APPENDIX-II

Proceedings of the Symposium on Museum Development, held in 1975 :

Dr. S. M. Nair, Planning officer, Natural History Museum, host for the Working Sessions and for the luncheon on the last day, welcomed all those present and invited attention to buildings having to be adapted to museum uses, as well as to new buildings planned specifically as museums.

Addressing at the first session, Mrs.Smita Baxi emphasised that today there is need of team work to bring together specialists in all subjects pertinent to museum planning and construction, to pool their knowledge and professional and technical resources, in order to produce buildings thoroughly functional and adapted to museum needs. Citing illustrations of lack of understanding by authorities, she pointed out that as early as the 1930's and 1940's new museum buildings in America and Europe developed only 40% of space to exhibitions, the remain in India, as much as 90% of the total museum space was still being planned for exhibition use, while work areas and storage needs were ignored.

Professor Lehmbruck, architect, then began the technical discussions, saying that the problems of museum architects were complex, and emphasised the need for team work. He stated that planning any museum building involves three categories of experts: 1)administrators to visualise the need and to take the initiative; 2) museologists to formulate the programme; 3) architects to plan and construct the building according to it. He emphasised that museum designing should be broad-based, to consider visitors of various categories of society, having different requirements. In his opinion, visitors visited museums for enjoyment and relaxation and not for education in the formal sense. Museum buildings should not be planned accordingly. Moreover, the needs of visitors, not only of today, but of the future, must be kept in mind.

Mrs. Marcouse, expert on museum education, of ICOM's International Committee for Education and Cultural Action, then explained that education in museum is communication and not merely conceptual learning. She emphasised that the related arts be demonstrated ...for example classes of modern dance in the contemporary painting gallery, Indian classical dance in the gallery of Asian sculptures. Such programmes of communication and instruction and of related cultural activities and demonstrations needed to be considered by the architect as well as the museologist in planning a museum building. When, queried, she answered

that museums of science and technology and of natural history could offer equivalent programmes, demonstrations and teaching.

Mrs. Kapila Vatsayan, in her personal capacity as scholar of performing and visual arts, apart from the multiplicity of different specialised museums, possible only in cities, drew attention to the need of museums in villages, in rural and in tribal areas- the reality of South and Southeast Asia- with their composite and complex cultures, and their distinctive requirements. That appropriate architectural forms, as well as programmes, should be developed for them.

Mr. M . Rana, Chief Architect, Ministry of Works and Housing, New Delhi, agreed that museums present a challenge to the architect, especially in regard to their present evolving active roles. Success should be equated with the satisfaction visitors feel.

Mr. Habib Rehman, architect, Secretary, Delhi Urban Art Commission, felt that architects had often in the past lacked precise directives from the professional/ technical users when planning museum buildings, and recommend consultation in the planning stages between architects and museum professionals in order to achieve satisfactory functional plans.

Mrs. Vatsayan again stressed the necessity of employing indigenous architectural forms and materials appropriate museum functions, particularly in the rural areas.

Mr. J.M. Benjamin, Chief Architect, Central Public Works Department, New Delhi, explained that museum architecture was not only the facade, but the total building, which meant that it included, in addition to the plans, also the execution of the work, for which also sufficient time must be allowed. He recommended that plans be flexible keeping in mind possibilities of future expansion. Landscaping the museum's surroundings he emphasised as important. Consultation among the specialists concerned with a museum was valuable in avoiding mistakes, for buildings which might have to last two hundred years or so should not be planned in a hurry.

Mr.V. A. Krishnamurthy, Chief Engineer (Electrical), Central Public Works Department, New Delhi, emphasised that a museum's size should be restricted in order to minimize fatigue.

Mr. Rehman asked Professor Lehmbruck's opinion of visitors' reactions in regard to over-powering architecture, like that of the Guggenheim, New York, for example. Professor Lehmbruck replied that there are the two extremes: either a building like a warehouse, with no architecture at all, or one of good architecture, which may be over-powering sometimes. As an example of the influence of architecture on visitors, he recalled that they have been observed normally to look out of the first window they encounter after being in artificially lighted galleries, obviously a psychological reaction to artificial light.

Mrs. Baxi, reviewing the discussions to that point, suggested that there was definitely need for different kinds of spaces for carrying on different museum functions- education, cultural activities, relaxation of visitors, as well as exhibitions.

Mr. Rana supplemented his remark by stating that there cannot be a set formula for "museum architecture", adding that by museum architecture is meant architecture evolved in response to the specific requirements of a museum.

Major General, T.V. Jaganathan, Project Officer, National War Memorial and Museum, New Delhi, proposed that each museum devise two circulation patterns: 1)for the non-specialist visitors, providing highlights for a rapid visit; and 2) for specialists and scholars, a longer, more detailed circuit of the exhibitions.

A suggestion to have four or five possible plans for various types of museums, to serve as guidance for museum professionals in planning their own buildings, was considered impractical. Mr. Rana warned that such type of designs would result in over-simplification and the specific needs of different kinds of museums would be overlooked. A suggestion for a check-list to help smaller museums consider what might be required in planning a building was received more favourably and considered to be of practical value.

Mr. Nanda suggested that a post-doctoral research project, by a team of at least an architect and a museologist be launched to draw up norms for museum professionals and architects of museums, when planning buildings and their varied facilities.

Mr. Krishnamurthy suggested that the National Building Organization be likewise involved in such a research project.

External Factors affecting Museum Planning: a) Location; b) Climate.

Mrs. Baxi reviewed the discussions of the preceding day, pointing out that even if types of museums differ and their sizes vary, certain requirements were common to all: appropriate facilities for communication of information and for education, for which provision must be made in the building plan. She emphasised that even within a limited budget much could be achieved if care in thinking ahead and in advance planning were applied.

Commenting on the location Professor Lehmbruck stated that it is of great importance. He enumerated the following points to be considered: I) within the city ii) in a suburb, somewhat distant from the city's centre; iii) at some distance, completely away from the town. He reminded those present that older museums almost everywhere had generally been constructed originally outside the city, but with the growth of the urban complex they often now found themselves right in the heart of the city. He then described the advantages of a location far from the city, in an area where people could come for day-long relaxation and enjoyment, thereby deriving greater benefits from their visit to the museum.

Mr. Agrawal recognised the advantage of the out-of-town location for the museum but thought that it had drawbacks in South and Southeast Asian countries: almost no cities had adequate public transport and private cars were rare, so that any distinction location would be impractical. He suggested as ideal that the museum be within walking distance of the city's centre, preferably surrounded by a park, or near one, to provide practical relaxation. Major General Jaganathan remarked that cities like Delhi allow little choice, as no sites for a museum are available in proximity to the city centre.

Mr. K. R. Jani, Senior Architect, Central Public Works Department, New Delhi, added that town planners did not know that museums were needed and so no provision was usually made for them in the Master Plan and no space was allocated for them near the city centre.

Mr. Rana pointed out that when Master Plans were ready for examination by the public, neither museum professionals nor educational and cultural authorities studied them to draw attention to such omissions. Indeed, people in general did not take enough interest to discover what was included in the Plan and what had been left out. They complained only

when they wanted to construct a building and by then it was too late to secure space.

Mrs. Vatsayan remarked that the earlier discussions on needs of museums should not be forgotten, and that choosing a location was rarely left to the museum professionals. Normally they must make use of a site available. For location she suggested that economic realities and the social structure of the community should be kept in mind.

Mr. Agrawal emphasized again that, whether or not the museum director was free to choose his site, he must know the advantages and disadvantages of different locations in order to plan his building with the architect.

Mr. Krishnamurthy warned that air pollution, as in the heart of a city or in industrial areas, should be avoided for museum buildings. Mr. Agrawal agreed, adding that for conservation, fume-free and dust-free ventilation was required. Professor Lehmbruck added that a location in a city does not usually allow for expansion, while the inaccessibility of the out-of-town location was obviously likewise a disadvantage. He emphasised that location should depend on the type of museum, its collections, and its intended services.

Mrs. Baxi, in summary, stressed the fact that location alone did not account for the popularity of a museum ; it was the activities offered by the museum and the publicity given to them, which resulted in the response of the public.

Mr. Rana stated that temperature could be reduced by 4 to 5 centigrade degrees by methods of construction and use of specific building materials, but he did not know how humidity might be controlled.

Mr. Rana explained that by observing the position of the sun at different seasons in a locality it would be possible to plan a building which the sun's rays would not enter directly, just as temperature could be controlled within 4 to 5 centigrade degrees by architectural planning.

Mr. Benjamin suggested that underground space, such as basements, could be developed to control temperature and even moderate abrupt humidity variations in tropical countries. He referred to the Delhi climate, where, in the torrid months, keeping spaces closed during the hot dry day-time hours, in contrast to ventilation needed in the humid periods, was a

traditional answer to the problem of human comfort, but might apply to museum objects also. It also provided protection from the dust of this hot season.

Mr. Agrawal asked the architects if thick walls could contribute to slowing down temperature changes. Mr. Krishnamurthy suggested that the question deserved study and might be referred to the Central Building Research Institute .

Dr. Morley cited examples of buildings designed specifically for temperature and humidity control- 1) modern: the Lalbhai Dalpatbhai Institute of Indology, Ahmedabad, in a region of great summer heat and low humidity in which the architect, Mr. B. V. Doshi, had provided for manuscript storage in the basement area, almost completely underground, except for the high windows, with a lofty ceiling, and surrounded by a "moat", and 2) traditional and ancient, in an even more severe desert climate: the Jain Bhandar in the upper city, the Fort, Jaisalmeer, where the manuscripts library is deep underground, with multiple tight doors.

Various experts suggested use of special building materials and special architectural and other provisions for controlling temperature and humidity variations. Among other suggestions it was stated that "cavity" walls, providing air space between outside and inside surfaces, were probably more effective than hollow bricks. Wooden furniture, carpets, hangings help in slowing down humidity changes.

Mrs. Baxi referred to khus curtains and screens and "desert coolers" to provide moisture in the hot dry climate of Delhi, in the excessively dry summer season, and mentioned humidifiers and dehumidifiers and air circulators of diverse types for help in controlling humidity.

Mr. Rana stated that dust one had to live with in this part of India; its penetration into building could be reduced but not entirely eliminated.

Professor Lehbruck pointed out that dust had two origins: 1) brought in by visitors on feet and clothes; and 2) pervading the atmosphere. The first could be controlled by door-mats, shoe covers, etc.; the second has to be endured. Control of entrances to galleries and of other openings, and especially dust-proof cases were remedies.

To Dr. Haque's query whether floor coverings and curtains could help control dust, Mr. Rana replied that they seemed to him to contribute the

problem of dust rather than controlling it, suggesting the polished terrazzo or stone floor as the best solution for museums.

Dr. Bedekar explained the difference between "circulation" within a museum building, that is relation of spaces to facilitate an unimpeded flow of people through the building, and "routing of visitors", which is directing them from exhibit to exhibit in a deliberate way, in order to unfold a theme or to make sure they saw all essential exhibits.

Professor Lehmbruck remarked that visitors generally dislike a too rigidly controlled routing, but prefer wandering about in a museum according to their own desire.

Mrs. Baxi suggested that subtle psychological guidance could be given to "route" visitors, unconscious of this influence, by various means: architectural arrangement, a path marked on the floor, etc.

Recommendations :

The means of employing architecture for the safest possible conservation of the objects, effectively protective without air-conditioning should be considered, laying strong emphasis on the following factors: 1) preservation of solar penetration and radiation by orientation of the building and placement of entrances and openings, and by provision of projections, baffles and "sunbreakers"; 2) helpful use of building materials and of construction methods effective for reducing temperature, adaptation of traditional practices and methods - underground storage, for example - and, likewise, of indigenous materials to control extremes and variations of temperature and humidity, such as *khus*; 3) planning of adequate ventilation and air circulation 4) provision of fountains and pools as well as vegetation around building to reduce temperature;

Programme of requirements

Science museums, natural history museums, art and archaeology museums have their specific requirements. Science and natural history museums have to fabricate many exhibits and need very large workshops. For archaeology museum the load-bearing capacity of floors is very important due to heavy weight stone sculptures. Movement of such objects needs careful planning for circulation purposes. The large and bulky exhibits like

machines or heavy sculptures also constitute a factor for determining sizes and heights of exhibition galleries.

The concept of museum is rapidly changing due to economic and social pressures, so planning of museums must take into account future requirements, expanding museums and flexible spaces that can be easily adapted to varied uses by the museums.

Museums are not built every day but if they are given a forethought, they may serve the purpose for a long period. The architecture of Museums need consideration and evaluation from three angles- first as a sensation through the eye or the building that contributes to the museum experience; that is how a museum functions and what are the requirements in terms of spaces needed for carrying out various functions and activities. The third aspect is the technical aspect of planning and designing of museum buildings, which allow the specific museum to carry out the functions that contribute to the total museum experience.

B. RECOMMENDATIONS OF CENTRAL ADVISORY BOARD OF MUSEUMS

CABM - Third Meeting Agenda, 1959

Secretary of the CABM on the action taken by Government on the recommendations made by the CAMB at its meeting held on 1960

I) Suggestions from the Government of Maharashtra:

The Board recommended that the following suggestions received from the Government of Maharashtra be referred to the standing committee of the Board for their reconsideration:

a) Plan for various types of buildings for different types of museums be prepared;

The Board considered this item and arrived at the following decision:-

a) The proposal is not feasible since the designs will have to vary with local conditions like light, rainfall, nature of exhibits etc.

II) Suggestions of the Government of Bihar:

That Central Government architect specialised in museum buildings be deputed to those museums who stand in need of his advice in the renovation of their building on modern lines:

Resolved that this is not feasible. But whenever approached by any State Government, the Central Government would try to make available the advice of the Architect Branch of the C.P.W.D.

Agenda - 3rd meeting CABM - 1962

ii. To consider the following suggestions of the Government of Madras:
a) that selected architects may be deputed abroad to study museum architecture to enable them to plan and design museum buildings in India effectively and to adapt old buildings to suit modern needs

Explanatory Memoranda:

At present day, Museum Architecture has developed into a highly specialised subject and advanced. Museum in the West have adopted many novel techniques in designing modern Museum buildings. It would be a great advantage if one or two architects from India can be sent abroad for a year or two for specializing in Museum Architecture so that they may be able to design the new buildings which are being built for museums in India under the Third plan, and also advise how to adapt old buildings to suit modern needs. They may also study in details problem of lighting and interior decoration of Museums thus enabling a better utilisation of the funds available for modernisation of our museums.

Remarks of Secretary: Some years ago at the instance of the Board, the C.P.W.D. were requested to keep in their Architect Branch an architect highly specialized in museum buildings to advise the Central and State Governments and non-Government agencies regarding museum buildings. This could not however be implemented.

Minutes - 8th Meeting of CABM - 1964

Item No.20 To consider the question of laying down austerity standards for museums buildings.

Museums are not built every day or at every place. These are prestige buildings which will be visited by a large number of Indians as well as foreigners and intended to endure for long periods. Being places of public

utility, austerity standards should not be applied to Museums. Economy may be achieved by cutting out ostentations.

Recommendations Experts Museum Survey Committee Buildings

17) An urgent requirement of the Museums in India is for certain repairs and alterations and for more space without which proper preservation is not possible. For this purpose, the first priority should be given to those museums where collections are in danger of being damaged or ruined on account of unsuitable structures.

18) Some additional space must be provided immediately, perhaps by adding a few wings, for reserve collections, working rooms, a photographic section, laboratories and storage, including strong rooms for valuable objects.

19) Most of the museums in India have buildings which are not very suitable for museum purposes. There is an urgent need to prepare some designs of different type for museum buildings to suit the needs of the country. These designs may be circulated to the museums for general guidance.

20) For each museum it is desirable to have a master plan in which the building, developments and the general needs for at least three or four decades are anticipated and provided for.

Decisions reached - CABM - First Meeting 1956

8. Appointment of Museum Architect: Steps have been taken to implement the resolution No.7 of the Board in which they recommended that the Government of India be requested to appoint on their CPWD staff a highly qualified architect who has made a special study of museum architecture and to make his services available at least in an advisory capacity to State Governments and other authorities wishing to construct, redesign or expand their museums.

The proposal to appoint such an architect has been approved by the Government of India. Details of the proposal are under the consideration. This problem of building occurred often. It seemed very general. After much discussion, Dr. Plenderlith suggested that museum curators at least agree on "does and donts" for museum building as guidance for architects.

The Museums Association of India agreed to try to study of what is suitable and functional in Indian climates'.