

Minimalism in Architecture

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Abstract: Minimalism is a style of architecture. The aim of the research is understanding minimalism and its influence in contemporary life and defining relation of this phenomenon to the reality. After World War II, Minimalism became the basis of many designs, especially in Europe. Because of the destruction caused in World War II, there was a need of minimalist architecture to redevelop the cities. This is the reason that minimalist architecture became more in trend in the current lifestyle. Therefore, this study deals with the elements, principles and characteristics of minimalism. Moreover, this paper also discusses the research on the planning and designing concepts of the architects involved in minimalist approach and the construction procedures of the buildings. Case studies and analysis of several works of minimalist architects are undertaken to know about their thinking behind the project. The conclusion includes understanding minimalism as a way of thinking and a lifestyle.

Keywords: Minimalism, simplicity, aesthetics, form and function, minimalist.

1. Introduction

Minimalism is about simplifying an equation of design to its clear and simple form. Simplest and fewest elements are used to create the maximum value. Minimalist architects and designers focus on the connection between nature and the form in an architectural design. Minimalism can be seen as the reduction of architecture to its most basic concept of space and mass. Its central theme is to rationalize, simplify and reduce the form subtracting from its shaped character, without the form losing its purpose, and identity.

The late 20th century saw many minimalist designs by designers and architects to achieve best possible design which is simplified and aesthetic on its own.

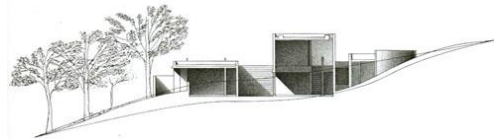


2. Related work

A. Literature review

1) Koshino house by Tadao Ando

The Koshino House, an architectural masterpiece, by Tadao Ando, a famous Japanese architect was originally made up of two parallel rectangular concrete boxes. In the second phase, a fan shaped extension which now contains atelier was added.



Front elevation

B. Concept

He gradually opened up the closed box, allowed interior and exterior spaces to communicate through gaps in the walls and between walls and the roof, and organized carefully worked-out spaces. The expressive themes became the fine texture of walls and dramatization by means of light; he began to use topography even more flexible in organizing space.

Principles of design used in koshino house:

- Asymmetrical balance
- Alignment
- Hierarchy
- Scale & Proportion
- Unity & Harmony
- Pattern repetition

Some minimalist elements:

- Simplicity in form- It is a concrete building, beautiful and relaxed in the midst of nature. Simple geometry is used in the form.
- Natural Lighting- Light enters through a sky-light between the wall and the roof, illuminating a curved

wall; a large window has been opened in the living room wall. The interior is gradually assimilated into the beautiful landscape.

- Connects with nature- There is a terrace between the two buildings—an outdoor living room where one can fully appreciate the abundant greenery. Ando suggests a life in which the occupant is made continually aware of the richness of nature on a spacious site surrounded by trees.

1) *Crown hall by Mies Van Der Rohe*

Crown Hall is one of 20 buildings designed by Mies van der Rohe for the Illinois Institute of Technology (IIT) in Chicago. This is the centerpiece of a masterplan for the campus founded in 1940 that covers approximately 50 hectares, the highest concentration of works by Mies in the world.



Features:

- The suspended roof, with no interior columns, created universal space that could be used for different purposes.
- He used of off-the-shelf components, including standard glass panes and steel I-beams, made the building economical to construct.
- Carefully-proportioned, repetitive elements of the exterior convey both uniformity and precision of construction.
- The design is seemingly simple. Mies described the building as “almost nothing.”

3. Inferences

The following inferences are drawn after completing the

study of concepts of minimalism and analyzing the works of Mies and Tadao Ando:

- Minimal design can only be achieved when only those elements are included which are adequately important and omitting needless elements.
- Materials are most important aspect as they help in defining the space and deriving the purpose and function of that space.
- Lighting and colors are key to define a space designed with minimal approach. Lighting is used for highlighting certain elements while colors are used in such a way that they bring out an expression out of the space.
- Minimum use of opaque materials like concrete and bricks to achieve a structure that responds to nature.

4. Conclusion

As we study the above data, the conclusion comes that we need to create spaces that respond to human needs and connects with nature, simple material and geometry is used. It can be concluded as maximum space with minimum design. It reduces form, material, connection, texture and color to their most basic levels. Lighting stands out as one of the most important element of minimalism, even natural or artificial usage of lighting and taking the natural light through interior spaces is most common point in minimalism. Correct usage of openings is of great importance to illumination and circulation between indoor and outdoor space.

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