

The Perceptions of Makkah's Architectural Identity by Residents' Pilgrims 2021

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Abstract This paper aims to contribute to the ongoing discussion of Makkah's architectural identity by focusing on the perceptions of pilgrims and their role in shaping the city's identity. While the city's architecture has undergone significant changes due to urban development, there has been a glaring lack of attention paid to how the pilgrims perceive these changes. To address this gap, the paper uses an online survey to engage with pilgrims and draw on their experiences of the sacred city. It analyzes their interpretations of symbolic connotations, colors, and urban features to understand how they contribute to the city's identity. By doing so, the study aims to provide a comprehensive understanding of Makkah's architectural identity and enhance the pilgrims' experience. The views of pilgrims are an essential agent of the debate on Makkah's architectural identity, and any attempt to construct this identity without considering their perceptions would be incomplete. The findings offer valuable insights for architects and urban planners seeking to enhance the pilgrims' experience and foster a more comprehensive understanding of the city's identity. This paper hopes to contribute to the ongoing discourse on architectural identity and add to the knowledge of Makkah's architecture and its value to pilgrims.

Keywords: Architecture, perception, identity, sacred, Makkah

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1. Introduction

Makkah, like many other sacred cities, exists in real and imaginary worlds. Makkah's architectural and urban character is tangible evidence of its existence in the physical world. The built environment, including its historic structures, modern developments, streets, and infrastructure, all contribute to its identity as a real place with a rich history and cultural significance. Beyond its physical attributes, Makkah holds a significant place in the collective imagination of Muslims. For billions of Muslims, Makkah represents the holiest city, the birthplace of Islam, and the site of the Ka'aba, the most sacred sanctuary in Islam. This symbolic significance imbues Makkah with a spiritual aura that transcends its physical boundaries, making it a focal point of reverence and devotion for Muslims worldwide. Religious texts, traditions, and personal beliefs influence how individuals perceive Makkah, even if they have never visited the city. The dual dimensions of Makkah's existence - the real and the imaginary - intertwine to form a complex and multifaceted understanding of the city's identity.

However, the visual identity of Makkah is undergoing significant challenges due to the interventions of decision-makers, planners, architects, and urban designers [1,2]. The influx of pilgrims during Hajj, which is the

pilgrimage to Makkah in the pilgrimage season, and Umrah, which is the pilgrimage to Makkah at any time of the year, necessitates expansions in services and accommodations, particularly around the Holy Mosque area (Figure 1). The increasing number of visitors and residents underscores the demand to enhance the urban quality of the city beyond the pilgrimage season [3]. These notable transformations raise questions about Makkah's perceived image, prompting a critical examination of how the city is evolving in response to the needs of its inhabitants and visitors. This paper sets the stage for a deeper exploration of the complexities surrounding Makkah's urban development and the perceptions of its architectural identity.

Drawing from historical records and scrutinizing the exteriors of Makkah's historic buildings, it is possible to identify four significant architectural vocabularies: entrance, Shoback, Roushan, and Kharijah. This paper is limited to the Roushan due to the extensive use of Roushan by urban developers to reflect local identity in Makkah. Typically made of timber, the Roushan is a projected wooden structure that overlooks the outside and contains movable wooden flaps to control light intensity.

The paper addresses the repercussions of modernization in Makkah on individuals' cognitive perceptions, particularly focusing on the gentrification of traditional sites and residents' responses to architectural and urban transformations. It presents an empirical case study that

examines pilgrims' attitudes toward the architectural vocabulary of Makkah. By delving into the dynamics of sacred heritage sites, the paper contributes to critical urban studies by scrutinizing the intricate relationship between vernacular architectural traditions and modern interventions. It also explores the interplay between the urban experiences of residents in Makkah as their home city and the cultural and symbolic understanding of the city by pilgrims.

The analysis aims to shed light on the complex dynamics between various stakeholders involved in the development and preservation of Makkah's architectural heritage. The paper offers a multidimensional perspective on the modernization of Makkah and its implications for residents' pilgrims. It underscores the importance of considering the diverse stakeholders' perspectives in navigating the evolving urban landscape while preserving the city's cultural and architectural heritage. The paper proposes analyzing stakeholders' perceptions that not only enrich theoretical discourse but also offer practical insights into the spatial dynamics and cultural identity formation within sacred heritage sites like Makkah. Before analyzing pilgrims' perceptions of Makkah, it is essential to provide the background of how real estate investors shaped pilgrims' perceptions of architecture.



Figure 1. The Holy Mosque in Makkah, left the first Saudi Expansion, right the third Saudi Expansion

2. Historical Background (Shaping Pilgrims' Perceptions of Architecture in Makkah)

The Makkah Construction and Development Company (MCDCo) organized an architectural competition for designing the 18,000-square-meter site, and the winning proposal was published in the *Albenaa* Architectural Journal in 1986 [4]. The initial winning proposal, published in the *Albenaa* depicted a collection of mid and high-rise buildings on a four-story podium, featuring plain glass frames for openings (Figure 2). The design was critiqued as reflecting an international style, detached from the local context of Makkah. *Albenaa* expressed dissatisfaction with the modernist proposal, highlighting its inappropriateness within the context of Makkah and calling into question the journal's perception of architecture in general [4]. This criticism urged MCDCo to reconsider its design approach.

In response to the criticism, the MCDCo replaced the modernist proposal with a new design. This design featured a mixed-use residential complex with a central hotel and high-rise apartment buildings connected on a podium of commercial and small business units [5]. The

new design incorporated local architectural elements, such as pointed arches and *Roushans* (a traditional wooden structure covering openings), to create a sense of local identification (Figure 3). This post-modernist strategy aimed to address the criticism of being too modernist and to better resonate with the cultural and historical context of Makkah. The evolution of architectural designs for the site in Makkah reflects a dynamic process of responding to criticism and contextual considerations, ultimately resulting in a design that seeks to integrate local vocabulary while still meeting modern functional requirements.



Figure 2. The winning design of MCDCo published by *Albenaa*, Issue 29-30, June- September, 1986

Many years later, the MCDCo's stakeholders invested in a new project on Mount Omar, establishing Jabal Omar Development Company (JODCo) to develop a 230,000-square-meter site with a capacity of 34,500 pilgrims [6]. This project aimed to address the growing demand for accommodations and facilities during pilgrimage seasons. In 1999, the JODCo organized an international competition to solicit design proposals for the development [6]. Unlike previous competitions, this time, the JODCo invited architectural schools in Saudi universities to participate, potentially as a strategic move to legitimize their actions and preempt criticism. By involving architectural schools, the JODCo sought to garner support from professionals and academics in the architectural community, aiming to mitigate potential criticism and lend credibility to their development plans. It reflects a strategic approach to garner support, legitimize actions, and address past criticisms, particularly regarding building height policies, in the development of the Jabal Omar project in Makkah.

Among the competitors was a well-known architect from Jordan, Rasem Badran [7]. During his studies in Germany in the late 1960s, Badran began his architectural journey by experimenting with technology [7]. This phase likely involved exploring innovative construction methods, materials, and design techniques available at the time [7]. Upon returning to Jordan, he shifted his focus towards utilizing local materials in his architectural projects [7]. This approach reflects a commitment to sustainability and cultural authenticity, as local materials are often readily available, environmentally friendly, and culturally significant [7]. His methodology evolved further as he began reproducing historic architecture using modern technology and new materials. This phase likely involved

extensive research, analysis, and interpretation of traditional architectural vocabulary found in Muslim history. One of Badran's key strengths lies in his ability to integrate traditional architectural elements into contemporary designs seamlessly.



Figure 3. The Holy Mosque and the MCDCo building in the backdrop

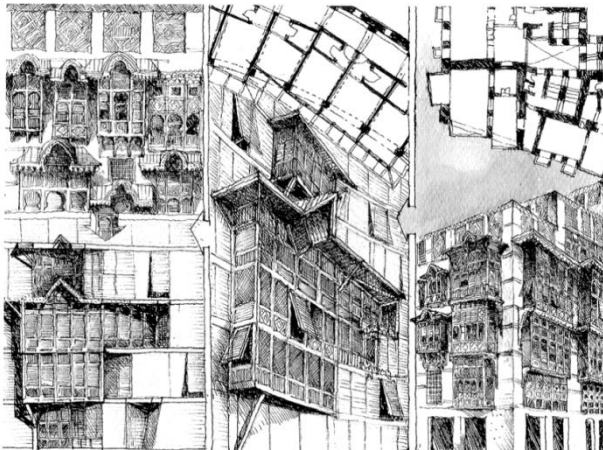


Figure 4. Rasem Badran development attempt for the Roushan for JODCo

Badran started his concept of Jabal Omar with the Ka'aba as a focal point [8]. The pilgrims' tawaf inspired him to echo their movement by proposing a radial geometry [8]. He determined the boundaries, entrance, and size of his design to create an appropriate spatial quality, which could not be found in the existing modern buildings [8]. The aim was to design a prototype that would form a human - scaled neighborhood, and this prototype could be replicated all around the Holy Mosque. To provide the best view of the Ka'aba, he suggested a tower typology for residences with a focus on historical solutions. He positioned two high-rise (tower) structures along the southwest axis; prayer spaces and markets would be located along the southwest axis, while residential units would be oriented radially [8]. The towers would serve as entrances to the Ka'aba, and the residential units would be bustling with bustle as they opened into the squares.

His approach to balancing the modern and traditional was inspired by a vocabulary acquired from the traditional legacy of many Muslim cities. The Roushan, a projecting window that allows inhabitants to view out without being seen, was utilized to bring natural air into the home. He erected prayer platforms made of canvas tents. This is the most serious objection to his approach; heritage vocabularies were created by various individuals under different situations and in response to varied variables; how can they be reproduced under current settings? He added modern Roushans, with fabric tents covering the prayer platforms (Figure 4). Nonetheless, the design did not win the competition. "Plausible evidence that is deeply associated with precedents on a spatial-functional level" seems to be lacking in Badran's technique [7]. It was the only perception of the design found in academia, with little access to the public. A new design was built of thirty-seven towers, ranging in height from twenty to forty-eight levels. The most impressive were the Twin Towers, which rose more than fifty levels. Roushans were featured in every building.

The company planned to pursue its project using an undisclosed design, claiming it evolved from the winning idea presented by the University of King Abdulaziz [8]. This decision suggests a divergence from the original competition process and a shift towards an internally generated project vision. Millennium Development, a Beirut-based architectural firm, oversaw the new design, which included 37 skyscrapers, notably twin buildings rising over fifty stories [8]. This indicates a shift towards high-density, vertical development in the Jabal Omar region. The MCDCo, on behalf of the JODCo Founding Committee, advertised in local publications to urge property owners in the Jabal Omar region to acquire stock in the firm or sell their properties [8]. This strategy aimed to consolidate ownership and facilitate the implementation of the development project. Rather than analyzing people's perspectives, the JODCo played a proactive role in shaping perceptions of future urban development in Makkah (Figure 5). By presenting its vision through temporary office setups and marketing efforts, the company sought to influence public discourse and garner support for its initiatives.

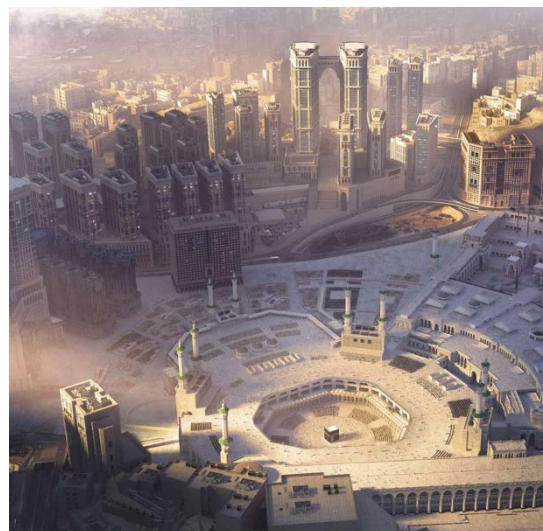


Figure 5. The Urban Development of JODCo

Today, large-scale developments are reshaping Makkah's perception. Masar is one of these mega-structures to the west of the Holy Mosque (Figure 9). The project marked the western entrance of Makkah, stretching over 3.5 kilometers with a width of 60 meters. No wonder most of the stakeholders from JODCo are stakeholders in the Umm Al-Qura urban development company [9]. The project is adjacent to and connected with the JODCo project. Why not go bigger? Masar is the largest urban development project in Makkah. This initiative, connected with the JODCo project, signifies a trend towards expansive and interconnected urban developments in the region.

3. Architectural Identity and Sacred Places

According to architect Charles Correa, identity is mentally constructed and physically represented [10]. In sacred places, pilgrims' perception encompasses sacred perception [11]. This suggests that identity is shaped by cognitive perceptions and tangible manifestations in the built environment. According to Victor Turner, pilgrims have a sense of the sacred place that transcends its physicality [11]. This concept of "anti-structural consciousness of sacred places" implies that pilgrims perceive sacredness based on their spiritual beliefs and rituals rather than the physical attributes of the place [11]. They create a picture of a sacred place based on the ideas they hold dear when performing their rituals in a phenomenon called anti-structural consciousness of sacred places, according to Turner [11].

For residents, however, the reverse is true. Anthropologist Jonathan Friedman suggests that cultures interact and influence each other through a process of equilibrium [12]. This indicates that cultural identities are dynamic and constantly evolving through interactions between different cultural groups [12]. Architecture is a crucial aspect of a society's identity that reflects its values, beliefs, and cultural heritage. It plays a vital role in shaping the built environment and fostering a sense of belonging and cultural continuity within communities [13].

However, the influence of Western architecture on modern architectural identity in Arab countries has been observed to be significant, resulting in elite-driven decision-making processes that often neglect local architectural traditions, cultural values, and community preferences [14]. Therefore, to promote a more authentic and inclusive architectural identity, it is essential to encourage collaboration between international architecture firms, local architects, urban planners, and community stakeholders. By engaging diverse perspectives and expertise, Arab countries can develop architectural identities that resonate with their unique heritage and aspirations while contributing to the global architectural discourse.

The physical attributes of architecture, including form, size, shape, decoration, construction system, and function, are fundamental components of architectural identity. These elements contribute to the overall visual identity and style of a structure and shed light on different aspects of a building's character. Therefore, by examining the

specific architectural features and components of a building, structural systems, intended use and function, choice of materials used in construction, and aesthetic qualities, it is possible to create functional and meaningful spaces that are sensitive to the cultural, social, and environmental context of the region while also embracing innovation and global best practices [15].

Residents in Makkah are a mix of locals and migrant pilgrims: they pass on some cultural customs, reconstructing space via their daily activities. Residents in Makkah are a mix of locals and migrants [16]. Pilgrims visit Makkah and opt to stay as migrants. Although pilgrims have an anti-structural consciousness of sacred places, the process is affected when they become residents. As a result, they pass on some cultural customs. They reconstruct space via their daily activities [16]. Thus, it is significant to examine what extends pilgrims' structure a consciousness of the physical environment related to their sacred perception of Makkah.

The transnational nature of capital and labor, with the advancing telecommunication, and competition among cities has led individuals and governments to position themselves globally. According to sociologist Manuel Castells, "cultural identity is a social process embodied in meanings according to cultural characteristics" [17]. Academic architect Yasser Mahgoub states that: "industrialized and developing countries re-examine their traditions in a search for their values and principles" [18]. The questions are these: To what extent do pilgrims structure a consciousness of the physical environment related to their sacred perception of Makkah? Have pilgrims become active agents in the construction process of architectural identity?

The following academic studies examine the perceptions and experiences of pilgrims visiting various sacred sites across the globe. A notable study conducted by Konstantinos Andriotis employed phenomenological methods to explore the experiences of pilgrims [19]. This research draws upon principles from phenomenology, religious studies, and tourism research to investigate how individuals perceive, interpret, and experience the sacred within diverse religious and cultural contexts. Through a combination of in-depth interviews and observational studies at various sacred sites, the study delved into the emotional, spiritual, and sensory dimensions of the visitor experience. It highlighted feelings of awe, reverence, and a sense of connection to something greater than oneself. The research confirmed the intricate relationship between the physical environment, individual beliefs, and the subjective experience of sacred spaces.

Singh, Rana PB, and Pravin S. Rana conducted a mixed-methods study that investigated Hindu pilgrims' perceptions of authenticity [20]. Through ethnographic research and case studies, the authors explored the diverse roles played by priests, monks, and other religious figures in guiding pilgrims, performing rituals, and managing pilgrimage logistics. The study examined how these religious functionaries influence the spiritual, social, and economic aspects of pilgrimage while addressing the challenges and complexities associated with their roles in contemporary society.

Snežana Brumec, Lavrič Miran, and Naterer Andrej conducted a qualitative study examining the sensory

experiences of pilgrims along the Camino de Santiago pilgrimage route in Spain [21]. The researchers investigated how various physical and social elements of the pilgrimage—such as walking, moments of solitude, interactions with fellow pilgrims, and the surrounding natural environment—contribute to transformative experiences. Through an analysis of pilgrim narratives, the study identified common themes and patterns, enhancing our understanding of the profound personal and social impacts associated with pilgrimage. The findings emphasized the need to cultivate authentic and meaningful experiences for pilgrims while preserving the cultural and spiritual significance of the Camino de Santiago.

The study conducted by Gili Merin delved into the architectural expressions associated with pilgrimage, focusing on the built environment linked to journeys toward sacred sites [22]. Leveraging insights from architectural history, religious studies, and cultural geography, this research examined how specific architectural forms and spaces are influenced by the distinctive needs and experiences of pilgrims. It aimed to analyze various architectural features—such as symbolism, ornamentation, and spatial layout—and their contributions to the pilgrim experience, enhancing feelings of awe, reverence, and spiritual connection.

Tahani Hassan and colleagues are conducting an in-depth study of the pilgrimage to the city of Mecca, focusing on the complex relationships among sociodemographic factors, motivations, satisfaction, and loyalty among individuals undertaking the Hajj [23]. This research draws on data collected from pilgrims to investigate how variables such as age, gender, education, income, and cultural background shape the motivations for participating in the Hajj. The study examined the correlation between these sociodemographic characteristics and pilgrims' satisfaction with various elements of the pilgrimage experience, including accommodation, transportation, food services, and the overall spiritual and cultural environment. By analyzing these intricate interrelationships, the research provided valuable insights for policymakers, tourism stakeholders, and service providers to enhance the pilgrimage experience for all participants and to ensure a more fulfilling and meaningful Hajj for future generations.

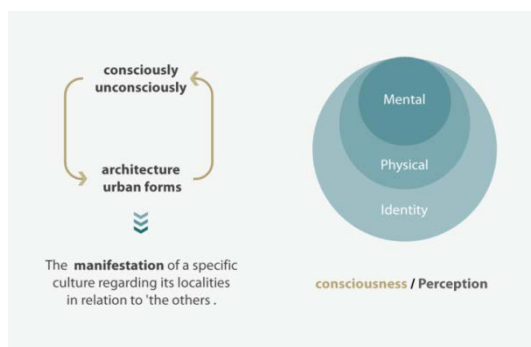


Figure 6. Theoretical Framework of pilgrims' perception of Architecture in Makkah

These studies exemplify the diverse approaches and methodologies used to investigate pilgrims' perceptions of sacred sites, shedding light on the significance of pilgrimage as a cultural, religious, and spiritual

phenomenon and the complex interplay between mental perceptions and physical representations of identity, particularly in the context of sacred places. While pilgrims may perceive sacredness independently of physical attributes, residents' perceptions of identity are more closely tied to tangible manifestations in the built environment (Figure 6). Additionally, cultural identities are subject to constant negotiation and interaction, leading to a dynamic equilibrium between different cultural influences.

4. Materials and Methods

The study was conducted during the 2021 Hajj season, which took place amidst the ongoing COVID-19 pandemic. Due to the global health crisis, the Saudi authorities restricted Hajj participation to residents, resulting in 58,745 pilgrims. To gather data, an online survey was distributed randomly using Google Forms. The platform allowed for real-time updates of response data and provided access to the raw data for further analysis or automation using Google Sheets.

The primary objective of the study was to collect information about the participants, including their occupations, qualifications, professions, and ages. The survey was a non-structured interview to identify which color participants believed represented Makkah and to provide reasons for their choice. This approach aimed to investigate how resident pilgrims perceived the architectural and environmental aspects of Makkah's surroundings.

The survey started at the beginning of the Hajj season, and it was open till receiving the last result was received, 3 weeks after the Hajj finished. Pilgrims spend one day in Arafat, one night in Muzdalifa, and three days in Mina, all of which are outside Makkah. Pilgrims arrive earlier at Makkah, and some of them stay longer after performing the Hajj to pray in the Holy Mosque. Their time in Makkah depends on their preference. The number of days does not affect the result of this study. We acknowledge that the factor of being in a sacred place might stimulate feelings and sentiments, but our concern is the built environment rather than the feelings, so we acknowledge this factor, but we do not think it might affect the result. Future studies might include residents and nonresident pilgrims, which will provide interesting insights.

5. Analysis and Discussion

Occupational Distribution: Most participants were from the governmental sector (57%), followed by the private sector (33%), and a small percentage from NGOs (2%). This distribution suggests a diverse representation across different sectors, contributing to a comprehensive understanding of the subject matter.

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Professional Background: A significant portion of

participants were employees in the private sector (37%), while academia was also well-represented (26%). Furthermore, individuals from the visual art industry, researchers, architects, and architectural students constituted a notable percentage, totaling 31%. This diverse mix of professionals, especially those related to architecture, enriches the study with varied perspectives and insights.

Educational Qualifications: The participants exhibited a high level of education, with 48% being university graduates and 44% holding higher education qualifications. A smaller percentage were undergraduates (6%) or technicians (4%). This suggests that the sample comprised individuals with a strong educational background capable of understanding the complexities of the study.

Age Distribution: Most participants were between the ages of 30 and 60, with the most significant portion falling within the 40 to 50 age range (30%). This demographic profile indicates that a substantial portion of the participants experienced the architectural changes in Makkah over the past three decades, contributing valuable insights based on their firsthand experiences.

The demographic profile of the participants suggests a diverse and educated sample with a range of professional backgrounds, qualifications, and ages, providing valuable perspectives on the subject matter of the study.

Association with Color: Regarding color, 52.5% associated Makkah with white, 15.8% selected black, and 9.9% selected white and black. Of the participants, 4% picked green, 4% picked gold, 2% selected grey, black, and gold, and 2% chose black, gold, and white. This association underscores the significance of color symbolism in shaping pilgrims' perceptions of Makkah's architectural identity.

Color serves as a potent instrument for conveying a diverse array of emotions and concepts. Its significance is evident in various fields, including art, fashion, and design, where color often communicates specific meanings. Furthermore, color can subtly reflect important aspects of identity and social dynamics. For instance, the hue of an individual's skin may lead to assumptions regarding their race, ethnicity, or character traits. Similarly, the color choices in a person's attire can indicate their social status, profession, or adherence to religious beliefs [24].

The interpretation of color is fundamentally contextual and can vary considerably across different cultures. For instance, while white may be associated with purity and innocence in certain societies, it may symbolize death and mourning in others. Similarly, red can evoke feelings of love and passion in one cultural setting, while in another, it may denote danger and anger.

Drawing upon a diverse array of scientific evidence, Hurlbert and Ling conducted an extensive analysis of the factors that influence human color preferences, highlighting both universal and individual differences [25]. Among the individual variations examined are biological and evolutionary influences, suggesting that our evolutionary history and survival needs have shaped our inherent color preferences, such as attractions to colors indicative of ripe fruits or healthy vegetation. Additionally, cultural and social influences play a significant role, as cultural norms, social learning, and personal experiences contribute to individual color preferences. The researchers

also explored psychological and emotional factors, demonstrating how emotions, personality traits, and unique experiences can affect color perception and preference.

Moreover, they addressed the importance of context, illustrating how the environment in which colors are displayed, such as background and surrounding objects, can significantly impact our perception and appreciation of those colors. Through this comprehensive exploration, Hurlbert and Ling provide valuable insights into the intricate interplay between human biology, culture, and psychology in shaping our understanding and appreciation of color.

Over half of the participants (52.5%) associated Makkah with the color white, linking it to their sacred perception of the city of purity, peace, and equality. In participant words: "[white] is the color of pilgrims' robes... as a symbol of purity and equality." Other participants said, "Because it is the source of divine light, it radiates white in the white dress of the pilgrims." It expresses peace and tranquility. A color that indicates peace and serenity, white is the color of ihram, the clothing worn by pilgrims." "[White] because of its frequent use for the floors and walls of the Holy Mosque...it is also the color of the tents where pilgrims stay during pilgrimage"... "When it came in the honorable Prophetic hadith: "Wear your white clothes, for they are among your best clothes, and shroud your dead in them".

In "Color and Meaning: Art, Science, and Symbolism," John Gage explores the complex relationship between color, human perception, and cultural significance [26]. Drawing on insights from art history, psychology, and cultural studies, the book examines how color has been utilized and interpreted across various cultures and historical contexts. For instance, in Western cultures, the color white is often associated with purity and innocence, as exemplified by its traditional use in bridal attire. In contrast, in many Eastern cultures, white is linked to mourning and death; thus, Chinese brides typically choose red garments, as this color is believed to symbolize prosperity and bring good fortune.

Black was also significant (15.8%), representing the color of the Ka'aba and being associated with luxury and sovereignty. For the color black, "[It] is the color of the Ka'aba. "black is a luxurious sovereign color." The color black often symbolizes death and mourning; however, it also serves as a sophisticated and elegant choice in design, particularly in minimalistic contexts. Beyond its associations with some themes, black has been embraced by the fashion industry for its flattering qualities and its ability to provide a chic, neutral background for jewelry and accessories.

In her work, "The Meaning of Color Terms: Semantics, Culture, and Cognition," Anna Wierzbicka explores the intricate relationship between language, culture, and human perception of color [27]. This chapter draws on concepts from linguistic anthropology and cognitive science, examining how various languages categorize and describe colors, and how these linguistic distinctions mirror deeper cultural and cognitive frameworks.

Wierzbicka's investigation likely encompasses several key aspects of cross-cultural variations in color terminology [27]. This includes an analysis of how

different languages identify and name colors, with a focus on the variances that exist across cultures. Additionally, the research examines the influence of cultural and social factors, exploring how cultural values, beliefs, and social practices contribute to the development and application of color terms. Furthermore, it addresses the cognitive processes that govern color perception and categorization, assessing how individuals perceive and categorize colors while considering the impact of language and culture on these cognitive processes.

Green (4%) was linked to religious texts and paradisiacal imagery. Regarding green, most participants associated the color with religious texts. Islamic scholar Ibn Battal said, "Green clothes are the clothing of the people of Paradise." In the Quran, God says, "And they wear green clothes." Al-Shawkani, another Muslim scholar, said: "It is desirable to wear green because it is the clothing of the people of Paradise, and it is also one of the most comfortable colors for the eyes and one of the most beautiful." Green is widely recognized for its universally positive connotation related to vitality, symbolizing fresh growth and the richness of vegetation. This vibrant color is often associated with health, renewal, and the rejuvenation of nature, reflecting the abundance found in flourishing ecosystems. Its presence in our environment not only enhances aesthetics but also fosters feelings of tranquility and balance. Furthermore, the psychological effects of green can evoke a sense of peace and calmness, making it a favored choice in design and wellness contexts.

Brown (2%) was connected to the physicality of Makkah's landscape and heritage buildings. A few participants associated the color of Makkah with its physicality; in their words, "Brown [is]... the mountain's color." Another one said, "Brown is the color of *Rawashen*," which are the wooden windows in heritage buildings in Makkah.

The photographs of Makkah during Hajj confirm the prevalence of white as the dominant color due to pilgrims' attire, followed by black for the Ka'aba and gold for calligraphy and architectural elements (Figure 7). These colors, which are associated with sacred symbolism, are visibly present in the perceived image of Makkah during the pilgrimage. The findings highlight the significance of color in shaping individuals' perceptions of Makkah's sacred environment, with each color carrying distinct symbolic meanings tied to religious, cultural, and physical aspects of the city.



Figure 7. Photograph of the Ka'aba During Hajj Season



Figure 8. View of Jabal Omar Urban Development Company



Figure 9. View of the Masar Project

6. Results

The color choices of participants reflect their sacred perceptions of Makkah, influenced by religious texts, traditions, and physical landmarks. White, the dominant color associated with pilgrims' clothing and the purity of the Hajj ritual, symbolizes peace and spiritual enlightenment. Black represents the sacredness of the Ka'aba and is associated with royalty and luxury. Green is linked to paradisiacal imagery and spiritual comfort, while brown signifies the natural landscape and architectural heritage of Makkah. While the colors white and green are associated with the virtual perception of Makkah as sacred brown was associated with the physical vocabulary of the city. The mountains and Roushan. The color black represents both virtual and physical, as it represents the Ka'aba, the sacred figure for Muslims, yet it physically exists. These colors, which are associated with sacred symbolism, are visibly present in the perceived image of Makkah during the pilgrimage. The findings highlight the significance of color in shaping individuals' perceptions of Makkah's sacred environment, with each color carrying

distinct symbolic meanings tied to religious, cultural, and physical aspects of the city.

7. Results

This paper aimed to increase understanding of identity through architecture as a nonverbal text with Makkah spatial quality. Architecture has been recognized in various ways as the expression, visions, and aspirations of the society that produced it. Pilgrims have an anti-structural consciousness when they visit pilgrimage sites, but when they become residents, they develop a consciousness of the physical environment and become active participants in debates about architectural identity. Residents of Makkah developed an image of the city based on its sacred status. The new image of Makkah has countered this perceptual image. Pilgrims associated the color of Makkah with their sacred perception of the city. White is the dominant color in the image of Makkah during Hajj. Even though the colors they chose are associated with sacred perception, they are present in the actual perceived image of Makkah.

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Today, developing architectural elements is essential. The research investigated shifting conceptions of Makkah's architectural character, with a particular emphasis on pilgrims' viewpoints. Pilgrims are active participants in building Makkah's architectural character by evaluating their interpretations of symbolic implications, colors, and urban aspects. The study's conclusions are intended to influence a reassessment of Makkah's architectural character and experiences. Discussion of Makkah's architectural identity must include pilgrims' perceptions. Neglecting pilgrim impressions would lead to an insufficient understanding of Makkah's architectural character. The study underscores the need to take pilgrims' experiences and perspectives into account while discussing Makkah's architectural identity, as well as their position as major actors in molding the city's physical environment. Makkah's architectural and urban character serves as a bridge between these realms, embodying both the physical reality of the city and the spiritual significance it holds in the hearts and minds of believers.

The paper proposes analyzing stakeholders' perceptions that not only enrich theoretical discourse but also offer practical insights into the spatial dynamics and cultural

identity formation within sacred heritage sites like Makkah. The analysis aims to shed light on the complex dynamics between various stakeholders involved in the development and preservation of Makkah's architectural heritage. The paper offers a multidimensional perspective on the modernization of Makkah and its implications for residents' pilgrims. It underscores the importance of considering the diverse stakeholders' perspectives in navigating the evolving urban landscape while preserving the city's cultural and architectural heritage.

Pilgrims often come to a sacred space with pre-existing beliefs and a sense of reverence. They may perceive the sacredness of a place independently of its physical attributes. This means the specific details of the buildings; landscape might not be the most important factor for them. Their faith and the religious significance of the location itself are likely more powerful.

However, for residents who live in a place with religious significance, their perception of identity might be more closely tied to the physical environment. The built environment, including religious structures and landmarks, becomes a constant reminder of the sacredness of the place and its connection to it. This can shape their sense of belonging and community. Pilgrims visiting a city like Mecca might find spiritual significance even in a temporary tent city. Their focus is on fulfilling religious obligations and experiencing the presence of the divine.

Some pilgrims might be deeply affected by the physical environment, and some residents might have a more independent perception of the sacred. The relationship between the physical environment and identity is complex. It's influenced by cultural traditions, personal experiences, and the specific meaning residents attach to the built environment.

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