
Analysis of Naturalistic Decorative Materials in Modern Spatial Design Aesthetics in Residential Home

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Abstract

In today's visually cluttered world, the human brain has developed mechanisms to selectively focus on specific visual stimuli for detailed analysis while disregarding others—an adaptive process known as selective attention. This ability is crucial for navigating and engaging with the environment, including human-made artifacts shaped by socio-cultural contexts. This study investigates the role of naturalistic decorative materials, such as wood, stone, and live plants, in modern spatial design aesthetics and their impact on environmental sustainability and psychological well-being. Naturalistic materials are shown to not only enhance visual appeal but also contribute to healthier and more harmonious interior spaces. Research indicates that these materials positively influence mental health by reducing stress and fostering creativity, making them a vital component in design strategies. Beyond their functional and aesthetic value, the use of natural elements reflects cultural heritage, social norms, and collective behavioural patterns. This interplay between materials and socio-cultural dynamics profoundly shapes the way spaces are designed and interacted with, influencing both individual behaviour and broader societal trends. By examining these dimensions, the study aims to provide a comprehensive understanding of the significance of naturalistic materials in spatial design, highlighting their potential to promote sustainability, well-being, and cultural continuity.

Keywords: *Naturalistic Decorative, Spatial design, Aesthetic Impact, Environmental Psychology, Contemporary Architecture*

Introduction

Though the trend of incorporating elements of the 'natural' world into interior spaces gained traction globally after the Cold War, this paper examines the specific context of Hungary, where the transition from state-socialist interpretations of modernist design to alternative styles was notably politicized. From the 1960s to today, Hungary has seen a paradigm shift from the aspirations of a modernist utopia, characterized by 'artificial' materials like plastic and concrete, to a neoliberal order that emphasizes 'natural,' or rather, supernaturally enhanced materials such as organic wood flooring and superior-quality roofing tiles (Fehérvári, 2012). This study utilizes a Peircean semiotics of materiality to develop a methodology for analysing aesthetic styles within material cultures, allowing for an examination of these transformations over time and their connections to broader political cosmologies.

The term 'naturalistic' embraces a wide range of interpretations across many fields, all fundamentally connected to the essence and phenomena of the natural world. In the realm of arts and literature, this term refers to a dedication to portraying human experiences and the surrounding world with unadorned realism, generally rejecting idealized portrayals in favor of a more accurate depiction (Mohamed, 2022). In the field of design and decoration, especially in residential areas, there is a tendency to use materials, patterns, and forms that are directly influenced by or derived from nature, such as wood, stone, and floral designs. The goal is to create rooms with a more natural and balanced feel.

Naturalism, from a philosophical standpoint, asserts that all phenomena originate from natural forces and laws, disregarding any supernatural influences. Within scientific contexts, particularly in the fields of ecology and biology, this entails the observation and understanding of natural processes, providing valuable insights into behaviours and interactions that remain unaffected by human interference. The term 'naturalistic' refers to a strong connection to and portrayal of the natural world, whether expressed through art, environmental design, explanatory systems, or scientific research (Parraman, 2014).

Literature Reviews

Our world is visually overwhelming and full of information, making it a daunting task to fully comprehend. However, our visual processing system has evolved to help us focus on specific details within a scene while disregarding or deferring other elements. This process, partly influenced by visual cues, is known as 'selective attention' (Criado-Boado et al., 2019). It plays a significant role in how we navigate and engage with our surroundings, including the unique human-made artifacts in various socio-cultural contexts. Colored decorative elements and patterns are used by businesses to attract customers, enhance the perceived value of products, and ultimately increase sales (Bradley, 2009; Kingsbury, 2004). The way colors are perceived and valued is shaped by historical and cultural influences. In the midst of rapid societal changes, rising work pressures, and an accelerated pace of life, people are increasingly seeking spaces that offer both physical and mental rejuvenation (Lu, 2023).

As a fundamental provider of human habitats and venues for activity, architecture is now expected to meet more demanding criteria. According to Lu (2023), the iconic Casa Batlló by Gaudí, a paragon of naturalistic architecture, as a case study, employing methods of literary review, visual analysis, and psychological evaluation to explore the restorative qualities of naturalistic architectural forms and decor within the built environment. The findings indicate that architecture, as an artistic medium, inherently embodies human emotions during its creation, evoking a sense of resonance and artistic solace in observers. Furthermore, naturalistic architectural elements and decorations channel the nurturing essence of nature, imbuing the built environment with a purifying, healing impact. The extent of naturalistic decorative elements incorporated into architectural design significantly influences the therapeutic effectiveness of the environment (Lu, 2023)

Mosque ornamentation includes intarsia, tarkashi, marble carving, metal engraving, metal inlay work, and tile mosaic. In keeping with the mosque's rectilinear layout, geometrical patterns and

calligraphy take on greater significance as the application of methods matures. The utilitarian and decorative parts are styled, abstracted, and symbolised through the use of diagonal lines and striking colours (Nasim, 2021). For instance, the Faisal Mosque in Islamabad stands out as one of the most acclaimed contemporary mosques within the modern Islamic world. Its location against the Margala Hills is notably remarkable. The soft, muddy terrain of the hills contrasts sharply with the mosque's distinct sharp contours. The mosque's white structure is prominently displayed as the focal point against the backdrop of olive-coloured hills. The mosque's layout, entryways, multiple tiers, structural design, decorative elements, and surface ornamentation are all uniquely distinct, showcasing innovations not previously seen. This mosque represents a unique architectural and decorative style of late 20th-century mosque construction. It merges traditional and modern decorative arts from Pakistan, characterized by thought-provoking concepts and exceptional craftsmanship in its structural and decorative naturalistic details (Nasim, 2021). The design features a skilfully balanced and harmonious interplay of diagonal, horizontal, and vertical lines. The ornamentation of the mosque can be seen as a progression of architectural features and ornamental mosques.

This design philosophy employs materials, shapes, and themes that are either directly sourced from nature or crafted to closely mimic natural forms. Common materials used in naturalistic designs include wood, stone, and various plant elements, each chosen for their organic textures and colours that evoke a sense of the outdoors. Designers might also opt for water features, natural fibre textiles, and other elements that enhance the connection to nature. The adoption of forms that resemble natural settings and landscapes is another crucial aspect of naturalistic design. This can manifest through architectural structures that integrate seamlessly with their surroundings, interior layouts that flow intuitively like natural landscapes, and decorative motifs that draw from flora, fauna, or geological patterns. Such designs not only create visually appealing spaces but also aim to promote a harmonious and soothing environment. This approach often extends to the spatial arrangement, where the interplay of light, shadow, and natural elements is carefully considered to mimic the dynamic yet harmonious complexity of natural environments, thereby fostering spaces that are both aesthetically pleasing and psychologically comforting.

In Thailand, many people, particularly those interested in Japanese culture, have begun to incorporate minimalist Japanese furniture into their homes. Minimalist design concepts are increasingly popular in-home decor, often featuring kitchens with white and grey cabinets and matching storage doors, living rooms with natural flooring and white walls, shared spaces with light natural finishes like oak panels and wooden planks, accented by black and white furniture, and apartments with classic white details and a monochromatic style (Jantarangsee & Krairit, 2022). According to Jantarangsee & Krairit (2022), the Japanese brand MUJI, founded in 1980, emphasizes "simplicity, flexibility, and modesty to accommodate diverse lifestyles and personal tastes." MUJI's product concept focuses on providing high-quality goods with no brand label, making it famous for its minimalist yet artistic home designs. This "no-brand" approach has helped MUJI gain a loyal global following (Jantarangsee & Krairit, 2022). However, due to significant differences in social, cultural, and architectural contexts across countries, placing and categorizing intellectual movements can be difficult, sometimes leading

to confusion about how trends are positioned (Esmaeili et al., 2019). Japan, for instance, has successfully merged tradition and modernity, allowing both elements to complement and enrich one another. Similarly, India has made progress in reconciling these differences, blending traditional and modern influences (Esmaeili et al., 2019).

Additionally, rapid changes in the environment pose a significant risk to worldwide biodiversity and the functions of ecosystems, making it essential to comprehend the effects on specific populations for the development of accurate forecasts and effective mitigation strategies. A promising method to aid in this effort is high-throughput sequencing technology, which allows for the examination of the genome in any species and any system to detect indications of environmental selection (Bay et al., 2017). Naturalistic forms and patterns have consistently provided valuable inspiration for architects and builders globally such as organic design as the creation of ‘building shapes and forms that evoke a human connection to natural features and processes, whether directly, indirectly or symbolically’ (Coburn et al., 2019). This approach includes direct replicas of animal and plant motifs in architectural detailing, engineering techniques inspired by the structural mechanisms found in nature, and the adoption of natural scaling and proportionality patterns in design and architectural features stimulate emotions that resonate with our intrinsic reactions to the patterns, movement, light, shapes and spatial configurations human experience in the natural world (Coburn et al., 2019). One significant research gap in the study is the lack of comprehensive data on the long-term durability and maintenance requirements of these materials compared to more conventional options. Additionally, there is limited understanding of the psychological impacts of various naturalistic materials across different cultural contexts which is essential for tailoring design practices to meet specific regional preferences and needs.

Methodology

Directed content analysis is a qualitative research method where existing theory or research guides the coding process, providing initial coding categories from relevant literature or theoretical frameworks. In the context of studying naturalistic elements in decorative design aesthetics, this approach can be particularly useful for organizing and interpreting complex data that may arise from various sources such as design portfolios, architectural plans, interviews with designers, and literature on design trends. To effectively utilize directed content analysis in this research, the first step is to thoroughly review existing literature on naturalistic design to define key concepts and variables. This initial review helps in establishing a theoretical framework that shapes the coding categories. For instance, categories could be derived from principles of biophilic design, materials commonly used in naturalistic settings such as wood, stone, bamboo and common themes such as the use of light, space, and natural forms. These categories will guide the examination of data sources, ensuring that the analysis is structured and focused on predefined areas of interest.

As the research progresses, the directed content analysis allows for the refinement and further development of these initial coding categories based on the data collected. This might involve identifying subthemes or patterns that are particularly relevant to modern implementations of

naturalistic aesthetics in design. For example, data from interviews with 4 contemporary designers might reveal innovative ways natural materials are being manipulated or combined with modern technology to enhance aesthetic appeal and functionality. The findings can then be systematically compared with the existing literature to draw conclusions about the evolution and influence of naturalistic elements in analysing realistic decorative materials in contemporary spatial design aesthetics. Decorative design, ultimately contributing new insights to the field and potentially suggesting directions for future research.

Findings and discussion

Narrative simulation of social experiences in naturalistic context

Narratives can be viewed as models of routine social interactions. They are essential for exploring the human mind within contexts shaped by social and cultural forces because they provide a basis for grounding in the shared realm of embodied cognition and active environmental engagement (Tikka et al., 2023). Neurocinematics is an integral part of the comprehensive strategy that enhances broader conversations on the functioning of the brain and connectomics. The discipline of naturalistic neuroscience exemplifies the shift away from localizationist perspectives and towards a more holistic approach to studying the mind, which was pioneered by luminaries (Lashley, 1951). This method encourages a two-way enrichment of conversations about the role of architecture in the brain and neural dynamics, while also delving further into the nature of holistic experiences (Tikka et al., 2023).

The emphasis on simplifying stimuli in traditional neuroscience made it difficult to evaluate brain activity in complicated real-world situations. Naturalistic neuroscience, on the other hand, has created methods to study brain activity in environments that are more analogous to the actual world (Tikka et al., 2023). These approaches capture additional contextual information that influence the perception of cognitive and emotional phenomena, and they also cover a wider range of traits over longer periods of time. The field of neurocinematics was an early adopter of the use of narrative structures, films, and storytelling in VR as stimuli. Using these narrative forms, researchers can test hypotheses about how common affective-cognitive experiences are, what parts of social situations people seem to understand each other or at least agree on, and how these experiences and the brain activity that goes along with them vary across demographics.



Figure 1 shows how the naturalistic context will enhance the social experiences

Human behaviour is profoundly impacted by cultural traditions, social norms, and economic factors, which are reflected in the diverse selection of realistic materials among nations. The historical importance and symbolic connotations of materials, which can elicit distinct emotional and behavioural responses, often dictate their preference as a result of cultural legacy (Esmaeili et al., 2019). In East Asia, for instance, bamboo represents resiliency, which influences how people see and engage with spaces. Material selections are influenced by social aspects such as economic position and environmental consciousness. Communities that prioritise sustainability may choose recycled parts, whereas wealthier civilizations may choose exotic woods for luxury. These decisions firmly embed these materials in the fabric of society behaviour and cultural expression, impacting individual and community well-being through improved comfort and reduced stress. They also stimulate social interactions and dynamics within places.

Spatial and colour features predict perceptions of naturalness

The findings from these experiments suggest that people have a clear preference for architectural designs that incorporate nature-like patterns of Scaling and Contrast as this finding concur with Coburn et al. (2019) that these elements significantly influence preference ratings for both interior and exterior scenes. The results indicate that individuals might systematically perceive and appreciate naturalistic aesthetics in architecture, often doing so unconsciously as they organize and interpret purely architectural scenes. Furthermore, mediation analysis revealed that the impact of Scaling and Contrast on aesthetic preferences is mediated by underlying perceptions of naturalistic aesthetics, suggesting that these architectural features may enhance pleasure by evoking familiar visual patterns seen in nature. However, while these results are indicative, they underscore the need for further research to conclusively determine the causal relationships involved in how naturalistic elements influence architectural preferences.



Figure 2 shows the naturalistic decorative materials in home decor

Societal factors to economic status and the level of accessibility

The selection and usage of naturalistic materials are greatly impacted by social factors, such as economic position and environmental consciousness, which vary across locations. Materials such as wood and stone are used in different ways in design and building due to their vastly different pricing and availability. Adorning one's home with opulent materials is a frequent practice in wealthy nations, where they serve as symbols of social status and personal ambition. In contrast, the same materials in more privileged areas might represent social status, which impacts social dynamics and individual aspirations. On the other hand, eco-friendly materials are becoming more popular as society places a greater emphasis on sustainability. Materials with a low ecological impact, are recycled, or are acquired locally are more preferred in environmentally conscious societies, which shows a trend towards more sustainable lifestyles. In addition to changing consumer habits, this trend is influencing a larger cultural shift towards environmental stewardship, which in turn is changing the way communities see and engage with their built environments.

Utilise naturalistic architecture style in healing

The usage of naturalistic architecture, which draws inspiration from the outdoors, is on the rise to facilitate recovery through the creation of soothing and rejuvenating spaces. The theory of biophilia, which holds that people are fundamentally attuned to the natural world, provides the theoretical foundation for this method (Schiebel et al., 2022). The Maggie's Cancer Care Centres are a prime example of this type of building; they are located in peaceful, environmentally friendly areas and make great use of natural materials like wood, stone and glass to create a positive and healing environment for patients (Martin & Roe, 2022). To help patients relax and feel better, these facilities include gardens, plenty of natural light, and open areas. Both the physical and mental aspects of patients are helped by the architectural focus on natural forms and elements, which makes them feel better emotionally and mentally as they heal. Colour harmony is fundamental to human nature, reflecting our needs and comfort levels. Throughout history, individuals have consistently sought out harmonious colour combinations

in painting and architecture across both natural and artificial environments. The hue of any colour, whether vibrant or muted, contrasting or nuanced, plays a crucial role as a significant source of emotional and aesthetic experiences (Mirkasimova & Amrahova, 2020).

Conclusion and further research

There have been major effects on ecological sustainability, psychological health, and aesthetic quality because of studies analysing realistic decorative materials in modern spatial design aesthetics. Natural materials such as wood, stone, and plant parts allow designers to craft places that are aesthetically pleasing, ecologically aware, and psychologically calming all at the same time. The study highlights the significance of these materials in creating a bond with nature, which is especially important in city contexts with restricted access to natural areas. An increasing demand for environmentally responsible design solutions may result from an uptick in interest in realistic materials, which in turn reflects a societal shift towards a more sustainable lifestyle.

For future research, the human health and environmental sustainability in relation to naturalistic materials need additional investigation into these questions. To gain a better understanding of the environmental impact of these materials from manufacture to disposal, studies should concentrate on their lifetime analysis. To further our understanding of how various natural materials affect the mind, we could conduct studies to compare their efficacy in this regard. Deeper insights into the global adaptation of naturalistic design principles could be gained by expanding this research to incorporate other cultural and climatic environments. The area of spatial design aesthetics would be further enhanced, and our knowledge of the material's global application would be expanded, if this were to happen. Additionally, techniques for design may be adapted to meet different regional needs.

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