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Scope of invisible architecture in Indian architectural context

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Abstract - *The idea of "invisible architecture" is put forth and investigated in this study as a way to interpret the city in the nineteenth century. The unobserved framework that keeps the modern city together and enables it to exist as a notion despite being impossible to fully understand is understood as invisible architecture. It has two sides: one that is restricting and stabilizing, and the other that is varying and utopian.*
In this approach, the thesis is concerned in the material and spatial basis of ideology, as well as the ways ideology can be disrupted or twisted. It also seeks to establish a relationship between unseen architecture and two other types of unconsciousness, including Walter Benjamin's "optical unconscious" and the psychoanalytic unconscious, which is interpreted through Freud and Lacan. The study also examines the continuing value of Benjamin's Arcades Project (1927–1940) for the literature of nineteenth-century cities more generally.
Key Words: *Glass, Architecture, Optical*

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I. INTRODUCTION

What is architecture that is invisible? It is what keeps the modern city together as an idea, but also what prevents it from existing as an united and knowable thing, as it means there is always some element of the city which is hidden. It often hides or suppresses undesirable aspects of capitalism, such as the ties between the rich and the poor or wealth and waste, but it also creates a place for potential reimagining or reshaping of the city. It has two sides: the first is utopian, erratic, and destabilizing, while the second is reactionary, paranoid, ideological, and militant. 1 By restricting and guiding visual perception, invisible architecture in particular organizes urban space.

II. LITERATURE STUDY

This study was carried out using literature reviews, including the author's prior research, and it is given in a descriptive way.
Green architecture was explored for the author's master's thesis, while the invisible in architecture from Rapoport'senvironmental behavior perspective was studied for the author's PhD thesis.
When referring to buildings, the terms "green building" and "sustainable building" refer to those that are designed andbuilt with as little negative environmental impact as possible.

III. CASE STUDY

3.1 OPTICAL GLASS HOUSE / HIROSHI NAKAMURA & NAP

The location of this home in the heart of Hiroshima overlooks a street with lots of moving autos and trams. It is nestled among tall buildings. On the street side of the house, we built a garden and an optical glass façade to create solitude and peace in these surroundings. All of the rooms have views of the garden, and the quiet soundlessness of the trams and cars passing by adds richness to home life. Through the glass, the easterly sun's reflection produces lovely light patterns. Water patterns appear on the entrance floor when rain falls on the water-basin skylight. On the living room floor, filtered light from the garden trees flickers, and a super-lightweight, sputter-coated metal curtain flutters in the breeze. Despite being near a city's central business district, the home offers inhabitants

.

Fig -1:

About 6,000 pure-glass blocks (50mm x 235mm x 50mm) were used to create the façade. The pure-glass blocks' high mass-per-unit area effectively shuts out sound and allows for the construction of an open, visibly artistic space. Glass casting was used to create extraordinarily high transparency glass from borosilicate, the primary ingredient in optical glass, in order to build such a façade. a landscaped garden with views of the city.

The casting method was extremely challenging since it needed both great dimensional accuracy and a slow cooling process to eliminate any remaining stress from the glass. Although the glass still had some surface asperities even then, we actively desired this effect because it would lead to some surprising optical illusions in the inside.

Fig -2:

The 8.6m x 8.6m façade was so large that it could not have been built using only rows of glass blocks that were 50mm deep. As a result, we drilled holes in the glass blocks and strung them on 75 stainless steel bolts that were suspended from a beam above the façade. Nevertheless, as such a structure would be susceptible to lateral stress, we additionally strung on stainless steel flat bars (40mm x 4mm) at intervals of 10 centimeters in addition to the glass blocks. A homogeneous 6mm sealing junction between the glass blocks was achieved by seating the flat bar within the 50mm-thick glass block, making it invisible. The end result, whether viewed from the street or the garden, is a transparent façade. The facade resembles a waterfall.

Fig -3:

3.2 MOSES BRIDGE, NETHERLAND

In the southwest of the Netherlands, there is a defense barrier known as the West Brabant Water Line that consists of a number of fortified cities and towns with inundation zones. It was built in the 17th century, but it wasn't repaired until the 19th. An access bridge across the moat of Fort de Rover, one of the fortifications, was required when the water line was finally repaired. This fort now serves a new, recreational use and is situated along various biking and hiking routes.

It is, of course, exceedingly wrong to build bridges across the moats of defense works, especially on the side of the fortress the enemy was expected to appear on.

Fig -4:

The ground and the water are so close to the edge of the bridge that it cannot be seen from a distance. The fortification becomes visible to you as you draw nearer through a little trench. Then, like Moses' walking on the water, you can approach its gates.

Fig -5:

The ground and the water are so close to the edge of the bridge that it cannot be seen from a distance. The fortification becomes visible to you as you draw nearer through a little trench. Then, like Moses walking on the water, you can approach its gates.

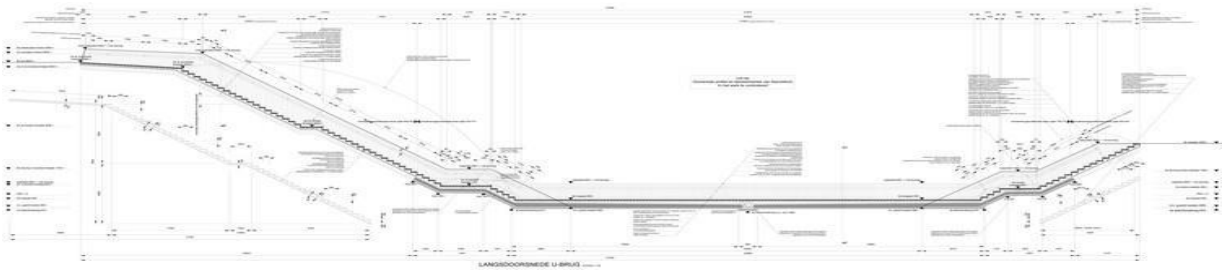

Fig -6: Bridge section

Sample paragraph Define abbreviations and acronyms the first time they are used in the text, even after they have been defined in the abstract. Abbreviations such as IEEE, SI, MKS, CGS, sc, dc, and rms do not have to be defined.Do not use abbreviations in the title or heads unless they are unavoidable.

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IV. ANALYSIS OF CASE STUDY

PARAMETERS	OPTICAL GLASSHOUSE	MOSES BRIDGE
AIM	The main purposeof this project IS to encourage the invisible architecture through the use of	Tis project highlightshow structure can bemade invisible by creating the major
	transiency of theglass.	part of the bridgeinside the water.
MATERIAL	Glass	Wood
PROJECT YEAR	2012	2010
ARCHITECTS	Hiroshi Nakamura	RO AND AD
AREA	385 M. SQ	50 M. SQ
MANUFACTURER	Equitone	Accoya
COUNTRY	Japan	Netherlands

Table 1 Analysis

V. CONCLUSIONS

INVISIBLE buildings have a number of benefits, including cheaper operating and maintenance expenses, higher interior environmental quality, decreased waste, increased comfort and productivity, and savings on energy and water. Despite this, there are several drawbacks to the building's architectural design that go beyond energy efficiency and environmental quality. The inactive components of structures and environments that are essentially invisible exist in architecture. These locations have dealt with issues like reduced function, less visibility, and less maintenance. It is possible to lessen the invisible in architecture by taking into consideration spatial order and basic architectural order in a significant degree, in addition to taking human behavior into such account.

Additionally, it can be used to lessen or even prevent resource waste, inefficiency, and the loss of the green value. If implemented in a significant way, the straightforward and antiquated theories of architecture can really aid in the resolution of contemporary issues, especially those that are unseen in relation to the conflict over green architecture.

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