

# Sacrifices and Opportunities of Museum Design: Circulation and Orientation for Better user Experience

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**Abstract**—In Indian context many important museums are converted museums rather than designed. Museum which were meant for some other purpose but not now being used as a museum are optimal instance of Adaptive Reuse. Search of problems from user point of view can lead us to think in various design dimensions regarding museums. This paper is an attempt to discuss the design issues coupled with orientation and circulation of visitors in Indian museums. The study has been conducted through examining literature study, live study and scholarly writing.

## 1. INTRODUCTION

One of the most important design parameter in context to museum design is orientation and circulation of visitors, the way designer weave all the exhibition halls and services together and help in creating contended experience for the visitors. Circulation is a very important design tool which either encourages or discourages the user experience. Circulation has close association with orientation of visitor in museum and leading them in a desired path. In case of adaptive reuse museum and some designed museum, that design parameter is compromised due to which the visitors tend to mislead in several directions. The circulation path becomes monotonous so that after visiting few galleries the visitor lose interest and visit the rest of the museum just to finish the tour.

## 2. MUSEUM EXPERIENCE

I was in school, the first time I was visiting a museum. Entire class was very excited about the museum but after visiting all of us was very exhausted and some of us were missing. For teachers it was quite a difficult task to find and keep track on all the students. After few years I visited the museum with my family we faced similar kind of problem, we were confused about the sequence and it was very taxing experience.

Then after completing higher secondary education I got admission into Architecture and got chance to visit Dadasaheb Phalke memorial and museum in Nasik. While sitting on a

beautiful Outdoor seating in Dadasaheb Phalke memorial and museum, I realize I had the best experience of museum so far. After synthesizing the memories of museum I realize problem was not with the museum it was with the circulation. Most of the museum in India are not meant to be museum so the scope of manipulating design elements like circulation are less which creates sour user experience.

## 3. DESIGNED OR ADAPTIVE REUSE

Adaptive reuse is used in architecture vocabulary many times, which refers to the practice of employing any structure for a cause which it was not built for. In India there lot of museums which are meant for some other purpose but now due to venerable character it is been converted into museum. When we convert a heritage building into museum the spatial relation built by visitor turns aside because of different struggle like restless, misleading, monotonous circulation to galleries and services provided by the museums. The Table 1 which is given below shows famous museum of India and their design intension.

Table 1: Indian Museum design orientation [1]

City	Museum	Adaptive	Designed
Delhi	National Museum		
Kolkata	Indian Museum		
Hyderabad	Salar Jung Museum		
Mumbai	Prince of Wales Museum		
Chennai	Government Museum		
Delhi	Rail Museum		
Ahmadabad	Calico Museum of Textiles		
Delhi	Shankar's International Dolls Museum		
Trivandrum	Napier Museum		
Bangalore	HAL Heritage Centre and Aerospace Museum		
Udaipur	Bagore-ki-Haveli		
Delhi	Gandhi Smriti		
Ahmadabad	Sardar Vallabhbhai Patel National Memorial		

#### 4. PROBLEM FINDING

Author does not deny the fact that when an old monument cannot serve as a museum but in fact it is great objective where the building itself is an abject to be seen and it house beautiful relevant article. But the building is meant for some other purpose that means the design parameters like orientation and circulation cannot be overlooked. The problem is not limited to adaptive museum but with the design museums too. The circulation and orientation create a sorted experience for visitors and helps them creating a better memory with better learning.

According to Hayward and Brydon-Miller [2] Museum experience begin long before they enter the museum and continue long after they go home; they pass on their experience with their friends and family which again create a virtual experience of the museum without going there. Orientation and Circulation are important in creating spatial bond of space with the visitor.

#### 5. CIRCULATION PRACTICES IN MUSEUM (LITERATURE REVIEW)

The journey where we go can be perceived like a thread that weaves lot of incidents and images together. In building like museum circulation acts like backbone which connects different spaces and weave them together to formulate a functional museum. Below are some circulation practices which are followed in museums. This circulation directs the user in desired path which are eventually followed by the visitor. In the given figure the network circulation is most confusing and misleading, which does not give a clear about the movement in the museum also create confusion among the visitors [2].

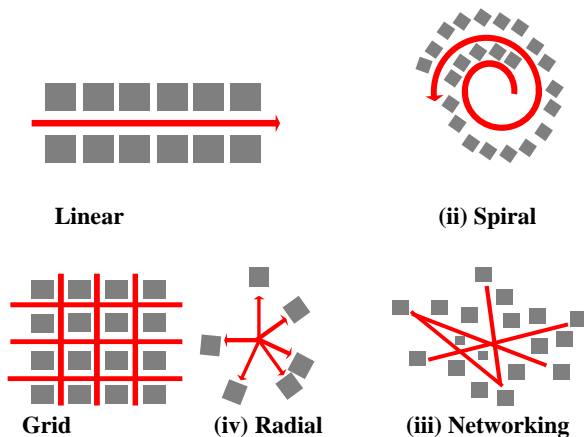


Figure 1: Circulation pattern in museums [3]

There are three major elements to orientation in museum: i) Conceptual orientation ii) way finding iii) circulation. [4]

#### 6. MUSEUM CASE STUDY

The existing museum in India are rich in terms of exhibits and as a building to see and experience but when we roam around or in the museum through the intension of visiting the galleries or accessing the services the circulation is compromised and create problems in orientation. In such case the scope of manipulating circulation and creating interests is challenging task. Old museum building has its own language without even knowing the potential of the building and just converting it into museum; we are not giving justice to the building and the user. The author is trying to compare the circulation and planning of two typology (designed and adaptive reuse) museums given below and concluding the user experience and orientation relation with it.

01. **Adaptive-** Salar Jang Museum dedicated to Nawab Mir Yusuf Ali Khan Salar Jung III (1889–1949), former Prime Minister of the seventh Nizam of Hyderabad. Designed to be Library “Dewan-deodi” later extended museum blocks on eastern and western arms of the museum. (Year of establishment- 2000),
02. **Design-** Dadashaheb Phalke Memorial Museum is dedicated to the legendary figure who was the progressive spirit behind the century old Indian Cinema. Designed to be memorial and museum (Year of establishment- 2000)

The User experience of both the museum is quite distinctive to one another because of the pattern of circulation followed throughout the museum. Circulation and the elements which are adding pause, interest and curiosity to stimulate the urge of going further and not just for the sake of visiting all the exhibition halls just because they have bought the tickets. That notion of interest should not be loose at any point of movement throughout the museum.

##### 6.1 Circulation Analysis to exhibition galleries

- (i) Dadashaheb Phalke Memorial Museum, Maharashtra- designed to be a museum

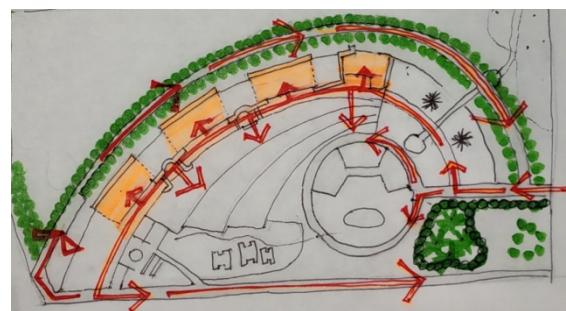


Figure 2: Circulation analysis of Dadashaheb Phalke Memorial [1]

**Circulation** - The sweeping linear corridor connects all the exhibition halls and bridges the indoor spaces with outdoors (Fig 2). It gives an opportunity to the enclosed spaces to look outwards through this sort of transition spaces. The design elements which are added at regular interval in elongated corridor manage the interesting pause for the visitors. The adequate seating on outward edge of the corridor helps the user to compose them.

(ii) Salar Jung Museum, Hyderabad- Converted from palace to museum- adaptive reuse

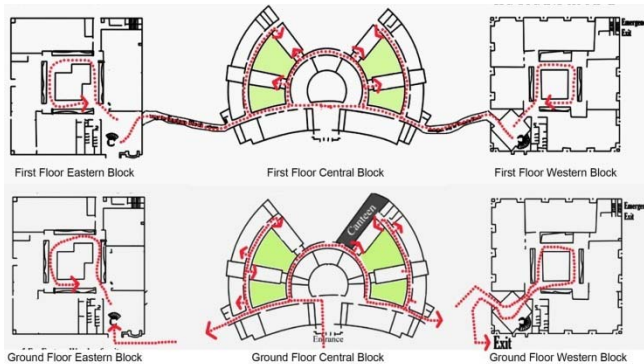


Figure 4: Plans of Salar Jung Museum [3]\*

Note: Circulation analysis on maps has been done by the author

**Circulation**- In contrast to Dadasaheb Phalke museum, Networking Circulation of Salar Jung museum is very taxing for user. The corridor which connects the exhibition halls looks inwards and there is no pauses in circulation which make the circulation path even longer (Fig 4.). All the connecting corridors are quite identical in nature which in turns makes it very confound for the user. The circulation does not have unidirectional approach which gives option to visitors to move in several directions which create confusion. Each circulation has many loose ends to it which lead visitor to dead end also.

The courtyards which are weaving the exhibition hall of central block are quite similar in nature, which makes the circulation even more uncertain for the visitor. Each courtyard rather could converse have different language and help in creating mental repose for the visitors.

Introduction and play of beautiful design principles is much more easy and flexible in a new design, but adding a play of elements in the existing design is very challenging. In old museums we cannot sacrifice user experience while thinking of retaining the image of the monument. There is still possibility of adding some folds to a continuous circulation, there is still possibility of adding some pause to that elongated circulation, and there is still possibility of adding some variance to a monotonous circulation. **Aged design**

(converted museum) should not have scope of sacrifices it should rather speak the language which youthful cannot replace.

## 6.2 Orientation to support facilities

In time of need the facilities and services provided by the museum can meet the crises. The services of the museum include shops, restrooms, restaurant, enquiry counters. These facilities should be blend with the circulation of the museum rather than isolated node in the museum. The facilities supplement the experience of the user as it acts as magnets and a landmark in their circulation which orient the visitors in certain direction.

## 7. CONCLUSION

A length of long circulation path could be reduce by adding some pauses which in turn will reduce the length of mental path which a user has created and will create interest and curiosity to move further. In converted museum the scope of playing with circulation is less in terms of adding or subtracting any permanent element to or from the monument. But with the advancement of materials and technology and know how's of the elements and principles we can address specific solution for particular in design.

**Pause in Design**- Introduction of different elements like Levels, Texture, Light and shade etc can make a prolonged circulation path more captivating. These design elements not only direct people in defined direction but it also create pause for visitors. The pause is very necessary in design to revive visitors and move ahead for the new exposure of provided collection in the museum. This design element breaks the monotony of circulation and orients the visitors in the most obvious manner rather than misleading them which eventually create great user experience.

## 8. ACKNOWLEDGEMENTS

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