Interpretation of Minimalism in Architecture According to Various Culture

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Abstract:- Minimalism is agreeable as a cultural definition that has an aesthetic approach towards various fields. Since the 1960s, minimalism has been a common movement of art, architecture and lifestyle. Minimalism is a name used to define arts that flourish in content and form with simplicity, as well as a sign of private expressiveness. Minimalism is recognized by reasoning as concept of culture. The modern culture is somehow impregnated by minimalism. Simplicity in architecture allows the user's/ viewers to experience and grasp the work instantly. Necessary elements in architecture to achieve a simplicity design is limited no. of. materials, play with light, color, and geometric forms and most importantly removing the minor elements to highlight the major elements. The idea of this study is to comprehend how different cultures have diverse understandings towards minimalist architecture.

Key words: Minimalist Architecture, Culture, Interpretation, Western, Japanese.

1. INTRODUCTION

From 1960s, minimalism has been a common movement of art, architecture and lifestyle. Visual arts and architecture are differentiated and conveyed at one of the points is modernism as a category of art-object (Macarthur, 2002). It is reasonable to say that minimalism is a self-aware version of modernism where it reflects the current way of life. Minimalism concentrated on the most essential elements and a form's simplicity and it is believed to be evolved from the modern movement whereas few philosophers tend to disagree by indicating that minimalism is indeed very closely linked to a user's lifestyle and culture. Japanese architecture becomes to be one such aspect. Minimalist architecture is regarded as a very influential style. The minimalist architecture has indeed been influenced and affected by traditional Japanese architectural style. Japanese architecture is known for its appreciation of simplicity in its lifestyle, culture and architecture which is based on the idea of minimalism of not overdoing things and only including, focusing on what is needed. Minimalism is a movement by western society (America). It was influenced by various things that originated before it such as the De Stijl art movement, Bauhaus art school. Reflecting and emphasizing lines, light and simplicity is a well-known concept of Japanese architecture. Minimalist approach towards building is not only about concentrating on the physical appearance but also on the users, their lifestyle and the surroundings which will affect the design of the space. One of the early architects who practiced and supported minimalist architecture is Mies van der Rohe (Stott, 2019) who labels it as the notion of being "Less is More" which is usage of elements to its absolute minimum. As per theorist Jenks (Ch. Jenks, 1997) saying, the conclusion of neutrality among various architects is due to the lack of ideological convictions.

This research focus on literature reviews that highlight the meaning of minimalism and its relationship with various cultures. Further studies were then carried out on case studies of minimalist architects to get a clearer view how minimalist architecture has translated into contemporary architecture of today.

2. ARCHITECTURE AS A CULTURAL REPRESENTATION

Many cultures promote simplicity as a motive that is to be followed which is very true as far as Japanese culture is considered as it promotes Zen philosophy. Culture represents people's motive, values, beliefs. Culture also expresses people's way of living. As it was mentioned earlier, various opinions on minimalism were seen at that time and minimalism was practiced extensively in some places whereas in other places minimalist architecture was not appreciated. This explains that culture plays a major role in the thought process. The values, beliefs are passed on from generations to the next by practicing it. Thus, even when migration happens people still hold on to their culture. Hence indicating that culture does influence people's life and their attitude towards many things (Vasilski).

From the above information it is safe to say that interpretation on minimalism differs according to their cultural. For example, Japanese culture includes Zen cultural elements in its architecture to achieve an aesthetic design (zen-philosophy, n.d.). Their aesthetic principles are Zen Philosophy (Moral Freedom), Ma concept (Emptiness), Wabi-sabi (Voluntary Poverty) which we will look into in detail. These principles of Japanese culture greatly influenced minimalist architecture in the early times. Architecture has the ability to display in what way our values and tradition of culture determines our everyday life (minimalism-zen-and-simplicity-in-design-a-movement-that-changed-the-world, n.d.).

Few examples to prove that culture is indeed an important factor is the hardness of work produced in Switzerland is derived from its culture and character of the place and as it also extends to Austrian architects such as Casper Mueller Kneer (Figure 1) and Eberle Baumschlager (Figure 2). Overall, when culture influences architecture, it will somehow allow people to explore

life's meaning through architecture. At some point, all these aspects were affecting and connecting with each other, resulting in different minimalist interpretations.



Figure 1: White Cube, Berlin, Germany (2008) (jeff_wall_masons_yard, 2007) © 2019 White cube

Figure 2: ETH e-Science lab, Zurich, Switzerland (2008) (baumschlager-eberle-eth-e-science-lab, n.d.)

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3. THE INFLUENCE OF VARIOUS CULTURE IN MINIMALIST ARCHITECTURE

Modernism in the Western society is the result of technological development, humanism and newly formed organizations. It was an emergence of philosophies and breaking down of rationality and identity. It brought in various changes in eliminating the traditionally agreed concepts. Western society has its own culture and traditional concepts but it does not solely depend on it to validate itself. In attaining the modernity, the traditionality was thoroughly put into test and was found that its flawed. This was the root for every modernity project in the society.

The Western interpretation of modernity is increase in knowledge of technology and science which gives out a change in the social system. Modernity is devoid of traditional values, norms and atmosphere. Christianity was one of the first religions that accepted modernity in their lives. Many scholars like Max Weber, Cyril E. Black, Samuel Philip Huntington has different opinion on modernity among others as they stressed upon institutional features. According to Max Weber (Max Weber, 2007), there were social modernity and cultural modernity. In the Western society, there were different conceptualizations for modernity. Modernity rise is due to the intellectual knowledge and the social force.



Figure 3: Church on Water by Tadao Ando (Sveiven, 2010)



Figure 4: Faulkner larchitects - Phenonemology (Bowman, 2018)



Figure 5: Salk institute, Louis kahn (louis-kahn, 2014)

Japanese culture which is linked to the concept of Zen and simplicity is always connected with Japanese design. Japanese architecture and design have always used clear cut lines and forms, simple colors and designs. Minimalist architects are heavily influenced by Japanese principles and design. For Japanese culture, less is always more and this concept has been followed for ages. This way of life was embraced by Japanese minimalism and the people did the same as in return, even though there are today instances of extreme aesthetic devotion that extends beyond the already rare values of maintaining only what is needed (Stevanovic, 2014).

Western society was heavily influenced by Japanese minimalism theories, mainly in America in the 18th and 19th century and the needs of Western society and design matched with their ideas. For example: Frank Lloyd Wright who enabled interior and exterior to merge with each other by using the Japanese sliding door concept. Japanese artistic ideals are searching for underlying beauty in objects, providing their natural form importance. Japanese minimalist architecture focuses on the essence rather than the appearance (Breyer, 2017). The Western minimalist architecture focuses only on the building and not the

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surroundings unlike Japanese architecture where it integrates its design with the nature. It is understood that Japanese architecture and its ideals are closely connected with its people, culture and tradition.





Figure 6: Moriyama house (Mairs, 2017) Figure 7: Framing house, form (framing-house, 2015) © Yoshihiro Asada

4. MATERIAL AND ITS EFFECTS

Materials plays a major role in a building's vibe and appearance. Minimalist architecture is all about using very few, simple and straight forward materials in exterior and interior of a building. Modernism led to the introduction of materials such as glass, concrete and steel. Many minimalist architects namely John Pawson and Tadao Ando relied greatly on glass and concrete to create strikingly simpler structures. The façade of a building can largely influences an individual's perspective towards it. Minimalist architecture focuses on the simplification of form and then the attention is shift to the materials, surface and details. A building's strength is also how immediate an individual's response is (Koppelberg, 1993).

Innovations in minimalist architecture is also because of materials like glass, steel, and concrete as the challenges it brought in was high. Glass as a building material is an apt choice for a minimalist building as it gives a sense of openness, brings in light, transparency and is invisible if need be. Many architects' masterpieces used glass as the main material. Due to its transparency, glass can give out the illusion of a large space. In the present-day scenario, there is a limitation of space for buildings where using glass will make it look larger and the amount of light brought in is maximized. Concrete gives the building a raw atmosphere and is a trademark material of modern minimalist architecture.

In the 1980's, a warehouse named Ricola storage building (Figure 10) was constructed with minimalistic approach that had equal simple volume designed by Herzog and de Meuron. The building was a prism in rectangular shape with deck on one side of it. The building looks windowless and door less, it looks devoid of any emotion but still attractive. The stacked horizontal lines in the façade used fiber cement cladding and timber posts. It heavily gives out the impression that if touched, it would collapse anytime giving out a shuttered vibe. Two main minimalistic approach in this building is the wise use of materials and simplicity.



concrete (mike, n.d.) Photographer: Iwan Baan



Figure 8: Minimalist house made of Figure 9: University of Ottawa, Ontario Figure 10: Ricola storage made of glass (maximizing-space, n.d.) Copyright © 2019 Hanley Wood Media, Inc.



building (Franklin, n.d.)

5. CASE STUDIES OF MINIMALISTIC ARCITECTURE IN VARIOUS COUNTIRES

5.1. CASE STUDY I: SECULAR RETREAT, DEVON, UK

Secular retreat is a holiday place with an area of 365 sqm being the first permanent building of the Pritzker prize winning architect located in Devon, UK. The furniture in the house and lighting are specially designed by Peter Zumthor. It consists of five bedrooms, holding ten guests of all ages at a time with en-suite washrooms.

5.1.1. Architect's principle -Laureate Peter Zumthor, an architect based on Swiss is known for his place-based attention and sensual materiality. His work values the experiential characteristics of each building over the technological, cultural and philosophical focus that his contemporaries often favor (peter-zumthor, 2019). The architectural style of Zumthor may personify the values of phenomenology, a belief in the primacy of architectural sensory and experiential characteristics inspired by Martin Heidegger's philosophy. His work had a resounding effect on the architectural globe. His structures are mysterious and enticing, but they do not display any indications of style or preconceptions of form. His issue relates to context, experience and materiality and not aesthetics. Maybe this is his most important contribution to architecture: a truly meaningful place and experience architecture.

5.1.2. Planning layout - The retreat house layout is very simple and a large open plan, all placed on one storey (Figure 11). There are two chambers – one chamber with two bedrooms, the other with three – and each bedroom has its own en-suite toilet in the middle of the 20-meter-high pine trees. Where the two chambers meet, there is a generous living room, including a kitchen, a seating area around a fireplace, and few quiet sitting areas where guests can enjoy solitary actions such as reading or listening to music (Figure 12). The botanical diversity in the garden is a highlight, with 5,000 local species of trees and bushes included in the plantations (Frearson, peter-zumthor, 2018). The landscape and garden are central to the idea of the house in tune with Zumthor's strategy

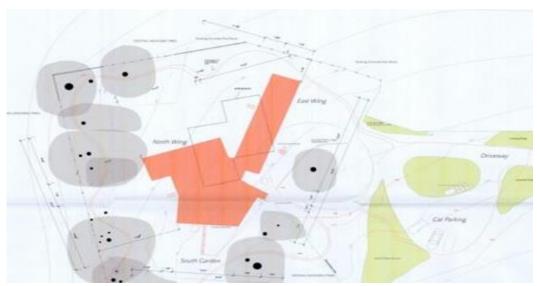
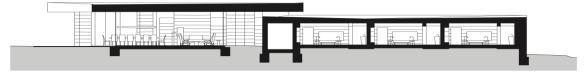


Figure 11: Secular Retreat concept plan (Fulcher, 2012)



section AA

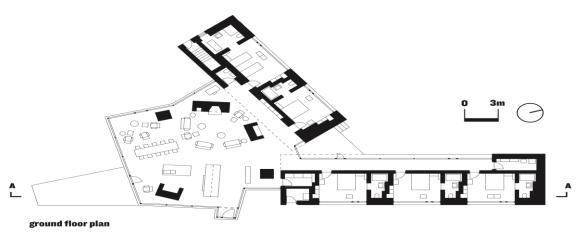


Figure 12: Secular Retreat layout plan (Mollard, 2019)

5.1.3. Material usage and details

Zumthor is known for his craftsmanship and materials use skills, which gives eternal value to his structures. The architectural vision and ambition have been uncompromisingly implemented and is tribute to a dedicated and hands-on client, engineering knowledge and a team of regional craftsmen engaged to construct this house. Concrete, glass, wood and stone floors are the major materials used in the house (Figure 13 and 14). It is a ground-breaking and creative use of rammed concrete. Rammed concrete is comparable to rammed earth, but as a binding agent instead of clay, lime and cement are used. The blend adds water, which is poured into a mold and would then be compressed manually or with hydraulic rams.

Furthermore, the building indicates a feature that is often connected with architectural seriousness, that the structure of the masonry is noticeable and naked, that all you see is really what backs it up. The carefully designed door joinery, inset racks, closets and kitchen furnishings, all produced from apple and cherry woods, brings warmth and contrast to the handcrafted concrete walls all around.





Figure 13: Exposed hand-crafted concrete done horizontally (Frearson, peter-zumthor, 2018)

Figure 14: Living space (secular-retreat, n.d.)

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5.2. CASE STUDY II – NEW MUSEUM, NEW YORK, UNITED STATES

New Museum of contemporary art completed in 2007 is designed by a Tokyo based firm called SANAA - Rye Nishizawa, Kazuyo Sejima located in New York, United States with an area of 58700 sq. ft. The New Museum of Contemporary art is a building of preciousness with a clear concept and robust impact. It is an eight-level structure with seven floors. The New Museum is the result of an audacious vision of establishing in New York City a radical, politicized center of contemporary art. The museum's name epitomizes its visionary spirit in order to differentiate itself from the current art organizations of the city by focusing on young artists.

5.2.1. Architect's principle

Japanese architects established SANAA (Sejima and Nishizawa and Associates) as founding partners. They have designed structures that have been appreciated for their sophisticated simplicity, spatial fluidity and conscious inclusion into their environment (Kazuyo-Sejima-and-Ryue-Nishizawa, n.d.). They have been granted the Pritzker Prize in 2010, becoming so honored as only the second partnership. Their work represents its adaptability affinity. The differences in design convey an urge to connect and work with the natural world, with a key feature being bold shapes. Their architectural works are defined as "deceptively simple". They discover the phenomenal characteristics of continuous area, lightness, transparency and materiality like few others to develop a delicate fusion. The works of SANAA are very straightforward.

5.2.2. Planning layout

The design of the museum is done in such a way that it blends with its surroundings. Lower Manhattan, with its square blocks and structures, can be regarded as a starting point for the picture of the Museum (new-art-museum-sanaa, 2010). It answers to the neighboring boxes and places them in different sizes and heights one on top of the other, as the plot was a park composed of cubes. The museum design is of shifted volumes that enables terraces and skylights while maximizing the zoned envelope and wall space. Seven boxes of differing sizes, stacked vertically around the center. Using the permissible floor space permitted by the zoning envelope, the architects prevented the room to move these boxes off-center and produce a complex interaction between the volumes. The building's innovative architecture was designed to create a distinct architectural character that embodied the client's creative philosophy.

5.2.3. Material usage and details

The materials and the design of the façade play a key role in having to be a light and clean subject in the vast cityscape of Manhattan. It is not unique or unfamiliar to most designers to choose a layer of anodized aluminum mesh on top of the white walls. In an angular structure covered within laminated glass with metal mesh, new facilities will be installed (Figure 15 and 16). The layout is supposed to be complementary but distinct from the building of SANAA, which involves masses that are irregularly stacked, often covered in metal mesh. Also Installed a ground level glass wall to physically impart a feeling of openness and transparency, the addition of the concrete sidewalk to the museum's concrete floor.

The wall's glass panels are concealed in the floor and reach into the ceiling. The building's structure, which depends on steel trusses to carry the load of the boxes, facilitated the use of glass walls. The trusses permit column-free galleries to exist, providing an open and extremely adaptable display space. The trusses are revealed to decorative features in certain areas, with diagonal struts bisecting the windows. The trusses were strategically placed elsewhere to prevent darkening the skylights.



Figure 15: Material - Glass (the-new-museum, n.d.)

Figure 16: Material – Metal mesh © Iwan Baan (new-art-museum-sanaa, 2010)

5.3. CASE STUDY III – CHINTALA ARCHITECT'S STUDIO, BANGALORE, INDIA

Studio Chintala in Bangalore (2017) designed by the principal architect Diwakar Chintala with an area of 980 sq. ft. The Studio Chintala is a building of transparency with a clean slate concept aesthetics. It is a ground-level structure. Studio Chintala is a collaborative design studio focusing on honest and simple spaces. The architecture addresses the duality of modernity, roughness and complexity, so that each of these qualities can coexist in harmony separately. The structure almost looks temporary with its metal framing and glass.

5.3.1. Architect's principle

Studio Chintala was established by Diwakar Chintala who has designed projects in the Middle East, China, United States and India over the past 18 years, believing that "simple and honest" development is the response to the many complicated problems we're facing. His planning process includes questioning preconceptions of buildings and typologies, beginning with a "cleanslate" and creating user-based concepts based on reason, context and preferences. "Style and beauty" are the product of this creative process. His work has recognized the influence of the developed-environment on human behavior, frequently providing a minimalist approach to architecture, from designing high-rise buildings to creating the \$1,500 House. The work of Diwakar includes models for multiple products, a line of furniture, graphic arts, video guides and user experience.

5.3.2.Planning layout

The most minimalist office ever designed in India is by Ar.Diwakar chintala, Bangalore for his Architecture Practice. The layout of the office is very open (Figure 17). There are no walls as such resulting in an open and free flowing plan. The planning is very transparent. It rests on steel columns above the ground. And from the other side, the isolation of the workplace from the floor on which it sits atop columns was correlated with the notion of purity, which in traditional Japanese architecture is mostly present. It can be considered as such in order to bring the concept of certain architectural flow to its utmost degree: the full relation between the person and nature, disrupted only by the necessary presence of bathroom, storage space (Chintala, n.d.) (Figure 19). There is a complete lack of the walls in office replacing floor-to-ceiling glass panels (Figure 18). The architect indicated that, without interrupting the glazed perimeter, the interior distribution would meet all practical requirements, installations. In terms of static structure, the Studio Chintala office is the maximum expression of minimalism, using only the minimum elements necessary to assure the stability of the office. The design consists of a steel frame, carefully crafted with beams and columns.

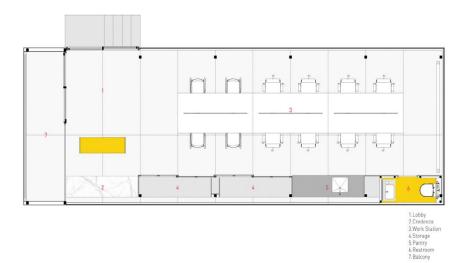


Figure 17: Studio Chintala office planning layout (Chintala, n.d.)





Figure 18: Studio Chintala office external façade (source- http://www.studiochintala.com)

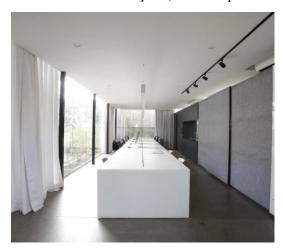


Figure 19: Studio Chintala office interior work spaces(source- http://www.studiochintala.com)

5.3.3.Material usage and details

The office consists of a metal structure surrounded only by glass that generates a viewpoint impression and pays homage to the beauty of the surrounding space. The openness helps one to be fully aware of the world from the inside, but also works in a creative way to integrate the inside of the office into the enclosure. The complete supremacy of glass refers to the idea of the relation between the inside and the outside, between the public and the personal, the last of which will be almost non-existent in this situation. The façade consists of individual glass panels extending from floor to ceiling, secured by steel frames to the structure. A piece of art made of laminated steel glass. The ties are welded structural steel in a way that minimizes their visual appearance.

6. CONCLUSION

Japanese minimalism in architecture is gradually fostering spiritual reflection and serenity. It is reasonable to assume that they are more conceptual in their modern approach and do not directly impact people. This conceptual framework is extremely adaptable to their conventional worldview and is highly appropriate for spiritual and private residential properties. Despite of the always developing style of architecture in Japan, there are still some conventional aspects that support the claim that minimalism in Japan is much more about the lifestyle than about architecture. Western minimalism, nevertheless, focuses mostly on the technical and physical quality factors. Technological advances will greatly assist in their discovery of new materials and construction methods. This strong recognition of the physical appearance aimed at creating a dramatic impact that for most of the time is becoming the core of its buildings.

In consideration of all these factors, it is evident that even the cultural background directly impacts the style of architecture. The method and intent of the architect may have modified the traditional culture and its demand pattern. Equally valid, the relation with the different cultures should typically lift the preconceived notion and recreate the architect's principle itself. The analysis of cultural background is therefore essential in order to assure that certain types are adapted to the environment.

Minimalist buildings are not only judged on the basis of their reduced presence in the longer term. It is fairly necessary to add value to the building, such as materiality, the image of the end user and detailing. In architectural considerations, these ideals are very integral and can create the style more meaningful and timeless. Further research should therefore be carried about how minimalist building can impact people's feelings or emotional responses. Although minimalist style is known to be more conceptual and reflective, phenomenological work may be the key to understanding the interpretation, experience and understanding of individual spaces. This type of research in fact is essential in order to obtain reviews from the residents, particularly for the newly built project in the form of the post-occupancy assessment.

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