BUILT FORM AND RELIGION: UNDERLYING STRUCTURES OF JEDDAH AL-QADEMAH

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The emergence of Islam around the beginning of the seventh century had a major effect on the lives of the people of the Arabian Peninsula. As their ways of life changed, so did the organization of their built environment, ultimately leading to the concept of the Islamic city. Since, the location of the homeland of Islam away from non-Islamic occupiers has allowed the original form of Islamic dwellings and settlements in the region to remain more or less intact. This paper explains the principal values of the Islamic faith and their effect on the structural development of the historic city of Jeddah, called Jeddah Al-Qademah. The compact layout of this city, in present-day Saudi Arabia, once served a pedestrian circulation system and was characterized by public and private spaces that responded to newly emergent Islamic traditions. Although living conditions in Saudi Arabia are much changed today, the Islamic religion still plays a role in people's lives. A vast architectural heritage remains in Jeddah Al-Qademah which may provide a more satisfactory basis for contemporary city design than many concepts now being implemented.

Following the advent of the Islamic religion in the Arabian peninsula and the subsequent spread of Islam to many parts of the world, there occurred an extraordinary burst of urban development. A rich heritage of city design was created in the various environments that made up the Islamic world. Indeed, in expressiveness, vigor and virtuosity the architectural quality of the Islamic cities of the era often rivals the granular metropolitan creations of present societies. Early Islamic cities were more than just spectacles of fortified places, palaces, domes, minarets and monumental buildings; they were an expression of underlying religious beliefs, social and
economic structures, and a unified visual sensibility. Their study reveals that Islamic faith, values, and culture have often been expressed in supremely assured conglomerations of buildings.

One early Islamic town is historic Jeddah (Jeddah Al-Qademah), located in present-day Saudi Arabia. Jeddah Al-Qademah was developed along the western shoreline of the Arabian peninsula during the second half of the seventh century by the third Muslim Khalif, Uthman-bin-Afan. Although there were people living on the site prior to the construction of the city, its structural form was developed by Muslim builders. No history is available regarding the structure of a settlement at Jeddah before the arrival of Muslim people.

Custom was particularly important among the early Muslim builders of Jeddah Al-Qademah. In this Islamic society tradition had a clear religious meaning, and city residents shared a strong religious sense, convinced their way of life was an expression of the will of Islam. For the city's early residents religion encompassed the whole of life, not only that small segment of activity concerned with specific acts of worship or fulfillment of religious duties. The aim of this paper is to investigate the organizational characteristics of Jeddah Al-Qademah, showing how the principles underlying its physical development meshed with socio-cultural and religious factors.

In general, the redefinition and analysis of the past has been useful to human societies for a wide variety of reasons: ideological, aesthetic, and technical. Today this can be demonstrated very readily in architecture and urbanism. In particular, broad scientific examination of traditional buildings — especially folk buildings — is an urgent task. This can be accomplished through an intensive study of theories and practices of the past, with special emphasis on societal values and beliefs. For this reason, this study is not merely a history of form or style; it is an attempt to provide a unified view of the religious, cultural and environmental factors that shaped the design of a city.

The paper is based on seven field trips carried out in Jeddah Al-Qademah during 1990–1994. Field observations were made, photographs were taken, and aerial maps and available drawings were analyzed. In addition, many interviews were conducted with elders of the city, and the information collected from them was compared with information obtained from a comprehensive literature review. Physical analysis was supplemented by a more qualitative study of cultural meanings. Symbolic and social connotations of the traditional environment were examined, especially the teachings of the Islamic religion.

The architecture of Jeddah Al-Qademah is the architecture of the Muslim people. It is hoped this analysis will bridge the gap between the concepts of current building practice in Saudi Arabia (primarily imported from the West) and traditional experience. The study is primarily addressed to architects, urban planners, city administrators, government officials and academicians who have direct or indirect influence on the practice of city planning and design in Saudi Arabia and/or other Islamic countries.

**ISLAMIC FAITH AND THE BUILT ENVIRONMENT: A MORPHIC ANALYSIS**

Islam is a universal and strictly monotheistic religion. According to Islam, Allah (God) demands that believers be resigned to his will (the meaning of the word “Islam”), and that they perform good acts (i.e., treat aged parents well, give to the poor, etc.). The Qur'an, the Muslim holy book, is the most important regulator of Islamic life. It and the Sunna (sayings and traditions of the Prophet Mohammed) are the basic sources of law, defining such things as behavior, manners, and rules for business and social relations. The Qur'an encourages believers to “Obey God and His Envoy” (surah 8:1). And it sets forth the Prophet as “a fine example for whosoever hopeth on God and the last day and remembereth God much” (surah 33:22). Occasionally, the sources also recorded aspects of Mohammed’s behavior, which helped raise ancient Arab customs to the level of religious tradition. These practices contributed greatly to endowing the Muslim city with certain characteristics. Hadith sayings of the Prophet provide a further abundance of historical, formal and practical detail on the beliefs and practices laid down in the Qur'an.

The religious sensibility of the inhabitants of Jeddah Al-Qademah had one further important characteristic. This was a strong sense of community — of common ties, outlook and purpose. Equality before God and the common purpose of Muslims were symbolized dramatically in such religious ceremonies as daily prayers, where rich and poor alike prostrated themselves side by side in obedience to a common creator.

Islam, it has been repeatedly emphasized, is essentially a religion of law. Schacht has argued that it is difficult to understand Islam without understanding Islamic law. According to Islamic beliefs, two characteristics summarize the structure of the Muslim community: the governance of God, and the equality of men in the sight of God. The institutions of Islam are founded upon three sources: the Qur'an; the Sunna, or the tradition of the Prophet; and the written and oral
teachings of jurists. It is the jurists who give Muslim law its various schools (madhab), but it is the two first sources to which no scholar can fail to refer, and which give Islam identity and cohesion. These sources were the basis decisions and dispute resolution in the Islamic city.  

Islamic law, or Shari'a (literally, "the straight path"), theoretically governs all aspects of Muslim life. As it constitutes the will of God, any Muslim who violates it commits both a crime and a sin. A Muslim believer submits to the fact that law and morals are aspects of religion. Thus, jurisprudence is not only based on theology, but subsumes elements which Western tradition might consider aspects of theology. For these reasons, Islamic law has had a far greater influence on Muslim society than Western law has had on Western society. The Shari'a is a sacred code, reflecting and deriving its authority from the will of God. It is thus a combination of law and morality: a code of law, and a code of behavior and ethics. Al-Hathloul observes:

Through the development of the Shari'a, the desire had always been to reaffirm the past's validity as a guide to the present. Thus, the Shari'a was advanced, accepted, and took the shape of tradition. This pattern of dominance, unchallenged and long-standing tradition is repeated in the context of the Arab-Muslim city's physical environment.  

According to Hakim:

...the roots of the structure and the unity prevalent in the numerous cities (within the fabric of each city) within the vast Islamic world are the product of the Fiqh: the mechanism interpreting and applying the axiomatic system of the Shari'a (Islamic Divine Law) within the processes of building and urban development.  

Within this line of thought, Al-Fayez argues that the building and planning principles that were applied in Islamic cities were based on the central principle of justice.  

According to Islam, each person commits himself or herself alone and appears before the Supreme Judge to answer for his or her actions. However, the bond that links people to the social body is so tight that people depend for salvation largely on each other and on more-or-less favorable circumstances. This enduring combination of individual effort and the communal framework became the most outstanding characteristic embedded in the form of early Islamic cities like Jeddah Al-Qademah.

Every Muslim is committed to fulfill certain required religious duties, living up to a divine pattern for life. Five basic duties make up the "Pillars of Islam": a confession of faith, the five daily prayers, alms-giving, fasting in the month of Ramadan, and the pilgrimage to Mecca at least once in a lifetime, if at all possible. Of these, prayer is the kernel of Islam, the rite which contributes most to the communal edifice and its cohesion. Every Muslim is required to pray five times daily: at dawn, midday, mid-afternoon, sunset, and after nightfall. Males are strongly encouraged to pray collectively. While prayer is often practiced in a mosque, it can be practiced elsewhere.

At the very broadest level, certain conditions preceding or accompanying the performance of prayer considerably influence the design and function of Islamic cities. For example, the basic requirement for a site large enough to accommodate all the faithful at Friday midday prayers (obligatory for male members of the Muslim community) determined that the Great Mosque of Jeddah Al-Qademah be located in the center of the city. But, as in other Islamic cities, the Great Mosque was not exclusively a place of prayer; it was also a meeting place where the city's news could be exchanged and a center for religious education. And, as was also the case in the layout of many other Islamic cities, its importance and central location invited commercial activities (the souk, or market) to locate around it.

In light of this brief explanation of the role of Islamic faith in Islamic society, we now proceed to an investigation of the morphology of Jeddah Al-Qademah as a manifestation of Islamic principles. In general, one may argue that the aim of town planning is to give material expression to abstract and spiritual realities, with the city itself becoming the symbol of a religious, social, economic and political system. In order to devise a physical portrait of a city and to recognize its urban morphology, therefore, it is necessary to study the plan which organizes its components. Contrary to the tendency of some Western observers to play down the importance of Islam in the interpretation of the city and to stress time and location variables over organic and social existence, it must be empha-
sized that the layout of Jeddah Al-Qademah is closely tied to religious precepts.

Two general levels may be observed in the city’s early development. First, conceptual planning was applied to such things as its surrounding wall, the location of gates connecting to caravan roads, and the size and location of major streets leading to the Great Mosque and the main commercial area at the city center. Second, an arrangement of roads was established at a smaller scale to connect main streets with houses. Development at this second level was accomplished according to local custom and planning based on Shari’a concepts. Ultimately, it created much of the city’s enduring character: the relationship of streets to buildings, and the location of urban elements/building types within a finer-grained system of movement.

WALL, SOUK AND RIBAT

One may begin the analysis by looking at the city’s wall (sur). Generally, the walls of Islamic cities in the East date from the Roman period and have a rectangular outline, as in Damascus (1,500 x 900 m), or one that is practically square, as in Jerusalem (1,100 x 900 m) and Aleppo (1,000 x 950 m). In comparison, the wall of Jeddah does not surround a regular geometrical shape (FIG. 1). This is partially due to the topography of the site and to the fact that many parts of the city fabric had been established prior to the construction of the wall in the tenth century.

As in all walled cities, the location of gates was extremely important. Jeddah’s ancient gates (bab) included Bab Medina and Bab Al-Jadid to the north, Bab Mecca to the east, and Bab Sharif to the south. According to the elders of Jeddah, these were closed with wooden flaps constructed by assembling beams, 12 cm thick and 20 cm broad, vertically on the outside and horizontally on the inside, and then bonding them with iron strips fastened with huge nails. Another important feature of the walls was the borg, or tower. Each of Jeddah’s gates was flanked by two towers, which also strengthened the wall. Two additional towers guarded the city along its western sea edge.

Overall, the organization of the Jeddah Al-Qademah was based on the creation of a strong contrast between central (public) and peripheral (private) areas (FIG. 2). The proliferation of commercial structures in the city’s core did much to accentuate its centrality. The important location of Jeddah Al-Qademah along the shoreline of the Red Sea and its function as a seaport for pilgrims on their way to Mecca contributed greatly to the development of commercial activities.

The establishment and integration of the souk system played an important role in the development of Jeddah Al-Qademah. The souk took many forms as marketplaces (souk) for the exchange of commodities, goods and necessities developed at many places within the confines of the city walls. The central souk was a single-story structure, consisting of many shops assembled in a linear, continuous or semi-continuous combi-
nations. Nearby, trade activities were also held in court-like open spaces to the south of the Great Mosque. Souks also appeared along major city thoroughfares, particularly those connecting city gates with the core. Here, souks occupied the ground floor of buildings, while upper floors were devoted to housing. An open-space souk system also developed on both sides of the city wall at its gates. And weekly or seasonal markets, a common activity in Islamic societies, were held in public spaces along major thoroughfares of the city. Finally, mini-souks (sauwaiqas), clusters of shops, groceries, and a nearby local mosque (masjid), were scattered throughout Jeddah Al-Qademah, usually located so as to function as neighborhood centers. In these places, shops were created from the surrounding housing fabric.

The early souk system of Jeddah featured small shops that faced the street and had facades two meters wide. An upper shutter served as a lean-to, and a lower, generally smaller one served as a display area. The shops were from three to four meters deep, and the back was often used as a workshop, since neither merchants nor craftsmen lived on the premises. Complex variations in design were possible using these basic elements grouped in various ways. The resulting physical arrangements were functional and created visual variety within a simple, unified organizational framework. The souk system highlighted the variation of physical relationships and organization that can still be observed within Jeddah Al-Qademah today.

Kostof observes that the weaving of local and long-distance activity into the urban fabric is a distinct feature of the business district in Islamic cities. In general, traffic flow was oriented to and from the center of the city, where the main market and the Great Mosque stood. Various trades and types of merchants were then grouped and located according to a symbolic framework centered on the Great Mosque and extending outward toward the city gates. This was similar to the souk system established in other Islamic cities.

There was one other major organizing feature of the early Islamic city. This was the ribat, a fortified building to house the Muslim army, the mujahedeen. Early Muslims were encouraged to participate in the spiritual jihad, involving the act of fighting to spread Islam. The number of ribats built in an Islamic settlement depended on its importance and location. One ribat was built in the center of Jeddah Al-Qademah, adjacent to the Great Mosque and the main souk. Another was built close to the Medina gate. Today both buildings are used as homes for the elderly.

STREETS

Public main streets have historically held an important place in urbanization. During the development of the urban fabric of Jeddah Al-Qademah, streets were constructed based on traffic requirements. Since there was practically no wheeled transport in Jeddah, this was made up primarily of pedestrians, porters, and animals. The width of streets was determined by the need for two loaded animals to pass. At the gates, camels with loads wider than could be carried through the smaller streets of the city were unloaded. Smaller bundles would then be carried to their final destinations by donkey, mule, horse or porter. Until the first half of this century porters carried enormous loads through the city and needed a certain freedom of passage.

The street system in Jeddah Al-Qademah, an essential component of its form, displayed a clear hierarchy. First were city-wide thoroughfares connecting the city’s main gates to its core. These arteries formed an integral part of the network connecting distant localities to the city, and their minimum width was determined by the functional requirement to allow two fully loaded camels to pass without hindrance (FIG. 3). The Prophet instructed Muslims: “If you disagree about the width of a street, make it seven cubits.” This minimum dimension equals 3.23–3.50 m. Hakim explains this led to a great similarity in the design of streets in various Islamic cities. He also observes: “The uniform legislative guidelines, and the almost identical socio-cultural framework

FIGURE 3. Main thoroughfares in Jeddah Al-Qademah are bordered by various types of souk elements. This street connects between the central souk and Bob Masca.
created by Islam helped produce remarkable similarities in approach to the city building process. Gelani claims that among the 6,666 verses in the Qur'an, there are about 200 which contain either an element of architecture or of town planning, indicating the great concern given by Islam to the structuring of human habitation.

The second order of streets in Jeddah Al-Qademah included primary streets and main access routes within and between the major quarters of the city. These streets tended to form shortcuts across the first-order streets (FIG. 4). While main thoroughfares were designed to connect the city gates with the center of the city, housing the vaik and the Great Mosque, secondary streets often ran east-west with some angle to the north or south, depending on location, to connect residential areas with the city center. This design also provided maximum shade and cool air during daytime.

Third-order streets provided access and linkage within quarters and tended to be used by people living, working, or with frequent contacts in the quarter (FIG. 5). Finally, at the smallest scale, there was a system of cul-de-sacs referred to as zaqqoq. This type of access was not public and belonged to adjacent or bordering residents. Entries to private houses faced onto these streets. There was no specific pattern linking them to the larger hierarchy, and they could be connected to any of the three types mentioned above.

The design of the cul-de-sac system in Jeddah Al-Qademah is a unique characteristic that distinguishes it and other Islamic cities from Greco-Roman and Occidental medieval cities. It primarily supported a desire for privacy, ensuring nearly total isolation of family life. The nature of the streets, the cul-de-sac system, and the use of city gates, of course, also created a highly secure layout.

Spreiregen explains that the structure of the Islamic city was very pragmatic, since its component parts were logically located and their dimensions could largely be determined by the mathematics of pedestrian circulation. But the layout of streets and alleyways in Jeddah Al-Qademah also indicates the importance of social life within the walls of the city. The arrangement of the city's buildings and other components supported a balance between social homogeneity and heterogeneity. This was a result of the social system requiring both segregation of domestic life and participation in the economic and religious life of the community.

Jeddah Al-Qademah characteristically comprised a tripartite system of public, semi-public, and private spaces, varying in degree of accessibility and enclosure. But the city's streets and other public open spaces were all considered public property, and were governed by Shari'a rules. The governor of Jeddah, represented by a number of assistants, was responsible for their adequate condition.

NEIGHBORHOODS AND RESIDENCES

Jeddah Al-Qademah was partitioned into three quarters (mahalla), urban cells that served as residential neighborhoods. These were Mahallat Al-Mazlum to the north; Mahallat As-Shame in the center and toward Bab Mecca; and Mahallat Al-Yemen toward the south (REFER TO FIG. 2). Each mahalla was divided into subsections which possessed all the institutions required for social life. Typically, a subsection would be grouped along an artery, called the suwayqah, and would contain a local mosque (masjid). The purpose of these mosques was to provide an easily accessible place for daily prayer. They also offered a place for juridical and scholarly activities. In the residential districts, streets between dwellings were called...
Since building and development of the various mahalla components was a continuous process, related rules and guidelines needed to remain uniform over time. In this, they were guided by the constant principles of Islamic law. The result was the homogenous built form that is still evident today. Individual houses expressed this attitude and satisfied cultural and symbolic requirements through siting, materials, and form. They reflected the presence of shared goals and values, a clear and agreed on purpose, and an accepted hierarchical structure of house, settlement, and landscape. Lynch describes this quality of the Islamic city as follows:

“The ruling metaphor is the container: everything is walled and gated from the city itself towards streets and quarters of the city to local residential clusters, to the house and its rooms. Even the major public ways are tightly confined. They lead to yet smaller local streets, to extremely narrow cul-de-sac like capillaries and to private doors.”

The unity of plan, site, and materials observed in Jeddah Al-Qademah generates an enthusiastic response even in lay observers. Much of this response is evoked by harmony with the landscape, as well as a sense of directness, forcefulness, and a feeling of fitness to purpose. An intimate scale is created by a series of walls which not only enclose space, but also tie houses together and link them to the landscape. The horizontality of the flat walls is contrasted
with the projected mashrabiyyah. Together with the use of various kinds of screening and balcony elements, these signify the need for women's privacy. Finally, there is a high degree of intricacy in residential facades, conveying many cultural meanings.

OPEN SPACE AND PUBLIC AMENITIES

According to Islamic teachings, human behavior should be committed to respecting privacy. In Jeddah Al-Qademah, this provision led to the elimination of direct visual corridors into the private domain. Further, Mohammed stated that people should not sit in thoroughfares, “but if you insist then you should respect the rights of thoroughfares: avoid staring, do not create harm, salute back to those who salute you, bid to honor and forbid dishonor.” Guided by Islamic principles, people in Jeddah Al-Qademah were committed to the concept of self-regulating societal behavior. This is sanctioned in the Qur’an: “You are the best nation ever brought forth to men, bidding to honor, and forbidding dishonor, and believing in God. Had the people of the book believed, it were better for them; some of them are believers, but most of them are ungodly” (surah 3:111).

Typical of Islamic cities, the arrangement of public places in Jeddah Al-Qademah created an orderly and mutually self-supporting hierarchy that commenced with the major elements of the city center and continued to the minor nodes of residential districts (FIG. 7). A clear definition was observed between private, semi-public, and public open spaces. Circulation in this system was completely devoted to the slow movement of pedestrians and animals. None of the spaces within the system was ambiguous. For example, signs at crossroads generally bore a name evoking a particular trade, renowned family, or a certain activity that took place in or adjacent to that place.

Another feature of the system was an open space called rahba that often occurred at the intersection of main streets. This space was used for commercial and public activities. Many rahaba are observed today in Jeddah Al-Qademah. They have retained much of their original form, character and function. It is due to the design and quality of a number of these spaces that one can observe and enjoy the visual character of the city’s traditional buildings.

Infrastructure was also a concern of the city’s Islamic builders. In particular, water supply is stressed in Islam not only because of its importance to life and the cultivation of land, but because of the importance of ritual ablution. Providing a public place with water for both men and animals implemented one of God’s commandments and followed hadith sayings regarding charity on behalf of God. In Jeddah Al-Qademah offering water to pilgrims on their way to Mecca was a further consideration.
Information regarding the early system of drinking water in Jeddah is scarce. However, recent excavations have revealed that the supply network comprised a main conduit fed from a source perhaps several kilometers distant. This conduit, a veritable aqueduct, gave birth to secondary branches, and then to smaller ducts and clay pipes which distributed water by simple gravity. According to the elders of Jeddah, distribution was achieved through numerous supply points. These were often small public drinking fountains, called sabi', placed against the walls of the residences of pious believers. Here passers-by could allay their thirst and ask God's blessing on the benefactor. In addition, there were a number of wells in public places that can still be observed in Jeddah Al-Qademah. Because structures providing water in the city displayed features inspired by the Shari'a, they represent an architectural type that is distinctly Islamic.

Contrary to the European concept from the Middle Ages of public assembly in front of a town hall or in a church square, a Muslim city of the same era had a mosque with a courtyard and perhaps a front yard for public gathering. In old Jeddah there were a number of large mosques. One was Al-Shafie Mosque, which still exists, with its vast courtyard surrounded by a portico. Another was the Great Mosque, which was recently demolished and replaced by a new mosque, Al-Hanafi. Also, on the occasion of Islam's great religious festivals, Eid Al-Fitr (at the end of the Ramadan month of fasting) and Eid Al-Adha (during the yearly pilgrimage to Mecca), the inhabitants of Jeddah gathered at the musalla place northeast of the city wall. This practice of gathering to pray in an open space is still exercised on the two Eid occasions.

Today one of the important characteristics of Jeddah Al-Qademah is the existence of physical elements cutting across all scales of the city and making up an agile set of components which are highly versatile in their combination and structuring capabilities. The basic elements are the various building types and their respective architectural elements. The system of building Jeddah Al-Qademah, while made up of relatively few elements and components, provides great flexibility and diversity (FIG. 8).

The unity and harmony in Jeddah Al-Qademah is the result of mechanisms in the building process. One of these was the fiqh, with its primary sources in the Qur'an and the Sunna. Other reasons included the use of common building materials and common responses of builders to climatic conditions. But another principle, maslah, or local custom, also played an important role in creating diversity within unity. Thus, various subtle interpretations were introduced to respond to specific micro-conditions at the neighborhood scale. They sprang from the participation of people, particularly neighbors, in making decisions in matters of building.

LESSONS FOR TODAY

The above morphological analysis illuminates how the layout of Jeddah Al-Qademah was irregular, yet coherent, based on a physical arrangement that evolved over a long period. As a unified physical organism, the city was formed of a mix of uses and was successful in creating symbolic perceptions and distinctively recognizable and meaningful images in the minds of its inhabitants. The city grew into a coherent and well-organized totality presenting a genuine and elaborate text that expressed a local heritage, a social system, and, most importantly, the impact of Islamic teaching and Shari'a law on the structuring of the built environment. This resulted in a tight correlation of the built environment with people's symbolic needs.

This study emphasizes that the quality of Jeddah Al-Qademah may be attributed to people's respect for Islamic principles within a unified society. Islam modulated the societal values of the original builders of the city, resulting in a legal mechanism to guide the process of building. Such an appreciation of Jeddah Al-Qademah provides a challenge to present decision makers in Saudi Arabia. Today there is a need to investigate how similar principles to those explained above can be used to enhance current planning and building practice to make them more responsive to the socio-cultural and religious traditions of Islamic society.
In comparison with the meticulous system of design and the authentic quality of architecture observed in Jeddah Al-Qademah, the modern built environment in Jeddah, as in other cities in Saudi Arabia, lacks the merits of traditional architecture. It is Western in form and style and maintains little continuity with local history. As a result, it stands apart from local culture. The rapid development of modern Jeddah city has demonstrated a restless search for the future and a constant denial of the past. A great architectural and design heritage has been lost as a result of the ruthless drive towards modernization and commercial gain.

Recently planned urban communities in Saudi Arabia are based on a gridiron layout that emphasizes a regular street system. The modern planning system is also far less dense than its traditional counterpart, without proportioned open spaces and low land coverage. Modern streets are wide highways, main streets, and thoroughfares, from 60 to 20 m in width. This has resulted in a decreased spatial relationship between buildings and streets, reversing the traditional relationship of building to open space. Also, the possibility for person-to-person interaction in the environment has decreased as a result of increased distances between residential buildings. Thus, the inherited Muslim norm of commitment and belonging, a concept that is strongly supported by Islamic religion, has suffered. Today, as a result of the recent arrangement of the built environment, community activities are lacking and social ties are diminishing.

In the urban fabric of modern cities in Saudi Arabia design destroys both the intimate scale and links with the land. New visual elements no longer express the relation of the individual to the group, and of the group to its surroundings. As opposed to the traditional pattern of Jeddah Al-Qademah, the new pattern makes individuals feel insignificant. The case of Jeddah Al-Qademah shows how designers, planners and government officials in Saudi Arabia today should give renewed attention to elements of increasing spatial scale and a demonstration of harmonious domains.

REFERENCE NOTES

3. The study of the residential quarters of Jeddah Al-Qademah was supported by field observations and abundant documentation available through the Municipality of Jeddah. But difficulties were encountered in studying the former central souk area because of the demolition of most traditional buildings here in the early 1970s. Information pertaining to the core of the city was pieced together from various sources. For example, an early aerial photograph was studied and thoroughly discussed with a number of the city’s elders.
13. The Great Mosque along with adjacent major souk structures have since been replaced by new buildings of different designs but similar function. The demolition of the city wall in 1947 caused the disappearance of commercial activities at the city gates.
15. There was actually one more major feature of the city that called out the nature of its planning according to Islamic teachings. This was the waqf (public cemetery). In respect to the
Islamic teaching which requires Muslims to place the head of a buried person facing the qibla (the direction of Mecca, the center of the Islamic world), the maqbara was located at the eastern corner of the city. Mecca is 90 km to the east.


19. Ibid., p. 12


30. Both the Qur'an and hadith sayings exhort Muslims to offer water to thirsty creatures, both human and animal. The Qur'an requires Muslims to follow the hadith if they are to win Allah's approval and forgiveness (surah 4:80, “who so obeyeth the Messenger hath obeyed Allah”); surah 59:1, “and whatsoever the Messenger giveth you take it. And whosoever he forbideth abstain (from it).” In the Qur'an it is made clear that water is a blessing shed by God, who offers it to men and animals to drink. It is not yet who are the holders of the store thereof.” Fazloul Karim (Al-Hadis) relates a hadith reported by Abu Dawood and Ibn Majah via Ibn Abbas, in which the Prophet explained that Muslims are partners in three things: water, pasture and fire.

All drawings and photographs by author except where otherwise noted.