www.irjet.net p-ISSN: 2395-0072

Exploring Contemporary Ornamentation: Articulation of interior spaces via space-making elements

Shivangi Singh¹, Ar. Alok Omar²

¹ M. Arch Student, Faculty of Architecture and Planning, Dr. A. P. J. Abdul Kalam Technical University, Lucknow ² Assistant Professor, Faculty of Architecture and Planning, Dr. A. P. J. Abdul Kalam Technical University, Lucknow

Abstract - Ornamentation in interior architectural design has evolved significantly with shifts in technology, materials, and design philosophies. This study explores the historical journey of ornamentation, from its roots in cultural expression and communication to its resurgence in contemporary design after its decline during modernism. Through a literature review and case studies, the research examines ornament's role in recent retail, office, and hospitality projects, focusing on its spatial, dimensional, constructional, and aesthetic impacts. The paper highlights the renewed relevance of ornamentation, facilitated by digital advancements like CAD, CAM, CNC machining, and 3D printing, which enable innovative, functional, and visually appealing designs. By legitimizing ornamentation's use in contemporary design, the research encourages emerging designers to leverage its potential for enriching spatial experiences.

Key Words: ornamentation, interior architecture, spacemaking elements, digital fabrication, contemporary design, functional intent, aesthetic intent...

1.INTRODUCTION

"The building's identity resided in the ornament."- Louis Sullivan

Interior design, as both an art and a science, has continually evolved over the years, reflecting shifts in societal values, technological advancements, and design philosophies. One of the fundamental aspects of interior design that has witnessed a remarkable transformation is ornamentation. Ornamentation has long been an integral part of architectural and interior design traditions, embodying cultural expressions and historical narratives.

We trace the history of art, design, and architecture back to the prehistoric and classical periods, then on to modernism and postmodernism. In the 20th century and beyond, design and architectural philosophy underwent a significant transformation. During the modern movement, excessive ornamentation and enrichment in architectural forms were purposefully abandoned.

As a result, there was a need for fresh aesthetics that were in line with the developing tenets of contemporary design. Machines, mass manufacturing, broad communication, the introduction of new materials, and technological

advancements—all of which were outcomes of industrialization and globalization—facilitated this shift. Technology's incorporation into interior architectural processes made these developments possible and allowed ornamentation, aesthetics, form, structure, construction, and architecture to come together as a single, unified organism.

1.1 Significance

This study aims to legitimize ornamentation's use in contemporary and future design practice, particularly for emerging designers. With the prominence of digital tools, fabrication, and technological advancements, ornamentation is experiencing a transformation that offers new possibilities for enhancing interior spaces.

1.2 Aim

The study aims to evaluate the contemporary relevance of ornamentation through an analysis of its defining qualities using space-making elements.

1.3 Objective

- To comprehend the attributes, qualities, and potential of ornamentation within interior spaces, including its influence on form, structure, and construction.
- 2 To investigate the significance of contemporary interior ornamentation in relation to construction techniques, fabrication processes, material selection, technological integration, and architectural details.
- 3 To examine how ornamentation influences spacemaking elements and construction, as well as the interplay between space-making elements and ornamentation in interior spaces.
- 4 To explore unique expressions achieved through ornamentation and space making elements within constructed environments.

1.4 Scope

Investigate the influence of ornamentation and the examination of space making elements in interior design projects. This study is confined to projects where space making elements play a pivotal role in imbuing ornamentation to enrich the overall spatial experience.

Volume: 11 Issue: 04 | Apr 2024 www.irjet.net p-ISSN: 2395-0072

1.5 Limitation

The limitation of the study is that it doesn't focus solely on the historical transition of ornamentation.

1.6 Methodology

The methodology comprised a literature review, case study selection, comparative analysis and synthesis:

- Literature review: Analyzed key texts on ornamentation's evolving role and interpretations in design.
- Case studies: Five recent projects showcasing ornamentation's varied usage were selected.
 Typologies included retail, office, hospitality and commercial.
- Comparative analysis: The case studies were analyzed based on spatial, dimensional, constructional and aesthetic qualities revealed through the ornamentation.
- Synthesis: Drawing inferences from the comparative assessments to highlight ornamentation's expanding functional and experiential scope in contemporary interiors.

2. UNDERSTANDING

2.1 Ornamentation

The word "ornament" has multiple concurrent linguistic origins. The primary meaning of the Greek term "Kosmos" is "to order" or "to arrange." Its secondary meaning, which alludes to embellishments, is "to equip, adorn, and dress." "Ornare" means "to equip" with the basics in Latin. Secondarily, the Latin verb "ornare" meaning "to decorate" or "adorn." "Alamkara," a word of classical Sanskrit origin, means to decorate. When alamkara is used in a statement in Vedic Sanskrit, it denotes aptitude, performance, appropriateness, etc. In Sanskrit, the term "bhushana," which also means "to glorify or magnify the value of an object or something," is another word for decoration (Coomaraswamy, 1930).

The notion of ornament has evolved in tandem with human existence and its interaction with the environment. The practice of ornamenting objects, seeking to imbue them with qualitative enhancements alongside their quantitative attributes, spans the entirety of human history. Throughout the iterative processes of thinking, designing, creating, and communicating, ornamentation emerges across diverse design domains, ranging from small objects to the intricate realm of urban planning. This dynamic interplay between individuals and ornamentation permeates various fields, forming an integral part of the broader design discourse. (Sağlam, 2014)

In the realm of interior architecture, ornament refers to elements serving structural or decorative purposes (Britannica, 2008). Architectural ornamentation can be broadly classified into three categories: mimetic or imitation, applied, and structural.

e-ISSN: 2395-0056

- 1. **Mimetic ornamentation:** Mimetic ornamentation embodies specific meanings and symbolic significance.
- 2. **Applied ornamentation:** Applied ornamentation constitutes an extrinsic layer designed to enhance a structure's aesthetics.
- 3. **Structural ornamentation:** The concept of structural ornament, emerging in the mid-20th century, posits that meaning is derived from a building's form, nature, or material.

Ornament can also be divided into three sub categories on the basis of its placement in interior architecture: Surface ornament, Edge ornament, Junction ornament

- 1. **Surface ornamentation:** Highly ornamental patterns or coatings applied to walls, ceilings, or other surfaces in a space to improve them.
- 2. **Edge ornamentation:** Colors, linear components, natural elements, etc. are used to draw attention to the corners and edges.
- 3. **Junction ornamentation:** It is the intricate use of material, construction, and form techniques to enrich the complete junction of a staircase, furniture, divider, railing, etc. A specific meeting condition of two materials, two elements, or objects constitutes a junction.

2.2 Conceptions of Ornament

Ornamentation across art forms, including architecture and interior design, is a vital expression of cultural, social, and aesthetic values. Serving both practical and symbolic purposes, it enhances objects with lines, patterns, and colors, while acting as a medium for communication and storytelling. Ornamentation enriches the built environment, shaping human experiences by delineating spaces and evoking emotions. Diverse interpretations of ornament include its role as a socio-cultural tool, visual narrative, and communication medium, all of which contribute to crafting unique, expressive interior spaces.

2.3 Historical Overview

Ornamentation stems from a basic human drive for self-expression, evident in the decoration of buildings and everyday objects since the advent of permanent structures.

Volume: 11 Issue: 04 | Apr 2024 www.irjet.net p-ISSN: 2395-0072

Historical analysis highlights the link between ornamentation and human expressive needs. (Ezdeşir & Şah, n.d.)

In the Primordial Era, ornamentation reflected cultural, temporal, and geographical factors, with ancient art demonstrating both decorative and structural expressiveness. Early examples, such as cave paintings and ancient Egyptian hieroglyphs, served as mediums for communication and storytelling, while Harappan and Indus Valley artifacts showcased the connection between ornamentation and the natural environment.

In the classical era, ornamentation was inspired by nature, mythology, and human figures, as seen in Greek Doric, Ionic, and Corinthian orders. The Romans added symmetry and complex forms, including arches, to architectural embellishments. Gothic style introduced pointed arches, flying buttresses, and ribbed vaulting, while gargoyles served practical and decorative purposes.

The Industrial Revolution transformed ornament production with mass production impacting interior design. The Art and Craft movement reintroduced decorative elements, while Modernism emphasized functional structures. In the 20th century, movements like Art Nouveau, Art Deco, De Stijl, Bauhaus, and Minimalism employed abstract ornamentation in lines, patterns, and colors.

2.4 Positioning the Continuity

After delving into the theoretical foundation, interpreting ornamentation, and exploring its historical context, we now transition to applying ornamentation in real projects. Building on the previous sub-chapter, we examine ornaments in works by practitioners like Louis Sullivan, Frank Lloyd Wright, and others. These examples are systematically presented for better understanding. Moving forward, the next chapter explores contemporary projects of different functions, types, and sizes, ensuring a comprehensive exploration of ornamentation in both historical and modern contexts. (Catalani et al., 2017)

3. CONTEMPORARY ORNAMENTATION

In the early 20th century, Adolf Loos criticized ornamentation as wasteful and regressive in his essay "Ornament and Crime," advocating for minimalism and functional design. In contrast, Frank Lloyd Wright celebrated ornamentation as a means to enhance function, using it innovatively to shape his architectural plans. This period marked a shift from Loos's rejection of ornament to Wright's appreciation of it as a functional, expressive tool. Other architects and designers also explored varied perspectives, including digital ornamentation, integrating ornament within modernism and the late 20th century. (Loos, n.d.)

Traditional views of ornamentation as merely decorative in interior architecture have faced critique, giving way to a perspective that sees ornament as essential and meaningful. Contemporary ornamentation transcends decoration, expressing cultural values and historical narratives. Modern interior architecture aims to integrate ornamentation with innovative design solutions, emphasizing color, texture, and material qualities guided by functionalist principles. (Balik & Allmer, 2016)

e-ISSN: 2395-0056

Antoine Picon notes that contemporary ornament, influenced by digital advancements, now includes a wider range of elements such as texture, pattern, and structure. Ben Pell discusses the division between theory and practice in architecture, focusing on both representation and technical aspects. Modern ornamentation leverages technology and fabrication processes, such as CNC and 3D printing, to explore a diverse range of forms and designs. (Östvall & Andréen, n.d.)

3.1 Types of Contemporary Ornamentation

Contemporary ornamentation can be categorized into three main types:

- **1. Structural Ornament:** Focuses on volumetric intricacies, shaping interior spaces through elements like form, structural screens, and surfaces. It establishes hierarchy, navigation, and layering of space, contributing to the overall expressive quality of the environment.
- **2. Functional Ornament:** Emphasizes the substance and context of space, serving specific functions such as visual narrative, pathfinding, and branding. Strategic use of color, texture, lighting, and patterns fulfills these functional needs.
- **3. Digital Ornament:** Concentrates on aesthetics and effects from the interplay of spatiality and context. Technology influences fabrication methods, enabling contrast and customization in interior designs. This form encompasses various dimensions including visual, tactile, sensuous, and structural elements.

(Suresh, 2023)

3.2 Intent of Ornamentation Creation

Functional ornamentation is guided by three driving forces: standardization, particularization, and customization, which are shaped by time, economy, design position, and program brief. Space-making elements organize and validate interior spaces, emphasizing ergonomics, dimensional relationships, and spatial narration.

1. Spatial Intent: Focuses on volume and scale, incorporating ornamentation into space-making elements.



Volume: 11 Issue: 04 | Apr 2024 www.irjet.net p-ISSN: 2395-0072

- 2. Dimensional Intent: Guides design decisions for elements to achieve character and functional needs.
- 3. Constructional Intent: Unifies materials and components, stabilizing structures and serving ornamental designs.
- 4. Aesthetical Intent: Develops a visual language, composing aesthetically pleasing ornaments within the functional context.

3.4 Interior Space Elements

In any space, the whole experience depends on its constituent parts (elements). The **purpose of design is to organize these parts into a coherent whole, aligning with functional, aesthetic, and behavioral objectives.** Interior design arranges selected elements into three-dimensional patterns, creating harmonized compositions for a specific purpose. These elements enhance functionality, express aesthetics, and contribute to the experiential narrative of the space, with each element positioned strategically to shape the surrounding space.

These elements can be categorized as:

Space making: These are those elements that make a space. Without these the realization of space is incomplete.

Wall / Floor / Column / Roof / Ceiling / Trusses / Fenestrations

Space constituting: These are the elements that don't make space physically but are important for the space to function according to its program function.

Furniture / Lighting / Doors / Window / Partitions / Levels / Staircases

(Pandya, 2016)

Spatial roles elements in interior spaces:

- 1. Defining the territory
- 2. Creating paths and guiding movement
- 3. Determining the scale and proportion
- 4. Embellishing a space

4. CASE ANALYSIS

The analysis focused on how ornamentation influences specific interior elements based on spatial, dimensional, constructional and aesthetic intents.

1. Sulwhasoo Flagship Store: Brass rod lattice ornaments foster space planning, connections and luxury aesthetics. They take on a structural role beyond surface embellishment (Neri&Hu, 2016).

2. Weinhandlung Wine Shop: Modular metal frame boxes create adaptable display storage. Applied ornamentation unifies interior through vibrant color clusters (Furch, 2012).

e-ISSN: 2395-0056

- **3. One Main Office:** CNC milled plywood ornaments integrate lighting, furniture and partitions through digitally enabled customization (dECOi Architects, 2016).
- **4. Indigo Deli:** Parametric carved wooden ceiling constructively becomes an expressive spatial envelope filtered through site constraints (SP+A, 2018).
- **5. Herman Miller Shop:** Fabricwood plywood mimics upholstery in structural enclosure, showcasing digital fabrication's ornamental potentials (PRODUCE, 2017).

5. CONCLUSION

Contemporary ornamentation leverages technology like digital fabrication, computation, and new materials to enhance design beyond mere decoration. It integrates diverse functions such as spatial organization, aesthetics, and branding. Computational processes allow ornamentation to become integral structural components and enable mass customization. Technology expands the complexity, dynamism, and performativity of ornamentation, while parametric modeling tailors' solutions to specific needs. Case studies highlight ornamentation's growing scope, including its functional and structural capacities.

In conclusion, contemporary ornamentation in interior architecture is undergoing a resurgence, combining computational methods and new materials to synthesize function and expression. This vital spatial tool enriches built environments and endures through ongoing experimentation and innovation.

REFERENCES

- [1] Ahani, F., Etessam, I., & Islami, S. G. (2017). The Distinction of Ornament and Decoration in Architecture. Journal of Arts and Humanities, 6(6), 25. https://doi.org/10.18533/journal.v6i5.1188
- [2] Balik, D., & Allmer, A. (2016). A critical review of ornament in contemporary architectural theory and practice. A/Z ITU Journal of the Faculty of Architecture, 13(1), 157–169. https://doi.org/10.5505/itujfa.2016.73745
- [3] Catalani, A., Versaci, A., Hawkes, D., Sotoca, A., Ghoneem, M., & Trapani, F. (2017). Cities' Identity Through Architecture and Arts Hocine Bougdah. In PROCEEDINGS OF THE 1 ST INTERNATIONAL CONFERENCE ON CITIES' IDENTITY THROUGH ARCHITECTURE & ARTS.

e-ISSN: 2395-0056 Volume: 11 Issue: 04 | Apr 2024 www.irjet.net p-ISSN: 2395-0072

- [4] Ezdeşir, Z., & Şah, B. (n.d.). Re-Ornamentation from Traditional to Present-Day in Design. IOSR Journal of Humanities and Social Science (IOSR-IHSS, 25(11). https://doi.org/10.9790/0837-2511035962
- [5] Loos. (n.d.).
- [6] Massey, J. (n.d.). Ornament and Decoration.
- [7] Östvall, K., & Andréen, D. (n.d.). Ornamentation in the digital age Ornament i den digitala tidsåldern.
- [8] Sağlam, H. (2014). Re-thinking the Concept of "Ornament" in Architectural Design. Procedia - Social Behavioral Sciences, 122, 126-133. https://doi.org/10.1016/j.sbspro.2014.01.1314
- [9] Gujuluva, B. S. (2022). Chrome. Retrieved from Rethinking the future: https://www.rethinkingthefuture.com/architects-lounge/a819ornamentation-in-contemporaryarchitecture/#:~:text=The%20ornamentation%20seen %20in%20contemporary,to%20three%2Ddimensional %20sculpture%20construction.
- [10] Pandya, Y. (2016). Elements of Spacemaking. Mapin Publishing.
- [11] Saxena, S. (2022). Theory in Architecture: Ornament.
- [12] Suresh, S. (2023, June). The function of ornament in contemporary interior practice. Retrieved from issuu.com: https://issuu.com/swethasuresh7/docs/00_function_of _ornament_-_swetha_pid21369