Manifestation Of Pavilion In Historical And Contemporary Context

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Abstract - Past impacts the present and present makes what's to come. The world exists inside the constant progression of time and architecture is no exception. There are various historical element of architecture which has retained the link to the present. The paper focuses on pavilion as historical key spatial element and how the pavilion, can proceed in present and future. This research work attempted to understand the character behind the pavilion as spatial element that leads to adopt with the change in time. This research explores the expression of pavilion in historical context and its application in contemporary architecture through selected projects of Architects. It has been concluded that impact of character of spatial elements has been provided learning from the past in spite of imitation of past irrespective of variation in expression of elements.

keywords - Pavilion, Spatial elements, synthesis, contemporary architecture

1.0 Introduction

Elements are the components or parts and principles are the rules laid down to follow. Space is the one of the element of design. Primarily open, semi-open and enclosed spaces are the types of space in the architecture. There are various elements existing in architecture, which are essential in space making. The spatial elements such as courtyard and pavilions draws people out to open to sky and semi-open space respectively, therefore these elements are the nature concerned elements. Such nature related elements generally absent in the current design and the built environment is artificially controlled in the box type systems. Whereas, various spatial elements have played an environmental conscious role in historical and traditional architecture. In order to achieve harmony with nature, the study of the past elements of architecture is of paramount importance. Pavilion was the one of the significant spatial elements in history of architecture.

2.0 Literature Review

2.1 Pavilions in Historical Architecture

Basically Pavilion is the semi-open structure, supported on columns and covered by roofs. It is a transparent element which provides shelter but does not enclosed. The different functions of the pavilion are celebrating life, religious rituals, pleasure and death. There are different types of pavilion, Madapa for gathering in Hindu Temple, Baradari for pleasure in Mughal complexes and Rajput, Diwan –a –Am for receiving visitors, Moti masjid for prayer, etc.

2.2 Pavilions in Temples.

Pavilion has a modular character. The modular unit includes four columns and a roof. The module might be existed individually or in a group. The repetition of module or multiplication of module gives form to the mandapa structure. Generally it was in the trabeated structure.



Fig.1-Mandapa at Sanchi (Source :http://us.123rf.com)



Fig 2 - Gejjala mandapa ,Hampi Source: india.jpghttp://us. 123rf.com



Fig.3- Madapa at Rankapur temple(Source: ttp://3bp. <u>.blogspot.com/-</u>)

India is a country of diverse religion and cultural groups with strong identity. Buddhism, Hinduism, jainisum and Islam were the markers of Indian cultural identity. Mandapa is an integral part of temple, common element lies in every culture. Fig 1 shows the temple built at Sanchi, Madhya Pradesh. It is a remarkable piece of <u>Gupta architecture</u>. This is an early temple, though lies in ruins today, having the elegant flat roofed Sanchi temple with a pillared porch forming mandapa and a walled sanctum. Fg.2

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represents the mandapa at Hampi, Karnataka of Hindu architecture, while Fig.3 depicts the three storied mandapa at Rankapur temple in Jain architecture.

In Hindu philosophy, prime importance is given to the transitional space. The juncture

between two extremes or two opposites considered to be the best and celebrated also. In Sanskrit, the juncture is called as Sandhis. Mandapa in the temple is the, transitional space or 'in-between' space that links the outside world of man with the Grabhagriha-the

world of God. The degree of enclosure slightly increases and intensity of light slightly decreases in temple architecture. The transition from the open outside world to the dark, enclosed inside metaphysical chamber is reflected in the semi open, perforated space that is mandapa. Pavilion provides the overlap between the spiritual and the worldly experience. The juncture of the two worlds is often enhanced by exquisite decorative details. [Pranali Parikh(2008)]

2.3 .Pavilions in Islamic Architecture

Kiosks or the pavilions are the important features in Islamic architecture, mostly existed in the arculated structure. The example of Indo Islamic architecture is the fatehpur Sikri where elements like courtyard, pavilion, water pond etc. counter the heat.



Fig.4- Panch Mahal in Fatehpur Sikri(Source :Kulbhushan jain)

Fig.5-Fatehpur Sikri Source:http:/www.nicehiliday India.com



Fig.6- Dargah of Sufi saint Shaikh Salim Chisti ,Fatehpur sikri Source:http://www.google.co.in

These elements provide space for public functions during sunny winters and summer evenings. Panch Mahal the pavilion structure clearly conveys the application of modular unit both horizontally and vertically. It is the example of multiplication of module. Fig.6 shows the tomb of Shaikh Salim Chisti at Fatehpur sikri. It is a pavilion structure easily converted into an enclosed space by the use of wooden screen. The transparent Jali works provides privacy and allow view to outside.

Baradari lies commonly in the north western parts of India. The main purpose of baradari is pleasure. It is located on terrace or high points, in gardens ,along water tanks etc. It is provided for good view, fresh air and general comfort. Fig shows the baradari on terrace in Amber fort, Jaipur.

'Chattri' amongst all pavilion forms, usually placed at the highest location of palaces, mosques, cenotaph to provide panoramic view.Pavilion, offers a simultaneous experience of the inside and outside. Open pavilions, not only connect the two spaces but also enhance juncture of the inside and outside, public and private areas. [Pranali Parikh (2008)]



Fig.7- Baradari in jaipur(Source:K.Jain) Fig. 8-Rajasthani Chattris Source :Keneeth Frampton

3.0Methodology

Literature review this paper identifies the character of pavilion through literature review and analyses application of character of pavilion. To analyse the application of historical elements Two architects projects of contemporary period has been identified. Two projects of each architect has been considered as Cases. Case study method has been conducted.

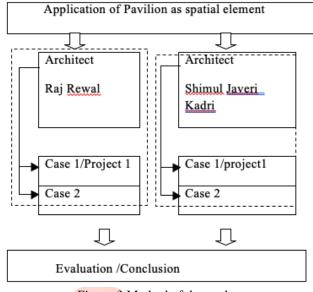


Figure 3-Method of the study

4.0 Application of Pavilion in contemporary architecture

Various architects in contemporary architecture explore the relation between traditional elements and modern design. The incorporation of pavilion element in modern architecture reflected the value of traditional architecture. Master architects such as B.V.Doshi, Charles Correa, and Raj Rewal has used this element in modern expression instead of copying as it in the past.

4.1 Few Works of Architect Raj Rewal

Tradition and innovation always go hand in hand in Ar.Raj Rewal's work.Raj Rewal has great influence of traditional architecture and integrate the historic housing elements.

A. Central Institute of Educational technology, New Delhi (1975-88)



Fig.9 Pavilion at Jahangir Mahal in Orcha Source:http://upload.wikimed ia.org/wikipedia/commons

Fig.10 & Fig 11–Pailion at central Institute of educational Building

Source A.G.Krishna Menon et.al

The central Institute of technology has inspired by the Jahangir Mahal in Orcha. The palace of Orcha consisted a central courtyard in square plan. The receding terraces on the first and second floor provide overlooking the central court on ground floor. The play of solids and voids has created by the configuration of room plus terrace and chattris.

The similar principle applied at Central Institute of Educational Technology. The floor areas decrease as one move upwards and the roof terraces overlooking the central court. The Kiosks, balconies are surrounded by the courtyard.

B. International centre For genetic Engineering and Biotechnology, New Delhi



Fig.12-Pavilion at city palaceFig.12 & Fig.13-Pavilion at centre for genetic engineering and
Biotechnology.(Source: A.G.Krishna Menon et.al)

In Udaipur palace pavilion become the key components of spatial organisation in response to the harsh hot climate and the high sense of privacy. Chhatris-small pavilions impart to construct the Rajput identity. City palace campus at Udaipur overlooks the entire city on one side and is flanked on the other side by the artificially created Pichola lake.

The site for the international centre for genetic engineering and biotechnology is located in the south –eastern corner of Jawaharlal Nehru University, New Delhi. The site is gently sloping away from the approach road on the eastern that links it to the other part of the city and provides a beautiful and panoramic view. [Raj Rewal(2010)]

4.2 Few Works of Ar.Shimul Javeri Kadri (SJK) Architects

Ar. Shimul javeri Kadri is the principle architect of the team of female architects in Mumbai. The works of team are becoming the examples of Modern traditions. Their work connects people, nature and spirituality. The incorporation of pavilion structure influenced from mandapa in temple.

A.Weekend House at Alibaug near Mumbai

It is the nature friendly house at Alibagh, addresses the outdoor. It consist the pavilion like spatial organization and beautiful play of transition. Design is based on concept of madapa. The play of light, dealing with inside and outside is very well done in this residential building.

The design is embedded in nature. The design of roof in a leaf form is very innovative. The concrete leaf –shell supported over the steel columns. The "leaf" roofs open and rise to the north and the east and protect lower and deeper on the south and the west. The lack of symmetry allows for walls to move as needed, open as needed and break into skylights or movable walls when required. This allowed for sun and wind to enter the pod in the right amount, so that quality of indoor light and air is dramatic and comfortable

....[SJKArchitects]



Fig.14,15&16-Houseat Alibhaug Source:http:sjkarchitects.com-Projects-Details



B.Synergy Factory, Karur (Tamilnadu) Karur.(2004)

The intension of architects was not to construct a normal industrial plant but to integrate local with global. The cafeteria around the courtyards is a pavilion like structure combines inside and outside very well. The courtyard allows pleasant temperatures. The team achieved craft and sustainability in the architecture of factory.



Fig.17 Cafeteria at Synegy Factory Karur(Source; http://www.sjkarchitect.com/SJK-Projects-Detail)

C. Four star hotel at Tirupati



Fig.19- pavilion at tirupati hotels Source<u>http://www.sjkarchitect.com/SJK-Projects-Detail</u>

The hotel design is inspired by Tirupati Temple. The pavilion located in the temple tank or Kund. The same principle applied for four star hotels. The Lotus shaped roof at the centre of the water tank is the pavilion like structure. It gives the simultaneous experience of inside and outside and pleasant, comfort environment and view.

5.0 DISCUSSION

Though the form, materials and style of elements in each project has been changed with time, spatial organization has been continued from past to present.

6.0 INFERENCE /CONCLUSION

The results and discussions concludes that the synthesis of traditional and modern is principally based on spatial organization, leads to continuity in today's time and context. Impression of spatial organization has been provided learning form the history irrespective of expression of elements in regards to material, form and style. Integrating the character of the element becomes the

7.0 Reference

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