The Role of Architecture in Shaping Social and Cultural Landscapes in Saudi Arabia: A Case Study Approach

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ABSTRACT

This paper investigates the possible role of architecture in shaping social behavior, as well as how architecture can enhance community engagement and voice cultural identity. To do so, the following three key architectural projects in Saudi Arabia were selected: Diriyah Gate, King Abdulaziz Center for World Culture (Ithra), and Jeddah Tower. The study was based on a qualitative case study approach in which data were gathered from 28 semi-structured interviews conducted with employees related to the architectural projects. The data gathered were analyzed in terms of themes associated with the social dynamics and expressions of culture that may have been indicated by the architectural design. The results indicated that the projects significantly enhanced social cohesion and community engagement through integration of traditional design elements with modern functionalities. Each project was a mark of national identity and aspirations while propelling inclusive spaces for other social interactions. This research contributes to the understanding of how architecture functions as a powerful medium for cultural expression and social interaction with focus on culturally sensitive design practices. The significance of this research will be more significant for architects, urban planners, and policymakers in highlighting that these needs are met by spaces eliciting responses of the community to the particular moment taking into consideration the general requirements of modern life. The knowledge that it will bring out can help future architectural endeavors lend to meaningful connections within evolving societies.

Keywords: Architecture, Cultural Identity, Community Engagement, Social Behavior, Saudi Arabia.

INTRODUCTION

Architecture has historically influenced not only physical spaces but also social, cultural, and economic dynamics. Architectural designs have historically mirrored social values, beliefs, and objectives from antiquity to contemporary times.1 The function of architecture in influencing social and cultural contexts beyond mere aesthetics and utility.² It examines the influence of constructed environments on human conduct, community engagement, and sense of place identity. The architecture of buildings and spatial organisation can influence social interactions and cultural practices in residential neighbourhoods, cultural hubs, and skyscrapers.3 Globalisation, urbanisation, and technological advancement necessitate that modern architecture harmonise traditional and contemporary elements. In the 21st century, urban centres and monuments epitomise cultural identity and economic vitality. Skyscrapers, cultural centres, and public plazas epitomise national aspiration and globalisation.⁵ The Bilbao Guggenheim Museum and Sydney Opera House have transformed their respective urban landscapes and fostered community involvement and cultural exchange. These projects illustrate how architecture may embody societal ideals and aspirations. Architecture actively shapes social, cultural, and economic narratives beyond mere design and engineering. As urban areas and populations expand, architectural initiatives increasingly impact social behaviours and cultural identities.8 Megacities and globalisation have rendered architecture essential for cultural exchange, sustainable development, and community welfare. These environments are social circumstances that influence interpersonal interactions and engagement with the surroundings.9 Architectural innovation is increasingly associated with smart city technology, sustainability, and inclusivity, rendering it vital to 21st-century urban development plans. Contemporary architecture projects are evaluated not just for their aesthetic and economic merits but also for their capacity to impact the social and cultural dynamics of their regions¹⁰.

Empirical research indicate that architectural designs influence social behaviour and cultural identity in various ways.11 Research indicates that the design of public spaces, residential areas, and iconic structures can influence community participation, social cohesiveness, and mental well-being.¹² Alraithi¹³ discovered that well-designed public spaces in high-density neighbourhoods enhanced community participation and social inclusion. These settings promoted spontaneity, interaction among many social groups, and a sense of belonging. Zakaria, and Ibrahim¹⁴ discovered that pedestrian-centric urban environments enhanced social interactions through the influence of roadway and plaza design. Subsequent research has investigated how architecture may convey culture and shape identity. 15 Contemporary architectural endeavours often represent national identity and economic power, as indicated by Moscatelli¹⁶ analysis of prominent structures. The Burj Khalifa and Shanghai Tower transcend mere architectural feats; they represent the global aspirations of their respective administrations.¹⁷ These structures embody modernism and advancement while integrating local culture. Alnaim, and Bay18 examined the role of museums and art galleries in uniting individuals from many cultures and fostering a collective identity. The impact of architectural design on conduct has been extensively studied. Alnaim and Bay18 posited "architecture as a social script," asserting that spatial configuration and design can subtly influence mobility, interaction, and social hierarchies. Ivanišević and Šmit¹⁹ spatial syntax study demonstrates the influence of spatial configuration on navigation and interaction within constructed settings. These studies demonstrate that architecture influences social dynamics. Noaime, and Alnaim²⁰ observes that iconic architecture generally garners global attention and investment, transforming a region's social and cultural dynamics while enhancing economic development and tourism. Studies indicate that architectural interventions foster sustainability and inclusivity. Al-Aqbi, Al-Yousif and Al-Nuaimi²¹ discovered that contemporary design employs sustainable materials and energy-efficient technologies to mitigate carbon emissions and enhance living circumstances. Sustainable designs generally coincide with efforts to create inclusive environments for diverse populations. Abdelrahman and Alghamdi²² investigated the potential of mixed-use and affordable housing developments to foster social equity by providing accessible residences for individuals from diverse socioeconomic backgrounds. These projects demonstrate how design may address climate change and social inequality.

Although the volume of research conducted is vast, but the empirical literature regarding architecture and social and cultural landscapes is lacking.²³ Numerous research investigate the immediate impacts of design interventions; however, social dynamics require longitudinal analysis.²⁴ Bajaber, and Mohammed²⁵ demonstrated that urban

architecture enhances social interaction; however, it remains uncertain if these benefits are enduring or if they diminish over time. Jobran²⁶ discovered that well-designed public spaces advantage pedestrians; nevertheless, there is limited data regarding their transformation in response to social, economic, and environmental circumstances. The relationship between architecture and digital as well as smart technologies is inadequately explored.²⁷ Kassab, et al.²⁸ have investigated the spatial and behavioural impacts of architectural design; however, the influence of smart technology in architectural projects on social interactions and community engagement remains largely unexplored. The Burj Khalifa and Shanghai Tower have been extensively studied; nonetheless, there is limited understanding of the influence of architectural projects in culturally and historically varied regions such as the Middle East or Africa on local social behaviours and cultural identities.²⁹ This disparity underscores the imperative for regionally tailored research that considers cultural, historical, and socioeconomic variances.³⁰ The social equity consequences of architectural initiatives remain ambiguous. Haddad³¹ and others have investigated the role of architecture in fostering social inclusion; nevertheless, additional empirical research is required to ascertain the impact of architectural designs on social inequality. Mixed-use developments may promote diversity and inclusion; nevertheless, there is insufficient research about their impact on marginalised populations or their role in gentrification and displacement.³² This disparity underscores the necessity for enhanced research on the impact of architectural interventions on social justice and the potential of design to foster more equitable and inclusive urban environments.

Social constructivism and spatial theory establish the connection between architectural design and social conduct. Abu-Orf, and Wafi³³ spatial syntactic theory posits that spatial configuration influences human conduct. This theoretical framework suggests that architecture influences mobility, communication, and interaction, rather than merely serving as a backdrop. Architecture regulates access, visibility, and movement, hence influencing social conduct positively or negatively. This concept aligns with the research objective of examining the influence of architectural design and spatial structure on social engagement and community development. Comprehending the influence of architecture on cultural identity is feasible through the lens of social constructivist theory. Alnaim and Noaime¹⁷ social construction theory posits that individuals generate and sustain social realities via collective experiences and actions. Architectural manifestations of cultural and social values influence the environments in which these collective experiences transpire. Architectural and public space design can reinforce cultural myths and cultivate a collective identity. This theoretical framework directs the research objective of examining how iconic and cultural edifices influence social and cultural identities.

Research Objectives

- 1. To understand how architectural designs influence social behavior and community engagement in Saudi cities.
- 2. To examine the relationship between architectural projects and the cultural identity of Saudi Arabia.
- 3. To explore the role of key architectural developments in shaping social and cultural landscapes.

Research Questions

- 1. How do architectural designs in Saudi Arabia shape social interactions and community life?
- 2. What impact do specific architectural projects have on reflecting and promoting Saudi cultural identity?
- 3. How do employees working in and around these architectural projects perceive their role in influencing social and cultural dynamics?

LITERATURE REVIEW

Architecture has long been viewed as an important influence on shaping communities' social and cultural identities.¹ Besides being a physical entity, it is therefore an expression of the values, traditions, and historical context of a society. Architectural form, style, and material lend meaning which both creators and inhabitants associate with their surroundings.³ Mostly, special architectural elements are manifested in most societies for particular religious, political, and social ideologies that enforce a sense of belongingness and identity within a special community.⁵ In this respect, the intricate designs and spatial organization of Middle Eastern Islamic architecture concretely reflect the emphasis placed by the culture in the importance of spirituality, community, and heritage.⁵ It is through this character that cultural narratives are imbedded into urban and rural spaces,

reminding people and societies of their histories and collective memories. Modern architectural innovations often respond to new cultural paradigms, and as such, it stands to reminder that architecture is continually modified within the process of change in the society. In turn, it makes the built environment a necessary expression of cultural dynamics.

This, consequently, manifests that the social function of architecture is not merely symbolic; since how people relate to one another and to their surroundings is directly influenced by the design and spatial organization of buildings.¹³ Planning in the built environment can promote or help in the development of social cohesion or instead tends to create social divisions through class, ethnicity, and stratified social classes.¹⁵ For instance, public space, residential areas, and commercial districts might be designed in ways that facilitate inclusive practices and communal interaction but also culminate in segregation and isolation of people.¹⁷ Architecture is also crucial in preserving culture because it has always played an important role, especially in areas experiencing rapid development in modernization and urbanization.¹⁸ They maintain cultural heritage such that modern societies would be connected with their past, through the restoration and preservation of history buildings, monuments, and even traditional architecture. In other words, architecture is not only meant for aesthetic expression.²⁰ It also becomes one of the devices human beings use to encourage them to make social relationships, ensure cultural continuity, and to develop a sense of place in an ever-changing world.

Architectural Designs Influence on Social Behavior

Architectural designs mold social behavior, and numerous empirical studies evidence this fact. It is well-supported that the built environment plays a definite role in molding the behavior and interactions of human beings with others as well as their own psychological well-being. For instance, research studies conducted in cities have demonstrated how open spaces, pedestrian-friendly avenues, and available public facilities foster social interaction, reduce stress, and induce neighborhood feelings amongst the residents in those cities. In those cities, the social dynamism of cities of public spaces, significantly enhances the social dynamism of cities. Similar studies in residential design indicated internal spatial arrangements, as those concerning common spaces within dwellings, impact the interactions of family members and their social cohesion. It has been found that clear designs with proper lighting, open spaces, and adaptable areas in institutions like schools and hospitals relate to positive social behavior, communication, and satisfaction among the occupants.

Further evidence for the link between architectural design and social behavior comes from empirical data, which shows that the design of a space affects how people interact.³² In many studies, it was found that architectural aspects such as seating arrangements, lighting, and spatial proximity encourage or discourage social interaction. For example, El-Bastawisy², brings back the lesson of how nice public plazas with proper seating, some greenery and shade allow spontaneous social interaction while enhancing community ties. On the other hand, if the spaces are poorly designed, it eliminates chances for social interaction and encourages feelings of isolation and disconnection.⁴ Empirical findings further support the notion that social behavior is learned through the way people perceive spaces; welcoming spaces encourage more frequent and pleasant social interactions.⁶ This can be quite visibly observed in settings like workplaces, with the more modern designs like open-plan allowing for 'collaboration and interaction' while the more conventional cubicles tend to limit social communication.⁸

Architectural Designs Influence on Community Engagement

Architectural designs based on the inspiration of engaging people with their community environment have been discussed in very broad terms under the discourse of urban studies.¹⁰ Empirical evidence supports that designing with sensitivity will ensure that community participation and interaction can be promoted. Grichting and Salama¹² stated that lively mixeduse neighborhoods with an open public space accessible to everyone increase community engagement by establishing natural spots for social activities to take place. Studies on community centers, parks, and other open spaces have indicated that in all scenarios, these kinds of spaces will be the central hubs for social interaction and civic engagement and collective action if created with the involvement of a community.¹⁴ Like other research in community-led architecture, especially in developing countries, it has been explained how designs that include local materials and participatory methods benefit communal

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ownership and responsibility toward shared spaces.¹⁶ It creates a sense of belonging and a deeper connection with the immediate physical environment, thereby strengthening overall community cohesion.

Empirical studies continue to show a positive correlation between architectural designs and community engagement, particularly in the context of accessible and inclusive spaces. ³⁴ Research by Tk³⁵ indicates that more civic participation and social capital will be achieved when public spaces are developed with a consideration for its users. For example, differently planned parks with a variety of amenities, like playgrounds, picnic areas, and sports facilities, attract diverse groups of community members who share experiences and communicate with each other. ³⁶ Another empirical evidence is that communities will not only use but also appreciate spaces that they have an affinity for, especially when the design contains local cultural elements and identities. ³⁷ Urban renewal programs have been the concept for participatory designs where community members contribute to the planning process with strategies showing to increase engagement and stewardship of public spaces long term, thereby echoing the connection between architectural design and community vitality. ³⁸

Architectural Projects and the Cultural Identity

This is the interplaying relationship between architectural projects and cultural identity-the extensive study of its literature with copious studies that indicate architecture as a catalyst for expressing and preserving cultural narratives.³⁹ Empirical research in other regions thus reveals that architectural projects often act as visual identities and representations of the values, beliefs, and traditions of a culture.⁴⁰ For instance, studies in the field of Islamic architecture in the Middle East have proven that mosques and other religious buildings, in addition to serving practical purposes, perform roles regarding the spiritual and cultural identity of the communities they serve.⁴¹ Likewise, research studies in vernacular architecture, such as a traditional Japanese house or an African mud-brick structure, demonstrate how such designs reflect their deep roots in local customs, climate, and cultural heritage.⁴² Such buildings are generally declared to be the expression of cultural identity of a place adjusted for needs, to today's times. Moreover, in most societies post-colonial, there is a growing exigency of retrieval of cultural identity through architectural projects that dispense with colonial elements of design for local elements.⁴³

Very often, such empirical studies have proven that architectural projects greatly relate to the preservation or promotion of cultural identity. ⁴⁴ For instance, the postmodern architectural theory researches; through an example of having local cultural symbols, patterns, and materials in architectural designs, have shown how much such designs resonate with the people they serve. ⁴⁵ This cultural resonance fosters a stronger connection for people with their built environment as seen in the work of architects such as Hassan Fathy, whose designs in Egypt tried to lean on the local traditions and materials to maintain cultural authenticity. ⁴⁶ Empirical evidence has found that upon implementing architectural renewal projects, communities have often rallied around such initiatives with efforts being increased culturally as well as consolidating social cohesion and collective pride. ^{47,48} These studies further indicate that whenever architectural designs respect and heighten the cultural identity, they thus become the carriers for the continuation of culture so that communities can be able to keep their heritage through globalization and fast-rate urbanization. ^{49,50}

METHODOLOGY

This was a qualitative, case-study examination of how architecture helps define social and cultural environments in Saudi Arabia. Case studies were selected here since they can provide the kind of deep insights relevant to complex, context-specific phenomena. The analysis of the paper discusses three significant projects in Saudi Arabia that merge architectural design with cultural identity and social behavior. These projects that have been chosen vary between traditional and modern architecture elements, thus allowing broad probing of architecture influence societal landscapes and cultural for these projects. Case studies: Diriyah Gate, King Abdulaziz Center for World Culture - Ithra, and Jeddah Tower. Research was done on three major architectural developments in different regions of Saudi Arabia. Diriyah Gate is in Riyadh and embodies the intensity of traditional Najdi design combined with modern infrastructure, symbolizing a part of the rich heritage in the Kingdom. The King Abdulaziz Center for World Culture, or Ithra, is situated in Dhahran; it represents a cultural metropolis dedicated to the promotion of exchange and cross-cultural transfer on a global level while also helping local Saudi arts and education. Finally, the Jeddah Tower in Jeddah should be counted as a representative of modernity, ambition,

and more so, the blend of local and international influences.

Semi-structured interviews were conducted with 28 participants who are staff of the respective architectural projects and linked to them as employees. Purposive sampling was used, such that participants could provide informed insights into any capacity regarding design, management, and the running of these projects. The researcher adopted this type of sampling to ensure a representative population regarding how architectural developments influence social behaviors, community engagement, and cultural identity in Saudi Arabia. The participants of the studies consisted of project managers, architects, cultural experts, and even operational staff, dealing with the projects from all directions.

Table 1: Respondents of the Study.

32 45 38	Diriyah Gate Project	10	D 1 1 2 1 4 12 4
	L	10	Bachelor's in Architecture
20	Diriyah Gate Project	20	Master's in Cultural Studies
138	Diriyah Gate Project	15	Bachelor's in Sociology
40	King Abdulaziz Center for World Culture	18	Bachelor's in Architecture
50	King Abdulaziz Center for World Culture	25	MBA in Management
29	King Abdulaziz Center for World Culture	7	Bachelor's in Marketing
55	Jeddah Tower Project	30	Master's in Urban Planning
42	Jeddah Tower Project	22	Bachelor's in Civil Engineering
35	Jeddah Tower Project	12	Bachelor's in Business Admin
28	Jeddah Tower Project	5	Master's in Environmental Science
39	Diriyah Gate Project 15 Master		Master's in Landscape Architecture
46	Diriyah Gate Project	20	PhD in History
34	King Abdulaziz Center for World Culture	10	Bachelor's in Design
48	King Abdulaziz Center for World Culture	15	Bachelor's in Engineering
31	King Abdulaziz Center for World Culture	8	Bachelor's in Arts
30	Jeddah Tower Project	4	Bachelor's in Architecture
37	Jeddah Tower Project 14 Bachelor's i		Bachelor's in Safety Management
41	Jeddah Tower Project	20	Bachelor's in Civil Engineering
44	Diriyah Gate Project	18	Master's in Community Development
36	Jeddah Tower Project	12	Master's in Urban Planning
29			Bachelor's in Business Admin
50	Jeddah Tower Project	25	MBA in Project Management
33	King Abdulaziz Center for World Culture	10	Bachelor's in Communications
29	Diriyah Gate Project	5	Bachelor's in Marketing
47	Jeddah Tower Project	20	Bachelor's in Quality Management
38	King Abdulaziz Center for World Culture	15	Master's in Economics
43	Diriyah Gate Project	18	Master's in Environmental Science
49	Jeddah Tower Project	22	Bachelor's in Law
	40 50 29 55 42 35 28 39 46 34 48 31 30 37 41 44 43 29 50 33 29 47 38 43	40 King Abdulaziz Center for World Culture 50 King Abdulaziz Center for World Culture 29 King Abdulaziz Center for World Culture 55 Jeddah Tower Project 42 Jeddah Tower Project 35 Jeddah Tower Project 28 Jeddah Tower Project 39 Diriyah Gate Project 40 Diriyah Gate Project 41 King Abdulaziz Center for World Culture 42 King Abdulaziz Center for World Culture 43 King Abdulaziz Center for World Culture 44 King Abdulaziz Center for World Culture 50 Jeddah Tower Project 51 Jeddah Tower Project 52 Jeddah Tower Project 53 Jeddah Tower Project 54 Diriyah Gate Project 55 Jeddah Tower Project 56 Jeddah Tower Project 57 Jeddah Tower Project 58 King Abdulaziz Center for World Culture 59 Jeddah Tower Project 50 Jeddah Tower Project 51 Jeddah Tower Project 52 King Abdulaziz Center for World Culture 53 King Abdulaziz Center for World Culture 54 Jeddah Tower Project 55 Jeddah Tower Project 56 King Abdulaziz Center for World Culture 57 Jeddah Tower Project 58 King Abdulaziz Center for World Culture	40 King Abdulaziz Center for World Culture 18 50 King Abdulaziz Center for World Culture 25 29 King Abdulaziz Center for World Culture 7 55 Jeddah Tower Project 30 42 Jeddah Tower Project 12 28 Jeddah Tower Project 5 39 Diriyah Gate Project 20 34 King Abdulaziz Center for World Culture 10 48 King Abdulaziz Center for World Culture 15 31 King Abdulaziz Center for World Culture 8 30 Jeddah Tower Project 4 37 Jeddah Tower Project 14 41 Jeddah Tower Project 18 36 Jeddah Tower Project 12 49 King Abdulaziz Center for World Culture 6 50 Jeddah Tower Project 25 33 King Abdulaziz Center for World Culture 10 29 Diriyah Gate Project 5 47 Jeddah Tower Project 5 48 King Abdulaziz

Participant data was collected using in-depth, semi-structured interviews that would allow participants to provide detailed insights based on their experience and observations related to the architectural projects. Interviews usually lasted for about 45 to 60 minutes, and they mostly conducted in person or via video conferencing based on the availability of the participant. The interviews were guided through a set of pre-determined questions, allowing participants to present their views in detail and elaborate on key issues or introduce issues not previously explored but relevant to the study. During the sessions, audio recordings of the interviews were made, and detailed notes were taken so as to ensure the accuracy and richness of the data gathered.

The six steps of thematic analysis were undertaken on the interview data, including: getting to know the data; coding; finding themes; reviewing themes; defining and naming themes; and writing the final report. Transcriptions of all interviews were verbatim, and analysis was carried out in NVivo software with an aim at systematized coding and identification of themes. Areas of study focused on patterns and themes culled from architectural designs on how architecture influences the social behavior and community engagement as well as cultures. Thence, themes are cross-referenced with the specific characteristics of the three architectural projects with a view to acquiring comparative understandings of the different ways in which architecture shapes social and cultural landscapes within Saudi Arabia.

Table 2: Interview Guideline.

Variable	Guiding Questions		
Architectural Design Influence	- How does the design of this project impact the way people interact with each other?		
on Social Behavior	- In your view, do the architectural features of this project encourage or hinder social interactions?		
Architectural Design Influence	- How does the architectural design foster community involvement and participation?		
on Community Engagement	- What elements of the design do you think draw people from the community to this space?		
Cultural Identity through	- In what ways does this project reflect Saudi cultural heritage or identity?		
Architecture	- How important is the inclusion of local cultural elements in the architecture of this project?		
Global and Local Influences in	- How do you think the design of this project balances local Saudi traditions with modern global trends?		
Architecture	- Can you describe how the architectural style of this project represents both local and international influences?		
Impact of Architecture on	- What changes have you observed in the social or cultural environment since the project's completion?		
Social and Cultural Landscapes	- In your opinion, how does the architectural design of this project shape the local cultural landscape?		

RESULTS

Case 1: Results for Diriyah Gate Project

In this sense, the Diriyah Gate project is a monument to how architecture can respect ideas about cultural heritage preservation in the face of increasingly necessary requirements for infrastructural modernization. Thus, the fusion of Najdi tradition with elements of modernity reflects the vision of the Saudi government concerning the reclaiming of its historical roots and urban development. Participants highlighted how the project functions not only as a cultural icon but also as a living functional urban space that maximizes social interaction and promotes communal identity. It is characterized by mud brick calling into narrow alleyways and traditional court-yards, thus making the space have an atmosphere nostalgic yet practical, underlining engagement by residents and visitors with the space in both social and emotional terms. The design elements have helped in creating public spaces with social behavior more akin to older times, while modern infrastructures ensure that the project caters well to the needs of the present day in regard to accessibility and efficiency. Participants also found out that the project has strengthened the ties of communities. Its residents can relate better to their heritage through the built environment. This emotional bond, coupled with the functional design of the space, supports socializing, cultural events, and group activities, thus strengthening the social foundation of the Diriyah area. The way toward walkability and across the open courtyards toward communal spaces has also been viewed as an important ingredient in the promotion of informal social interactions and improved livability of the area.

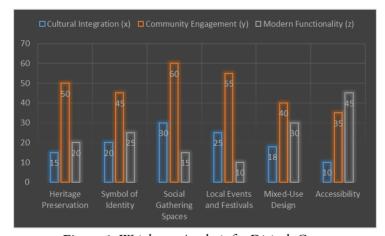


Figure 1: Weightage Analysis for Diriyah Gate.

"The architecture of Diriyah Gate, with its traditional Najdi style, gives us a sense of belonging. It connects us to our roots while still feeling modern enough to serve our everyday needs." (Interviewee 7). This statement points out the ability the architectural design presents with regard to the merging of tradition with modernity in an environmental context that will evolve strong sense of cultural identity. Interviewee 7 admits that the architectural style of Diriyah Gate does more than reflect Saudi heritage aesthetically; rather, it evokes an emotional connection to the past and also provides contemporary functional requirements. Hence, this space should balance all these aspects so perfectly

to be considered a success in both the cultural and social bases.

"People come here not only to appreciate the architecture but also to meet friends, attend events, and spend time in the courtyards. It feels like an open invitation to the community." (Interviewee 12). There seems to be, according to Interviewee 12, a clear reflecting testimony of how the project seems to be doing a great job in bringing this space about as a community interactive area. In terms of the courtyards and open spaces, not only are they aesthetically interesting but serve as vehicles for social interaction. This feeling of being included is promoted also through the use of space planning, encouraging people, either residing within the locale or passing through the area, to participate in enjoying the environment in a communal way. Architectural design, through open public spaces, seems to act as a stimulant for a connection within society.

"This project has brought back memories of old Riyadh, yet it's so accessible and functional. You can see people from all generations interacting here." (Interviewee 3). This remark indicates the intergenerational appeal of the Diriyah Gate project. The architecture preserves the original design while making it usable, making the area accessible to all demographics. Interviewee 3's testimony that different generations go about their daily activities together shows that the design promotes social inclusion and bridges the gaps between older and younger generations due to cultural experiences shared in the space, creating a meeting point for cultural transmission and social engagement.

According to earlier study on architectural design and social behaviour, especially in culturally significant areas, the Diriyah Gate project supports this relationship. Costantino, *et al.*⁴³ noted that public space and architecture can serve as cultural memories, giving residents a tangible feeling of their history. Diriyah Gate follows this direction as courtyards and mud-brick bring nostalgia and belonging to the community, as earlier studies showed that culture-based architecture can strengthen social ties and invite community participation⁴⁴. Yang *et al.*⁴⁵ and other urban space experts noted that well-designed public spaces encourage social contact since they are user-friendly and easy to use. According to participant accounts, Diriyah Gate's open courtyards and walking pathways bring people together for social, cultural, and recreational activities. The idea combines traditional and modern aspects, related to the occurrence. This confirms Tzonis and Lefaivre's claim that critical regionalism—architecture that respects local tradition and embraces modernity—makes a place culturally and operationally valuable.

Table 3: Coding Analysis for Diriyah Gate.

Theme	Sub-theme	Code	Quote from Interviewee
Cultural	Traditional Design Integration	Heritage preservation	"Diriyah Gate beautifully blends modern infrastructure with our Najdi heritage." (I1)
			"It symbolizes who we are as Saudis." (I2)
	Community Connection	Local engagement	"It draws the community together, especially during cultural events." (I3)
Social	Public Spaces	Gathering places	"The open areas invite families and friends to meet and interact." (I4)
Interaction	Event Hosting	Cultural events	"We host festivals here that bring people from different backgrounds." (I5)
Modern	Mixed-Use Spaces	Versatile design	"It accommodates shops, cafes, and cultural exhibits all in one space." (I6)
Functionality	Accessibility	Inclusive design	"The design is accessible for everyone, including those with disabilities." (I7)

Case 2: King Abdulaziz Center for World Culture (Ithra)

The King Abdulaziz Center for World Culture (Ithra) is among those indispensable architectural designs as the monumental structure epitomizes Saudi aspirations toward global cultural engagement and simultaneously cultivates local arts and education. Ithra is utterly modern, an iconic design with intertwining geometric forms starkly contrasting traditional architectural styles representing, in the eyes of the world, a forward-looking vision of Saudi Arabia. For instance, participants commented on how Ithra exemplifies a twofold role—it first is a global center of culture: hub for the global promotion of cross-cultural exchange, and secondly, a hub for the development and conservation of Saudi local arts, education, and cultural heritage. The building's architecture fully symbolizes the modern element but also incorporates all different backgrounds in its place, triggering "inclusivity and cross-cultural interaction" for both community engagement and cultural identity. As depicted by many of the interviewees, Ithra is indeed a bridge between Saudi Arabia and the world garden. Actually, the educational programs, exhibitions, and performances on its grounds bring together vastly different crowds in a sort of convergence of people and ideas. People and ideas really converge at Ithra because of the fluid movement and weaving in and out from one space to another, which encourages interaction between visitors and participants. The inclusive nature of its design has been the central element in the

development of a dialogue of cultures, support to the arts, and the formation of a shared social identity within the Kingdom. Moreover, with its massive scale and modern aesthetic, the architecture is perhaps a beacon of national pride showing Saudi's commitment to innovative cultural frontiers and its traditions.

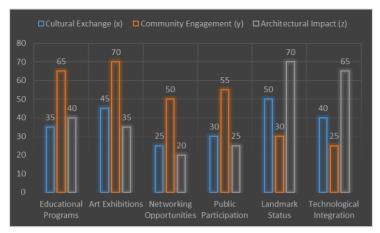


Figure 2: Weightage Analysis for King Abdulaziz Center for World Culture (Ithra).

"Ithra's design is so unique, so modern, yet when you walk inside, you feel a sense of connection to both Saudi and global cultures. It's a place where local meets international in a way I haven't experienced before." (Interviewee 9). This statement underscores the manner through which Ithra has closed the cultural gap which exists between the local and the global. The participant has noticed that the architecture has been carried out in such a way that it is in line with encouraging inclusiveness and shared identity as Saudi Arabia cements itself into preservation of its past but keeps itself open to modernity also looking at the crossroads of global vistas. Fluid open spaces contemporary designing of the building allows free movement in different cultural elements so that there will be a natural fusion of local traditions as well as global influences.

"The way the building is structured encourages you to explore, to participate. I've seen people from all walks of life come here—young artists, international visitors, and local families—all engaging in the same space." (Interviewee 14). This observation embodies Ithra's function in community engagement through architecture. It is stimulating to roam around and participate in the surrounding atmosphere, where a flow of people from all walks of life could meet and share moments together. The layout encourages movement and interaction that not only provides an enriching experience but also builds a common interest. As Ithra would permit coexistence of diverse groups through cultural, educational, and artistic interfaces, it forms a stronger and more encompassing community.

"It feels like a place where you're not just a spectator but a participant in a cultural conversation. The design makes you feel connected to something larger, like you're part of this global cultural movement." (Interviewee 5). Interviewee 5's comment emblematically captures the participative nature of Ithra's architecture. Here is not only a design that begs to be observed but also one which lures in the spectator into cultural and educational dialogues. This participative aspect is evocative of a relationship between the individual and the larger cultural context in a more profound way. The space is well-designed, shaped more than a museum or exhibition center, which will be a dynamic environment in terms of promoting active involvement, hence fashioning both personal and collective cultural identities.

The Ithra project appears to support prior work on promoting cultural discourse through modern architecture and community interaction. Sabarirajan, *et al.*⁴⁶ describes how iconic architecture in globalisation symbolises how local and global cultures meet through cultural exchange. Ithra's architecture symbolises Saudi Arabia's desire to blend its cultural past into modern society. As Ekici *et al.*⁴⁷ states, architecture can take the form of spaces that encourage a wide range of bodies in inter-action. The building's design promotes active participation in the cultural experience as well as aesthetic appeal. Additionally, Del Soldato, and Massari⁴⁹ research suggests that architecture fosters engagement in cultural and social platforms since cultural centres generally serve as convergence points for different cultural, social,

and educational practices. Its design allows for easy movement between areas, which illustrates this concept. The fact that the building has been an attractor for both local and international visitors, yet it still brings a sense of belonging, is evidence of Sassen's argument that globalized cities require locations that enhance cultural integration but respect the identity of the original people. Ithra's importance in creating a common cultural heritage is similar to research on cultural centers in rapidly growing countries. An iconic building can depict a nation's goals.⁵¹ This huge design and modernistic style by Ithra signifies the Saudi tendency to be the world leader in the culture and education sphere, yet in a respect where local cultural tradition and values express the dynamic nature of the Kingdom.

Table 4: Coding Analysis for King Abdulaziz Center for World Culture (Ithra).

Theme	Sub-theme	Code	Quote from Interviewee
Cultural	Educational Programs	Knowledge sharing	"Ithra offers programs that connect global cultures." (I8)
Exchange	Art Exhibitions	Promoting local artists	"We showcase Saudi art, bridging it with international works." (I9)
Community	Public Participation	Inclusive activities	"We encourage community involvement in planning events." (I10)
Engagement	Networking Opportunities	Social events	"It's a hub for professionals to meet and collaborate." (I11)
Architectural	Iconic Design	Landmark status	"Ithra has become an architectural icon for the region." (I12)
Impact	Innovative Features	Technological integration	"The use of technology in exhibitions enhances visitor experience." (I13)

Case 3: Jeddah Tower Project

The Jeddah Tower is a mark of modernity and ambition, because it manifests the history of architectural effort for portraying the vision of Saudi Arabia for global impact. This megastructure will show the marriage between the latest technology and the elements of local architectural influence - it symbolizes a desire of the Kingdom to project a global image but retain its cultural roots. At times, the respondents stated that the Jeddah Tower is a symbol indicating the entrance of Saudi Arabia into the world arena of architectural monuments representing both capabilities and aspirations of the country to become a modern place. This Jeddah Tower has influences socially and culturally that are complex in nature. Even though this architectural wonder exists, it also acts as a flag that can help in stimulating economic and social activities. New urban spaces are being produced in and around the tower, providing a fun place that is supposed to be exciting and foster not only local but also international interest. Judging from their reaction, it can be found that the tower catches the eye of global investors, tourists, and media and turns Jeddah into a crossroads of international interest. The impact of this phenomenon on the local culture is also outstanding; the locals take pride in it and consider it as an indicator of the country's progress. The tower offers a space where Saudi nationals and international visitors come together, creating a new social and cultural dynamic within the city. Moreover, the landmark's state-of-the-art design-feature and smart-city technologies reflect a forward-thinking approach to developing and planning urban environments, infusing local and global architectural influences.

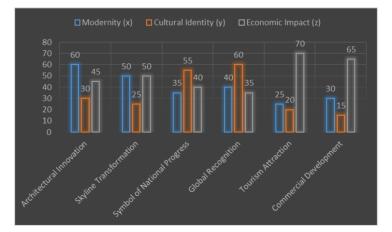


Figure 3: Weightage Analysis for Jeddah Tower.

"When I see the Jeddah Tower, I feel immense pride. It's a symbol that Saudi Arabia can stand tall on the world stage, both literally and figuratively." (Interviewee 2). This statement reflects the symbolic meaning of Jeddah Tower in the

construction of the national identity. Interviewee 2 relates this great tallness to Saudi's ambitions and capability in saying that the architectural design has worked effectively towards creating national pride. The connection between the physical structure of the building and the national psyche might be that the tower could stand not as a building but as representing the country's aspirations toward becoming a world leader. This feeling of pride also suggests that the tower strengthens collective social identity among Saudis.

"The area around the Jeddah Tower has completely transformed. It's not just a building; it's an entire community that's developing. You see businesses, cafes, and people coming together." (Interviewee 15). This is an observation of the impact of the Jeddah Tower to transform the landscape within the local urban environment. According to Interviewee 15, the construction of the tower has provided the impetus for the development of other infrastructural facilities in the locality, thus realizing social interaction and economic development. New businesses and social spaces along the tower indicate that the anchor effect in the broader sense is the tower itself. With planning of the surrounding areas, this design of the tower, therefore, encourages community involvement and economic activities and, therefore, forms part of the developing social fabric of Jeddah.

"What's fascinating about the Jeddah Tower is how it brings together people from different backgrounds. You see locals visiting with their families, but also international tourists who are drawn to the innovation and height of the building." (Interviewee 20). Interviewee number 20 reported that one would be glad to see people from different walks of lives meeting in the Jeddah Tower. By this understanding, by design, the Jeddah Tower is a very potential meeting place for locals and foreigners since it attracts many nationalities, along with the latest techniques that are expressed through its architecture. This comingling of various social groups in one place makes the tower a greater icon of modernity and inclusiveness, creating new social circumstances in the city. It does not only provide an aesthetically beautiful design but a functional space that promotes the melting of cultural and social identities.

Indeed, the Jeddah Tower project's findings align with historical studies on iconic architecture's impact on social and urban landscapes. Abdul Aziz, *et al.*³⁴ describes how iconic skyscrapers symbolise national aspiration, economic strength, and modernity. The world's tallest building, the Jeddah Tower, puts Saudi Arabia on par with the world's architectural and economic powerhouses. The project symbolises the country's desire to be seen globally through architecture. Building design is not only a landmark but also a catalyst for urban space reform, as shown by studies on landmark buildings and their influence on society and the economy.⁵³ Studies on the Bilbao Effect, such as how the Guggenheim Museum in Bilbao promoted urban and economic growth through iconic buildings Li *et al.*³⁷, show how architecture may benefit urban regeneration. Participants' opinions on how the Jeddah Tower affected growth in the neighbourhood. The skyscraper has created new commercial, infrastructure, and social spaces that boost the economy and urban landscape. Globalised architecture and social interaction study also emphasises the tower's ability to unite various populations. Mattone and Frullo⁵⁴ believed that global city icon buildings provide melting pots where the "other" interacts with city residents, sustaining the city's social fabric. Such is the case with the Jeddah Tower, which attracts local and international visitors and naturally fosters cultural exchange and interaction, allowing architecture to seamlessly facilitate social engagement.

Table 5: Coding Analysis for Jeddah Tower.

Theme	Sub-theme	Code	Quote from Interviewee
Modernity	Architectural Innovation	Engineering marvel	"The engineering behind Jeddah Tower is groundbreaking." (I14)
lviodernity	Skyline Transformation	City landmark	"It changes the skyline of Jeddah and reflects our aspirations." (I15)
Cultural	National Pride	Symbol of progress	"It embodies our ambitions as a nation." (I16)
Identity	Global Recognition	International presence	"The tower attracts global attention to Saudi Arabia." (I17)
Economic	Tourism Attraction	Economic growth	"It boosts tourism, leading to job creation." (I18)
Impact	Commercial Development	Investment opportunities	"Many businesses are drawn to the area because of the tower." (I19)

DISCUSSION

Architecture uniquely reflects, shapes, and transforms social and cultural landscapes. Indeed, it becomes a canvas for communities to write their identities, aspirations, and histories. In this study, three monumental architectural projects in Saudi Arabia - Diriyah Gate, King Abdulaziz Center for World Culture (Ithra), and Jeddah Tower - will be analyzed as examples that expand how designs could shape social behavior, community engagement, and most

importantly, cultural identity. The comprehensive researches done on these projects reveal that architecture is not just a building; it is an expression of culture and engagement with society. They are providing an account that balances the local context with current objectives and sets about underlining how architecture affects the community with its well-being and sense of belonging.

Diriyah Gate first stands as a portrayal of architectural interventions that strengthen cultural identity while changing social behavior. Traditional Najdi styles and modern infrastructures are mixed in it, which Saudi history is supposed to fit into- just like how Saudi history fits into modern times. They showed pride in their culture through architecture by reminding them of their history and ideals through interviews. Many participants stated that now Diriyah Gate is a local and national site, meaning locations like it accommodate interaction and culture. One respondent said, "The use of Najdi design here is not only for decoration; it tells a story, it connects us to our past while also giving us modern spaces to socialise and celebrate our culture" (Interview3). According to Rosetti, *et al.*⁴⁰ and other architects, architecture can be utilised to communicate personal culture and identity. Diriyah Gate shows how modern infrastructure can be combined with traditional design elements in accordance with space conditions to create a bridge between past and present and foster a sense of continuity and belonging in the community.

In social behaviour, the Diriyah Gate project shows that culturally relevant design may engage communities. Traditional courtyards and open spaces in Diriyah Gate are meant to support functions and activities in communal spaces to foster a sense of community among visitors. Several interviewees said the design promotes spontaneous socialisation. One said, "The arrangement invites staying. Because the space is friendly and familiar, we meet friends, relatives, and strangers "(Interviewee 10). Roque⁵⁵ research on public spaces found that efficient urban design creates a comfortable and accessible interaction area that promotes social life. The project's architecture actively promotes social engagement by providing assembly areas and a shared culture. Such findings support the use of cultural meaning in architectural design to create familiar and communal spaces that favourably influence social behaviour.

However, Ithra, the King Abdulaziz Centre for World Culture, uses modern architecture to demonstrate cultural interaction and globalisation. Interviewees have noted that Ithra connects Saudi culture to global creative and intellectual developments. One interviewee noted, "Ithra showcases Saudi culture and international exhibitions. It's a concept and tradition junction "(Interviewee 7). According to Maietti³⁶ research, cultural centres are increasingly developed as global interaction nodes in architecture. The center's modern design contrasts sharply with Diriyah Gate's traditionalism, as does Saudi Arabia's desire to lead the world's cultural stage. The centre preserves and celebrates Saudi arts and education through architecture, which embodies culture and globalisation. In this way, the design indicates Saudi Arabia's cultural and intellectual aspirations rather than just center-level social behaviour.

Ithra's multipurpose room stimulates social engagement by hosting art exhibitions, talks, and cultural acts. Such locations brought people from different backgrounds together and encouraged planned and unplanned interactions, interviewees said. One participant commented, "Our events and exhibits are unpredictable, but that's their appeal. You can discuss diverse perspectives with people worldwide "(Interviewee 14). The finding is consistent with earlier cultural centre research, such as Chase, *et al.*⁵⁶, which found that such locations are melting pots where members share knowledge and experience through interaction and community participation. Ithra's open galleries and performance spaces encourage debate and collaboration. Architecture not only hosts cultural events but also facilitates social participation, bringing local and global groups together.

The lessons from Diriyah Gate and Ithra show how architectural constructions can affect social behaviour and cultural identity. Diriyah Gate leans towards traditional design, which boosts local and community pride, whereas Ithra uses modern architecture to promote cultural interchange and worldwide interaction. Although different in design, Diriyah Gate and Ithra propose that architecture can influence social behaviour by reintroducing forms of belonging and cultural continuity and by establishing venues for global exchange and idea exchange, respectively. Others, like Sabarirajan *et al.*⁴⁶, have claimed that building spatial design can direct and promote social connections, suggesting that architecture may influence both local and global cultural landscapes. This study's most essential finding is that intelligent architectural design shapes a community's social and cultural prowess, whether it's protecting cultural history or integrating with the world.

The final instance, the Jeddah Tower, vividly shows how new architecture may transform cultural behaviour and identity, especially in Saudi Arabia's rapid modernisation. The world's highest building, the Jeddah Tower, symbolises ambition and global interconnectedness and the country's desire to lead internationally. Many interviewees saw this tower as both an architectural statement and a social reflection of the country's progress. One respondent said, "The Jeddah Tower represents our modernity. It shows our progress and future. It represents our future, not just a building' (Interviewee 17). This is related to Yang, *et al.*⁴⁵ research on monumental constructions as emblems of national identity and pride. The Jeddah Tower's elegant, futuristic architecture and top spot in the tallest buildings show Saudi Arabia's modernisation while retaining its cultural heritage.

Social Behaviour: The Jeddah Tower has created new urban social patterns in Jeddah. Construction of luxury homes, business spaces, and entertainment venues turned the region into a playground full of bustle. Interviewees found that the tower and its environs foster social contact by providing leisure and business spaces. Previously, Jeddah had no space for persons of varied socioeconomic backgrounds. It changed that; it's a gathering place "(Interviewee 21). Sabarirajan, *et al.*⁴⁶ urban design research shows that public space design strongly influences social interaction and community participation. The Jeddah Tower and its twin development foster social contact amid the city's changing social fabric. It shows how attentive urban planning and design can foster social harmony and community participation.

The Jeddah Tower exemplifies a global architectural trend where megatall towers symbolise modernity, development, and economic dominance. Interviewees constantly said the tower symbolises Saudi Arabia's globalisation. One commenter said, "This skyscraper announces Saudi Arabia's global status. It proves we can do the impossible "(Interviewee 23). Bahho, *et al.*⁵⁷ found that iconic architectural works often symbolise more than themselves: "iconic architectural works often have several messages conveyed through them that relate to political, economic, and cultural ideologies". The Jeddah Tower, the new symbol of change, will transform the skyline and Saudi Arabia's objectives as a global leader in economics, innovation, and culture. The tower in Jeddah's centre symbolises the country's aim to preserve its culture while embracing economic and technological advancement.

Diriyah Gate, Ithra, and Jeddah Tower demonstrate how architecture shapes Saudi culture and social behaviour. Each project approaches a culturally significant intersection with modern utility differently, demonstrating how design may foster community participation and social harmony. From the cultural landmark Diriyah Gate to the Jeddah Tower representing global ambitions, these structures are a dynamic interplay between traditionalism and modernity, demonstrating how architecture can serve individual and collective experience. These architectural works show how cautious design may create inclusive, dynamic venues that honour cultural traditions and incorporate into community conversations as Saudi Arabia modernises. Thus, the research findings contribute to a holistic knowledge of a complex nexus of architecture, society, and culture and stimulate further study of their mutual changes in a changing global context.

Implications

This study expands the literature on architecture and social dynamics in cultural contexts, which has theoretical consequences. The study uses spatial theory and social constructivism to show that building designs affect social behaviour, community interactions, and cultural identities. Based on Diriyah Gate and Ithra's shared experiences, architecture may promote social cohesiveness by establishing inclusive areas that stimulate contact. The study stresses famous monuments like the Jeddah Tower as emblems of national identity and objectives, placing architectural attempts in socio-political contexts. Academic discourse in architecture and urban studies is enhanced by theory and empirical data, which benefits practitioners and policymakers. Understanding how design affects social behaviour and cultural expression ensures future architectural projects are culturally relevant and meaningful. Theoretical study is crucial to understanding architecture's social function, allowing future studies to examine the dynamic relationships between space, identity, and community in a changing setting.

This research has significant practical consequences for architects, urban planners, and policymakers designing and developing public places. The successful combination of traditional Najdi architecture with modern infrastructure at Diriyah Gate shows the need to combine cultural heritage with modern architecture. Architects must incorporate local cultural elements into their designs to create structures that resonate with the community and improve public engagement and social interaction. The research shows that multifunctional facilities are needed, as shown by the

King Abdulaziz Centre for World Culture (Ithra), a cultural exchange and education hub. Design adaptability helps practitioners build different spaces that encourage community participation and keep cultural organisations relevant to a wider audience. This research can inform strategic urban planning to improve social cohesion and cultural expression in rapidly urbanising areas. The Jeddah Tower shows how famous architectural projects can transform cities, attracting local and international visitors and boosting local economies. These advances can help policymakers develop integrated urban landscapes that improve citizens' quality of life and foster lively communities through social and cultural exchange. This research suggests that urban designers should promote pedestrian-friendly zones, public places that encourage interaction, and architectural icons that reflect local identity and enhance global narratives. Practical implications point to the necessity for a comprehensive approach to architectural design and urban planning, understanding that built environments affect social dynamics and cultural landscapes and supporting sustainable and inclusive urban development.

Limitations

This research sheds light on architecture's impact on social and cultural settings, but its limits must be acknowledged. Case studies focused on three Saudi Arabian architectural projects, which was a limitation. The findings may not apply to other cultures or places due to this geographical context. Architectural traditions, social dynamics, and historical contexts vary by country and culture, affecting how architecture and social behaviour interact. Comparative analyses of architectural projects across cultural contexts may help future research understand how different designs affect community involvement and cultural identity. Further, an analysis of architectural designs within different metropolitan contexts can also throw light upon how socio-economic conditions, climate, and local governance impact the potential of architectural design to generate social interaction. On account of primary qualitative data collected from interviews, the findings of this research could carry a bias. The experiences and opinions of the 28 interviewees are likely to influence the findings. Qualitative interviews may not represent all stakeholders including community members, as those do not engage in such forums or may have divergent opinions on their relevance. To make the conclusions more empirical, further research can use quantitative approaches, for instance, surveys or observational studies to include more perspectives. The mixed-method approach would thus strengthen the rigour of the research and establish the results more convincingly while offering an in-depth understanding of how architectural designs work on diverse groups' social behavior and cultural identity.

The current study also did not explore the extent to which architectural projects affect long-term changes in social behavior and community involvement. Respondents responded to immediate effects, but their sustainability over the long term cannot be confirmed. Changes in social, economic, and demographic factors with regard to space use and perception often intervene over time. A longitudinal study can explore the social dynamics of these architectural undertakings over a period to determine their long-term effects. An investigation of how perceptions and attitudes change over time would educate researchers on whether or not architectural designs promote community engagement and cultural identity. There is a need for much more research on what technology and architecture means regarding the new social behavior and culture. Virtual reality, smart city infrastructure, and social media are altering the ways in which communities relate. Future studies could incorporate technical discoveries and design building to create new forms of social and cultural expression. This study may explore how architecture might evolve to incorporate new technology such that built space continues to mediate and facilitate meaningful connections in the digital world. Investigation of the interface between technology, architecture, and sociality provides useful insights into the ways manufactured surroundings and communal experiences are shaped in modern society.

CONCLUSIONS

This study examines Diriyah Gate, King Abdulaziz Centre for World Culture (Ithra), and Jeddah Tower to demonstrate how architecture shapes social behaviour, community engagement, and cultural identity in Saudi Arabia. The findings show that architectural design can promote social cohesion and cultural values beyond its pragmatic role in urban planning. These designs merge traditional and modern features to resonate with the local people and showcase the nation's aspirations. These structures improve social dynamics, showing that design may foster community participation by creating inclusive areas where varied groups can connect. This study highlights the necessity of culturally responsive design that honours tradition and modernity. Beyond the case studies, this research can teach architects, urban planners, and policymakers how to build and develop public places. Stakeholders can

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improve citizens' quality of life and sense of belonging by prioritising cultural heritage and community requirements in architectural projects. This research can inform future architecture projects to be responsive to social dynamics and cultural manifestations as societies manage globalisation and modernisation. This study provides a platform for additional research into the complex links between architecture, society, and culture, enabling novel design methods that build community bonds. Architecture and social dynamics must be discussed to shape the built environment to reflect global societies' changing identities and ambitions.

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