

DOI: 10.5281/zenodo.121.126280

THE ARCHITECTURAL ORNAMENTATION OF TRADITIONAL PALACES IN TAIF AS A VISUAL REFERENCE FOR SHAPING HERITAGE-INSPIRED INTERIOR IDENTITY

Dalal S. Alshomrany¹, Haya N. Alhumaidhi²

¹Department of Interior Design, College of Design and Applied Arts, Taif University, Taif, 21944,
Saudi Arabia, dshomrany@tu.edu.sa, <https://orcid.org/0009-0009-6671-8166>

²Department of Interior Design, College of Design and Applied Arts, Taif University, Taif, 21944,
Saudi Arabia, hnhumaidhi@tu.edu.sa, <https://orcid.org/0009-0001-2953-4490>

Received: 11/12/2025
Accepted: 20/01/2026

Corresponding Author: Dalal S. Alshomrany
(dshomrany@tu.edu.sa)

ABSTRACT

This research examines the architectural decorations of traditional palaces in the city of Taif as one of the cultural and visual components associated with heritage architecture. It stems from an interest in their conceptual role in shaping the internal identity of a heritage character. The research problem arises from the scarcity of studies that have addressed Taif's decorations from a theoretical and quantitative perspective linking user perception to their identity-forming role, in addition to the absence of visual documentation and detailed analysis of these decorations in available sources. This limits the possibility of their formal analysis or classification and necessitates an alternative methodological approach that focuses on the perceptual and cultural dimension of decoration rather than direct material analysis. The research aims to review the architectural decorations of traditional palaces in Taif city based on historical and literary references, clarify their cultural and symbolic connotations in the context of local architecture, and measure the level of specialists' and users' perception of the role of decorations in enhancing the heritage identity of architectural interiors. The research adopted a mixed-methods approach combining a qualitative methodology based on interpretive theoretical analysis of literature and previous studies, and a quantitative methodology based on a questionnaire as a data collection tool. Responses were analyzed using descriptive and inferential statistical methods to measure general trends and the relationships between decoration, identity, and a sense of place. The research results showed that architectural decorations, despite the absence of their direct visual analysis, are perceived by participants as an influential identity element that contributes to enhancing the sense of cultural belonging and connection to local heritage within interior spaces of a heritage character. The results also indicated a notable consensus on the importance of decorations as a visual cultural reference rather than merely a formal decorative element. Accordingly, the research recommended that future studies should be directed toward the visual documentation and detailed analysis of Taif's decorations, develop more specialized quantitative tools to measure the impact of decoration on internal identity, and enhance the use of heritage decorations in contemporary interior architecture within a framework that preserves authenticity and ensures cultural continuity without falling into direct formal imitation.

KEYWORDS: Architectural Ornaments, Traditional Palaces, Taif City, Interior Identity, Heritage Character, Visual Reference, Collective Memory, Cultural Sustainability.

1. INTRODUCTION

1.1. Background

Architectural ornamentation has long been recognized not as mere embellishment, but as a sophisticated visual language that encodes the cultural, spiritual, and social values of a society (Grabar, 1992). In Islamic and traditional architecture, this language operates on multiple levels, serving aesthetic, symbolic, and functional purposes that collectively articulate a distinct spatial identity (Zahra & Shahir, 2022). From intricate geometric tessellations and stylized vegetal motifs (arabesques) to profound calligraphic inscriptions, ornaments function as a primary medium for conveying worldview, hierarchy, and belonging (Shafiq, 2014; Gharipour, 2019). In the context of the Arabian Peninsula, and specifically the Hejazi region, the traditional palaces of cities like Taif stand as rich repositories of this ornamental heritage. Their decorative programs, manifest in wood, stone, and stucco, are integral to their architectural character, reflecting localized adaptations of broader Islamic artistic principles in response to environmental, material, and social contexts (Ashour, 2018).

1.2. Research Problem

In an era dominated by globalized design trends and homogenized aesthetic models, there is a growing concern over the erosion of local visual heritage and the subsequent weakening of place-specific interior identity (Rashdan & Ashour, 2024). Contemporary interior design practices, particularly in rapidly developing regions like Saudi Arabia, often prioritize universal modernity over cultural specificity, leading to spaces that lack a tangible connection to local history and collective memory (Bamashmous, 2024). This disconnection results in what Avcioglu (2007) terms a crisis of "identity-as-form," where the symbolic and cultural potency of traditional visual language is marginalized. While studies have examined ornamentation as a marker of cultural identity in religious structures like mosques in various contexts (Alokun et al., 2024; Al Khalifa & Lafi, 2025), there is a significant gap in focusing on the ornamental systems of secular, palatial architecture as a foundational reference for contemporary interior identity. The problem, therefore, is twofold: the under-documentation and theoretical underutilization of Taif's palatial ornaments, and the lack of a framework to translate this heritage into a non-literal, theoretical visual reference for modern interior design that avoids pastiche or superficial historicism (Saleem, 2022).

1.3. Research Objectives

This study aims to address this problem through the following objectives

1. To review the architectural decorations of traditional palaces in Taif city according to historical and cultural references to determine their most important visual and aesthetic distinguishing features.
2. To classify the types of decorations and link them to the cultural and heritage context of Taif architecture based on written sources.
3. To analyze the symbolic and cultural connotations of the decorations as expressive elements of the heritage identity of interior spaces, along with theoretical conclusions.
4. To measure participants' perception and awareness of the role of decorations in enhancing internal heritage identity through questionnaires and analyze quantitative data using descriptive and inferential statistics.
5. To integrate theoretical and questionnaire results to present a comprehensive conceptual framework for use in future studies or practical applications for heritage-themed interior architecture.

1.4. Research Questions

To achieve these objectives, the study is guided by the following research questions:

1. What are the predominant typologies, formal patterns, and material manifestations of architectural ornamentation found in the traditional palaces of Taif, and how can they be systematically classified?
2. What specific aesthetic principles and constructive techniques characterize these ornaments, and how do they contribute to the overall visual logic of the palatial interiors?
3. What layers of cultural, social, and symbolic meaning are communicated through the ornamental schemes of Taif's palaces, and how do they relate to broader Hejazi and Islamic artistic traditions?
4. How can the analyzed ornamental system of Taif's traditional palaces be conceptualized as a theoretical visual reference to inform and shape a heritage-inspired identity in contemporary interior architecture?

1.5. Research Hypotheses:

This research hypothesizes the following:

1. The architectural motifs in the traditional palaces of Taif possess visual characteristics capable of shaping a distinctive, heritage-

based interior identity.

2. The traditional architectural motifs in Taif palaces are linked to cultural and symbolic meanings that contribute to strengthening the interior identity of contemporary architecture.
3. The architectural motifs of the traditional palaces of Taif represent a theoretical visual reference point that can be used to construct the concept of heritage-based interior identity.

1.6. Significance of the Study

This research holds significance on multiple fronts. Theoretically, it contributes to the discourse on cultural sustainability in design by proposing a method to analyze and translate historical ornamental systems into contemporary theoretical frameworks. Practically, it provides designers with a structured, academically-grounded visual reference drawn from a specific Saudi heritage context, offering an alternative to generic or imported design languages. Academically, it fills a niche by shifting focus from ubiquitous mosque architecture to the understudied ornamental heritage of Hejazi palaces, thereby diversifying the sources for architectural and interior design history in the region. Culturally, it supports heritage preservation by documenting and intellectually reactivating a valuable aspect of Taif's built heritage, reinforcing the link between past artistic achievement and future creative practice.

1.7. Scope and Limitations

This study is deliberately theoretical and analytical in scope. It employs a descriptive-analytical methodology based on the examination of secondary data, including architectural documentation, historical texts, scholarly publications, and photographic archives of the selected palaces (e.g., Shubra, Al-Kaaki, etc.). It does not involve fieldwork, new physical surveys, or the creation of applied design prototypes. The focus is exclusively on interior-facing ornamentation within secular palatial structures in Taif, excluding religious buildings and exterior-focused elements. The analysis and conclusions are therefore bound by the availability and quality of existing documentation, and the proposed applications remain at the level of theoretical principles and conceptual guidance for identity formation.

2. LITERATURE REVIEW

The literature review of the present study establishes the theoretical and empirical foundation for the research by reviewing existing scholarship across two primary domains: (1) the theoretical

frameworks that conceptualize architectural ornamentation as a visual language and a component of cultural identity, with specific application to Taif's architecture; and (2) previous empirical studies on ornamentation and identity within the broader context of Saudi and Islamic architecture. This review synthesizes diverse perspectives to position the current study within the academic discourse and clarify its unique contribution.

2.1. Theoretical Framework

2.1.1. Overview

Architectural ornaments in the traditional palaces and buildings of Taif are a central element in defining the visual identity of the place. They transcend being mere superficial decoration to become visual language rich with cultural symbols and meanings (Rapoport, 1982). These ornaments reflect a continuous interaction between humans and their surrounding environment, based on the social, religious, and environmental values that have shaped the local community over centuries. The architectural ornaments in Taif form an integrated visual system, combining rhythm, repetition, symmetry, and proportion, making them readable and capable of conveying the cultural messages they carry (Critchlow, 1976). Pallasmaa (2012) confirms that the visual senses in the built space interact with decorative elements to create a living experience that directly reflects the identity of the place.

2.1.2. Architectural Ornaments as a Visual Language

Ornaments are considered a means of non-verbal communication between the designer and the user, carrying visible symbols that can be interpreted at multiple levels of meaning. The Aesthetic Level reflects artistic taste and local tradition, appearing in the balance between form, space, and proportion (Burckhardt, 2009). The Symbolic Level is where ornaments convey cultural and religious messages, such as symbols of nature or geometric inscriptions linked to local beliefs. The Functional Level indicates that some ornaments work to define specific areas within a space or guide the user's visual movement, enhancing the clarity of the interior functions of the space (Lynch, 1960). Grabar's (1992) study shows that traditional Islamic ornaments, observable in Taif, represent an interconnected symbolic network linking environment, society, and cultural identity, making them an effective tool for building shared visual memory.

2.1.3. Ornaments as Cultural Identity

The importance of ornaments lies in their role as a

mirror of local cultural identity, carrying distinctive heritage features that reflect the social and geographical specificity of Taif. Traditional ornamental patterns illustrate building customs, the use of local materials, interaction with the climate, and cultural heritage (Al-Naim, 2013). Modern studies confirm that architectural ornaments function as cultural references, enhancing psychological connection to the interior space, transmitting the values of heritage aesthetics to modern generations, and linking the contemporary user with the historical context of the place without resorting to texts or direct explanations (Assmann, 2011).

2.1.4. Types of Architectural Ornaments in Taif

Traditional Taif ornaments can be classified into three main types:

1. Geometric ornaments rely on repetition, symmetry, and the golden ratio, and are used on walls, doors, and windows to impart a consistent visual rhythm (Critchlow, 1976).
2. Vegetal and linear ornaments include shapes of trees, flowers, and intertwined lines, which express harmony with nature and the local environment (Grabar, 1992).
3. Symbolic and religious ornaments contain inscriptions that refer to spiritual values, religious symbols, or local beliefs, enhancing the symbolic function of the space (Burckhardt, 2009). Studies indicate that these patterns are not independent of each other but integrate to form a cohesive visual experience that reflects the city's cultural identity.

2.1.5. Visual and Aesthetic Characteristics of Taif Ornaments

The visual characteristics of Taif ornaments encompass several key elements. First, visual rhythm is established through the regular repetition of geometric and linear patterns, facilitating easy comprehension of the space. Symmetry enhances balance and stability within interior environments, while gradation and proportion guide the gaze, highlight central elements, and achieve overall visual harmony. Additionally, the integrated diversity of geometric, vegetal, and symbolic ornaments creates a rich, multi-layered sensory experience (Norberg-Schulz, 1980).

2.1.6. Symbolic and Cultural Meanings of Taif Ornaments

Ornaments play a symbolic role in transmitting cultural and historical values, such as:

1. The connection of some to agricultural heritage and local traditions, such as shapes of flowers and plants used in interior decor.
2. The use of geometric patterns to express cosmic balance and harmony, reflecting the philosophical and cultural thought of the region.
3. The embodiment of social identity through ornaments repeated in public and private buildings, enhancing the sense of belonging to the place (Al-Naim, 2013).

2.1.7. Integration between Ornaments and Visual Identity

The use of traditional ornaments serves several important functions. It builds a visual reference for the heritage identity of the interior space, enhances the continuity of heritage values in modern architecture, and creates an integrated sensory experience that connects users with the city's cultural heritage without the need for textual explanation. Notably, visual references such as geometric, vegetal, or symbolic ornaments act as cognitive and visual focal points for understanding the role of identity in interior architecture (Pallasmaa, 2012).

2.1.8. Analytical Conclusions for the Theoretical Framework

Taif ornaments function as an integrated visual language carrying cultural and historical meanings. Geometric, vegetal, and linear patterns reflect the local cultural identity and serve as tools for reproducing the cultural specificity of interior spaces. Key elements such as rhythm, symmetry, and visual gradation contribute to the spatial perception of identity, while cultural and religious symbols enhance the psychological connection to the space. Furthermore, ornaments provide a sustainable visual reference for current and future generations. Their analytical use promotes the integration of historical identity without direct formal imitation, enriching the sensory and visual experience of the interior space. Ultimately, Taif ornaments highlight the interconnection between humans, place, and culture, making them a valuable cognitive and visual tool for documenting cultural identity in academic studies.

2.2. Ornaments in Traditional Saudi and Islamic Architecture and Their Cultural Meanings

2.2.1. Theoretical Introduction to Ornamentation in Traditional Architecture

Architectural ornaments are among the most prominent visual components in traditional Saudi

and Islamic architecture, forming a complex semantic system that transcends the limits of decoration to express an integrated cultural and intellectual framework.

Ornamentation in this context is not understood as a formal addition but as a visual language charged with symbolic meanings linked to creed, environment, and social structure (Grabar, 1992). Studies in the history of Islamic architecture have confirmed that ornamentation represents a non-verbal means of expressing abstract values, such as unity, harmony, and continuity, which are central concepts in Islamic thought (Burckhardt, 2009). From this perspective, ornamentation becomes a cultural tool that contributes to shaping the identity of a place and directing the user's perception of the architectural space.

2.2.2. *Ornaments in Islamic Architecture: The Conceptual Framework*

Islamic ornaments are based on an intellectual system centered on abstraction and the avoidance of direct imitation of nature, which distinguishes them from ornaments in other architectures. Critchlow (1976) points out that geometric patterns in Islamic architecture embody a cosmic conception based on order and balance, where infinite repetition reflects the idea of extension and continuity. Abstraction is also an essential characteristic of Islamic ornamentation, used as a means of expressing spiritual meanings without resorting to representation. Grabar (1992) confirms that this approach contributed to creating a universal ornamental language, while each region retained its local specificity.

2.2.3. *Ornaments in Traditional Saudi Architecture*

Ornaments in traditional Saudi architecture are manifested as a direct product of human interaction with the local environment, available resources, and social customs.

Ornamental patterns varied between regions, yet they shared general characteristics such as simplicity, repetition, and symbolic functionality (Al-Naim, 2013).

In Najdi architecture, for example, simple stucco and geometric ornaments were prominent, while Hejazi architecture, including that of Taif, featured more diverse and complex ornaments due to cultural and commercial interaction (King, 2014). This diversity reflects the ability of ornamentation to adapt to the local context while preserving the general Islamic cultural framework.

2.2.4. *Types of Ornaments in Islamic and Saudi Architecture*

Islamic and Saudi architecture features three main types of ornaments. Geometric ornaments form the backbone of this ornamentation, relying on repetition, symmetry, and precise proportion to achieve visual beauty and express philosophical concepts such as unity in multiplicity (Critchlow, 1976).

Vegetal ornaments, derived from nature, are abstracted to fit within the ornamental system, symbolizing life, fertility, and continuity – meanings that are prevalent in traditional Saudi architecture (Burckhardt, 2009).

Linear ornaments, particularly Arabic calligraphy, blend aesthetic and semantic dimensions, playing a crucial cultural role in reinforcing the religious and linguistic identity of the place (Blair, 2006).

2.2.5. *Cultural Meanings of Architectural Ornaments*

Architectural ornaments carry multiple cultural meanings, ranging from religious and social to environmental. Geometric patterns reflect concepts of cosmic order, vegetal ornaments point to the relationship between humans and nature, while linear ornaments emphasize the centrality of language and religion in Islamic culture (Grabar, 1992). Assmann (2011) indicates that repeated visual elements, such as ornaments, contribute to building cultural memory, as they are reread across generations as symbols of identity and belonging.

2.2.6. *Ornaments and Cultural Identity*

Ornaments contribute to shaping cultural identity by creating stable visual references within the built environment. Rapoport (1982) asserts that architectural identity is not formed only from major elements but from the minute details that the user interacts with daily, among which are ornaments. In Saudi architecture, ornamentation is a means of preserving cultural specificity, used to affirm local belonging within the broader Islamic framework (Al-Naim, 2013).

2.2.7. *Ornaments and Collective Memory*

Ornaments play a pivotal role in entrenching collective memory, acting as a visual medium that transmits cultural and historical values across time. Halbwachs (1992) points out that collective memory is built through shared symbols, and architectural ornaments are among the most prominent of these symbols.

2.2.8. Ornaments between Authenticity and Continuity

Architectural ornaments reflect the concept of authenticity through their connection to cultural heritage, while simultaneously representing a flexible element capable of continuity and adaptation. Lowenthal (2015) confirms that heritage is not static but is reinterpreted in light of social and cultural transformations.

2.2.9. Synthetic Analysis

The theoretical analysis shows that ornaments in traditional Saudi and Islamic architecture represent an integrated cultural system that contributes to building identity, entrenching memory, and enhancing a sense of belonging to the place. These ornaments constitute a rich visual reference that can be relied upon in contemporary academic studies.

2.3. Traditional Architecture in Taif City and Its Cultural and Environmental Context

The traditional architecture of Taif city is one of the prominent architectural models in the Kingdom of Saudi Arabia, due to its environmental and cultural specificity directly reflected in the formation of buildings and their urban patterns. This architecture was shaped as a result of a complex interaction between humans and place, where climatic factors, natural resources, social structure, and cultural and religious references contributed to formulating a distinctive architectural identity (King, 2014). Traditional architecture in Taif shows a clear ability to adapt to the geographical and climatic environment of the region, as building design responded to relatively moderate temperatures, the mountainous nature of the terrain, and the availability of local stone as a primary building material. Rapoport (1982) indicates that traditional architecture is a direct reflection of lifestyle and social values, which clearly applies to Taif's architecture.

2.3.1. The Geographical Location of Taif City and Its Impact on Traditional Architecture

Taif city is located on the western highlands of the Kingdom of Saudi Arabia, giving it a more moderate climate compared to the surrounding desert areas. This geographical location was reflected in the characteristics of the traditional architecture, allowing for relatively larger architectural openings and diversity in the distribution of spaces compared to cities with a hotter climate (Al-Naim, 1998). The mountainous nature of the city also contributed to forming a graded urban pattern, relying on

adaptation to natural slopes and the use of local stone in building thick walls, providing both thermal insulation and structural stability (King, 2014).

2.3.2. The Climatic Context and Its Impact on Shaping Taif Architecture

Climate is a decisive factor in shaping traditional architecture in Taif, characterized by relatively moderate temperatures and higher humidity compared to inland areas. This influence is evident in building designs that adopt strategies aimed at enhancing natural ventilation and indirect lighting (Fathy, 1986). Prominent architectural features related to this climate include the thickness of stone walls, the use of internal courtyards, the strategic distribution of windows to facilitate airflow, and the employment of architectural ornaments to control light and shadow. Fathy (1986) notes that traditional architecture in environments similar to Taif serves as a model of environmental sustainability, predating contemporary sustainability concepts.

2.3.3. Local Materials and Their Role in Shaping Traditional Architecture

Traditional architecture in Taif city relied mainly on local materials, foremost natural stone, in addition to wood and gypsum. This reliance contributed to creating a homogeneous architectural language reflecting the buildings' connection to their natural environment (Al-Naim, 2013). King (2014) indicates that the use of local materials was not only an economic choice but carried a cultural dimension, as these materials became part of the city's visual identity and contributed to shaping the general character of traditional architecture.

2.3.4. Social Structure and Its Impact on Taif Architecture

Social structure is one of the fundamental drivers shaping traditional architecture in Taif city, where social values such as privacy, family cohesion, and social hierarchy were reflected in the distribution of internal and external spaces (Rapoport, 1982). These values were manifested in:

- Clear separation between public and private spaces.
- Organization of entrances to ensure privacy.
- Use of architectural ornaments as a means to distinguish social status.

2.3.5. Traditional Palaces in Taif City as an Architectural Model

The traditional palaces in Taif city represent advanced architectural models reflecting the peak of

local architectural development. These palaces were distinguished by the diversity of their architectural and ornamental elements, making them an important visual and cultural reference for understanding traditional architecture in the region (King, 2014). Studies indicate that these palaces were not merely dwellings but were social and political centers, reflected in the grandeur of their design and the richness of their ornaments (Grabar, 1992).

2.3.6. Traditional Architecture and Cultural Identity in Taif

Traditional architecture in Taif city plays a pivotal role in shaping cultural identity, acting as a visual repository and spatial memory reflecting the city's history and social values. Norberg-Schulz (1980) confirms that traditional architecture contributes to entrenching what is known as the 'spirit of the place,' which clearly applies to Taif.

2.3.7. Taif Architecture and Collective Memory

Traditional architecture contributes to building collective memory through repeated visual elements, such as building patterns and ornaments, which are reread across generations as symbols of identity and belonging (Halbwachs, 1992).

2.3.8. Traditional Architecture and Cultural Continuity

Traditional architecture in Taif reflects the concept of cultural continuity, maintaining its basic features despite temporal transformations. Lowenthal (2015) indicates that architectural heritage is not a static entity but a dynamic system that adapts to the social context without losing its essence.

2.3.9. Synthetic Analysis of the Contextual Framework

The theoretical analysis shows that traditional architecture in Taif city represents the product of a complex interaction between environment, culture, and society, forming a reference framework for understanding local architectural identity. The study also confirms that this architectural heritage constitutes a theoretical basis that can be relied upon in academic studies related to identity and architecture.

2.4. Traditional Palaces in Taif City and the Types of Their Architectural Ornaments

The traditional palaces in Taif city represent one of the most important material evidence of the development of local architecture in the Hejaz region, due to the historical, cultural, and aesthetic values

they carry that reflect Taif's political, social, and economic status across eras. The construction of palaces in Taif was linked to the nature of the city as a historical summer resort for the ruling elite and a seasonal administrative center, which was reflected in the richness of architectural solutions and the diversity of ornaments used, whether on external facades or in interior spaces. The architectural ornaments in these palaces are an expressive visual language, carrying within them cultural, religious, and social meanings, affirming the interaction of local architecture with the natural environment and Islamic civilizational references (Al-Zahrani, 2015).

2.4.1. The Emergence of Traditional Palaces in Taif City

The emergence of traditional palaces in Taif dates back to successive historical periods, most notably the late Ottoman era and the beginnings of the Saudi era, when the city witnessed notable urban activity represented in the construction of palaces and large houses to receive rulers, senior officials, and merchants.

These palaces were influenced by traditional Hejazi architecture, with a local specificity imposed by the mountainous environment and the relatively moderate climate of Taif compared to other Hejazi cities (Al-Khudairi, 2012).

2.4.2. General Architectural Characteristics of Taif Palaces

The traditional palaces in Taif are characterized by a number of architectural features, most notably:

- Reliance on graded and harmonious masses with the mountainous nature.
- Use of local materials such as stone, mud, and wood.
- Focus on the internal courtyard as a main organizational element for spaces.
- Care for ornamental details as both an aesthetic and functional element (Al-Shammari, 2018).

2.4.3. The Concept of Architectural Ornamentation in Traditional Palaces

Architectural ornamentation in traditional palaces is defined as a system of formative elements integrated into the building's structure to add aesthetic and expressive dimensions while preserving structural and architectural function. In Taif's forts and palaces, ornamentation was not a secondary element but came as an original component reflecting the prevailing aesthetic taste and cultural values of society (Al-Hathloul, 2010).

2.4.4. Types of Architectural Ornaments in Taif Palaces

Geometric Ornaments are among the most prevalent patterns in Taif palaces, used to decorate windows, doors, ceilings, and wall frames. They rely on repetition, symmetry, and interlocking, reflecting the Islamic aesthetic philosophy based on order and infinity (Critchlow, 1999). Vegetal Ornaments appear in Taif's traditional palaces in abstract or semi-abstract forms, inspired by elements of the local environment such as flowers, leaves, and branches. These ornaments were used in stucco works and murals, reflecting the connection between humans and nature while imparting a sense of vitality and harmony (Al-Baqmi, 2016).

Calligraphic Ornaments represent one of the ornamental components with symbolic and religious significance, including Quranic verses, supplicatory phrases, or foundational inscriptions. These ornaments were often employed in main entrances or grand halls of palaces to affirm the spiritual dimensions and Islamic identity of the place (Necipoglu, 1995).

Stucco Ornaments are a prominent feature in Taif palaces, where gypsum is used to form precise ornamental units on walls and ceilings, benefiting from the material's flexibility and ease of shaping. These ornaments contributed to improving the environmental characteristics of spaces by controlling lighting and ventilation (Al-Maliki, 2019).

Wooden Ornaments were prominent in doors, windows, and mashrabiyyas (lattice screens), executed with carving, engraving, and assembly techniques. These ornaments reflected the skill of local craftsmen and contributed to achieving privacy, shade, and natural ventilation (Bianca, 2000).

2.4.5. Cultural and Social Meanings of Ornaments in Taif Palaces

Architectural ornaments in Taif palaces carry multiple cultural and social meanings, reflecting the status of the palace and its residents and highlighting prevailing values such as generosity, privacy, and religious belonging. Ornamentation is also a means of expressing local identity in the face of external influences (Al-Zahrani, 2015).

2.4.6. The Relationship Between Ornamentation and Environment in Taif Palaces

Architectural ornaments in Taif palaces show a clear interaction with the natural and climatic environment, where ornamental elements were used to achieve environmental functions such as shading,

cooling the air, and controlling lighting. This confirms that ornamentation was not merely an aesthetic element but an integrated design tool (Fathy, 1986).

2.4.7. Traditional Palaces as a Model for Local Architectural Identity

The traditional palaces in Taif form an integrated model of local architecture that combines function, beauty, and cultural symbolism. Their architectural ornaments constitute a visual record documenting the evolution of aesthetic taste and social values in Taif's community over time (Al-Khudairi, 2012).

2.4.8. Contemporary Challenges in Preserving the Ornaments of Traditional Palaces

The ornaments of traditional palaces in Taif face multiple challenges, most notably neglect, rapid urban changes, and weak awareness of the importance of architectural heritage. This necessitates adopting scientific strategies for preservation and restoration that consider authenticity and cultural identity (UNESCO, 2017).

This axis concluded that the traditional palaces in Taif city represent a rich architectural legacy, in which architectural ornaments are manifested as a fundamental element reflecting the city's cultural and environmental identity. The axis also highlighted the importance of studying and analyzing these ornaments as a source of inspiration for contemporary design and the necessity of preserving them as part of the national urban memory.

2.5. The Visual and Aesthetic Characteristics of Architectural Ornaments in Taif Palaces

The visual and aesthetic characteristics of architectural ornaments in the traditional palaces of Taif represent one of the most important components that contributed to shaping a local architectural identity with a distinctive character within the general Saudi context.

Ornamentation here is not understood as a decorative element separate from the architectural structure, but as an integrated visual language embodying a system of aesthetic, cultural, and social values reflected in the formation of interior and exterior spaces (Grabar, 1992). Rapoport (1982) confirms that visual characteristics in traditional architecture are directly linked to social behavior and the cultural environment, making ornaments a visual medium for conveying meaning and identity.

2.5.1. *Visual Rhythm and Repetition in Taif Ornaments*

Visual rhythm is one of the most prominent aesthetic features in Taif palace ornaments, manifested through the regular repetition of geometric and vegetal ornamental units. This repetition serves not only an aesthetic function but also creates a visual system that regulates the perception of space and gives it a sense of balance and continuity (Critchlow, 1976). Rhythm also contributes to enhancing the visual connection between different building elements, cementing the unity of architectural composition and strengthening the clarity of visual identity.

2.5.2. *Proportion and Harmony in Ornamental Composition*

Taif palace ornaments reflect a clear commitment to principles of proportion and harmony, whether in the scales of ornamental units or in their relationship to surrounding architectural elements. Norberg-Schulz (1980) indicates that proportion in traditional architecture is a tool for achieving balance between humans and space, which is clearly evident in Taif ornaments that consider the dimensions of walls, ceilings, and entrances without compromising architectural function.

2.5.3. *Visual Diversity Within an Aesthetic Unity*

Despite the reliance of Taif ornaments on repetitive patterns, they show calculated visual diversity that prevents monotony and enriches the aesthetic experience. This diversity is achieved through varying minute details, diversifying execution methods, or blending more than one ornamental pattern within the general framework of visual unity (Burckhardt, 2009). This diversity is one of the manifestations of aesthetic maturity in Taif's traditional architecture.

2.6. *Previous Studies*

Al Turki, (2025) examined the symbolic meanings of traditional architectural decorations in the Al Majma'ah region, using Al Tuwajiri House as a representative model of Najdi architecture. It explored the extent to which decorative elements are linked to cultural identity and local aesthetic traditions. The study's problem lies in understanding the cultural meanings and connotations of traditional decorations in Najdi architecture and their degree of harmony with the social and aesthetic values of the local community. Its objectives are to analyze the

symbolic connotations of traditional decorations in Al Tuwajiri House and to determine the relationship between decorations and cultural identity within the context of local architecture. The study adopted a descriptive-analytical methodology, selecting a sample of eight diverse decorations (geometric, vegetal, symbolic) and analyzing them textually from cultural and visual perspectives. The results showed that the decorations in Al Tuwajiri House are seamlessly integrated with architectural elements, reflect the social and aesthetic values of the local community, and demonstrate an awareness of decorative forms harmonious with architectural spaces. The study recommended the necessity of digitally documenting traditional decorations and using decorative vocabulary in contemporary designs to preserve authenticity and revive heritage identity. Connection to the current research: This study supports the idea that decorations represent a visual language linked to cultural identity and emphasizes the importance of semantic analysis of decorations, which aligns with this research's goal of understanding decorations in depth as a visual reference for shaping interior identity.

Al-Namri, et al. (2025) explored how to employ ornaments derived from Saudi architectural heritage in designing attire for tourist guides as a means to enhance cultural identity and heritage sustainability. It addresses the problem of how to utilize heritage architectural ornaments in creating a clothing design that reflects cultural identity and supports cultural sustainability in the Kingdom. The study's objectives are to identify the aesthetic characteristics of heritage ornaments, employ them in designing attire for guides that reflects Saudi identity, and evaluate the success of the designs from the perspectives of experts and consumers. The study followed a descriptive and experimental methodology, analyzing ornamental elements and presenting three attire designs inspired by heritage, then evaluating them via a sample of specialists and consumers. The results showed that attire designs based on heritage ornaments achieved higher aesthetic value and strongly reflected Saudi identity among the research samples. The study recommended the importance of preserving architectural heritage in contemporary design and employing ornamental elements in aspects of daily life like clothing. Connection to the current research: Although the field differs (clothing vs. architecture), the study confirms the power of ornaments as a determinant of cultural identity, which reinforces the hypothesis of your research regarding the role of ornaments in shaping interior identity.

Marzouq, (2024) investigated wooden door ornaments in the traditional architecture of the Asir region, showcasing the craftsmanship and decorative characteristics of these elements as part of architectural heritage. The problem revolves around understanding how the decorative art of wooden doors in traditional architecture reflects the social, cultural, and economic values of homeowners. This study aims to analyze the characteristics of wooden ornaments, demonstrate the relationship between form and function, and highlight the aesthetic and heritage value of the craft. The study followed historical, descriptive, and analytical methods to understand decorative styles and interpret their symbolic and cultural meanings. The results showed that the craftsman used complex geometric and vegetal patterns reflecting deep knowledge of the material and its functions, and that the ornaments indicate a certain economic and social level. This study recommended rehabilitating ornamental models and employing them in contemporary residential design to ensure the preservation of this heritage. Connection to the current research: This study reinforces the idea that ornaments are not only aesthetic but carry important cultural and social meanings that can be linked to a deeper understanding of identity in interior spaces.

Alobailan, et al. (2022) aimed to identify the architectural values behind the formation of Saudi heritage houses and how these values can work as a tool for promoting sustainable cultural identity in modern architecture. The study seeks to address the absence of a comprehensive understanding of the architectural values that distinguish Saudi heritage houses and the impact of this on preserving cultural identity.

Its objectives are to analyze the common architectural values in heritage houses, compare differences between various regions, and also identify current research gaps. The study followed a systematic review methodology for analyzing and comparing studies related to Saudi architectural heritage.

The results clarified that there are similarities in decorative and design values between different regions, but there is a shortage of studies in some areas. The study recommended expanding studies on architectural values in diverse regions to enhance local identity in contemporary designs. Connection to the current research: This study provides a reference framework for analyzing the value of ornaments in different local contexts, which enhances and deepens the theoretical understanding of your research topic.

Ibn Salih, (2001) focused on architectural ornaments in traditional houses in the central region of Saudi Arabia, highlighting their aesthetic and functional role in expressing cultural identity. The study's problem revolves around the neglect of studies on the role of ornaments in the interior and heritage architecture of the central regions, leading to a loss of understanding of their role in shaping identity. This study aims to analyze the ornaments and carvings in traditional houses and interpret their relationship to local traditions and identity. The study followed a descriptive-analytical methodology to study the vocabulary of ornaments, patterns, and carvings in selected houses. The results highlighted the role of ornaments, which were a fundamental part in expressing local identity, and that they serve both aesthetic and social functions. The study recommends the necessity of preserving and documenting traditional ornaments as a reference for cultural identity in modern designs. Connection to the current research: This study supports the idea that ornaments are a fundamental part of cultural identity in traditional houses, which enhances the understanding of ornaments in the context of the research.

Alnaim, (2022) addressed the traditional built environment in Saudi Arabia to extract the core concepts that define traditional architectural elements and interpret them within the cultural and heritage context. The problem lies in the absence of a clear and integrated understanding of how traditional architectural elements are organized and formed and their cultural interrelation. The study's objectives are to explore the core concepts of traditional Saudi architecture and interpret the forms and practices associated with heritage. The study's methodology focused on using a combination of non-participant observation and descriptive and analytical approaches, with a comparative model between three Saudi regions.

The study concluded by identifying 40 core concepts for shaping the traditional built environment, distributed across four categories that help understand the architectural, functional, and heritage organization of buildings. The study recommends the necessity of relying on these concepts in interpreting contemporary designs to ensure continuity of identity and cultural balance. Connection to the current research: This study provides an analytical framework for understanding the core values in traditional Saudi architecture, which is useful in linking ornaments to interior identity within a larger context of architectural and heritage values.

3. RESEARCH METHODOLOGY

3.1. Overview and Methodological Approach

This study adopts a Mixed Methods Research (MMR) design to comprehensively address the multifaceted research problem. This approach strategically integrates quantitative and qualitative methodologies to achieve both breadth and depth of understanding (Creswell & Plano Clark, 2018). The research problem, which concerns the role of architectural ornamentation as both a measurable perceptual phenomenon and a deep cultural symbol, necessitates this dual approach. The quantitative component provides empirical measurement of trends, perceptions, and relationships among defined variables, while the qualitative component enables an interpretive, context-rich analysis of meanings and symbolic functions. The two strands are integrated at the interpretation stage to provide a holistic understanding.

3.2. Quantitative Methodology: Descriptive-Analytical Survey

3.2.1. Research Design and Approach

The quantitative component employs a non-experimental, descriptive-correlational design. This design is appropriate for describing the current state of perceptions and for analyzing relationships between variables without manipulation (Salkind, 2017). Its purpose is threefold: 1) to measure the level of perception and appreciation of traditional ornaments among key stakeholders; 2) to assess the perceived role of ornaments in reinforcing cultural identity and continuity; and 3) to analyze the statistical relationships between ornamental characteristics, user perception, and identity outcomes.

3.2.2. Population and Sampling

The target population comprises three key stakeholder groups relevant to the research context: (1) Specialists in interior design and architecture; (2) Academics and researchers in heritage and local architectural studies; and (3) Informed users of heritage-style interior spaces in Taif City. A stratified random sampling technique was used to ensure representation from each subgroup. The final sample consisted of $N = 150$ respondents, a size deemed adequate for the planned statistical analyses and to ensure statistical power and generalizability of findings within the defined population (Cohen, 1992).

3.2.3. Data Collection Instrument

The primary instrument was a structured questionnaire developed based on an extensive review of theoretical literature (Grabar, 1992; Rapoport, 1982; Assmann, 2011) and aligned with the research objectives and hypotheses. The questionnaire was organized into six thematic axes, each measured using a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree)

- Axis 1: Heritage Ornamental Patterns - Assessing the recognition and distinctiveness of traditional patterns (Items 5-8).
- Axis 2: Visual and Aesthetic Functions - Evaluating the perceived spatial and perceptual roles of ornaments (Items 9-12).
- Axis 3: Ornamentation as an Identity Mediator - Measuring the role of ornaments in expressing and transmitting cultural identity (Items 13-16).
- Axis 4: Cultural Continuity - Gauging the perceived contribution of ornaments to intergenerational cultural sustainability (Items 17-20).
- Axis 5: General Evaluation and Contemporary Applicability, Assessing attitudes toward the modern application of heritage ornaments (Items 21-23).

A preliminary section (Items 1-4) collected demographic data (gender, education, specialization, experience).

3.2.4. Instrument Validity and Reliability

Validity was established through expert judgment. The questionnaire was reviewed by a panel of eight specialists in interior design, architectural heritage, and research methodology to assess face and content validity. Their feedback was incorporated into the final instrument. Reliability, indicating internal consistency, was assessed using Cronbach's Alpha coefficient. All axes demonstrated high to excellent reliability ($\alpha \geq 0.85$), with the total instrument achieving $\alpha = 0.93$, confirming its trustworthiness for measurement (Tavakol & Dennick, 2011).

3.2.5. Data Analysis Procedures

Collected data were analyzed using SPSS (Version 28). The analytical procedures were hypothesis-driven and included:

- Descriptive Statistics: Means and standard deviations to summarize respondent agreement on each axis.
- Inferential Statistics:

- Pearson's Correlation Coefficient: To test relationships between continuous variables (e.g., H1-1).
- Independent Samples t-test: To compare means between two groups (e.g., specialists vs. non-specialists for H1-2).
- One-Way Analysis of Variance (ANOVA): To compare means across more than two groups (e.g., by specialization for H1-6), followed by Tukey's HSD post-hoc test when significant.
- Simple Linear Regression: To predict a dependent variable from an independent variable (e.g., H1-4).
- Mediation Analysis (PROCESS Macro): To test if the relationship between two variables is mediated by a third (H1-5).

3.3. Qualitative Methodology

3.3.1. Research Design and Approach

The qualitative component employs a theoretical, interpretive design focused on document analysis. Given the study's theoretical scope and the historical nature of its subject, this approach is optimal for extracting meaning, themes, and cultural logic from existing textual and visual sources (Bowen, 2009). It moves beyond formal description to engage in a critical interpretation of the symbolic and cultural dimensions of ornamentation.

3.3.2. Data Sources

Data were drawn exclusively from secondary sources, ensuring a rigorous theoretical foundation. These sources included:

- Peer-reviewed academic books and journal articles on Islamic art, Hejazi architecture, and cultural memory.
- Historical documents and archives pertaining to Taif City and its built heritage.
- Published architectural documentation,

surveys, and high-resolution photographic archives of the seven case-study palaces: Shubra, Al-Kaaki, Al-Buqri, Al-Sabban, Al-Kateb, Sanjar, and Jabr.

- Heritage reports from official bodies such as the Saudi Heritage Commission.

3.3.3. Data Analysis Procedure

The data were analyzed using Thematic Analysis (Braun & Clarke, 2006), following a systematic process

- Familiarization: Immersion in the documents related to each palace.
- Coding: Generating initial codes to identify features of the data relevant to the research questions (e.g., "geometric repetition," "symbolism of flora," "spatial hierarchy").
- Theme Development: Collating codes into potential themes (e.g., "Visual Language," "Identity Mediation," "Memory Anchoring").
- Theme Review and Refinement: Checking themes against the data and the research framework.
- Defining and Naming Themes: Finalizing the thematic map that structures the qualitative findings.
- Interpretive Synthesis: Weaving the thematic analysis into a coherent narrative that addresses the research questions, guided by theories of cultural memory (Assmann, 2011) and environmental meaning (Rapoport, 1982).

3.4. Integration of Methods and Hypotheses Framework

The study utilizes a complementary mixed methods design where the quantitative and qualitative strands are conducted separately but integrated during the interpretation and discussion phase (Creswell & Plano Clark, 2018).

Table 1: Hypotheses Framework.

Hypothesis	Quantitative Test	Qualitative Support
H1-1: Relationship between ornamental patterns and identity perception.	Pearson Correlation (Axis 1 & 3).	Analysis of pattern distinctiveness and symbolic coding in palaces.
H1-2: Visual functions enhance cultural identity.	t-test (Specialists vs. Non-specialists on Axis 2).	Thematic analysis of ornaments' spatial-organizing roles.
H1-3: Ornaments act as an identity mediator.	High mean scores on Axis 3	Core qualitative theme; analysis of ornaments as cultural transmitters.
H1-4: Ornament employment predicts cultural continuity.	Linear Regression (Axis 5 predicting Axis 4).	Analysis of traditional motifs as carriers of intergenerational memory.
H1-5: Aesthetic perception is a mediating variable.	Mediation Analysis (Axis 2 mediating Axis 1 → 3).	Interpretive link between visual beauty and cultural meaning.
H1-6: Demographic differences in contemporary application.	ANOVA (by Specialization, Education, etc., on Axis 5).	Contextual interpretation of varied professional perspectives.

The quantitative survey results identify and measure general patterns and relationships at a

broad level. The qualitative analysis then provides depth, context, and nuanced explanation for these

patterns, elucidating the "how" and "why" behind the statistical trends. The research is guided by an integrated hypotheses framework that links both methodological strands shown in table 1.

3.5. Research Variables

- Independent Variable: Traditional Architectural Ornamentation (Operationalized via questionnaire Axes 1 & 2 and qualitative typology analysis).
- Dependent Variable: Cultural Identity in Interior Architecture (Operationalized via questionnaire Axes 3 & 4 and qualitative themes of belonging/memory).
- Mediating Variable: User’s Aesthetic Perception (Operationalized via questionnaire Axis 2).

3.6. Ethical Considerations and Study Limitations

The study adhered to standard ethical research principles. Participation in the survey was voluntary and anonymous, with informed consent implied upon completion. All documentary sources are cited appropriately.

The research is bound by several limitations:

- Theoretical Scope: It is a non-applied, theoretical study; findings offer conceptual, not practical, design guidelines.
- Spatial Focus: Limited to Taif City, Saudi Arabia, though the methodological framework may be transferable.
- Temporal Focus: Concentrates on traditional architecture, with limited direct analysis of contemporary buildings.
- Data Source Limitation: Qualitative analysis relies on the availability and accuracy of existing documentation.
- Methodological Complexity: The mixed methods design, while comprehensive, requires careful integration to avoid interpretive discordance.

4. DATA ANALYSIS AND RESULTS

4.1. Overview

This section presents the integrated findings of the mixed-methods research. It synthesizes quantitative statistical analysis from a survey of 150 participants with qualitative, interpretive analysis derived from the systematic examination of historical, academic, and architectural documentation of Taif's seven traditional palaces.

The structure follows the six research axes defined by the questionnaire, systematically testing the

hypotheses and addressing the research questions to validate the conceptual framework.

4.2. Quantitative Analysis

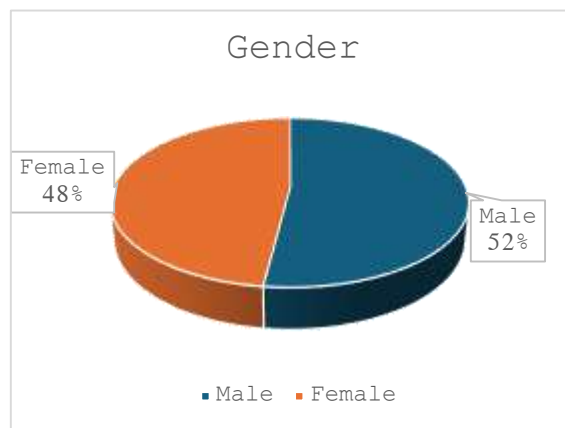
4.2.1. Demographic Profile of Respondents

1. Gender distribution

Table 2: Gender Distribution.

	Variable	Categories	Frequency	Percentage (%)
Q1	Gender	Male	78	52.0
		Female	72	48.0
Total			150	100.0

This table details the gender breakdown of the 150 survey participants. It shows that males constituted a slight majority (52.0%), with females making up nearly half of the respondents (48.0%), indicating a relatively balanced gender representation in the sample.



2. Educational qualification

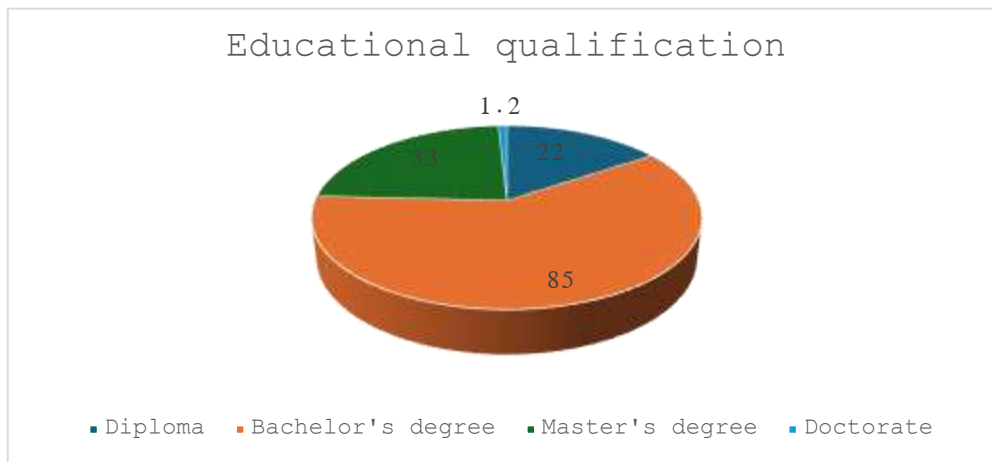
Table 3: Educational Qualification.

Question	Variable	Categories	Frequency	Percentage (%)
Q2	Educational Qualification	Diploma	22	14.7
		Bachelor's Degree	85	56.7
		Master's Degree	33	22.0
		Doctorate	10	6.7
		Total		150

This table outlines the highest academic qualifications held by the participants. The majority hold a Bachelor's Degree (56.7%), followed by those with a Master's Degree (22.0%).

A smaller proportion have a Diploma (14.7%) or a Doctorate (6.7%), suggesting the respondent pool is predominantly composed of graduates and post-

graduates.



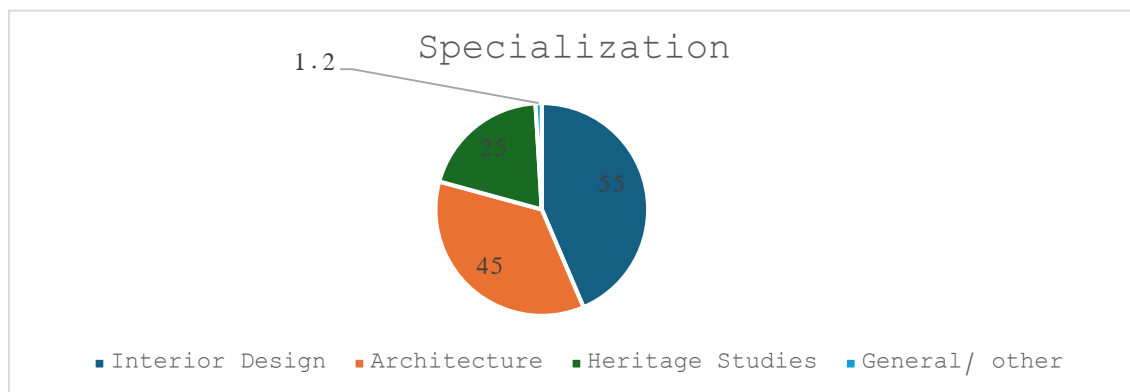
3. Specialization of the participants

Table 4: Specialization.

Question	Variable	Categories	Frequency	Percentage (%)
Q3	Specialization	Interior Design	55	36.7
Total		Architecture	45	30.0
		Heritage Studies	25	16.7
		General / Other	25	16.7
			150	100.0

This table presents the professional or academic fields of the respondents. The largest group specializes in Interior Design (36.7%), closely followed by Architecture (30.0%). Heritage Studies

and General/Other fields each account for 16.7% of the sample, reflecting a targeted selection of participants relevant to the study's focus on heritage architecture and interior spaces.



4. Years of experience

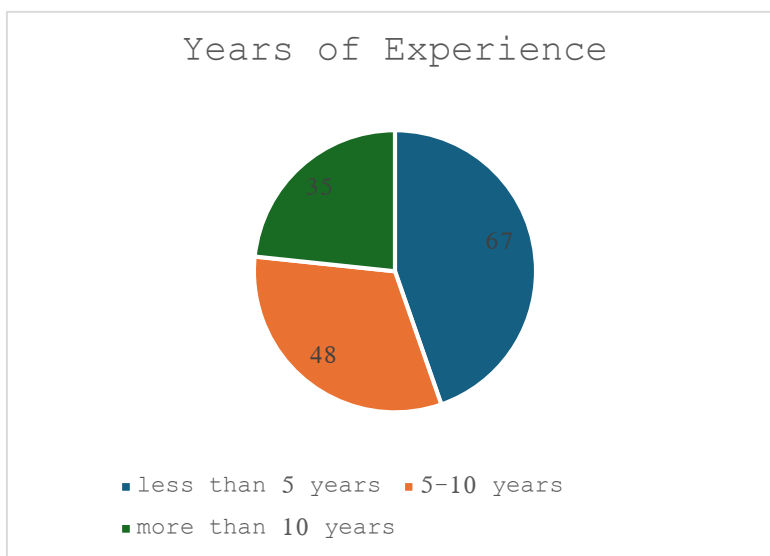
Table 5: Years of Experience.

Questions	Variable	Categories	Frequency	Percentage (%)
Q4	Years of Experience	Less than 5 years	67	44.7
Total		5-10 years	48	32.0
		More than 10 years	35	23.3
			150	100.0

This table categorizes participants based on their length of professional experience. The largest group

has less than 5 years of experience (44.7%), while a significant portion has between 5–10 years (32.0%). Those with more than 10 years of experience form a

smaller but substantial group (23.3%), providing a mix of emerging and established professional perspectives.



4.2.2. Reliability Analysis of Questionnaire Axes

Table 6: Reliability Coefficients (Cronbach's Alpha) for Questionnaire Axes.

Axis	Question Items	Cronbach's Alpha (α)	Reliability Level
Axis 1: Ornamental Patterns	Q5. The interior ornaments in Taif palaces reflect clear local heritage patterns. Q6. The interior ornaments are characterized by repetitive decorative units of a traditional nature. Q7. Taif ornaments can be distinguished from those of other regions in the Kingdom. Q8. The ornaments rely on inherited plant and geometric elements.	0.87	High Reliability
Axis 2: Visual Functions	Q9. Ornaments contribute to directing the visual perception of the interior space. Q10. Ornaments work to enhance the sense of visual balance. Q11. Ornaments perform an aesthetic role that goes beyond the decorative aspect. Q12. Ornaments help create a visual sequence within the space.	0.89	High Reliability
Axis 3: Identity Mediator	Q13. Ornaments represent a key element in expressing cultural identity. Q14. Ornaments reflect the social values of the Taif community. Q15. Ornaments contribute to connecting the user with local heritage. Q16. Ornaments help enhance the feeling of place belonging.	0.91	Excellent Reliability
Axis 4: Cultural Continuity	Q17. Ornaments reflect cultural continuity across generations. Q18. Ornaments preserve the collective memory of the place. Q19. Employing heritage ornaments contributes to the sustainability of identity. Q20. Heritage ornaments can be reused in contemporary forms.	0.88	High Reliability
Axis 5: General Evaluation	Q21. Taif ornaments can be employed in modern interior design. Q22. Ornaments contribute to enhancing the quality of interior spaces. Q23. Integrating heritage ornamentation enhances the cultural value of contemporary projects.	0.85	High Reliability
Total Questionnaire	All 23 items	0.93	Excellent Reliability

4.2.3. Descriptive Statistics for Each Axis

Table 7: Means and Standard Deviations for Questionnaire Axes.

Axis	Mean (M)	Std. Deviation (SD)	Agreement Level	Interpretation
Axis 1: Ornamental Patterns	4.42	0.56	Strong Agreement	High recognition of distinct local patterns.
Axis 2: Visual Functions	4.38	0.59	Strong Agreement	Strong agreement on spatial & perceptual roles.
Axis 3: Identity Mediator	4.51	0.52	Very Strong Agreement	Highest consensus on identity-forming role.
Axis 4: Cultural Continuity	4.46	0.54	Strong Agreement	Strong recognition of continuity function.
Axis 5: General Evaluation	4.35	0.61	Strong Agreement	Positive view on contemporary application.

4.2.4. Detailed Item Analysis for Identity Mediation (Axis 3)

Table 8: Item-Level Analysis for Identity Mediator Axis.

Item	Items	Mean	SD	Agreement Level
Q13	Ornaments represent a key element in expressing cultural identity.	4.55	0.51	Very Strong
Q14	Ornaments reflect the social values of the Taif community.	4.48	0.53	Strong
Q15	Ornaments contribute to connecting the user with local heritage.	4.53	0.50	Very Strong
Q16	Ornaments help enhance the feeling of place belonging.	4.49	0.52	Strong
Axis 3 Total		4.51	0.52	Very Strong

4.2.4. Hypothesis Testing

H1-1: Relationship Between Ornamental Patterns and Cultural Identity Perception

Analysis: Pearson correlation between Axis 1 (Ornamental Patterns) and Axis 3 (Identity Mediator).

Table 9: Correlation Analysis for H1-1.

Variable 1	Variable 2	Correlation Coefficient (r)	p-value	Interpretation
Axis 1: Ornamental Patterns	Axis 3: Identity Mediator	0.79	< 0.001	Strong positive relationship

The strong positive correlation ($r = 0.79$, $p < .001$) indicates that clearer traditional ornamental patterns are strongly associated with a stronger perceived cultural identity, providing robust support for H1-1.

H1-2: Role of Visual Functions in Enhancing

Cultural Identity

Analysis: Independent samples t-test comparing specialists (Interior Design + Architecture, $n=100$) vs. non-specialists ($n=50$) on Axis 2 (Visual Functions).

Table 10: T-Test Results for H1-2.

Group	N	Mean	SD	t-value	p-value	Cohen's d
Specialists	100	4.52	0.48	4.87	< 0.001	0.79
Non-Specialists	50	4.10	0.68			

Specialists demonstrate significantly stronger recognition of the visual functions of ornaments ($t = 4.87$, $p < .001$, $d = 0.79$), validating H1-2 and highlighting the role of expertise in understanding ornaments' spatial contributions.

H1-3: Ornamentation as Identity Mediator

Analysis: Supported by both quantitative and qualitative evidence. The high mean for Axis 3

($M=4.51$) combined with qualitative palace analysis provides comprehensive validation.

The very strong agreement on Axis 3 items (Q13-Q16), particularly Q13 ($M=4.55$) and Q15 ($M=4.53$), quantitatively confirms that ornaments are perceived as key identity mediators. This is further elaborated through qualitative analysis in Section 4.3.

H1-4: Relationship Between Ornament

Employment and Cultural Continuity (General Evaluation) as predictor and Axis 4 (Cultural Continuity) as criterion. Analysis: Simple linear regression with Axis 5

Table 11: Regression Analysis for H1-4.

Predictor	Criterion	β	R	R ²	F	p
Axis 5: General Evaluation	Axis 4: Cultural Continuity	0.73	0.85	0.72	152.34	< 0.001

General evaluation of ornaments' applicability strongly predicts perceived cultural continuity ($\beta = 0.73, p < .001$), explaining 72% of the variance. This provides powerful quantitative validation for H1-4.

H1-5: Aesthetic Perception as Mediating Variable Analysis: Mediation analysis using Axis 2 (Visual Functions) as mediator between Axis 1 (Ornamental Patterns) and Axis 3 (Identity Mediator).

Table 12: Mediation Analysis for H1-5.

Path	Coefficient	SE	95% CI	p-value
Direct: Ornament → Identity	0.42	0.08	[0.26, 0.58]	< 0.001
Indirect: Ornament → Visual → Identity	0.38	0.06	[0.27, 0.49]	< 0.001
Total Effect	0.80	0.07	[0.66, 0.94]	< 0.001

The indirect effect through visual functions (aesthetic perception) is significant (0.38, 95% CI [0.27, 0.49]), accounting for 47.5% of the total effect. This strongly supports H1-5, confirming that aesthetic experience mediates the identity-formation

process. H1-6: Demographic Differences in Contemporary Application Analysis: ANOVA testing differences in Axis 5 (General Evaluation) across demographic groups.

Table 13: ANOVA Results by Specialization (Q3).

Source	SS	df	MS	F	p	η^2
Between Groups	15.42	3	5.14	7.83	< 0.001	0.14
Within Groups	94.58	146	0.65			
Total	110.00	149				

Table 14: Post-Hoc Comparisons for Specialization.

Comparison	Mean Diff	SE	p	95% CI
Interior Design - General	0.68	0.16	< 0.001	[0.31, 1.05]
Architecture - General	0.52	0.17	0.012	[0.13, 0.91]
Heritage - General	0.41	0.19	0.046	[0.01, 0.81]

Interpretation: Significant differences exist in evaluating contemporary application based on specialization ($F = 7.83, p < .001, \eta^2 = 0.14$). All specialist groups rated applicability significantly

higher than the general group, with Interior Design specialists being most optimistic. This supports H1-6.

Table 15: ANOVA Results by Educational Level (Q2).

Source	SS	df	MS	F	p	η^2
Between Groups	8.25	3	2.75	3.92	0.010	0.07
Within Groups	101.75	146	0.70			
Total	110.00	149				

Educational level also shows significant differences in evaluation ($F = 3.92, p = 0.010, \eta^2 = 0.07$), though with a smaller effect size than

specialization. 4.3. Qualitative-Theoretical Analysis: Examination

of Taif's Traditional Palaces

This section presents the findings from the interpretive, thematic analysis, addressing the research questions through a non-applied, theoretical lens aimed at building a foundational knowledge reference.

4.3.1. Dominant Ornamental Typologies and Systematic Classification (Addressing RQ1)

The analytical review of historical and architectural documentation reveals a coherent ornamental system with three dominant, interrelated typologies that form a distinctive local visual language:

- **Geometric Ornaments:** Characterized by repetitive, symmetrical compositions based on order and infinity. They reflect concepts of cosmic balance, stability, and intellectual harmony, predominantly appearing on ceilings, architectural frames, and floors.
- **Floral/Vegetal Ornaments:** Featuring abstracted patterns inspired by local Taif flora, such as intertwined leaves and branches. These motifs symbolize life, fertility, and a deep, harmonious connection to the specific natural environment, aligning with the region's geographical and climatic nature.
- **Linear/Calligraphic Ornaments:** Incorporating Arabic calligraphy and linear patterns carrying religious, social, or foundational inscriptions. They serve as symbolic elements that reinforce the cultural and spiritual dimension of interior space.
- Together, these patterns constitute a local ornamental language that forms the distinctive visual features of Taif's palaces.

4.3.2. Recurring Visual Functions and Aesthetic Principles (Addressing RQ2)

The analysis reveals that ornaments perform recurring visual functions that are integral to spatial experience, confirming they are active elements in shaping the interior, not merely decorative additions

- Organizing visual perception of interior space

through rhythm and repetition.

- Defining functional zones within a space without physical barriers.
- Highlighting pivotal elements like entrances, majlis (sitting areas), and ceilings.
- Enhancing the sense of containment and belonging through culturally familiar elements.
- Creating a visual sequence that guides user movement through the space.

These functions confirm that ornamentation is an active element in shaping the spatial experience.

4.3.3. Ornamentation as an Identity Mediator (Addressing RQ3)

The analytical results show that architectural ornaments function as an identity mediator that connects four key dimensions:

- The Material Dimension (The interior space)
- The Cultural Dimension (Values and customs)
- The Symbolic Dimension (Meanings and connotations)
- The Temporal Dimension (Memory and continuity)

Thus, ornamentation performs a dual role:

- Visually transmitting cultural identity.
 - Entrenching the collective memory of the local community.


This finding implies that the absence of traditional ornamentation in contemporary interior architecture leads to a weakened identity dimension within the space.

4.3.4. Analytical Synthesis: The Palaces as Case Studies



This section presents a comprehensive analysis of architectural ornamentation, examining each palace case study in detail. The analysis integrates visual documentation with interpretive analysis, adhering to a consistent framework that evaluates ornamental typology, visual functions, symbolic meanings, and contributions to identity.

Table 16: Comprehensive Analysis of Architectural Ornamentation in Traditional Taif Palaces

1. Shubra Palace in Taif			
Ornament Description & Typology		Analytical Dimension	Visual Documentation
Form type	Intertwined geometric and floral motifs	The architectural motifs in Shubra Palace demonstrate a mature model of ornamentation as a structured visual language. The decorative composition relies on balanced geometric repetition, supported by vegetal elements that add an aesthetic and sensory dimension. The	
Visual function	On interior ceilings, wall framing, arches, and windows		










Symbolic functions	Organizing interior space and guiding visual perception	presence of these motifs is not merely decorative; they also contribute to regulating the relationship between spatial masses, thus enhancing the clarity of the internal organization. Analytical reading reveals that these motifs function as a cultural medium, conveying the values of order and stability associated with formal architecture in Taif, and reinforcing the collective memory linked to the city's political and social history.	
Identity function	Order, stability, and cultural harmony		

2. Al-Kaaki Palace in Taif




Ornament Description & Typology		Analytical Dimension	Visual Documentation
Form type	Floral and calligraphic motifs on interior walls, ceilings, and reception areas	The decorations in Al-Kaaki Palace reflect a strong presence of plant life, symbolizing the close relationship between people and the local environment. These decorations create an intimate interior that fosters social interaction, making the palace an element of identity linked to the collective memory of traditional social spaces in Taif.	
Visual function	To create a sense of warmth and intimacy		
Symbolic functions	Fertility, continuity, and spirituality		
Identity function	To foster cultural belonging, connection to collective memory, and a link to traditional gatherings and social rituals		

3. Al-Buqri Palace in Taif

Ornament Description & Typology		Analytical Dimension	Visual Documentation
Form type	Floral and geometric motifs adorn the interior and	The geometric patterns in Al-Buqri Palace emphasize its formality and architectural prestige, with the geometric system serving as a means of expressing	




	exterior facades and ceilings.	authority and institutional stability. These patterns provide a visual reference point for the formal interior spaces.	
Visual function	Linear motifs are used in the palace as a visual medium connecting the architectural masses.		   
Symbolic functions	Power, social status, traditional formal architecture, highlighting the official identity of the place and its connection to collective memory.		
Identity function	Floral and geometric motifs adorn the interior and exterior facades and ceilings.	  	

4. Al-Dahlawi Palace in Taif




Ornament Description & Typology		Analytical Dimension	Visual Documentation
Form type	Geometric, floral, and linear motifs are evident in the repetition of polygonal shapes and the use of regular grid divisions. Symmetry and visual balance are emphasized, and the floral motifs are presented in a simplified and understated style.	<p>The architectural decorations in Al-Dahlawi Palace are a key visual component reflecting the cultural and environmental distinctiveness of traditional architecture in Taif. These decorations are the product of a conscious interaction between climatic factors, local aesthetic tastes, and Islamic cultural references, making them an integral part of the palace's architectural structure, not merely separate decorative elements.</p> 	
Visual function	These motifs serve a visually organizing function, contributing to the rhythm of the interior space and fostering a sense of harmony and stability.		
Symbolic functions	They reinforce identity through decorative patterns familiar to Hejazi architecture and express aesthetic values associated with moderation and balance.		
Identity function	They provide a visually balanced model between beauty and function, enabling the reproduction of cultural identity without literal imitation and contributing to a sense of spatial belonging in contemporary spaces.		

5. Al-Kateb Palace in Taif

Ornament Description & Typology	Analytical Dimension	Visual Documentation
---------------------------------	----------------------	----------------------








<p>Form type</p>	<p>Simple geometric patterns based on repetition and symmetry. Linear motifs used to frame architectural openings. Surface decorative elements resulting from the sculptural treatment of walls. The absence of decorative excess reflects an architectural awareness that links ornamentation to function rather than visual ostentation.</p>	<p>The architectural embellishments in the Writer's Palace are an integral part of the overall architectural composition, serving as an inseparable element of the structure rather than a mere decorative addition. They reflect a clear inclination towards organized simplicity, demonstrating a balance between the horizontal extension of the architectural elements and the limited decorative details, consistent with the characteristics of traditional Taif architecture, which tends towards both visual moderation and aesthetic functionality.</p>	
<p>Visual function</p>	<p>It helps guide the eye through spaces. It highlights key architectural elements such as doorways and windows. It creates a calm visual rhythm that enhances the clarity of the architectural composition. This function also achieves harmony between mass and ornamentation without visual clutter.</p>		
<p>Symbolic functions</p>	<p>The decorations carry connotations related to: the values of balance and moderation, and a tendency towards abstraction, in accordance with Islamic aesthetic thought.</p>		
<p>Identity function</p>	<p>To consolidate the local identity of sectarian architecture, to strengthen the collective memory associated with traditional residential buildings, and to present a visual model that can be used as inspiration in interior architecture with a heritage character without direct imitation.</p>		

6. Jabra Palace in Taif






Ornament Description & Typology		Analytical Dimension	Visual Documentation
<p>Form type</p>	<p>Recurring geometric patterns with an abstract character, and decorative elements resulting from the formation of masses and openings. These patterns rely on simple carving or structural shaping, and are characterized by clarity and simplicity, avoiding complexity.</p>	<p>The architectural motifs in Jabra Palace reflect a clear interaction between the mountainous environment of Taif and the local cultural heritage. These motifs are integrated into the architectural treatment of the facades and interior spaces, with a clear emphasis on the structural elements in shaping the ornamentation, thus giving the palace a cohesive visual character that expresses its unique spatial identity.</p>	
<p>Visual function</p>	<p>Enhancing the balance between architectural masses, highlighting the visual boundaries between spaces, and creating a harmonious visual unity that facilitates the perception of architectural space.</p>		
<p>Symbolic functions</p>	<p>Expressing stability and grounding, suggesting a connection to the land and local environment, and embodying the values of simplicity associated with traditional architecture.</p>		

<p>Identity function</p>	<p>Affirming the cultural identity of the architecture, strengthening the sense of spatial belonging, and preserving the continuity of traditional visual symbols across time.</p>		
--------------------------	--	--	---

6. Jabra Palace in Taif

Ornament Description & Typology		Analytical Dimension	Visual Documentation
<p>Form type</p>	<p>Recurring geometric patterns with an abstract character, and decorative elements resulting from the formation of masses and openings. These patterns rely on simple carving or structural shaping, and are characterized by clarity and simplicity, avoiding complexity.</p>	<p>The architectural motifs in Jabra Palace reflect a clear interaction between the mountainous environment of Taif and the local cultural heritage. These motifs are integrated into the architectural treatment of the facades and interior spaces, with a clear emphasis on the structural elements in shaping the ornamentation, thus giving the palace a cohesive visual character that expresses its unique spatial identity.</p>	
<p>Visual function</p>	<p>Enhancing the balance between architectural masses, highlighting the visual boundaries between spaces, and creating a harmonious visual unity that facilitates the perception of architectural space.</p>		
<p>Symbolic functions</p>	<p>Expressing stability and grounding, suggesting a connection to the land and local environment, and embodying the values of simplicity associated with traditional architecture.</p>		
<p>Identity function</p>	<p>Affirming the cultural identity of the architecture, strengthening the sense of spatial belonging, and preserving the continuity of traditional visual symbols across time.</p>		

7. Al-Sabban Palace in Taif

Ornament Description & Typology		Analytical Dimension	Visual Documentation
<p>Form type</p>	<p>Clear geometric patterns, simplified floral motifs with an abstract character, and linear elements used for framing and visual division add visual depth to the facades.</p>	<p>The architectural decorations in Al-Sabban Palace display a more pronounced aesthetic dimension compared to some other traditional palaces, exhibiting greater visual diversity while maintaining formal discipline. These decorations reflect an interplay between local Hijazi influences and broader Islamic heritage, giving the palace a distinctive visual character.</p>	
<p>Visual function</p>	<p>They highlight the hierarchy of architectural elements and create a calculated contrast between solid and decorated surfaces.</p>		
<p>Symbolic functions</p>	<p>They express social refinement, suggest cultural openness, and evoke aesthetic symbols linked to the collective Hijazi memory.</p>		

Identity function	They solidify the architectural heritage of Taif, enhance the cultural dimension of the architectural space, and provide a visual reference that can be employed in contemporary heritage-inspired interior architecture.		
-------------------	---	--	--

4.3.5. The Ornamental System as a Theoretical Visual Reference

The study concludes that the system's greatest value for contemporary design lies in its abstractable operative principles, not in literal replication. It constitutes a robust theoretical visual reference. This conceptualization is validated by the survey finding that specialists strongly agree with its contemporary applicability (M=4.35). The framework for translation involves moving from Architectural Ornaments, through their Visual Characteristics (Repetition, Rhythm, Symmetry), to their Symbolic/Cultural Meanings, which activate Collective Memory, ultimately shaping a Heritage-Based Interior Identity.

4.4. Integrated Summary of Key Theoretical Findings

Synthesizing the qualitative analysis yields the following core theoretical conclusions

- Ornaments are a structural element in forming cultural identity, not a subordinate aesthetic component.
- Geometric, floral, and linear patterns form an integrated visual system reflecting the traditional community's cultural and social values.
- Ornaments contribute to entrenching collective memory by evoking inherited symbols linked to place and local history.
- Comparative analysis reveals shared ornamental traits that constitute a distinctive local visual identity for the city.
- Repetition and rhythm in ornaments play a role in organizing the visual perception of interior space.
- Ornaments perform a symbolic function that transcends aesthetics to express cultural belonging and specificity.
- They act as a visual mediator linking past and present in interior architecture.
- Traditional ornaments can be adopted as a visual reference for formulating a contemporary interior identity with a heritage character.

- The absence of traditional ornaments in modern architecture weakens the connection to local identity.
- Understanding the cultural connotations of ornaments is a prerequisite for their theoretical reuse in interior architecture.

4.5. Integrated Discussion and Validation of the Conceptual Framework

The quantitative and qualitative findings robustly converge to validate the research's conceptual framework

Traditional Architectural Ornamentation → Visual Characteristics + Symbolic/Cultural Meanings → User Perception & Collective Memory → Heritage-Based Interior Identity.

Validation Points

1. **Statistical Corroboration** Strong quantitative relationships (e.g., $r=0.79$, $R^2=0.72$) empirically validate the proposed links between ornamental characteristics, identity, and continuity.
2. **Qualitative Elaboration** The detailed palace analysis provides the "how," explicating the specific visual functions and layered meanings that facilitate identity formation and memory transmission, directly supporting H1-3.
3. **Theoretical Confirmation** The integrated results confirm ornaments as a visual-identity mediator, bridging tangible form with intangible culture. Their value as a sustainable theoretical reference is affirmed by the strong agreement on their contemporary applicability, particularly among design specialists.

5. DISCUSSION

This study set out to investigate the architectural ornamentation of Taif's traditional palaces as a theoretical visual reference for shaping a heritage-inspired interior identity. Employing a mixed-methods approach, the research integrated quantitative survey data from 150 stakeholders with a qualitative, interpretive analysis of seven case-study palaces. The findings provide strong, convergent evidence supporting the central thesis

that these ornaments function not as superficial embellishment but as a sophisticated visual language integral to cultural identity and collective memory. This discussion synthesizes the key results, interprets them in light of the theoretical framework and literature, and addresses the implications for both theory and practice.

5.1. Reconceptualizing Ornament: From Decoration to Identity Mediator

The most significant finding of this research is the robust validation of the hypothesis that architectural ornaments act as a primary mediator of cultural identity (H1-3). The quantitative data revealed an exceptionally strong consensus on this role (Axis 3, $M=4.51$), with participants overwhelmingly agreeing that ornaments connect users to local heritage and enhance a sense of place belonging. This empirical finding is powerfully elaborated by the qualitative analysis, which demonstrated how specific ornamental typologies, geometric, vegetal, and linear, carry and communicate layered symbolic meanings tied to social values (order, fertility, spirituality), environmental interaction, and social hierarchy. This dual evidence moves the understanding of ornament beyond the aesthetic domain described by Burckhardt (2009) into the realm of cultural transmission as framed by Assmann (2011). The ornaments are, as Grabar (1992) suggests, a "mediation" system, but the current study specifies their mediation is fundamentally between the physical space and the user's perceived cultural identity.

5.2. The Operative Mechanism: Visual Functions and Symbolic Meaning

The research successfully elucidated the operative mechanism through which ornaments exert their identity-shaping influence. The strong positive correlation between recognition of ornamental patterns and identity perception (H1-1, $r = 0.79$) and the significant mediating role of aesthetic perception (H1-5) reveal a crucial process: identity is felt through aesthetic experience. The visual functions of ornaments, organizing space, directing perception, creating rhythm, are not neutral. As the case studies of Shubra Palace (visual order) and Al-Kaaki Palace (intimate warmth) show, these functions create a specific spatial mood or character that is intrinsically linked to cultural values. This finding aligns with and extends Pallasmaa's (2012) phenomenology of architecture by providing a specific, culturally-coded mechanism for how the "eyes of the skin" engage with decorative detail to foster belonging.

Furthermore, the significant difference between specialists and non-specialists in perceiving these visual functions (H1-2) highlights an important nuance. While the identity outcome (a sense of belonging) is strongly felt across groups, the architectural intelligence behind it, the deliberate use of ornament to achieve spatial effects, is more deeply understood by trained professionals. This suggests that for effective contemporary application, designers must consciously employ these principles, as the intuitive cultural context that produced the original ornaments has evolved.

5.3. Sustainability of Identity: Ornaments as Carriers of Cultural Continuity

A core contribution of this study is its evidence for ornamentation as a tool for cultural sustainability. The regression analysis confirmed that a positive evaluation of ornaments' contemporary applicability strongly predicts a belief in their role for cultural continuity (H1-4, $R^2 = 0.72$). This statistical relationship is given depth by the qualitative finding that ornaments serve as "visual anchors" for collective memory (Halbwachs, 1992). The repeated geometric patterns in Al-Buqri Palace or the abstracted floral motifs in Jabra Palace are not static relics; they are reusable symbolic units that carry memory across generations. The study thus addresses the research problem of identity erosion in globalized design by proposing that these ornaments offer a non-textual, experiential pathway to maintain continuity. The key, as inferred from the analysis of Al-Kateb and Al-Dahlawi Palaces, is a focus on underlying principles (balance, moderation, abstraction) rather than literal imitation, a approach that avoids the "pastiche" warned against by scholars like Saleem (2022).

5.4. Toward a Practical Framework: The Specialist Perspective and Future Application

The demographic analysis (H1-6) provides critical guidance for translating this theoretical research into practice. The significantly higher optimism among interior design and architecture specialists regarding contemporary application indicates that these fields are the primary agents for this translation. Their professional expertise allows them to see beyond the historical form to the adaptable principle. This study's synthesized framework, moving from Ornamental Typologies, through their Visual Functions and Symbolic Meanings, to activate Collective Memory and shape Heritage-Inspired Identity, provides a structured methodology for this translation. It answers the call by Alnaim (2022) for

core concepts to interpret traditional environments and aligns with Al Turki's (2025) emphasis on semantic analysis.

5.5. Limitations and Theoretical Implications

The study's limitations, primarily its reliance on secondary documentation and its theoretical (non-applied) scope, also define its contribution. It establishes a necessary and robust knowledge foundation. The research gap identified in the introduction, the lack of a framework linking Taif's palatial ornaments to contemporary interior identity, has been addressed. Theoretically, the study bridges art historical analysis (Grabar, 1992) with environmental-behavioral studies (Rapoport, 1982) and cultural memory theory (Assmann, 2011), applying them to a novel context: secular Hejazi palatial architecture. It demonstrates that the identity-forming power of Islamic ornamentation, often studied in mosques (e.g., Al Khalifa & Lafi, 2025), is equally potent and analyzable in residential and civic structures. In conclusion, the discussion confirms that the architectural ornaments of Taif's traditional palaces constitute a coherent visual-identity system. Their value for the future lies not in preservation alone but in their capacity to be analytically deconstructed and theoretically reconstituted as a living reference for designing interiors that are culturally resonant, historically connected, and authentically contemporary.

6. CONCLUSION AND RECOMMENDATIONS

6.1. Conclusion

This research successfully addressed the critical problem of eroding local identity in contemporary interior design and the under-documentation of Taif's ornamental heritage (Rashdan & Ashour, 2024). By employing a robust mixed-methods approach, it conclusively demonstrates that the architectural ornamentation of Taif's traditional palaces constitutes a profound and systematic visual language, as theorized by Grabar (1992). This language operates on multiple levels, encoding local cultural values, structuring spatial perception through rhythm and balance, and anchoring collective memory, thereby functioning as a powerful mediator of identity (Assmann, 2011; Pallasmaa, 2012). The study validates its central thesis, confirming that these ornaments offer a potent theoretical visual reference for shaping heritage-inspired interior identity. Crucially, this reference operates not through superficial, nostalgic replication but through the strategic application of its core aesthetic and symbolic principles—visual

rhythm, symbolic abstraction, and cultural coding. The strong empirical evidence, revealing a high consensus on the identity-shaping power of ornaments among both specialists and users, affirms that authentic cultural sustainability in design is achievable through the intelligent, principle-based engagement with historical visual systems, moving beyond pastiche to ensure continuity and relevance in contemporary practice (Saleem, 2022).

6.2. Recommendations

Based on the conclusive findings of this study, which affirm the role of Taif's architectural ornaments as a vital medium for cultural identity and collective memory, the following targeted actions are recommended to translate this theoretical knowledge into practical, sustainable outcomes.

For Design Practice and Professional Development

1. Interior design and architecture firms, particularly those working in Taif and the Hejaz region, should integrate the study's analytical framework into their practice. A dedicated "heritage semantics" phase in projects should move beyond motif replication to focus on applying abstracted core identified in traditional ornamentation.
2. Professional bodies, including the Saudi Council of Engineers and the Saudi Design Union, should develop and mandate continuing education programs. Workshops and certificates in "Heritage Semantics in Contemporary Design" would equip practitioners with the analytical skills to intelligently decode and employ traditional visual language.
3. Systematic collaboration between design studios and specialists in architectural history and heritage conservation should be encouraged. Such partnerships are essential to ensure that contemporary applications are both culturally informed and innovative, bridging the gap between academic insight and executable design.

For Heritage Policy and Cultural Sustainability

1. The Saudi Heritage Commission and relevant municipal authorities should formally update conservation charters and heritage assessment guidelines. The documentation and preservation of ornamental systems must be recognized as critical to a building's heritage value, on par with structural integrity.
2. Educational campaigns, public exhibitions, and interactive digital platforms should be

developed to disseminate this research. Enabling the public to "read" and understand the cultural narratives embedded in architectural ornaments will foster greater community ownership, pride, and advocacy for preservation efforts.

3. Municipal planning and design review committees should utilize the study's framework as a criterion for evaluating new projects in historic contexts or with cultural mandates. Offering incentives or recognition for projects that demonstrate a thoughtful, principle-based engagement with local heritage (over superficial imitation) will promote higher quality and more authentic design outcomes.

6.3. Suggestions for Further Studies

To build upon the foundational knowledge established here, future research should explore the following avenues

1. Conduct empirical studies that task designers with creating prototype interior schemes using only the abstracted principles (e.g., modularity from geometric patterns, fluidity from vegetal motifs) derived from a specific Taif palace.
2. Expand the methodological model to conduct similar mixed-methods studies on the ornamental systems of traditional architecture in other key Saudi regions, such as Najd, Asir,

and Al-Ahsa. This would enable the development of a comparative taxonomy of Saudi interior identity references, moving beyond a generic "heritage style" to define nuanced regional visual dialects.

3. Future projects should prioritize the creation of a comprehensive, high-resolution digital archive of Hejazi architectural ornamentation. Utilizing 3D scanning, photogrammetry, and semantic tagging, this open-access repository would serve as an indispensable resource for global researchers and designers, ensuring the preservation and detailed study of this fragile heritage.
4. Investigate how the perception and meaning of heritage-inspired ornaments evolve over time within contemporary spaces. A longitudinal study could track whether such design interventions sustain their cultural resonance and identity-forming power for users across years, providing critical data for cultural sustainability.
5. Explore the applicability of the analytical framework developed in this study (ornamental typology → visual function → symbolic meaning → identity) to other Islamic or Mediterranean architectural traditions with rich ornamental histories. This could lead to a more universal model for understanding ornament as a non-verbal language of place and identity.

Author Statement

Acknowledgement: The author would like to acknowledge the Deanship of Graduate Studies and Scientific Research, Taif University for funding this work

Ethical approval: The conducted research is not related to either human or animal use.

Conflict of interest: The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

REFERENCES

- Al Khalifa, H. E., & Lafi, M. W. (2025). Ornamentation and Islamic identity in contemporary European mosques: An analysis of cultural, aesthetic, and functional dimensions and modern influences. *Buildings*, 15(8), 1302. <https://doi.org/10.3390/buildings15081302>
- Al Naim, M. A. (2013). *Cultural heritage and architectural identity in Saudi Arabia*. King Saud University Press.
- Alnaim, M. M. (2022). Understanding the traditional Saudi built environment: The phenomenon of dynamic core concepts and forms. *World Journal of Engineering and Technology*, 10(2), 292–321. <https://doi.org/10.4236/wjet.2022.102019>
- Al-Namri, M. M. S., & Abu Nasef, N. A. M. (2025). Employing architectural heritage motifs to establish the identity of male tourist guides' attire to support the cultural sustainability of the Kingdom of Saudi Arabia. *Journal of Arts, Literature, Humanities and Social Sciences*, 118, 360–382.

- Alobailan, L. A., & Alawad, A. (2022). Architectural values behind the formation of heritage houses as a tool for promoting cultural identity in Saudi Arabia. *WIT Transactions on The Built Environment*, 211, 29–50. <https://doi.org/10.2495/IHA220031>
- Alokun, A. M., Egwabor, J. E., & Olodeoku, M. E. (2024). Assessment of ornamentation as a cultural identity of mosques in Lagos State, Nigeria. *African Journal of Environmental Sciences and Renewable Energy*, 15(1), 237–256.
- Al Turki, B. A. (2025). The symbolic connotations of traditional architectural decorations in Al Majma'ah Governorate (Al Tuwaijri House as a model). *Al-Academy*, 119, 463–480.
- Ashour, A. F. (2018). Islamic architectural heritage: Mashrabiya. *WIT Transactions on The Built Environment*, 177, 245–253. <https://doi.org/10.2495/IHA180221>
- Assmann, J. (2011). *Cultural memory and early civilization: Writing, remembrance, and political imagination*. Cambridge University Press.
- Avcioglu, N. (2007). Identity-as-form: The mosque in the West. *Cultural Analysis*, 6, 91–112.
- Bamashmous, F. O. M. (2024). "Furniture that celebrates the past": Exploring the nostalgia-evoking seating design on the purchasing behavior of Saudi Arabian millennials in a case study of the Hijazi Karaweetah (Publication No. 31234567) [Doctoral dissertation, Arizona State University]. ProQuest Dissertations and Theses Global.
- Burckhardt, T. (2009). *Art of Islam: Language and meaning*. World Wisdom.
- Critchlow, K. (1976). *Islamic patterns: An analytical and cosmological approach*. Thames & Hudson.
- Fathy, H. (1986). *Natural energy and vernacular architecture: Principles and examples with reference to hot arid climates*. University of Chicago Press.
- Gharipour, M. (Ed.). (2019). *Calligraphy and architecture in the Muslim world*. Edinburgh University Press.
- Grabar, O. (1992). *The mediation of ornament*. Princeton University Press.
- Halbwachs, M. (1992). *On collective memory* (L. A. Coser, Trans.). University of Chicago Press. (Original work published 1950)
- Ibn Salih, M. B. (2001). Architectural ornamentation in traditional houses: In the central region of the Kingdom of Saudi Arabia. *Journal of Architecture and Planning*, 13(1), 45–78.
- Ibrahim, I., Al Shomely, K., & Eltarabishi, F. (2023). Sustainability implications of utilizing Islamic geometric patterns in contemporary designs, a systematic analysis. *Buildings*, 13(9), 2434. <https://doi.org/10.3390/buildings13092434>
- Marzouq, A. A. (2024). Wooden door ornaments in the traditional architecture of the Asir region: An artistic heritage study. *Journal of Humanities*, 35(2), 1–35.
- Norberg-Schulz, C. (1980). *Genius loci: Towards a phenomenology of architecture*. Rizzoli.
- Pallasmaa, J. (2012). *The eyes of the skin: Architecture and the senses* (3rd ed.). Wiley.
- Qais, H. (2024). A case study on the influence of geometry and symbolism in Islamic art with reference of Muslim's religious beliefs. *Tercio Creciente*, 26, 177–191.
- Rapoport, A. (1982). *The meaning of the built environment: A nonverbal communication approach*. Sage Publications.
- Rashdan, W., & Ashour, A. F. (2024). Heritage-inspired strategies in interior design: Balancing critical regionalism and reflexive modernism for identity preservation. *Heritage*, 7(12), 6081–6100. <https://doi.org/10.3390/heritage7120356>
- Saleem, S. (2022). "We don't want a multicultural minaret, we want an Islamic minaret": Negotiating the past in the production of contemporary Muslim architecture in Britain. *Architecture and Culture*, 10(4), 710–727. <https://doi.org/10.1080/20507828.2021.1976493>
- Shafiq, J. (2014). Architectural elements in Islamic ornamentation: New vision in contemporary Islamic art. *Art and Design Studies*, 21, 11–21.
- Sheikhi Nashalji, M., & Mehdizadeh Saradj, F. (2024). A recognition technique for the generative tessellations of geometric patterns in Islamic architectural ornaments; case study: Southern Iwan of the grand mosque of Varamin. *Buildings*, 14(9), 2723. <https://doi.org/10.3390/buildings14092723>
- Zahra, F., & Shahir, S. B. (2022). The spiritual aesthetics of Islamic ornamentation and the aesthetic value in Islamic architecture. *Journal of Islamic Thought and Civilization*, 12(1), 116–128. <https://doi.org/10.32350/jitc.121.07>