Parents of children take special pride when kids manage to get prizes. Therefore, instead of a few very large prizes, there should be many small prizes.

The Ministry of Environment and Forests of the Government of India has organised an all India competition on the theme of environmental education which was implemented by the National Museum of Natural History, New Delhi. There were several categories under which public could send their entries like poems, slogans, cartoons, logo, scripts for plays and film, etc. in all Indian languages. Those who were successful got awards at a special ceremony in New Delhi and their entries were exhibited.

The Minister himself wrote letters of congratulations to all successful competitors. This projects a favourable image of museums.

Some progressive museums abroad as the Glassgow Art Gallery and Museum's Annual School Children's Art Competition is as old as 1904. Such annual events encourage local talent as well as familiarize school children with the museum collections. Every year, the students between the ages of ten and eighteen visit local museums in their own spare time and attempt to draw objects on display. The completed drawings are then submitted to a panel of assessors or judges who select the prize-winners for the year. In the year of 1941, new arrangements were introduced in these annual competitions which were held in the month of June which is suitable for schools. The competition was held twice daily over a period of four weeks and each entrant was allowed one session of three hours to complete his drawing. These competitions are very successful. Similar competition can be organised in museums where ethnographic objects are on display so that school children begin taking visual interest in tribal heritage of their areas.

(15) Cooperation between Museum Staff and School Teachers

It is generally recognized that the extent of existing cooperation between schools and museums may differ from one museum to another even in a single city. It is also acknowledged that most schools make little or superficial use of museum collections, exhibits and facilities. One reason is the poor preparation of school classes before they come to museums. The teachers very often are ignorant of what museums possess. They are not ready to take troubles to go to museums and inquire in time. Even it is found that free informative circulars or notes prepared and supplied by museums and supplied at the doorsteps of schools are not fully used. Very often those are not accessible to teachers in the school libraries.

The most effective solution to such problems is increase in the opportunities for personal discussions between museum education staff and school teachers or their authorities. The most difficult aspect of that work is how to integrate museum visits or museum experiences into the school curriculum. Teachers who are familiar with museum resources and museum staff who appreciate the responsibilities of formal education can always interact. The museum visit has to be an open-ended and an exploratory experience to be really useful. But to weave these experiences into school routine requires imagination and flexibility. For this reason, in many progressive museums, the routine conventional gallery tours of children are not emphasized. The accent is on projects which groups of school children can carry out in the museums using museum resources but under the guidance of teachers.

Lending of educational films is another suitable service which ethnographic museums can undertake. But the museums can serve a community by renting out films thus creating some much needed revenue. It need, good planning to offer films on rental basis. An example of this service can be seen in the Milwaukee Art Center, Wisconsin, U.S.A. which offers many colour sound films of short duration. However, the Information Centre, Ahwa in the Dangs also provide various educational and cultural films show for the group visitors and school children in day time and local people at evening according to the special request for free charge.

(16) Museum Work in School and Follow-up Service

Both the schools and museums share their common concern for learning. Schools take it for granted that learning takes place on their premises. At least, all worthwhile learning has origin in school work by teachers for the students is the basic assumption of school or school authorities. Similarly, museums also tend to regard themselves as places for unique education which schools can never offer because of their dependence on words or because the schools are compelled to divide the instruction into rigid formats of periods, academic terms and standards, all oriented to examination. Museums consider such fragmentation as opposed to their own holistic, interdisciplinary approach to learning.

Museums are right in supposing that they can contribute to general, nonformal, continuing and visual education. But practically, they do not create durable influence on school children. Museum work in schools is one way in which what is done in museum is supplemented with what can happen in school situations. It is one very important way of "outreach". This work is based on the appreciation of the fact that isolated and short term contact between school children and museum materials. Museum educational staff will not be enough for lasting impressions which will mould the minds of children.

There is also the problem of time which children can spend in museums not only during their sponsored visits but also outside them. The special evening or morning programmes for school children who can come on their own have so far remained only theoretical possibilities in India except in case of science and technology museum programmes. Similarly, such work on weekends and holidays is also ideal but museum staff is not very enthusiastic to spend their own free time on performing museum activities regularly. The vacation programmes for schools in museums are more popular because those can fit into museum schedule of work in normal opening hours. For these reasons, there is no good substitute to what museums can do for school children in school situations. This is the best way to establish

continuous and purposeful relations with individual as well as groups of school children. This also offers a better way of organizing curricular and extra curricular work because it not fully controlled by school authorities though held in school premises.

Museum work in schools take the following different forms:

(i) Museum staff visiting schools for lectures-cum-demonstrtions, or illustrated lectures, or slide shows, or demonstrations only.

(ii) Museum staff helping school teachers in classroom presentation of topics which can be successful and effective if references are made to original materials found in museum collections either in stores or on display.

(iii) Such educational materials have to be in terms of copies, reproductions, photographs mounted to facilitate frequent handling. Ideally, such materials even if not original, they should be under protective acrylic covers so that money invested in them is fully used by circulating it over a long period of time. An important factor for the success of this work is the production of such materials. They should be physically attractive and durable. In this direction, a lot of importance should be attached to visual aids. It is advisable to make bibliographical lists for all the themes covered by such lending sets. If the books and journals are not available in the normal school reference libraries, the teachers should be informed about the places in which the publications are locally available. It is always good to take help of the local library authorities and librarians about such references so that the interested teachers can find no difficulty either in locating the specific publications or borrowing them. It may not be possible for the museums to reproduce such references by spending their own money. But a few sets may be kept for consultation in museum libraries.

(iv) Museum can prepare a series of circulating and loan exhibitions as a part of their service to schools and in schools. Very often individual schools can never afford to install such exhibitions on their own. Curricular topics are extremely difficult to be translated into visual exhibitions. For example, cells, cell structure, nervous system, volcanic activities, tectonic movement of the earth crust, oceanic phenomena, glacial activities in the earlier geological etc. are only a few instances which need immense expertise and technological outlay in creating attractive exhibitions. To make them participatory is another challenge. Only museums can hope to create them and supply them because of the inter museum cooperation in recent years where national level museums are ready to help smaller local museums. Such loan or circulating exhibitions are very effective if proper publication and audio-visual shows also accompany them.

(v) A very good form of museum work in schools is that the teachers and students themselves attempt to set up their own museum or class room collections which will enlarge the vision of the children about the natural and cultural heritage of the local communities. A large number of techniques can be demonstrated. These days, films and video tapes can be used to record the technical processes so that museums need not repeat them very often. But recordings alone will not be sufficient. Recordings should be used along with personal explanations and question and answer sessions should follow video showing.

Use of the slide-tape-shows is very popular in museum education. This is considered as a very versatile "image-medium". Through this, information can be communicated more dramatically. The image-medium comprises of texts, catalogues, guides which depend on spoken or written language. A guided tour in its conventional form is more of word-medium. On the other hand, image-medium takes visitors directly to the specific form of the original objects. In museums, this is very essential because nothing should stand between the original and the visitor in the process of explanation. As museums are to serve as places for direct experiences, words should be used least. Words should be replaced by images. Hence, bare minimum spoken comments should be recorded on tapes on which are entered electronic commands to the automatic projectors.

The most common forms of museum educational services are listed below. These are very relevant to the interpretative work based on Dangi cultural material in different museum contexts.

(i) The initial contact with individual visitors to museums is very decisive. A bad first impression may spoil the mood of the individual visitor. It may discourage him to pay sincere attention. Hence, the visitor service at the entrance is extremely important. But mostly museums in India, this is not satisfactory in terms of visitors. The staff should have good idea about the public and also of what museums can do for them. For this reason, it was very interesting to know the excellent design made by the Jawaharlal Nehru Foundation for Development's Centre for Environmental Education, Ahmedabad as a part of their projects for wild life sanctuaries. It is so designed that a well trained person will be able to give good directions to different categories of visitors. Only that person should be asked to serve at the counter who is very familiar with the museum mission. What such a mission is should be made clear in the mission statement. Education will be without direction in the absence of such a mission statement.

The information desk may be attended by a volunteer if the museum has succeeded in attracting good persons for voluntary

work. A volunteer who is not a paid staff may be more ready to look at his work as social service. In the context of India, a person who will work for seven to eight hours every day may feel tired and may avoid his work. But if volunteers are in-charge of the information desk they may do the work by turn about one hour at a time, then they will show sufficient freshness and enthusiasm to help visitors in appreciating museum resources.

In case of museums dealing with the Dangi Culture, there is a special need to organise a good information desk service so that the visitors are provided with the correct picture of the Dangi life. Even a map at the desk can help in locating the areas related to the Dangi culture. Such a map will be more useful if several divisions of the Dangs district are made to link them with ethnic peculiarities. Nowadays a custom-made box incorporates colour transparencies into a map. By that way the ecological and cultural factors can be interrelated. Ideally, plastic covered sheets bearing basic features of the Dangi culture should be made available at information desk so that visitors will attempt to refer to the overall perspective in which Dangi life is meaningful.

(ii) Printed materials can be used for the visitor service. These gallery brief, fact or informative sheets are very useful for the concerned visitors. Popular topics on Dangi culture can be interpreted by means of such printed materials. Special exhibits should be covered by suitable catalogues. These need not be very bulky and heavy in research contents. Catalogues should give popular introduction and main features of themes which are illustrated by original objects on display. Museums can spread their educational influence through such published materials because visitors can take them away for leisurely reading and reference. Such publications should be well illustrated and well printed. Museums should not rely only on written texts.

(17) Children's Art Carnival

A landmark in museum education in India may be found in the Children's Art Carnival. It came as a gift to India from the Museum of Modern Art, New York. The gift came from late Mrs. Jacqueline Kennedy, the wife of the American President. She presented it to the Prime minister of India, Mrs. Indira Gandhi in 1962.[1] That was a duplicate of the carnival which is presented annually at the Museum of Modern Art in New York for six to eight weeks since 1942. The carnival consists of two octagonal rooms

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1. Bal Bhavan and the National Children's Museum, *The Children's Art Carnival in India 1963-64*, New Delhi, The Bal Bhavan and National Children's Museum, 1964.

joined along one side. Both are made of aluminum so that the whole structure is of light and easy transportable from place to place.

The Indian Aluminum Company produced the necessary tubes, angles, bars and sheets. The carnival structure was so designed that it can be installed or dismantled in forty hours with a crew of twelve skilled workers. The two sections of carnival hold many toys which appeal to the imagination of children. Adults can watch children playing with the materials from outside through the square plexiglass windows. There is the motivation area which introduces children to the basic aspects of art in the form of specially designed toys which can be operated by children to see changes in the form and colour.

In the second part which is the workshop area, children are encouraged to do creative work. For this, a well equipped workshop is provided as an area for participation, with easels, tables, materials and tools. The Carnival which was a great success in India gave a demonstration of the philosophy of art education whose main theme is that children can develop creativity provided there is stimulating environment, sensitive guidance and freedom to express. They need no interference from adults. Imagination and individual expression are the two aspects of emphasis in the carnival. The Carnival stayed in New Delhi and it moved to Hyderabad, Madras, Bangalore, Bombay and Ahmedabad and many hundreds of children enjoyed it in three months time. There were many workshops and teacher training meetings which gave a boost to museum work for children in creative activities. The carnival finally returned to the Bal Bhavan and National Children's Museum, New Delhi.

Every day children and young people are confronted by an over abundance of images. But they are not given sufficient opportunities for analysing the content of what they see. Nor are they given help in developing their own imaging. The kits and loan exhibitions are teaching aids and should be designed in consultation with those who can pass on the ideas and experiences to school children. Museums have special programmes which encourage children to plan their own exhibitions which should be a natural activity based on some environmental project.

The problems of museums in organizing such services for schools are given below:

(i) Lack of funds sanctioned to museums for regular school museum cooperation.
(ii) The way in which school curricula are structured do not fit easily into activities in common museum galleries.
(iii) Ignorance on the part of museums about teaching methods in practice in local schools.

(iv) Teacher's difficulties in including museum visits in their yearly scheduling of work.
(v) Museums failure to keep school informed about what they can do for school teachers and children.
(vi) Museum education staff not fully aware of teacher's needs in classroom work.
(ii) Reluctance on the part of museum staff to go to schools for pre-museum visit preparation because they are busy with other work.
(viii) Museum education staff unwilling to give attention to individual classroom needs.
(ix) Uncertainty about who should take initiative? Museum or school towards their combined ventures.
(x) Lack of special workshops for classroom teachers to formulate correct attitude to museum use. In this respect, the reports and surveys indicate that sending circulars is not enough. It is only when teachers have chances for personal involvement then only attitudes towards museums are changed.
(xi) Lack of openness on the part of museum staff about their overall educational perspectives.
(xii) Museums have no arrangements for teachers to know how exactly they can use museums not once, but over a longer period of time, directly and take teachers into confidence. Many teachers feel that museums make use of them for museum sake and hot for school development.
(xiii)The understanding of learning mechanism on the part of teachers and the museum educational staff may not correspond. Hence, they may not join hands to achieve common objectives.
(xiv) Museum image in the parents is usually such that students expectations from museum visits are negative:
(xv) Museums are often seen as places for scholars or those who already know a subject. These beginners can also start on a road towards discovery is not easily acceptable to students till they are convinced about such a possibility through the efforts of some enthusiastic teachers and museum staff.
(xvi) Museums are not seen publicly as "visitor-friendly" because security appears to be the dominant aim of museum organisation. Therefore, students have to be explained how educational use can go hand in hand with conservation and security measures.

An ideal museum education service can be a collective effort in which all local museums and institutions concerned with heritage, conservation and interpretation are involved. There are circulars on Museum Education which make a good list of circulating exhibitions available locally. Vast amount of work is being done to extend museum service beyond their walls for the benefit of the schools and communally. Many of these exhibitions are so transported in boxes that by removing protective covers the structures can be used as exhibition furniture. The common circulars are issued collectively by museums for the benefit of

the school teachers. It gives highlights of the series and the facilities which are available on specific terms. Some of the lending material is in the form of "Exhibit of the Week" series. So also circulating exhibits and also teaching exhibits which rotate amongst schools before they are given to non-formal educational institutions for their educational uses. Many lending sets are of slides, films, mounted pictures, audio-visual records.

(18) Audio-Visual Equipment

In the recent years there is an increasing use of audio devices as interpretive aids. No doubt these devices are not as good as live guidance but they are independent of any individual persons who may not be available when a visitor wants guidance or when guides get tired of repeating the same explanations. Nowadays, many museums may make more use of these interpretive devices. As a visitor can carry such a device along with him either in his hand or hung on his shoulder, he is free to see things when at the same time he is listening to the audio explanations. Such devices can be controlled by pressing "On" and "Off" button so that a visitor can hear first and spend enough time in viewing before explanation of another object is heard. There is also an advantage in getting the person with most pleasant voice to speak for the recorded guidance and the text prepared by the ablest expert available for the purpose. Hence, good presentation and good scholarship can be combined to serve a visitor's education needs. The same can be followed by visitors and carried from exhibition to exhibition on the portable systems.

A "listening post" system was successfully used in an exhibition in the National Museum of Natural History, New Delhi for a "Tiger Exhibit". It was indigenously created by the Central Electronic Engineering Research Institute (CEERI), Pilani, Rajasthan. Both of the above systems can be used for Dangi exhibitions. A partially restored the Dangi hut may be fitted with a listening post device so that who so ever will enter into the hut can get audio commentary on the real life situation. Such devices are very effective in "walk in dioramas" or exhibitions. The Jawaharlal Nehru Foundation for Development's Centre for Environmental Education has created its own audio devices which are also connected with mechanism for dramatic changes in levels and directions of illumination. The same can be adapted for ethnographic displays. In them sounds come from different hidden speakers within a display and are synchronized with atmospheric as well as ecological sounds. They also incorporate the general running commentary. The Centre also has devices which can be operated by the visitors themselves. These devices are very tough and have stood successfully many trials so that even long and reckless handling by some visitors.

Educationally informative inputs are required to be very carefully selected with simulating experiences. This is particularly relevant to the Dangi cultural materials which consist of the Dangi music and dialects. Audio devices for individuals and those for groups have to be suitably combined for a balanced interpretation.

Audio-visual Projection Programmes are very suitable for the interpretation of the Dangi culture in the museum context. Comparatively, this device is less expensive and a medium sized museum can easily possess it. The Tribal Museum of the Maharashtra Tribal Research and Training Institute, Pune, has successfully installed this device. It has arrangement to have audio components. In them, the audio tapes can be changed. Along with them there are the detachable trays which accommodate upto 200 slides on the themes which are covered by the audio cassettes. This facility helps to use even one machine to offer introductions to all sections of the museum.

It is possible to use such a device for interpretation of the Dangi culture. Ideally, such a device may be installed in the orientation section where visitors can get a synoptic idea of the scope of the museum collections, its research and activities. If a museum can afford another device, it may be used in the area for educational work outside public galleries. Automatic Audio-visual Projection programmes have great potentiality for museum interpretation. The institution which use them may have a technical staff to take care of their maintenance. The device should not be operated by visitors because rough handling causes severe damage particularly in synchronizing of sound and image.

The Tribal Museum of the Tribal Research Training Institute, Maharashtra, Pune has arrangement to operate the system which is placed in the public gallery from within the service are by a museum staff. It has the screen for rear-projection. It is on the principle of periscope or angled parallel mirrors. Such screen should look as if it is built into a structure supporting exhibitions. So that educational staff use this device not as complete substitute to live guidance but only a complementary medium of instruction. The public responses to the presentation should be followed up by changes in the sequence of slides or changes in the audio commentaries.

Audio and video cassettes are a very important educational facilities in ethnographic museums. The range of audio and video cassettes are very vast from the Dangi oral literature, their rituals, seasonal activities and day to day life. The museum visitors can enjoying listening devices in the form of headphone so that others are not disturbed. Alternatively, there should be sound proof booths. The reason is that museums dealing with the

Dangi culture should have audio libraries is the large number of folk tales, folk songs and folk poetry in the Dangi dialects. A large number of them are translated in English, Marathi and Gujarati but the concerned public and students would come to museum to listen the Dangi dialects, literature and songs. Many of such songs are symbolic and associated with the feelings of love, romance and separation from lovers and parents. To incorporate audio devices in the public galleries is an ambitious idea but can be used in special exhibitions for great impact. With the advent of video which combines image, movement and sound, new dimensions are open for organizing such libraries as an integral part of interpretive service.

In the Dangs situation, Ghelubhai Naik who is a local historian and social worker in the Dangs is a mine of information about the individuals and institutions who have been making audio and video recordings of Dangi music and dance in the last two decades. According to Ghelubhai Naik (1991), these lovers of Dangi music go the centres which are famous for dancing and make the recording during nights when the Dangi youth are at their best. Besides, there are special songs which sung at the time of marriages which go on for whole night. My field work has given me a number of opportunities to make video recordings as well as audio recordings which give very real vision of the essence of Dangs. But it needs great patience to collect these kinds of data because the Dangis have their own ways. Too much and too frequent drinking of liquor also creates problems during recordings in proper sequence.

D.B. Chitale who is also a local archaeologist and social worker in the Dangs has a very large number of audio recordings. His collections reported are unique because of his extensive field work in the interiors and nooks and corners of the Dangs in all seasons. He has the privilege of making complete recordings of the funeral rites and ancestral worships which are normally not accessible to outsiders. But, unfortunately, museums have no facility open to visitors and especially students of the Dangi culture to hear such significant recordings as a part of public education.

Providing the visitors with references of the relevant things or facts in the galleries is also a modern educational service. Its best example can be found in the Jawaharlal Nehru Science Centre, Bombay. This library facility is different from an ordinary library. Gallery library consists of a collection of a limited number of selected books which are directly related to a specific theme of the gallery. These references are readily available to the children in particular to know more about the things which are in the exhibits. Such references are well illustrated literature which encourages same specific activity

like quizzes, completion of half finished pictures, etc. may form part of this gallery library. Besides, printed books, this library may also keep portfolios on specific themes. Such library can serve both individual casual visitors, children as well as groups of school children who may come for specific assignments.

(19) Infrastructural Support to Museum Education

If education would have been a matter of theory, it could have taken place in any and all museums without special efforts. But that is not the case. Education is essentially an experience which takes place in individuals in their own lives. One part of that experience is highly personal and subjective matter. But the other part is connected with objective reality. For this reason, it is possible not only to organise educational facilities and programmes but also to conduct suitable tests to find out their success or failure.

Infrastructure is the structure which is basic for organisation of an activity. In the context of museum education, the infrastructure may consist of all the public facilities and technologies made available for organizing educational activities. They may include suitable buildings which will facilitate educational work both in the exhibition halls and other areas. According to a statistical survey of museums in U.S.A. and Canada conducted by the American Association of Museums in 1965, thirty years ago museum attendance was around 50 million visits a year, fifteen years ago it exceeded 100 million visits a year and the figure has exceeded 300 million within 10 years. The rise in museum attendance is not only in U.S.A. and Canada, it is world-wide. Not only the growth is seen in the large cities, but even smaller towns can demonstrate the rising popularity.

Printed educational materials for not only school children but also the adult are suitable for ethnographic museums. The Australian Museum, Sydney has specialized in producing such printed educational materials namely, "Walkabouts". Children are given these to fill in and return to the staff at the entrance while leaving. They are expected to write their names, addresses and names of schools. Such information helps museums education staff in getting feedback about the effectiveness of such material and their exhibitions. Necessary changes may be made in displays on the basis of such feedback. It asks searching questions which persuade children to see things carefully and read and reread the texts. The walkabouts also expect children to make some drawings of the key objects in displays. This is a very reliable way to ensure memorability of what is seen. It also makes children observe things carefully and in great details especially the special features. In this respect, a good walkabout does what a live teacher can do in guiding children's attention and actions.

V. 5. Through Researches

A. Ethos and World View of the Dangis

The Dangi tribal communities have their own value and belief system. Although they are multi-ethnic group, their ethos has been formed by intellectual and evaluative elements. Similarly, their world view has been established by emotional, cognitive and existential elements. They live in the forest, and their ways of life are depending essentially on their cultural and natural environments. Their socio-economic system dose not equally correspond with that of the non-tribal communities inhabiting in the adjacent areas. From the outsiders' viewpoint, the Dangi tribal communities have been isolated from other communities because of different ecological factors and cultural background. It is, therefore, known to outsiders that the Dangi has his own peculiarity in terms of value and belief system which give coherence and consistency to an ideology.

However, from the insider's viewpoint, the Dangi tribal communities have formed their own socio-cultural system, at least, till the British came to the Dangs in 1818. Thereafter, their socio-economic and political system have been gradually changed by enforcing new regulation such as the Indian Forest Act, 1878, and the provisions of the Bombay (Enlargement of Area and Alteration of Boundaries) Order, 1947. In view of modern history, from the first Forest Lease (1842) till the Dangs District became part of the Gujarat State (1960)[1], there were several changeful events which affected the Dangi ethos and world view. Various socio-political changes of the Dangs such as bringing it under the administrative jurisdiction of the Collector and Political Agent, Khandesh (1842-1903), under the direct control of the Forest Department (1903-1933), the out-break of World War I (1914-1918), under the political control of the Government of India (1933-1943), under civil administration by the Government of India (1943-1947), and merger of the Dangs in the Bombay Province (1947-1960)[2] might have influenced the present Dangi ethos and world view. So far as

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1. Patel, G.D. (ed.), *Dangs District Gazetteer*, Ahmedabad, Government of Gujarat, 1971, p. 9.

2. ibid., p.p. 8-9.

interpretation of the Dangi culture is concerned, socio-economic and political changes should be considered while analysing of the Dangi ethos and world view.

In fact, it is not easy to define the Dangi ethos and world view in a few words. A well-known anthropologist P.K. Bock (1974) defines the term "ethos" as "integrating patterns of value which gives coherence to an ideology."[1] It refers to general patterns or orientations to reduce the complexities of a value system to a few "basic pattern" which influence all parts of the system and to account for the coherence among socio-economic, moral and aesthetic values. However, it stands in the same relation to a value system as does "eidos" to a belief system. The term "edios" refers to "integrating principles of belief which gives consistency to an ideology".[2] Some of the basic premises described in the section on the eidos could be equally treated under the heading of the ethos. An example of this matter was made by E.C. Banfield (1958), who dealt with "armoral familism"[3] as the belief and its consequences for social and political behaviour.[4] To anthropologists, the general principle of "armoral familism" is useful in understanding the ideology of a society.

In terms of anthropology, one of the earliest attempts to characterize the ethos of the primitive societies was made by Ruth Benedict (1934). Benedict felt that every culture can be described in terms of its general emotional approach to the world and to human relationships.[5] She (1934) described four very different societies: (i) the Zuni Indian as "Appolian", (ii) the Plain Indian as "Dionysian", (iii) the Kwakiutl Indian as "megalomaniac" and (iv) the Dobuans as "paranoid" as if each had

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1. Bock, P.K., *Modern Cultural Anthropology: An Introduction* (2nd), New York, Alfred A. Knopf, 1974, p. 449.

2. ibid.

3. Note: Armoral familism is the belief the one should maximize the material, short-run advantage of the nuclear family, and assume that all others will do likewise.

4. Banfield, E.C., *The Moral Basis of a Backward Society*, New York, Free Press, 1958, p. 85.

5. Benedict, Ruth, *Pattern of Culture*, New York, Houghton Mifflin, 1934.

a unique and consistent personality.[1] She believed that each such cultural ethos was developed when the members of society would select a particular character type as their ideal and would then elaborate their arts and institutions in ways consistent with the chosen type. However, in presenting the four very different societies as unique "configurations" (whole culture patterns), she failed to represent the diversity of values found in human societies.

According to Clifford Geertz (1973), "a people's ethos is the tone, character, and quality of their life, in particular, its moral and esthetic style and mood".[2] The Dangi ethos is the underlying attitude toward Dangi themselves and what their world that life reflect. However, according to Robert Redfield (1952), "the world view is outlook upon the universe that is characteristic of a people."[3] The world view is mainly concerned with idea about the universe and the relationship between nature and man. In this connection, D.G. Mandelbaum (1952) pointed out three different types of relationships in relation to the world view -- man to man, man to nature, and man to the supernatural.[4] A people's world view is the part of an ideology and perspective of nature, of self, of society. It can, therefore, be said that the Dangi world view contains their most comprehensive ideas of the universe and human order. To add to the above, Clifford Geertz (1973) stated that "the ethos is made

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1. Note: (i) Appollonian ethos -- seeking peace and order through self-control and cooperation, with a high degree of subordination of the individual to the group, (ii) Dionysian ethos -- valuing violent emotions and stressing the individualistic quest for supernatural power, (iii) megalomaniac ethos -- assertive and self-glorifying, and (iv) paranoid ethos -- hostile and supicious.

2. Geertz, Clifford, *Interpretation of Cultures: Selected Essays*, New York, Basic Books, Inc., Publishers, 1973, p. 127.

3. Redfield, Robert, "The Primitive World View", *Proceedings of the American Philosophical Society*, Vol. 96, No. 1, 1952, p. 30.

4. Mandelbaum, D.G., "The World and World View of the Kota", in Marriot, Mackim (ed.), *Village India*, Chicago, University of Chicago Press, 1955, cited in Mehra, J.D., "The Woirld View of Indian Tribes", Dube, S.C. (ed.), *Tribal Heritage of India: Ethnicity, Identity and Interaction*, New Delhi, Vikas Publishing House, 1977, p. 59.

intellectually reasonable by being shown to represent a way of life implied by the actual state of affairs which the world view describes, and the world view is made emotionally acceptable by being presented as authentic expression"[1]. N.K. Bose (1971) pointed out in an important statement that the world view of a community does not remain constant but is reshaped as its components keep changing.[2] N.K. Bose (1971) believed that there are two common elements to all communities; one is to build a spiritual refuge, the other is to seek guidance for courses of action in everyday life. Such a world view can provide the people with an escape from reality, and it may open the door to creative activities.

(1) The Dangi Ethos

The Dangi ethos may be discussed in terms of aesthetic style and moral aspect of their ways of life. Historically, before the British came to the Dangs, most of the Dangis lived in the round shape huts which could be easily constructed for the semi-permanent or temporary staying, near agricultural fields or river banks. The Dangi ancestors were originally the nomadic tribes who were living by food-gathering, hunting and fishing. Still many Dangis maintain their life through practising the primitive methods and slash and burn agriculture. Although they have lived in the forest for hundreds of years, they have not settled in a place for a long time because of their life style. Of course, their home is always in the Dangs forest but their settlement has been shifted from one place to another place. Whenever they faced any disaster or evil omens in their surroundings, they would shift from one place to another. For this reason, the Dangi huts were simply constructed for the yearlong settlement only. It was natural in the past that the Dangis preferred to construct a round shape hut which demanded a less efforts and less materials rather than to construct a rectangular shaped one (See, Fg. 17-1, Vol. II).

However, nowadays, most of the Dangis prefer to construct a rectangular shape house rather than a round shape hut (See, Fg. 17-5, Vol. II). The reason is that they should settle in a place as long as possible, because the provisions of Indian Forest Act (1878), strictly prohibited the people to inhabit in the forest, especially, the reserve forest. In practical, since 1889, the Dangs Forest were divided into reserved and protected forests.[3]

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1. op cit., Geertz, Clifford, 1973, p. 127.

2. Bose, N.K., *Tribal Life in India*, New Delhi, National Book Trust, 1971, cited in Mehra, J.D., 1977, p. 64.

3. op cit., Patel, G.D. (ed.), 1971, p. 95.

After that, the Dangis should have settled in a place and cultivation was forbidden in the reserved.[1] Therefore, they became settlers as agriculturists. In general, the settled agriculturists prefer to stay in a larger and more durable house rather than a smaller and temporary hut for the yearlong settlement and storing a large quantity of agricultural products in their house for safety. For this reason, there are only a few round shape huts which are seen in the remote areas. Those round shape huts are mostly of the poor Dangis. Most of the Dangis believe that making round shape is easier than others, e.g., huts, baskets and *chapati* (See, Fg. 33-1, 33-2, Vol. II). They also believe that the round shape symbolizes completeness and perfection while the rectangular shape is incomplete and imperfect. However, young Dangis today do not mind selecting either round or rectangular shapes. This principle would be applied to the basketry and other crafts also.

Most of the Dangis like very much decoration in various ways such as wearing various ornaments, drawing various stories on the wall, offering flowers and applying *kunku* (vermilion) or *sindur* (reddish powder) on the images of gods and goddesses (See, Fg. 43-6, 44-7, Vol. II). Moreover, they are fond of various kinds of tattoos. on the forehead, cheeks, the chin, the chest, arms, hands, legs, etc. So far as Dangi favourite ornaments are concerned (See, Fg. 27-3, 27-4, 28-1 to 28-12, Vol. II), a Dangi woman is fond of wearing various decorative ornaments such as a gold nose ring or knob, a pair of silver ear rings or knobs in the upper and lower parts, a red or black bead necklace, various silver necklace, a pair of silver armlets, or silver bracelets, a pair of glass bracelets, silver or copper finger rings, a pair of silver anklets, and a pair of silver second-toe ornaments. Besides, a wealthy Dangi woman likes to wear silver hair ornaments and a silver waist belt. Similarly, a Dangi man likes to wear a pair of silver ear rings or knobs in the upper and lower parts, a pairs of silver, nickel-silver or copper bracelets or armlets, silver or copper finger rings. A wealthy Dangi is fond of wearing a silver waist belt on the occasions like special events or festivals.

The Dangis believe that a person tattooed can be protected from the evil spirits and witches, and his tattoos can go along with his body to the afterworld. It is believed that only tattoos can be taken by the human being to the afterworld. Hence, tattooing is very popular among the Dangis . From the early childhood, both boys and girls are tattooed by the skilled tattoo designers from the *Bazaar* (market), especially, at the time of fairs and the Dangs Darbar

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1. ibid.

held at Ahwa and other places. In the past, tattooing was made by the neighbourhood uncles or aunts who knew how to tattoo. Generally, a needle, a safety pin or a jungle fork and soot or some mixture of earth colours are necessary for tattooing. In case of complicated design of tattoos, tattooing itself creates serious skin problems. However, many Dangi women believe that tattoos can improve their beauty and health. Popular design of tattoos partly corresponds with their beliefs like totemism or animism. Such designs are of leaves or branches of *Pipal* (ficus religiosa) and acacia trees, lotus flower, dot(s), vertical lines, emblems of the sun, the moon, star, figures of scorpion, serpent, etc. on forehead, cheeks, chin, neck, upper chest, arms, hands, legs, and feet (See, Fg. 29-1 & 29-2, Vol. II).

The Dangis are fond of wall drawings. These are drawn by women during the festival of *Diwali* or *Panchawi*. Various pictures of Dangi life are shown not only on the outside walls of the hut but also the inside walls of the kitchen (See, Fg. 43-13 to 43-15, Vol. II). Besides, this kind of drawings are seen on the surface of grain jar which are generally kept in the kitchen or storing room (See, Fg. 26-23 & 26-24). The required materials for the wall drawings or paintings are a *datan* (brush), simple colours and the wall as a canvas. In the past, special colours were made from ashes of *sadado* and *dhamlo* woods with mixture of *haldi* (turmeric powder), but nowadays ready made powder colours are prevalent. The main subjects of the wall drawings are of the sun, the moon, star, tiger, peacock, serpent, bullock, cow, horse, dancing, seeding, ploughing, harvesting, cattle breeding, tree, hands, human and his house, etc. Mostly Dangi wall drawings signify best wishes for prosperity, safety, and amusement. In practice, Dangi wall drawings reflect their pantheon; subjects of worship, their life style; agriculture and cattle breeding with amusement, and their best wishes for prosperous and joyful life.

Since execution of the first Forest Lease (1842), the Dangs territory was gradually opened to the outsiders who were mostly timber traders or Forest Department workers. Due to the opening of the forest road, even interior forest areas were also gradually opened to the outsiders. To the Dangis, all outsiders except merchants seemed to be enemies or invaders because the earlier visitors including the British military officials had slaughtered the Bhils as wild animals. As a result, the Bhils dislike communicating with even commercial visitors who wanted to buy timber and forest products. Many Dangis held a biased view against the outsiders who had economic power and social status because they would take Dangi girls and even house wives. Therefore, the Dangis didn't like to meet outsiders, and they moved away from the outsiders whenever they faced outsiders. As a result, they have had no positive attitude to meet and to communicate with outsiders. They are always suspicious against outsiders. Although they give warm hospitality to the outsiders

at first meeting, they don't like to give any information about themselves to outsiders. Only after a long relationship, they open their mind and give their sincere friendship. It is not easy for the outsiders to establish a good rapport with the Dangis within short time. It takes considerable time for outsiders to converse with the Dangis and form good relationship and friendly mood due to their nature.

Since the Dangs was under the direct control of the Forest Department (1903), many poor Dangis economically depended on the Forest Department, e.g., in supplying foodgrains and other daily necessities. When they had insufficient grains due to bad crops, in particular, in 1907-08, 1911-12, 1920-21, 1926-27 and 1927-28, the Government supported the Dangis. To maintain their life government managed the *Nagli* (Grain) Depots since 1908. Through the Government *Nagli* Depots, the Dangis borrowed grains and money for agricultural purpose. As a result, most of Dangis became habitual borrowers in grains and money. At this stage, many Dangis got into debt from either the Governmental societies or private money lenders. Owing to their family affairs including marriage, and other living expense, they would incur excess expense as compared to their income and economic situation.

Many senior Dangis are quite lazy, they don't like hard work in the field. But they like very much to drink liquor in the village. Even senior Dangi women and young people also like very much to drink liquor and to smoke *bidi*. Without liquor they cannot perform any ritual ceremony and they cannot amuse themselves. During festivals, they would enjoy dancing and drinking liquor throughout night. When they come back from the field after finishing the day's work, they enjoy dancing and playing musical instruments such as *dolak* (drum) and *pawa* (flute). They are really fond of *chaula* (eating), *piula*, (drinking) and *nachula* (dancing). With music and liquor they can do whatever they want. They are mostly optimists and pleasure-seekers who are living in their forest paradise. But they are strictly prohibited to live in the reserve forest and to drink liquor in the Dangs. It is interesting that no liquor shop is in the Dangs but most of the Dangis enjoy drinking liquor which are distilled in their houses.

Many Dangis don't mind breaking the Government rules and acts concerning to protection of the forest and prohibition of liquor. An example of insurrection was taken placed by the Dangis who were inhabiting in the areas near Mahal, northern part of the Dangs, March, 1992. The main issue of insurrection was the strict prohibition of cultivation in the reserved forest. According to the Dangis, that was a struggle for their existence in the forest. They are reckless but most of them are honest and kind. In a word, they are innocent because they struggled only for survival in the forest.

During the World War I (1914-1918), not only in the Dangs as also in other countries, there were serious shortage of foodgrains and other necessities. To check the spiral of rising prices, the Government opened fair price shops. These fair price shops supplied the people with essential commodities like cereals, pulses, cloth, sugar, kerosene, etc. The stocks and accounts of these shops were inspected by the Government. Therefore, the Dangis gained benefits such as getting articles in normal price and buying necessary items periodically from the Government shops. As a result, many Dangis would be faithful people under the direct control of the Forest Department. Since that time, many Dangis, in particular, the Konkanas and the Gamits started to follow the Government policy. But the Bhils of the Dangs have hardly followed the Government policy. Therefore, there were some conflict between the Bhils and the Forest Department of the Dangs, i.g., the Dangi Chiefs rose in revolt against the British rule in 1914. Due to strict enforcement of the Indian Forest Act (1879) and the out-break of World War I (1914-18), all these factors sparked off trouble the fire was lighted all over the Dangs forest. In case of the revolt lead by the Pimpri Naik in 1914, not only the Bhils but others also participated.

As a result, the Pimpri Naik was sentenced to six months' imprisonment due to the wild fire. Since then, the privileges of the Dangi *Rajas* and *Naiks* were gradually lost. After that, the Bhil community has been isolated from other tribal communities of the Dangs. The Bhils are self-reliant and they like to be independent. They don't like to be subordinate to any authority even though they work for the landlord. They don't mind living in a village with other communities, but others don't like to be near the Bhils. Of course, there are many reasons in terms socio-cultural aspect, e.g., different social customs and religious ideas and code of ethics between the Bhils and other Hinduized tribal communities, in particular, the Konkanas and the Dhodias.

So far as socio-economic participation is concerned, the Bhils hardly participate in the various developmental project work organised by the Government or the District *Panchayat* Office. In a sense, they are not much interested in improving their socio-economic situation. As a result, they are extremely poor compared to others in the Dangs. Unless someone participated with the Development Project work, he cannot get any benefits such as wages and free-supply of things in terms of social welfare. At present, except the Bhils, most of the Dangi communities, especially, the Konkanas, the Gamits, the Kotwalias, and the Mangs actively support the Government policy and faithfully participate in the Development Programmes organised by the District *Panchayat* Office.

(2) The Dangi World View

The world view of a community entirely corresponds with the cosmology of a community. In general, the world view is mainly concerned with the idea and perspective of the previous existence, this world and after world. It is also concerned with the relationship between man and nature, which is a common concern in between the world view and cosmology. However, the cosmology is concerned with the origin and evolution of the universe, and the relationship between the universe and human being. Surajit Sinha (1957) also suggested three types of man, nature and the supernatural relationships as already D.G. Mandelbaum (1955) discussed. According to Suranjit Sinha (1957), the gods are divisible into two categories: "benevolent and malevolent".[1] But S.S. Solanki (1980) who had carried out fieldwork in the Dangs classified the gods into two categories: "clean and unclean."[2] To the "clean" gods (vegetarian) namely,*Hanuman, Mahe Dev, Munjia, Baram Dev, Khanderao, Ganapati, Ishwarpind, Samva Dev,* etc. the Dangis offer only fruits, flowers, coconuts, grains, etc. But it is not easy to distinguish practically "benevolent from malevolent" gods or "clean from unclean" gods. "These gods are portrayed as being more interested in personal loyalty than in any demonstration of ethical or moral virtue."[3] In case of the Dangs, many Dhodias and Konkanas prefer to worship clean gods and goddesses rather than unclean gods and goddesses due to influence of Hindu ethics. Rituals are performed by the *Bhagat* mainly to avoid sickness and death, and further, to wish for abundant harvest, prosperity and safety.

The Dangis believe in the existence of after world and the previous existence. They know the linear time dimension which is never repeated like ordinary lifetime. "A linear dimension is one in which time period A is followed by period B which is followed by period C, and so on".[4] In case of human life, after birth, one has to pass the times of infancy, childhood, adolescence, adulthood and the old. It is believed among the Dangis that after death, a man can have rebirth in this world according to his fate. Therefore, in terms of time

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1. Sinha, Surajit, "Tribal Culture of Peninsular India", *Man in India*, Vol. 37, 1957, cited in Mehra, J.D., 1977, p. 65.

2. Solanki, S.S., *Area Study of Dangs*, Ahmedabad, The Tribal Research and Training Research Institute, Gujarat, 1980, p. 115.

3. op cit., Sinha, Surajit, 1957.

4. op cit., Bock, P.K., 1974, p. 191.

dimension, the Dangi lifetime is not in a linear dimension but in the complex linear one.

However, the Dangis believe afterworld which is in the heaven (soul) or on the earth (ghost). As earlier discussed in connection with the selection of graveyard or pyre place, in general, the Dangi wants to go and stay in his own community, in particular, the Konkanas want to go to the heaven occupied by their own community. It is believed among the Dangis that a man who meets an unnatural death cannot go to the heaven and then he turns into a malevolent spirit. Most of the Dangis believe in the existence of magic and witchcraft. Their beliefs represent the natural universe to be continuous with the human world of interactions and sentiment. They believe that the entire universe is animated by supernatural beings and all human beings are more and less equal to each other. They also believe that man, nature, and the supernatural are all bound within a common boundary.

The Dangis worship celestial bodies such as *Chandra* (moon), *Surya* (sun) and *Thara* (star), in particular, *Rohini*, and nature such as *Dungar* (mountain), *Sagar* (pond), *Pirthomi* (earth), *Pani* (rain), and *Bhutiya* (wind). They also worship animals such as *Wagh* (tiger), *Mor* (peacock), *Nag* (cobra or male serpent), *Hanuman* (monkey), *Sun* (dog), *Godha* (horse), and *Gai* (cow). Besides, they believe various supernatural beings including High Gods, Gods, *Bai*, *Bir*, *Chella*, and ghosts, and witches. In general, High God is a remote figure who rarely interferes with human life. He is followed by a host of lower gods and spirits such as *Bai*, *Bir and Chella*, who are closely concerned with human fate. They have four different status for gods and spirits in their pantheon. The *Bhagat* who is a medico-religious man can drive away retreat witches who practise magic. Most of Dangis are afraid of a witch (a living woman who can practise magic) rather than a ghost (a spirit of the dead).

The Dangis know *Rohini nakshatra* (constellation) that is a sign to inform the beginning of monsoon season.[1] They have twenty eight *Nakshastras*[2], which affect work a periodical change in daily life. According to this seasonal calendar, they start to

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1. See, op cit., Patel, G.D. (ed.), 1971, p. 197.

2. There are twenty-eight Nakshatras in a year, viz. Ashvini, Bharani, Krutika, Rohini, Mrig, Aradra, Punarvasu, Pushya, Ashlesha, Magha, Purva, Uttara, Hasta, Chitra, Swati, Vishakha, Anuradha, Jyeshtha, Mul, Purva-ashdha, Uttara-ashadha, Shravana, Dhanishtha, Shatataraka, Purvabhadra pada, Uttarabhadra pada, Revati and Abhijita.

cultivate agricultural fields such as ploughing the field, sowing seeds, weeding crops, and harvesting crops. In the Dangs there are three seasons, namely *Hiyalo* (winter), *Unalo* (summer), and *Pahuo* (monsoon). The Dangis also follow twelve months in a year and seven days in week. But they have their own time table. It is believed among the Dangis that the blooming of *hindan* (bamboo flower) takes place every 60 years. Traditionally, they remember a specific year in the blooming of *hindan* or other historical events such as World War I, India Independence, etc. They have no scientific time standard and seasonal calendar. However, they know "a cyclical (time) dimension is one in which the sequence of periods is repeated a definite or indefinite number of times"[1] such as the Dangi twenty eight *Nakshastras*. It is regrettable that the Dangis can't accurately know the beginning or ending of a month without the Hindu calendar. A month is generally remembered by an important festival or fair which falls in a specific month.

The Dangis have the concept of space in terms of cultural aspect such as "inside and outside" of a hut, "sacred and profane" places, "in a village and outskirt of a village", and "hut, agricultural field and forest. Regarding sacred and profane places, except *mandir, devta*, there are no serious distinction between sacred and profane places in terms daily life. But when any ceremony or ritual is performed by the priest or Bhagat in a place, the sacred place is not indistinguishable from the profane place. For example, the Konkana bride and groom sit together on the earthen floor by the side of *Kuthie* (pounding hole) or *garthi* (grinding stone) to perform a specific procedure in marriage ceremony. While performing the procedure of wedding, the place is continuing to be sacred in terms of rites of passage. In this respect, Arnold van Gennep (1908) pointed out that "Sacredness as an attribute is not absolute; it is brought into play by the nature of particular situation"[2]. Practically, all ceremonies and rituals are performed in sacred situation, but "nothing solely sacred or solely profane exists in the common experience of life, or in the ultimate analysis of things".[3]

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1. ibid.

2. Gennep, Arnold van, trans. by M.B., Vizedom and G.L. Caffee, *The Rites of Passage* (4th), Chicago, The University of Chicago Press, 1966, p. 12.

3. Saraswati, Baidyanath, *The Spectrum of the Sacred*, Ranchi Anthroplogy Series 6, New Delhi, Concept Publishing Co., 1984, p. 18.

In other words, they are two sides of the same coin, but each side of the coin can be shown differently according to the situation.

The Dangis also have the notion of spatial orientation. They believe that the east is an animated, live/birth and rising direction, the west is an unanimated, dead/rebirth and falling one. On the other hand, they believe that the north is a cold, dark and moisture direction, the south is a hot, bright and rainy one. Almost Dangis believe that after death, they should go to west and they can come back from east. They also believe that rain comes from the southwestern, a clear sky appears from the northeastern. Their favourite direction is the east, and disliked direction is the south due to cultural and ecological factors. Almost the Dangis believe that the supernatural beings or spirits are inhabiting in the east or in the west. In case of East Asian countries such as China, Korea and Japan, the people believe that the supernatural beings and spirits are inhabiting in the north and are sitting onto the south.

B. Changes of the Dangi Self-Image and Identity

To anthropologists, the term self-image means the concept of its own personality or its characteristics in a community. In this connection, K.N. Sahay (1977) defined self-image of the tribal as "their own ideas, estimations, and concepts about themselves".[1] On the other hand, the term identity means its own characteristics to be distinguishable from others; it represents its own individuality of a particular group or people. Some people believe that it also implies "the way the group associates itself with other phenomena".[2] Thus, the first meaning of identity is not much different from the meaning of self-image. The second connotation goes beyond it and covers the associations and affiliations of the group or people. In this section second connotation also should be considered into the analysis of the Dangi identity.

So far as the Dangi self-image and identity is concerned, the concepts of a tribe should be discussed to get a definite idea about the Dangis. In general, "anthropologists defined tribe as a type of society characterized by political autonomy, a

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1. Sahay, K.N., "Tribal Self-Image and Identity", in Dube, S.C.(ed.), *Tribal Heritage of India: Ethnicity, Identity and Interaction*, New Delhi, Vikas Publishing House, 1977, p. 8.

2. ibid.

subsistence economy and territoriality".[1] Another meaning of a tribe is a stage in social evolution or a group of primitive people. In India "tribe" is a colonial term for the purpose of administration under the British Government of India, and as such it has continued to be used till today. In this connection, Herbert Ganslmayr (1978) suggested "not to use any longer words like `tribe' or `tribal' in museums of ethnogrphy, because they could have a negative meaning, especially in western countries where `tribalism' is seen as the cause for many problems in developing countries"[2]. He also recommended use of the name of the ethnic group.[3] As a result, ICOM's International Committee of Ethnography Museum (ICME) finally decided that "using the naming of the ethnic group, preferably that which they used for themselves,was the most satisfactory course for museums to follow in the labelling".[4]

The tribal communities of the Dangs have no political autonomy and no subsistence economy. But their territory is culturally and ecologically isolated from the adjacent areas because the Dangs is entirely a forest. Therefore, in a sense, the Dangis are not tribes because the Dangis have no sovereignty and no self-reliant economy in the Dangs. They are a backward class and an undeveloped society from the viewpoint of socio-economic situation. Their lifestyle and primary occupations are definitely primitive in perspective of the developed and industrialized countries. Among the Dangis, there are many sub-ethnic communities not only the Bhils, but also other tribes. In the past, the name `Dangi' referred to the Bhils of the Dangs, but nowadays the 'Dangi' means people who are permanently living in the Dangs territory.

In the past, the Bhils believed that they were the kings of the forest. They were landlords of the Dangs. But nowadays they are poorer than others such as the Konkanas, the Dhodias and the Gamits in terms of socio-economic and political situation.

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1. Devalle, S.B.C., *Discourses of Ethnicity: Culture and Protest in Jharkhand*, New Delhi, Sage Publications, 1992, p. 29.

2. Ganslmayr, Herbert, "The Concept of the `Tribe' -- and Can It Be Explained in a Museum of Ethnography", Morely, Grace (ed.), *Visualisation of Theoretical Concepts in Anthropology in Museums of Ethnography* (Proceedings of the Syposium of ICME, New Delhi, December, 8-9, 1978), New Delhi, National Museum of Natural History, 1978, p. 41.

3. ibid.

4. ibid, p. 14.

They were hunters and food-gatherers but they became agriculturalists and forest labourers since the British came to the Dangs. At present, the Konkanas is the largest community in terms of population. Since residing in the Dangs, they are favourable agriculturalists. They are constituted of mostly farmers and partly peasants. The second rank is occupied by the Bhils community as discussed above. The third rank is possessed by the Warli community. The Warlis are basically agriculturists. But only few Warlis are farmers and others are peasants cum forest labourers. The fourth rank is held by the Gamits community. They are basically agriculturalists. Most of the Gamits are living in the northern part of the Dangs as farmers. The Dhodias are basically favourable agriculturalists. P.G. Shah (1964) stated that "the term Dhodia seem to be derived from *Dhundi* (a small thatched hut) -- *dhundia* meaning hut-dweller; *dhundi* also means weeder and dhundia means big or large, a corrupted form of *dhor* meaning old inhabitants of the part of the country".[1] The Dhodias who are living in the Dangs are mostly government servants, teachers, traders or forest labourers. Most of the Dhodias are relatively wealthy and educated.

Besides, there are a few minor tribal communities such as the Kotwalias, the Kathodis, the Mangs etc. The Kotwalias and Mangs are living on bamboo crafts. The Kathodis are living on gathering forest products or working in the forest as labourers. Except the Dhodias, the Kotwalias, the Kathodis and the Mangs the rest are basically agriculturalists.

Not only in the Dangs but also in other areas, agriculturalists are industrious, kind and peaceful in terms of their ways of life. Non-agriculturalists are variable according to the nature of their occupations. Forest labourers and timber traders are active, energetic and fearless due to the environmental factors. Most of agricultural labourers are relatively passive and timid because they are always subordinate to the owner. Craftsmen are frugal and industrious owing to their nature and inborn caste. Merchants are accumulative and tactful, who come from Bansda, Nasik and Navapur areas. Only few indigenous Dangis are living on trading or marketing in the local market. Those who deal with trade in the northern part of the Dangs are mostly Muslim merchant, on the contrary, those who are dealers in southern and western parts of the Dangs are both Hindu and Muslim merchants.

Regarding change of self-image and identity, D.N. Majumdar (1944) stated that "from very early times there has been a

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1. Shah, P.G., *Tribal Life in Gujarat: An Analytical Study of the Cultural Changes with Special Reference to the Dhanka Tribe*, Bobay, Bharatya Vidya Bhavan, 1964, p. 19.

gradual and insensible change from tribe to caste and many are the processes of conversion from tribe to caste."[1] In the Dangs, there are some tribals such as the Dhodias and the Konkanas who prefer to call themselves Hindu peasants. It cannot be overlooked that the Konkana is a scheduled tribe in the Dangs. As a result of change in their self-image, they would like to identify themselves increasingly with Hinduism or Brahminism. They seek regular services of a Brahmin priest whenever they perform marriage or other ceremonies, and daily worship Hindu gods and goddesses. They also know the Hindu mythology and follow Hindu ethics.

Since the Christian missionary came to the Dangs, many poor Dangis are converted to Christianity. At present, number of Christian churches are established all over the Dangs. Among Dangi Christians, some people sometimes follow ethics of both the Christian and the Dangi. They are not original Christians but they like to call themselves as Christians. Mostly Dangi Christians are Protestants or Baptists. Most of Dangi Christians are educated and sincere. Christian missionaries have contributed to improved education and better socio-economic situation through mission.

C. Cultural-Ecological Adaptation of the Dangis

It is true that certain cultural traits or phenomena can be explained as influenced by the ecological factors. The Dangis are widely scattered in the Dangs forest. They are inhabiting in only the protected forest because of strict enforcement of Indian Forest Act. Before the execution of Forest Lease (1842), they could inhabit any part of the Dangs forest. Most of landlords were the Bhils who allowed the Konkanas to stay and cultivate their agricultural fields. The Konkanas are favourable agriculturalists who introduced the methods of cattle-ploughing and manuring in agriculture. The Konkanas immigrated later and brought advanced cultivation system. Therefore, they gradually have settled in a place. As a result, the population of the Dangis rapidly increased but they had no sufficient supply of food due to serious drought. To obtain required food the Dangi chiefs took to plunder the adjacent areas. To survive in the forest they followed the law of the jungle namely "might is right".

It was sometimes not easy for even the Dangis to survive in the difficult environment. The Dangs forests are very luxurious.

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1. Majumdar, D.N., *Races and Cultures of India*, Lucknow, The Universial Publishers, 1944, p. 95.

In particular, bamboo and teak are very rich and they are the representative forest products of the Dangs. Owing to the thick forest, they have undergone various difficulties such as deprivation of their base, restriction in selecting residential site, and the loss of sovereignty. To survive in the forest the poor Dangis become agricultural or forest labourers. Some Dangis like the Kathodis, the Kotwalias, the Mangs, etc. continually practised their own traditional caste or crafts. Practically, the Kathodis make charcoal, the Kotwalias and the Mangs make bamboo baskets, etc.

Strict enforcement of Indian Forest Act has prohibited the Dangis from cutting trees and not cultivate field in the reserved forest. Their fields are mostly located either near river bank or over hill slopes. Their huts are usually located near agricultural fields. But the Government prohibits the Dangis not to build huts in reserved forest. Therefore, Dangi traditional ways of life gradually changed into a new living patterns. For a Dangi, the life is extremely difficult, and everyone has to work hard for existence. Although, supposedly, the Super Natural Beings gifted the forest to the Dangis, they have not been able to properly utilize their land because of the Government interference.

In general, a Dangi has to be independent from his parents after he married. They cannot remain a liability to the parents, and vice versa. Therefore, a newly married couple has to work hard for existence, happiness and prosperity. They have to build their own house which is generally located nearby their parental house. A Dangi does inherit a part of parents land and some house hold items as his or her share. In general, a married son succeeds to part of his parents land and a daughter also inherits her parents property when she prepares for marriage. It is believed among the Dangis that either a son or a daughter has equal right to succeed to their parents property because they work so hard from even childhood. The Dangi children are forced to work hard for whatever they need in daily life, e.g., gathering forest products, grazing cattle, etc. Therefore, parents take it for granted to give equally their property to their children. This custom is derived from their life style and ecological factors, i.e., even a child also can collect profitable things from the forest.

A relationship of reciprocity and cooperation is specially exhibited among the Bhils who inhabit in more undulating areas, and where the level of agricultural fields are sharply different. An agricultural field, at a higher elevation gets ready for ploughing and sowing, earlier than one at a lower elevation where rain water takes longer time to dry up. A Dangi alone with his pair of bullocks and plough, cannot properly

manage ploughing and sowing of his sloppy fields which get dry at a rapid speed. In this context, he has to cooperate with other cultivators, his relatives or neighbours who bring their respective ploughs and bullocks to help in timely ploughing the land and sowing the required seeds. One would see a number of ploughs operating simultaneously in the same field. The owner of the field under ploughing and sowing, provides food and drinks to the helpers either on the spot or in owner's house according to the location of the field and the time of taking food. With such collaboration, the timely sowing is assured. After sowing the field, all troupes of ploughs would go to next field which is possessed by one of helpers. Such co-operation continues till all the participants' fields are completely ploughed and sown. This kind of labour collaboration system is essential and it is a typically found in the terrain. The helps remains at the labour level as the produce is not shared and it goes as per the cultivator of the field.

Another example of the environmental adaptation of the Dangis is found in case of the digging of irrigation well. In general, a site of a well is located in nearby perennial or seasonal streams which are commonly placed at lowest elevation on the ground. In general, according to the *Bhagat*'s direction and after performing the simple ceremony for the digging of a well, the villagers start to drill the respective ground where water table is high. The Persian pin-wheel and buckets are used for that purpose (See, Fg. 52-1 & 52-2, Vol. II). The entire mechanical arrangement of the wheel is of wood which is locally available. In this context, the villagers collaborate with each other to dig the ground and to draw soil and pebble dug from the basement. Mostly the Dangis depend on mutual-cooperation because they know each other and also what co-operation is required for this purpose. It is a fact that the Dangis face water scarcity every year. To solve this problem, the District *Panchayat* has helped each village to drill a well. In the Dangs District, at least, one or two wells available are in each village. However, there are some villages in which the villagers face serious water problem in summer. For this reason, every summer, the villagers who face serious water problem worship *Pan Dev* (God of crocodile) who is supposed to controls rainfall. It is remarkable that *Pan Dev* is sincerely worshiped by only a small number of villages which are mostly located in the northwestern part of the Dangs. The fact shows that the Dangs had rarely faced water scarcity in the past, i.e., prior to felling immense trees which created barren forest and no water reservoir. The maintenance of good relationships between man and nature, either man may take a lot of abundance from the nature, and vice versa.