

Analysis of Significance of Form and Space in Museology Architecture

Gayathri.M¹, Ar.Neeta Mishra²

Amity School of Architecture & Planning, Amity University Chhattisgarh, Chhattisgarh, India,

Abstract

Types of Buildings will be properly justified only through the respective design process. Museology buildings which is socio-cultural have to be expressed through respective typology and by its architecture itself. The design process of Museology buildings is very significant as it endows cultural, educational exhibits which are core attributes of it. Museology buildings are known for Transformed into museum and being constructed in same conventional methods throughout the years but museology architecture have to be given core importance for its design process and it should be presented with respective design properties.

Keywords: Socio-cultural,conventional,educational.

I. INTRODUCTION

This research paper analysis about museums typologies and its methods. The importance of design process in museology buildings are discussed. As all over the world, raising of museum buildings is increasing through new constructions, adaptive reuse and transformed buildings. Museum holds a huge base of cultural and educational attributes to it for the greater exposure of certain culture or community. There has been discussions in regional meeting like what way museum building can be portrayed that it would increase mutual awareness, an instrument for educating people,center for cultural activity or institution reserved for tourists. Two years later, Hugues de varine said an important point that “Culture is being invaded by trade and industries. Collecting art work is increasingly becoming a commercial activity.

Museums which is defined as temple of muses that is Goddess protecting art and sciences. Primary purpose of museums are religions. Considering india, museums existed from earlier times, kings were liberal patrons of art and organised chitrasalas and visvakarma mandir.Throughout the major cities, largest museums are located. While the other local musuems are located in rural areas and small towns. The main goal of museums which has collections ad documentation is to serve researches and specialists, by serving them it also goes to the general public.

In ancient Greece, the museum is also used in the meaning of garden,temple, holy centers or halls of festivals. In 1792,

museum was decided to name the places which keep, protectand present the objects with cultural values, as museums. In 1946, the

International Committee of Museums established in France defined the museum as follows: Museums are institutions for

evaluation, especially for promoting public opinion and education, which are managed according to the interests of the public. In

short, museums are places for displaying and keeping artistic and scientific works or objects used in art and science in a permanent or temporary manner.

A. Aim and Objectives

The Aim is to research about the form and space of the museum building and to go through the analysis of importance in the design process of museology architecture. The objectives are understanding the evolution of contemporary methods in museum, enhancing the knowledge through understanding of spatial and functional aspects of it. To acknowledge the museum as a form of architecture.

B. Research Method

The research methodology includes museums from earlier times and their construction methods followed by transformations of large buildings into museums and exploration of juxtaposition in museology architecture. Hence, concluding the form and shape transformations through the years with inferences of Architects who achieved it in earlier times.

II. ROLE OF MUSEUMS IN EARLIER TIMES

Museums were considered to be collection of art and science works as its growth was increasing. The museums involve truth, thought, beauty, goodness said by a Dutch sociologist. This definition made a change in attribute of the museum that it is not only for the collection of objects, that it also acts as a service centre for the development of society. Back in days, museum was found on different purposes, it used to be a research place for scientists containing the collections of plants and animal parks, objects for studying philosophy. Museums are varied in different timelines through evolutionary changes which are being reflected on the formation of museums. The basic and conventional methods are followed until the revolutions and world war occurred. As going through changes in the society and increasing level of cultural importance, the museums' formations and typologies have emerged throughout the world. Educational importance was high and that turned more universities to incorporate museums within or conversion into museums was being held. Conservation of historical buildings which have been constructed for other purposes and usage have been turned into museums and galleries with displays.

Architectural alterations and transformations throughout the years

As discussed before, due to the timelines and changes happening around the world such as revolutions and world war, the purpose and functions of museums undergone changes in the following timelines:

A. Museums between 19th century and early 20th century

B. Museums from mid 20th century to date

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In 15th century, the oldest building that was built in the basics of making a museum is the V&A Museum, founded by V. Albrect

After that, in 17th century as the educational purpose was increasing due to the collections that resulted in universities in European countries to have collections into museums which became very common. The

Amerbach Cabinet is a large collection of art found in the Kunstmuseum Basel, a heritage museum that was established in the year 1661. It is the world's first university museum, followed later by The Ashmolean in Oxford. Therefore, a private college considered as a public space, was first opened for public use.



Figure 1: Kunstmuseum, Basel, Switzerland



Figure 2: Ashmolean, oxford Source:jagranjosh

In 18th century the french revolution, social development and political factors made a great significance towards the organisations of the museums. Collection of works at royale palace was presented with new idea to the public. Those collections were the personal choices of religious and government officials, noblemen and elites, were opened for public use. The first museum to serve as educational tool for people, the Louvre Museum in Paris. It is found to be one of the oldest and most famous museum in that time period and also folk culture grew by the foundation of this museum. Followed later by Luxemburg Museum in france. Museums were being considered as art exhibition form in palaces and villas until the early 19th century for example: Victoria and albert museum, London.

Neoclassical architecture emerged in 19th century, majorly in Germany. Glyptothek museum, Munich was made in a form like Greece temples endowed with pillars, high plinths and circular shapes of temples. Museums have been taken inspiration from before temple like structures and being made in similar model. Fundamental changes have occurred during industrial revolution which affected the architecture of the museums. The plan of making museums in a palace or temple manner was disregarded. After that, museums were given significant for the aesthetic and functionality design process.

Universalization of art and power of civilization has changed the role of museums in the community. The understanding of role of museum was achieved in the society as it had the opportunity to engage

people with educational benefits, enjoyable , entertaining place. In the stage of 20th century, the importance of science museums were emerging due to the impact of development of industry. Museum architecture was affected due to Second World War and flexibility of usages for different purposes and other changing needs.

B. Museums from mid 20th century to date

The availability and activities of museum was different until this period, allowance of people included the modern consumers but not available for the public. In simple terms, museum places were not active and awaited certain group of society. But today museums are attracting people and has more tasks. The eastern wing of National Gallery of Washington, USA.

The adaptive reuse of old buildings or commercial buildings getting converted into museums were taking place in this century. As the usage of those buildings got lost, to make it for other purpose and useful. The museum of Orsay in Paris is converted from train station into museum being the example of this type of museums. As the new formations for museums was emerging, certain architects took up the initiative for the formation in museum which has functions as core and functions follow form yet bringing out aesthetically appealing form.

III. BUILDINGS TRANSFORMED INTO MUSEUMS







BUILDING	LOCATION	TYOLOGY	CONVERSION	COLLECTIONS	YEAR
Louvre museum 	Paris, France	Historical building	Palace to museum	Art works and Antiquities	1793
Belvedere museum 	Vienna, Austria	Historical building (Residence of Habsburgs)	Palace to museum	Art works	1903
Medieval mile museum 	Kilkenny, Ireland	Assembly Building	Church to museum	Ancient tombs and monuments	1202
Museo balio 	Treviso, Italy	Historical building	Monastery building to museum	Archeological, modern and medieval art works	1879
History Museum 	Quifeng Village, China	Residential building	Communal house to museum	Historic artifacts and documents of the village	2018
Museum of Orsay 	Paris, France	Station building	Train station to museum	Paintings and sculptures	1986

Table 1: Buildings that are industrialised to museums Source: Architizer







Large buildings usage was being lost and got converted into other purposeful buildings. In this, majorly old historic buildings or commercial buildings was transformed into museums. The above Table 1 discuss about such cases of museums which are converted from different typologies of buildings into

museums. The timeline and collections varies accordingly with respect to the community or society where the museum is located. Some of them are altered in the exteriors as well as interiors. Considering interiors, partitions walls are removed for flexibility of movement for the public inside the museum. Some additional activities are added to the museums like restaurants, libraries etc.

JUXTAPOSITION: FORM ALTERATIONS AND ADDITIONS IN MUSEUMS

As centuries got ahead of emerging of alterations and additions in museums was increasing. Infill of modern architecture to the historic old museum buildings was being done. Museum buildings have to be made which would bring matching with the buildings in surroundings. The evolution and modifications that have been made with respect to had not been restricted to the functions of museum. The construction, structural and architectural features of museum buildings.

Until 1959, the converted museums were existing however after that new vision for the museum and its use of space appeared. It became a trend of juxtaposed concept for museum to exhibit the current constructional methods on the old buildings rather than expansion. As the older structures conveys about that time of period construction and cultures as an addition to it, the modern advancements and construction methods have been implemented.

BUILDING	LOCATION	ARCHITECT	ADDITION	MATERIALS	YEAR
Louvre museum 	Paris, France	I.M. Pei	Large scale pyramid	steel and glass	1989
Museum of military house 	Dresden, Germany	Studio libeskind	200 ton Wedge interrupting building symmetry	steel, glass and concrete	2011
Kunstmuseum moritsburg 	Halle, Germany	Nieto sobejano Arquitectos	New roof and towers	metal and glass	2008
Brooklyn museum 	Brooklyn, New York city	Ennead Architects	15,000 square foot Entrance	glass and steel	2004
Royal Ontario museum 	Toronto, Canada	Studio libeskind	5 intersecting crystalline volumes	metal and glass	2007
Museum de fundatie 	Zwolle, Netherlands	Bierman henket Architecten	Modern dome on roof-cloud art	3D ceramic elements, blue and white glazed tiles	2013

*Table 2: Museums implemented with juxtaposition concept
Source: Architectural Digest*

IV. SWITCH IN FORM OF MUSEUMS BY ARCHITECTS




ARCHITECT	BUILDING	LOCATION	YEAR	SPECIFICATIONS
John Russell Pope American Architect	National Gallery of Art, West Building 	Washington, US	1936-1983	<ul style="list-style-type: none"> - Modernised Renaissance - Complex shallow layering of pilasters, moldings, architraves, panels. - Interplay between linear and volumetric. - Materials: Marble, Tennessee pink marble.
Frank Lloyd Wright American Architect	Guggenheim Museum 	New York, US	1956-1959	<ul style="list-style-type: none"> - Spiral formation - Continuous ramp loops around the central large atrium - Materials: Reinforced concrete, white paint, steel and glass for skylight dome
Le Corbusier Swiss-French Architect	National Museum of Western Art 	Tokyo, Japan	1959	<ul style="list-style-type: none"> - Double height spaces are raised on Pilotis. - Vertical circulations is mostly through ramps. - Skylight systems brings natural light into the galleries - Materials: Precast concrete, steel, glass.

Table 3: Architects conversion of form in museums

Source: SAH Archepedia, Dezeen, Archdaily

Conclusion

All buildings have to be designed according to their respective design process, majorly in significant buildings. Museums endows basic and greater culture which has to be portrayed in justified manner. Museology architecture have to be given significance as the needs, types, education of museums exhibits facts, thought, truth and history. Buildings that are turned into museums have to be implemented properly according to the space requirements and changes in the form and shape. Juxtaposed trend in museums have showcased the modern infill in the Traditional building working out both functional and aesthetically pleasing.

As discussed before, subverting the traditional methods of museums, Architects as mentioned above have changed the basic model of museums through form, space, functions and materials. To imprint the current advancements and techniques, implementation of modern architecture and change of conventional methods leaves pathway to make the museums more accessible and suitable for the respective typology of museum. As an Architect or designer to intake the importance of museum needs, typology, culture and society for bringing the balanced method of both cultural yet contemporary.

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