

CONCEPT OF MINIMALISM IN INTERIOR DESIGN WITH GREEN TECHNOLOGY

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ABSTRACT

The past of the interior design profession can be traced back just a hundred years ago, in America nearly in 1900. Although the practices and design elements, patterns, motifs and so on that we see in our present-day interiors and exteriors can be traced in many of our lost civilizations across the globe like the Egyptian Civilization, Babylon Civilization, Mohenjo-Daro Civilization etc. where we can see the use of mud house or kaccha houses and design motifs of the period, beautiful murals and sculptures, and use of metallurgy items like bronze and copper artefacts. Getting inspired by the different old and ancient civilizations, The Romans and The Greeks followed and used in their interiors like the mosaic flooring and frescos. Then The French Renaissance, Baroque, Rococo and Neo-Classical art movement brought the next-level designs thought process like the use of stained or coloured glass, delicate material like porcelain and MOTHER OF PEARLS, fine silk and velvet textiles. Starting from the 19th century, today's interior design concept gained popularity by the name of interior decorator as a profession which emphasis both on functional appliances and decorative accents of individual styles. The field of an interior designing has come a long way from mud, straw, thatch and brick houses to man-made and synthetic materials to create new trending design concepts globally and also for individual recognition of styles. Interior Designing is defined as an art of refining and enhancing space to create an aesthetically pleasing environment. Traditionally, Interior Design was more of art and crafts based, disciplined design, home styling, interior décor and furnishings. The present paper tends to shed light on the necessity of minimalist lifestyle-oriented design rather than focusing on the lavish, expensive and non-environment friendly concepts in design especially emphasizing in the interiors and exteriors of any building or structure.

Keywords: Green Technology, Interior Design, Minimalism, Sustainable Living, Environment

I. INTRODUCTION

Minimalism means "less is more". It gained popularity not before the 20th century after the second WORLD WAR. Minimalist began as a movement, all design-related forms in graphic, architecture, music, fashion, textiles, and such other forms. Pioneer of new architectural style and the founder of "Less is more", Ludwig Mies van der Rohe brought the minimalist building to America in the 1930s. But the noticeable artists Robert Morris, Anne Truitt, Dan Flavin, Donald Judd, Agnes Martin and Frank Stella who made the concept more fashionable and trendy. No doubt some works of De Stijl also got influenced by this concept. Bauhaus also followed approximately principles of minimal design among others before the minimalist concept came into light or gained popularity alone somewhere between the 1960s. Minimalism follows the main and the foremost Principles of design i.e. Principle/Law of Simplicity. It means that the simpler the things are, it gives a simpler message to understand and use by an individual. Here, the most prejudiced line "Form Follows Function" (Bauhaus) in design fits well enough in its functionality. Minimalism, the ideas that come to our head, associated with, Clean and Straight lines, Straightforwardness and Use of Neutral or Pastel colours, less disorder and more natural lighting. Simplicity can also be seen in the Japanese (Traditional) Design Concept following ZEN's philosophy. Zen's philosophy advocates the quality of simple and plain objects, giving more free space for essential objects only.



Figure-1 Showing a clean interior arrangements view of modern interiors

II. METHODOLOGY

Factors to Consider

Every design is hypothetical in some unrealistic thought process at first and a practical experiment later. It happens many times that an interior designer finds difficulty in verbalizing or to express his or her design ideas because of implied knowledge and communication enhancement rather than logical thinking. The incorporation of the concept of “**HUMAN CENTERED DESIGN**”- problems solving framework and “**DESIGN THINKING**”- to approach a problem creatively enables the designer to work on innovative solutions from a different angle of mindset and approach especially from the perspective of the defined user needs.

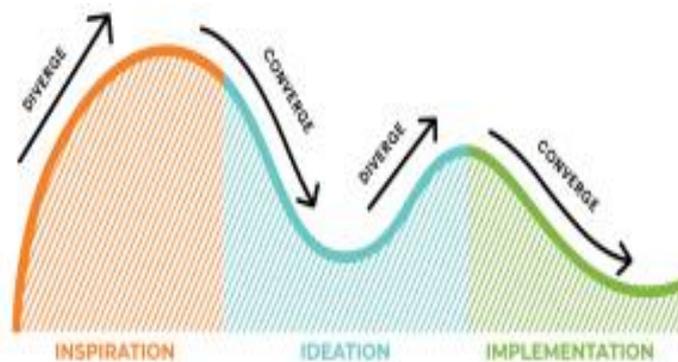


Figure-2: Design Flow of Human Centered Design

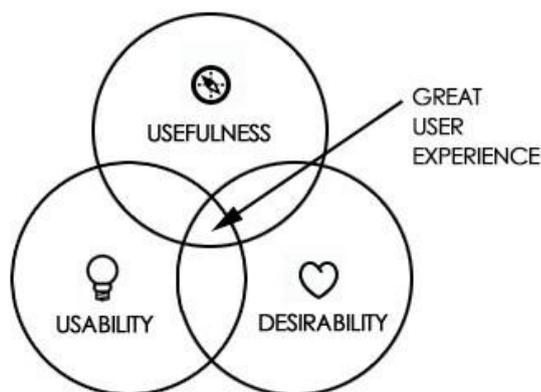


Figure-3: Human Centered Design Process



Figure-4: Design Process of Design Thinking

The idea of minimalist design not only helped interior designers to focus on human-centered design by design thinking framework but also focuses on the result production to be user-friendly and specified need.

The following important features are the **Basic Elements of Minimalism:**

1. It works well with small spaces as space is a big factor in our day-to-day life today.
2. Minimalist design and decor never go outdated or out of fashion.
3. It creates a harmonious balance with space and nature.
4. With fewer traffic zones, it creates wider free space for movement.
5. Negative zones are removed, allowing the room or the space to breathe.
6. Put functionality as a priority.

a) Green Technology in Interior Design

Green Technology stands a boarder concept, in terms of design, build, set-ups, preservation, performance etc. responsible for inhabitant’s health and well-being and ease the environmental negative effect as a whole. The Green design is similarly known as eco-design or sustainable design. Green Technology stress on the use of renewable resources, recycled and re-usable, sustainable resources, passive solar energy, rain-water harvesting, storm-water management, waste management which are healthy for our environment and individual’s psychological and mental well-being. The main staple of ecological design philosophy is the three **R’s (Reduce, Recycle & Renewable)**. According to some experts, people, in general, have notable differences in the requirements of the living environment combined with the actual conditions of the construction, individual’s needs and building standards.

Interiors designed with green technology aims to provide a safe, healthy, comfortable and convenient to use indoor living spaces. The other factors of interior designing come from the layout of space or space planning, indoor colours, accessories and soft and hard furnishings at the same time the efficient use of energy resources to reduce pollution and improve air quality on the primary position to meets the occupants of physical, emotional, psychological, health and other requirements.

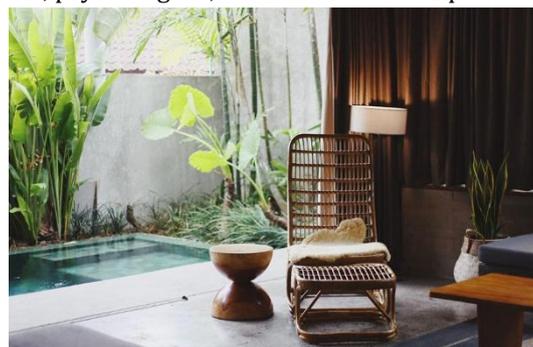


Figure-5: An interior view of a living room focusing on sustainable design

b) Minimalism with Green Technology

The world at large is very conscious nowadays about the use of natural and organic resources and there gained the popularity of “green movement”. In light of the matter, materials around the globe are shortened by its huge demand, less supply to meet the demands and uses, the new minimalism concept in design can be considered environmentally friendly or sustainable. A designer can integrate the green technology in while designing which not only helps to enhance the designs but also eliminate the stress in the environment and focus on the lifestyle of healthy living.



Figure-6: An exterior view of a small house showing the minimalist design and the use of recycling material

VI. CONCLUSION

With the development of science and technology and the emergence of industrialization, people got disconnected from nature and the concern of individual’s health and wellbeing started to stress a lot, deforestation, climate change, depletion of the ozone layer among others. After a certain period, people started to deepen thoughts in understanding the natural and eco-friendly materials, energy uses of solar and wind and other green concepts and how all these green technologies enables to reduce “greenhouse effect”, “global warming” most importantly and create a green environment and better, comfortable and stress-less lifestyles.

Minimalist means uncluttering a space, use of wooden furniture with straight lines without bends or curves, use of pastel colours, adding house-plants to give life to space and simple yet elegant design which gives more functionality to space.

Both minimalist design and green design can go a long way hand in hand promoting a positive aura for Mother Nature, healthy and focus lifestyles for residents.

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V. REFERENCES

- [1] Title: Energy & environmental science, Published/Distributed: Began with: Vol. 1, no. 1 (July 2008) Cambridge, UK: RSC Pub
- [2] Title: Journal of Sustainable Architecture and Civil Engineering, Publishing House: Exeley Inc., Print ISSN: 2029-9990, Online-ISSN: 2335-2000
- [3] Indunil D. Batuwangala (2018) , An Overview of the Green Building Concept – Dubai

- [4] Title: Green Construction: Analysis on Green and Sustainable Building Techniques, Chandra Shekhar Singh, Department of Civil Engineering, Amity University Chhattisgarh, India Submission: January 21, 2018; Published: April 17, 2018, Civil Eng Res J. 2018; 4(3): 555638, DOI: 10.19080/CERJ.2018.04.555638
- [5] Lu, W., Tam, V.W.Y., Chen, H. and Du, L. (2020), "A holistic review of research on carbon emissions of green building construction industry", Engineering, Construction and Architectural Management, Vol. 27 No. 5, pp. 1065-1092. Publisher: Emerald Publishing Limited.
- [6] Vaneenoo, Cedric. (2011). Minimalism in Art and Design: Concept, influences, implications and perspectives. Journal of Fine and Studio Art. 2. 7-12.
- [7] Meyer, Katherine. 2015. Towards a Definition of Minimalism: Principles of Minimal Visual Design in Web Interfaces.
- [8] Sherwin D (2006) Reducing the cost of green. Journal of Green Building 1(1): 46-54
- [9] Author: Ramchandran Jaikumar , (Daewoo Professor of Business Administration), Harvard Business School, USA, Title: When more is less: A minimalist architecture for manufacturing
- [10] Kasey Lloyd, W. Pennington, Towards a Theory of Minimalism and Wellbeing. Int J Appl Posit Psychol (2020), Published: 16 February 2020
- [11] Journal of Fine and Studio Art Vol. 2(1), pp. 7-12, June 2011, ISSN 2141-6524 ©2011. Minimalism in Art and Design: Concept, influences, implications and perspectives, Cedric VanEenoo, University of Technology Sydney, Australia.
- [12] Vasilski, Dragana. (2016). On minimalism in architecture - space as experience. Spatium. 1. 61-66. 10.2298/SPAT1636061V.