



TRANSFIGURING THE USER COGNITION PARADIGM OF CONVENTIONAL COMMERCIAL BUILDINGS

Architecture

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ABSTRACT

In the present context, we tend to continually revolve around two core dimensions within every sector, that is advancement and innovation. The term innovation further leading to the idea of changing the age old perception and creating something new. Elaborating on the same aspect with respect to architecture, most of the user's have a fixed mindset i.e.

If posed with a question of imagining a house within few seconds, we all imagine a small dazzling house having a nice sloping roof that can be probably seen on a hill station. If we say a building, we all imagine the same vertical block depicting horizontal floors. If we say a temple, we all image a intricately carved stone shikhara. Now for instance if asked to imagine a commercial building or an office space then we all perceive the same lavish iconic glass building forming a landmark of a region.

These series of fixed set of visual perceptions or imaginations of a structure forges the need to understand the thrust behind user cognition and postulate a methodology that lends in changing the existing paradigm of cognition which leans predominantly with respect to material rather than form in the context of commercial spaces. This paper deals with the design methodologies apropos cognition of commercial spaces based on qualitative data generated with the aid of survey, interview and observations.

KEYWORDS

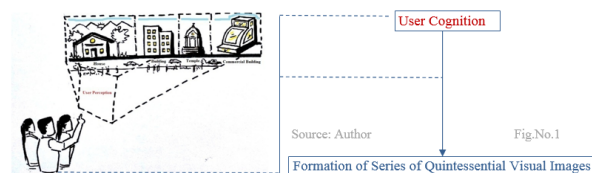
User Cognition, Paradigm, Commercial Buildings, Glass Building

1. INTRODUCTION

The built spaces play a fundamental role in evolving an identity of a stipulated region. They also form a series of visual images guiding the user with aid of references and landmarks leading towards visual mapping of a region. The user being the common man or passer-by formulating recognition to the street or region through a restricted spectrum governed by individual cognition.

The contemporary architectural scenario of urban spaces in India, formulate a series of stereotypical visual images leading to dominant set of cognition pattern concerning with material as an identification base. This in turn resulting in larger assertion of glass clad spaces with minimum concern towards the climatic and environmental aspect, in turn declining the role of built-form in the scrutiny of the user.

A commercial building refers to a space intended to generate profit either from capital gain or rental income which includes shopping complexes, office buildings, warehouses and retail outlets. The paper majorly deals with user cognition of shopping complexes as a commercial space.



1.1 Evolution of Shopping Complexes

The trade and commerce history paved way for the establishment of shopping areas. Initially the products used to be stacked outside forming open market areas and bazaars. The limitation of these spaces being that they did not offer protection from the prevalent climatic conditions. The expansion of the range of goods and increase in demand-supply, the physical structures of the markets began to evolve into shopping streets. The shops were arranged together along different floors of buildings along a street providing covered enclosures for display of goods. But in such cases the circulation spaces of street that formed the central spine of movement were not covered and not protected from the climatic conditions. This led to the further evolution of covered smaller streets creating a semi-open shopping area known as arcades and plazas. These arcades provided climatic protection yet visual connectivity with the street.

The further stage of evolution came with the increase in demand for greater display and storage areas, with new methods of manufacturing leading to development of departmental stores. They included floors with interior corridors and atrium spaces providing access to natural light. The advent of modernization and changing lifestyle paved the

ways for shopping malls. These buildings were planned introvert being isolated from the external streetscape having stores placed along internal corridors.

1.2 Factors of User Cognition

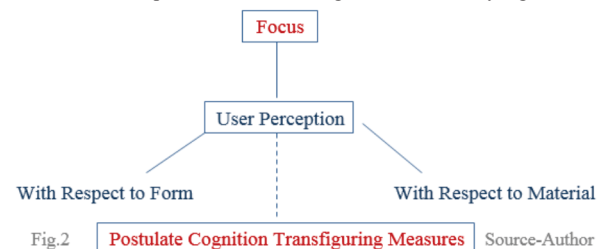
This paper deals with users as the common people or passer-by who perceive built-spaces with minimum sense of architectural perspective. The two major factors that govern the cognition of any entity are its features or elements governed by the form and second being the material. Considering, a built-space with respect to the typology as residential, religious and commercial. On generic basis, it is observed that both the categories of user group, that is, the direct users who are utilizing the space and the indirect users who are the passer-by or pedestrians who are not directly accessing the space have a specific perception in form of a visual image in relation to the space.

2. METHODOLOGY

Qualitative information with the help of Survey and observation of four existing shopping complex at Nagpur (M.S.), India was very useful to analyze the present set of user cognition patterns. The Survey helps in understanding and postulating alternative design methods for transfiguring the user cognition of the contemplated space. The qualitative data comprising of the user perception and visual imaging are considered as per the survey with reference to formulated set of questionnaire for interviewing, data collection and observation.

3. FOCUS OF THE PAPER

The paper focuses on analysis of four existing shopping complexes at Nagpur with respect to its user cognition, emphasizing on the need to postulate varied design methods to transfigure the existing set of visual images in the head space of the users. The paper tries to fortify the thought of transforming the existing user perception in order to enhance the architectural dimension in designing more efficient built-forms which can change the glass façade modules into effective climate responsive forms, which gives prior consideration to environmental aspect while formulating landmarks for any region.



4. Selection of Commercial Complex

The shopping complexes considered for the purpose of survey were selected from Nagpur (M.S.), India. The geographic coordinates of

Nagpur are Latitude: 21.15 and Longitude: 79.08. The spaces selected are located at four varied zones catering towards the recreational needs of the entire area within the city.

Commercial Complex Location	Site Map	Built-Space Image
1.Eternity Mall, Sitabuldi, Nagpur		
2.Jaswant Tuli Mall, Kamptee Road, Nagpur		
3.Central Mall, Shankar Nagar,Nagpur		
4.Emress Mall, Cotton Market,Nagpur		

5. Data Collection

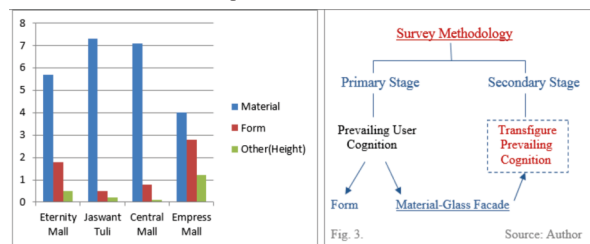
The qualitative data collection to access the existing pattern of user cognition was done with the aid of survey questionnaire and interview. The survey was conducted in two stages. The first stage included objective questionnaire for implementation of survey methods to gather the primary data in form of existing set of user perception, to analyze the modus operandi of solidification of perception. The initial data collection helped to access the observation skills of the user group within the streetscape.

The preliminary stage of survey gave a clear idea of user cognition with respect to form or material. The second stage of survey included subjective questionnaire comprising of pictorial representation of varied forms and the user were required to identify those forms by stating an adjective or word. The survey was conducted at three different time brackets of morning, afternoon and evening for a week at all the four locations. The data of 80 user's from each location, that is 320 total user's was considered to formulate the primary base of the study.

6. Primary Data Analysis

The data collected in the initial stage of survey included questionnaire for the assessment of the overall observational and perceptual skills of the user group by posing questions like-Which landmarks do they easily recognize on the stipulated street? Which feature of the commercial complex, do they easily identify with? How will they narrate the address of the built-space to a stranger? What do they recollect easily about a commercial space-Its material or form?

The data collected from the user's at all four locations was collectively evaluated to discern the predominant user cognition base on a generic basis. The statics shown in Fig.3 as shown below clearly indicates the fact that the major user cognition with respect to commercial buildings was based on its material as glass rather than its architectural features or form. These set of visual images lead to the loss of peculiar identity of the stipulated built-space and paves way for generic thought process in case of commercial complexes.



7. Requisite for transfiguring User Cognition

The initial survey results portray the predominant base of user

perception apropos material, which poses a necessity to configure the design methods on the basis of which the recognition of a built-space can be transformed with respect to its architectural feature or form. This paper attempts to postulate measures that can be implemented to transform the generic perception of commercial complexes with respect to form, enhancing the role of an architect in building the identity of the streetscape with the help of identifiable architectural elements or forms rather than identifiable materials. This lead towards the secondary stage of pictorial survey based on formation of four categories of easily cognitive forms derived by the aid of – Relatable Things, Relatable Solid Geometric Shapes , Relatable Alphabets and Relatable Voids.

8. Secondary Stage of Survey

The later stage of survey was conducted to evolve generic perception. As visible in Table No.2 and Table No.3 below, the preliminary step was to display few other images of commercial complexes from varied locations and enquire the user about their cognition in one word or statement. This further dealt with solidifying the scenario of identity crisis and material based cognition.

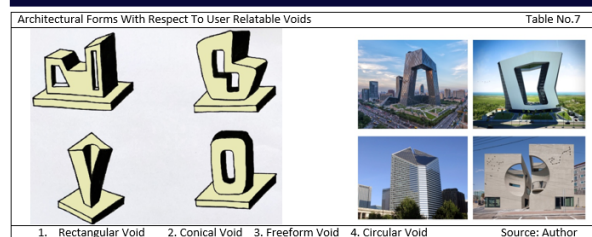
Architectural Forms- Existing Commercial Complexes		Table No.2
		Source: Google
1. Phoenix Marketcity, Mumbai	2. Sun City, Vasant Square, New Delhi	
Architectural Forms-Existing Commercial Complexes		Table No.3
		Source: Google
1. Orion Mall, Bangalore	2. City Center, Hyderabad	

The second step included display of four set of pictorial survey images based on user cognitive forms categorized under four heads of easily identifiable things, geometric shapes, alphabets and voids as shown below in Table No.4, Table No. 5, Table No. 6 and Table No. 7 respectively. The expected outcome being that the user had to describe about their cognition in a word or a statement in order to analyze and understand the process of evolution of perception.



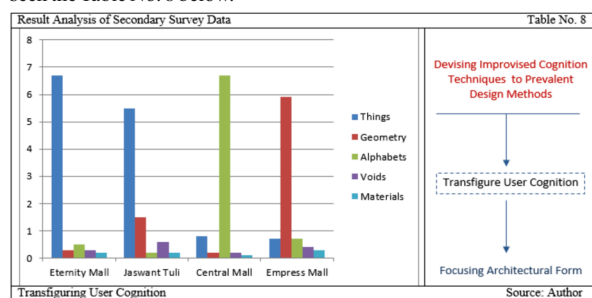
Architectural Forms With Respect To User Relatable Things		Table No.4
		Source: Author
1. Staircase	2. Egg	
		Source: Author
3. Birds Wings	4. Hourglass	

Architectural Forms With Respect To User Relatable Solid Geometric Shapes		Table No.5
		Source: Author
1. Cube And Cuboid	2. Cuboid	
		Source: Author
3. Sphere	4. Trapezoidal Prism	



9. Secondary Data Analysis

The user description for second set of pictorial images was in form of its architectural form which the user's could relate and describe with ease. The focus of perception was deviated from material specific scale of judgment to identifiable forms based scale of cognition, as it can be seen the Table No. 8 below.



10. CONCLUSION

The work presented in this paper aimed to contribute towards the understanding of prevalent User Cognition with respect to commercial buildings in India, and attempts to address the issue of lack of distinctive architectural identity within the observational domain. The paper further tries to the provoke thought of transforming predominant design methodologies and evolve design techniques based on rectifiable iconic forms that can linger within the user cognition, enhancing the stance of an architect within the design of commercial built-spaces.

11. REFERENCES

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