

Mosque Architecture in an Insular Context: Al-Alkhalaf, Saudi Arabia

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Abstract. As a result of its physical **characteristics** and its cultural and religious role in the Muslim society, the mosque has long attracted the attention of **many** scholars. The mosque cemented beliefs by providing a physical and psychological focus for the Muslim community. This work **examines** the traditional mosques of the community of **Al-Alkhalaf** in Southwestern Saudi Arabia. **The** historical development and achievement of these cultural and religious buildings have notable significance to the architecture and planning of Al-Alkhalaf context. The work describes the relationship of basic Islamic principles to the site selection, design, construction and use of the mosques. It then documents the design elements of the two remaining traditional structures in the community. It assesses the impact of the early mosque of Prophet Mohammed on the development of **Al-Alkhalaf** mosque architecture and also notes the influence of the spatial arrangements and pattern of the **settlement** on the mosque allocation. The study demonstrates that the simplicity of the indigenous design should not necessarily be abandoned in the rush to erect modern "exotic" architecture. Rather today's architect and planner must take **from** tradition that which contributed to mosques which perfectly **met** community requirements both functionally and spiritually.

Introduction

Few studies on mosque architecture in Saudi Arabia were reported. For example, Al-Shuaish [1] studied and documented some of distinguished old mosques in central Najd.

Geoffery King contributed to the study of the architectural history of traditional mosques in Saudi Arabia by documenting numerous photographs and providing valuable descriptions of traditional mosques throughout the country [2]. His accomplishment stimulated the interest of researchers on the significance of **the** theme in the different Muslim communities, though it lacked the graphical information utilized by architects such as floor plans, sections, elevations and other details.

Asiri outlined some of the characteristics of the archaeological mosques in Asir [3]. He emphasized the factors which influenced the building of such mosques. He depended on oral history and a few written credentials found on the walls and ceilings of the buildings themselves. The findings of these researchers were useful to this investigation, and it is hoped that the present research will compliment them by adding useful information not previously discussed.

According to Al-Abid, mosque architecture was the beginning of theorizing the Muslim architectural thought, being a visual aspect of social and architectural history [4]. It is important to document and study traditional mosques in insular areas, such as Al-Alkhalaf, which have high cultural and religious significance. Al-Alkhalaf settlement is located in Asir region. It is important area in southwestern Arabia. Its fertile mountains, valleys and plains, as well as its moderate climate and its heavy rainfalls, made it one of the important settlements in the Arabian Peninsula. Such documentation will aid in understanding the indigenous architectural theories behind their location, design, construction, usage and later, post-occupancy evaluation.

Al-Alkhalaf is suffering gradual demolition and alteration of its traditional architectural heritage, such as the tower-like houses, the qasabat (warning and defence towers) and mosques, without any intention of remedy or conservation.

Albrahim emphasized the influence of complicated architectural styles from other Muslim countries on contemporary mosque architecture in the city of Riyadh [5]. This influence is also seen in the new mosques of communities such as Al-Alkhalaf. One of three traditional mosques has already been replaced by a new one sporting a modern, "exotic" design without any attempt to relate it to the simple and expensive indigenous architectural character of the traditional community.

The historical development and achievement of these cultural and religious buildings have notable significance to the architecture and planning of Al-Alkhalaf in such an insular context. The demand is pressing to safeguard the cultural heritage of this distinguished region in the face of the abandonment of many traditional buildings.

The present research is intended to accomplish the following: First, to describe the relationship of basic Islamic principles to the site selection, design, construction and use of mosques in Al-Alkhalaf. Second, to document and analyze the design elements of the two traditional mosques remaining in the community. We will assess the impact of the early mosque of Prophet Mohammed on the development of Al-Alkhalaf mosque architecture and also note the influence of the spatial arrangements and pattern of the settlement on mosque allocation.

The two existing traditional mosques were photographed and surveyed during an ethnographic field study between 1990-93. The research depended primarily on the collection and analysis of this visual data, recording of personal observations, interviews held with Al-Alkhalaf elders, and documentation of the existing traditional mosques as

they are related to the spatial pattern of the settlement. The researcher also conducted a review of relevant literature.

Physical context

The settlement of Al-Alkhalaf is located about 117 kilometers southeast of Abha, the capital city of the Asir Region of Southwestern Saudi Arabia (Fig. 1). Settlement began in the mid 16th century. The community of Al-Alkhalaf is physically divided into two distinct sections. The northern and the southern parts are each inhabited by one moiety of Khalaf Eben Yaala Al-Bishri, settlement founder.

The formation and development of Al-Alkhalaf is a result of the accumulation of decisions and the influence of design synthesis of many different factors. It is impossible to identify one factor as the main determinant, be it Islam, prevailing political situations, the physical environment, cultural values, or socio-economics.

One hundred and three traditional residential buildings and a Friday market were originally served by three mosques (Fig. 2). The three mosques now serve a community of more than 1,000 inhabitants. The settlement is considered one of the largest in Asir with a distinguished traditional architectural character and densely built form. [6].

The economy was and still is dominated by agriculture. The settlement site is surrounded on the east, south, and west by mountains, and agricultural fields are located to the east, north, and west. Until recently, this location could be considered an insular one.

The mosques: An overview

Mosque architecture followed two typologies in its course of development. Davies defined them as the closed plan mosque and the open plan mosque. [7] The open plan mosque is a rectangular structure of which part is roofed but open from one side, leading to an unroofed section. The mosques of the central region of Saudi Arabia lie in this typology. Some open plan mosques contain a basement. For example, in the central region of Saudi Arabia, the harshness of climate in both summer and winter accompanied by a scarcity of heating and cooling sources necessitated the excavation of a basement to be used in place of the main prayer hall in harsh weather conditions. The closed plan mosque is a single entity, part roofed and completely walled and the other part unroofed. The open air section is surrounded by colonnades instead of solid walls. Al-Alkhalaf mosques are all the closed plan design with the exception of the traditional Friday mosque which has arcades on one side.

There are three mosques in the traditional site of Al-Alkhalaf. The southern and northern mosques are located on the west periphery of the settlement. The northern mosque was used for the Friday prayer until ten years ago. The third mosque is located on the eastern periphery of the traditional settlement. The traditional building was used as a daily mosque and for attendees of the Friday weekly market. In 1983 it was demolished

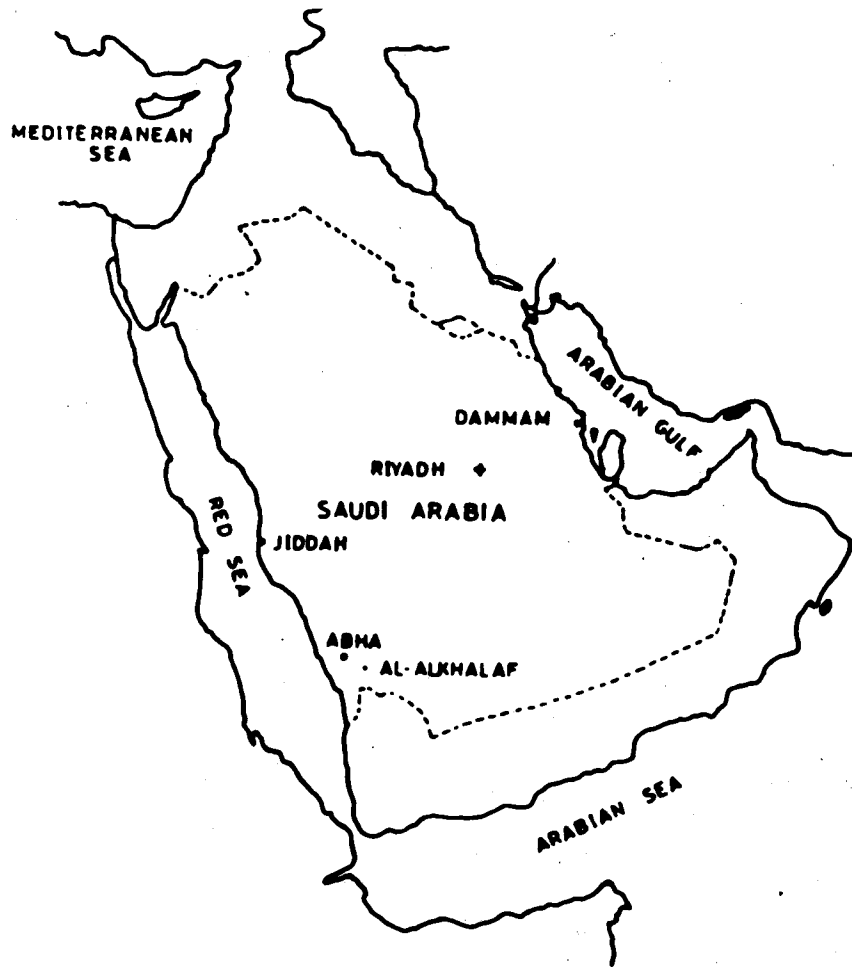


Fig. 1. Map of Saudi Arabia shows the location of Al-Alkhalaf.

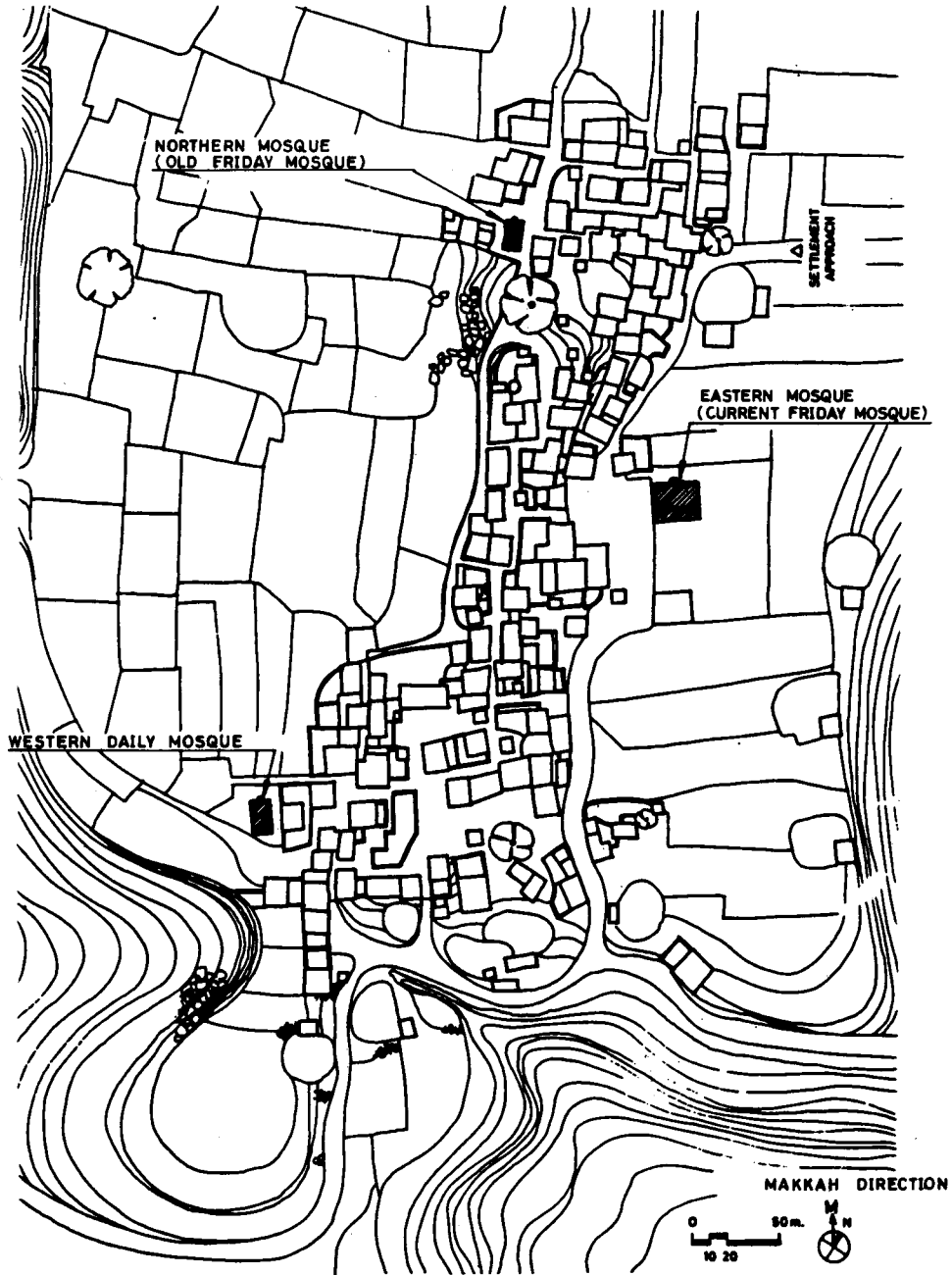


Fig. 2. Schematic site plan showing the location and orientation of the sites of the three mosques as related to the residential buildings.

and replaced by a contemporary structure which then became the mosque for the Friday prayer due to its larger size and close proximity to the new residential areas developed in the north and east of old Al-Alkhalaf (Fig. 3).

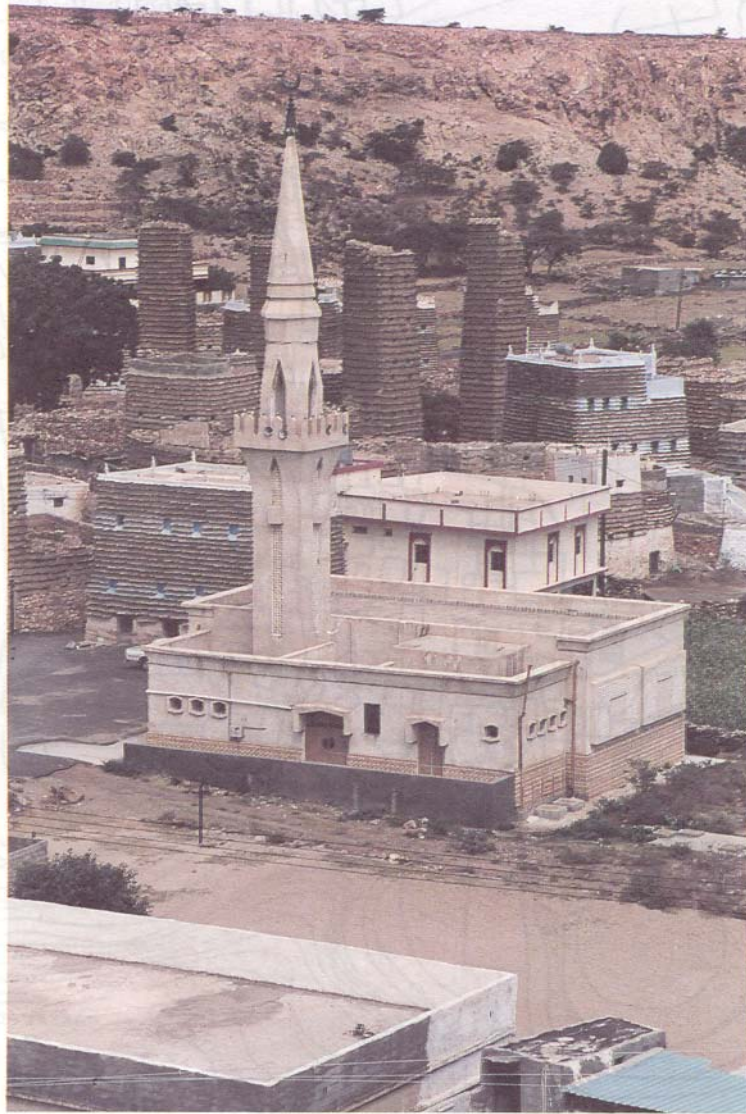


Fig. 3. The newly built Friday mosque located on the site of the demolished weekly market mosque.

Mosque location and functions

A review of Al-Alkhalaf traditional mosques provides a remarkable picture of how residents carefully planned the location of the buildings to verify social and political values.

Thus, three mosques were located at key sites according to the settlement plan. Each of the two main residential sections was served by its own quarter mosque, while the third served the communal area of the weekly market site. In contrast to most Muslim settlements, where public buildings such as mosques are tightly woven into the settlement fabric, the mosques of Al-Alkhalaf are free standing structures located apart from the continuous built form on the peripheries of the settlement (Fig. 4).

This site selection accomplished social and political objectives at two levels. First, the location on the settlement peripheries provided ease of access to all community residents throughout the day whether they be working in the fields surrounding the settlement or in the residential quarters, encouraging and enabling residents to participate in the congregational prayer.

Secondly, mosque location helped to verify the relationship of settlement inhabitants to non-residents of the community. The mosque stood as a symbol of peace for travelers,



Fig. 4. The southwestern mosque, the second mosque built on the periphery of Al-Alkhalaf, is distinguished from a distance by its form, color and height.

visitors and attackers alike, as opposed to Al-Qasbat, which symbolized power and readiness for defence. Traditional settlements of the Arabian peninsula had to contend with the constant threat of raiding, a prevalent practice among the tribes at that time. Because of its agricultural economy, Al-Alkhalaf was particularly susceptible to raids, necessitating an environment built strategically with the issue of defence in mind. On the other hand, as discussed earlier, the settlement was obligated to welcome strangers to the community and open the doors of its mosques to every Muslim. This was not only due to the Islamic injunction of hospitality and brotherhood, but because Al-Alkhalaf was given the distinction of hosting the Friday weekly market to which people from all surrounding communities came to transact business and share important news. Al-Alkhalaf residents dealt with these issues successfully by locating the three traditional mosques in the periphery of the settlement, one near the market site. In this way, travelers, visitors and market attendees were accommodated without the necessity for them to actually enter the settlement itself, thus providing security to residents while fulfilling social obligations. The structures were placed so that they were visible and accessible from any point of approach to the settlement.

In Al-Alkhalaf, the mosque provided a space for *Al-Matawa*, the keeper of the mosque, to perform marriage ceremonies. Usually, an announcement of marriage banquets or other special events was issued in the mosque, welcoming all to participate either immediately after the prayer or after one or two days. Thus, settlement residents were regarded as one family, with all able to participate in social events and special occasions, the mosque again serving as the axis of unity.

Al-Masjid Al-Jami, the northwestern mosque

Al-Masjid Al-Jami, the oldest mosque in the settlement, was constructed more than 350 years ago. It is located on a flat site in the northwestern sector of the settlement. Tower-like houses and one *qasabah* (defence tower) surround the building on the east, west and north. Open land providing access to the agricultural fields is located to the south (Fig. 5).

This mosque is located northwest of Al-Talkah tree, which designated a congregational area for the community. Friday and communal prayers were performed in this mosque before the new one was built in the eastern sector in 1983. It today serves as the daily mosque of the Al-Mattar moiety.

The basic rectangular plan contains three functional spaces. The first is a walled courtyard in the center of the mosque; the second is a level-roofed prayer hall, located on the northwestern side of the courtyard; and the third is the ablution and bathing facilities located on the southeastern side of the courtyard (Fig. 6).

The entrance to the prayer hall is a double-leaf rectangular doorway set in the center of the southern wall opposite the mihrab. Above the entrance is a shallow porch shade to

protect the doorway from the flow of rainwater and provide shade. It is made of wooden cantilevered beams that support a 30 cm thick mud slab (Fig. 7).

Two rectangular windows, 25 x 30 cm, punctuate the eastern wall of the prayer hall to provide necessary ventilation. Window cells are located one meter above the floor.

The mihrab is oriented northwest, occupying the middle of the front wall. It is in the form of a deeply curved recess which is vaulted by a steep keel-arch (Fig. 8). A square niche for storing copies of the Qur'an is found on the west side of the mihrab interior. Projection of the mihrab outside the mosque in the form of a curve in the exterior wall emphasizes the importance of this place and provides a decorative element to the building. It also maximizes the use of space. During prayer, worshippers stand behind the imam and straight rows within average distance of 1.2 m. apart. The projection of the mihrab provides additional pace for one prayer line. If the imam is not located in the mihrab, this space cannot be used by the worshippers.

Access to the courtyard from outside is via a wooden double-leaf door in the eastern wall of the mosque. The door has a stone frame on both sides with a wooden lintel above and a stone thread at the bottom.

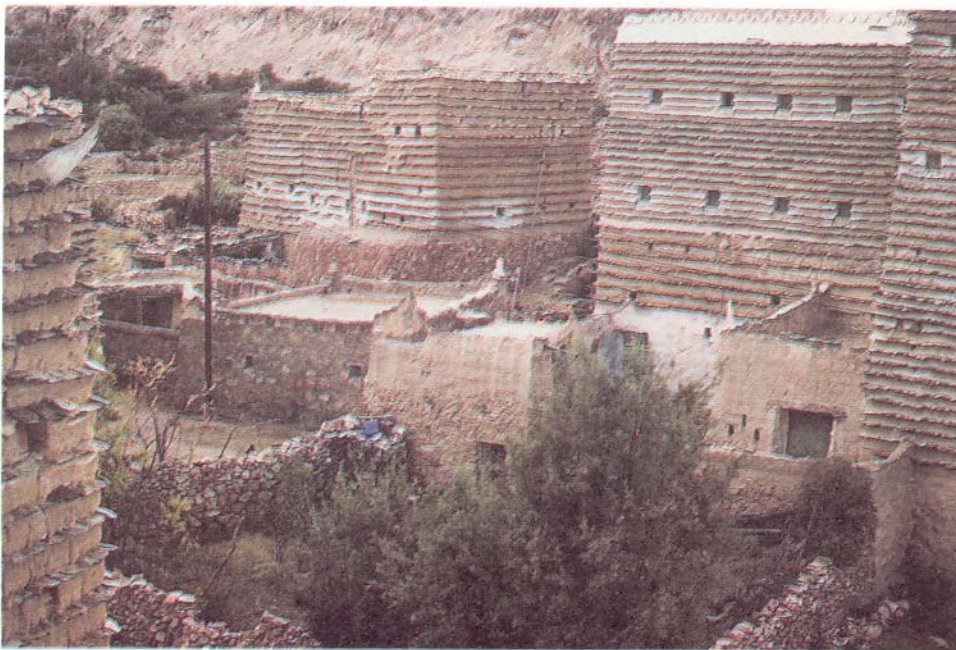
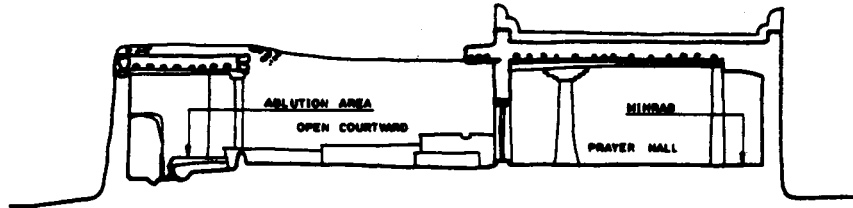
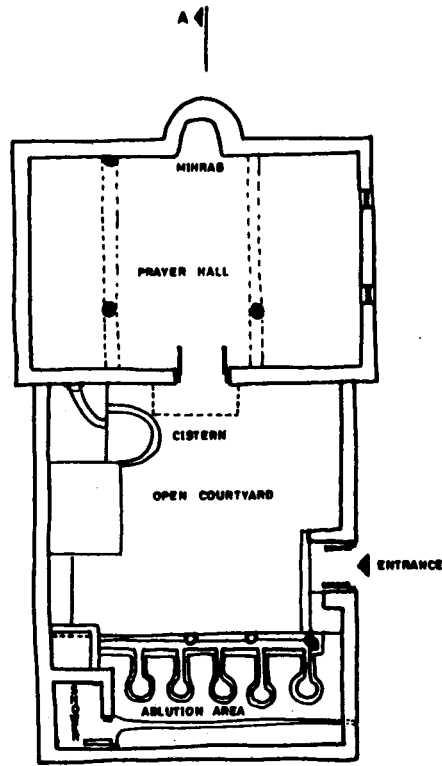


Fig. 5. The mosque located on the northwestern periphery of the settlement originally served as Al-Masjid Al-Jami (the Friday mosque). It is the oldest mosque in Al-Alkhalaf. Recently, it has been surrounded by tower buildings on the north and west.



NORTHERN MOSQUE (OLD FRIDAY MOSQUE)
SECTION A - A



NORTHERN MOSQUE (OLD FRIDAY MOSQUE)
GROUND FLOOR PLAN

Fig. 6. The plan and section of Al-Masjid Al-Jami showing the basic functional elements, the central courtyard, the closed prayer hall, and the ablution facilities.

The axial location of the courtyard with both prayer hall and the Qibla direction is in keeping with the above-proposed design parameters. Directionality and laterality of the courtyard and prayer hall contribute to the heightening of attention in prayer.

El-Wakil notes that the symbolic importance of the courtyard in capturing the natural order within the prayer area is enhanced by its useful function of providing extra space for Friday prayer [8].

Two underground water cisterns store rainwater collected on the roof of the prayer hall, providing worshippers with water for showers and ablution year round. A *mizrab*, or wall water channel, acts as a gutter. It is cut in the summit of the southwest exterior wall of the prayer hall to allow rainwater to run off the roof. The water is then collected in the underground cisterns.

The two cisterns are connected through an opening that allows water to flow freely from one storage tank to the other. The ablution facilities consist of water channels and receptacles for water, *marusa*, raised above the plastered courtyard floor. Five basins have been excavated in the floor along the southeastern wall to collect water from plastered water runnels (Fig. 9). Water is pulled up via leather sacks from the cisterns,

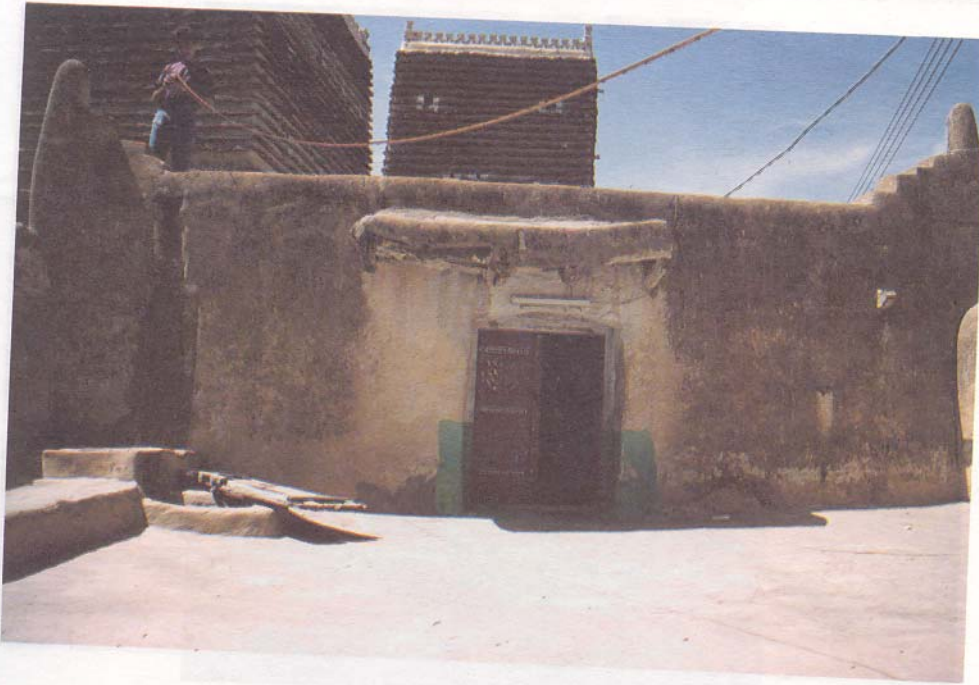


Fig. 7. The entrance to the prayer hall of Al-Masjid Al-Jami. The manhole leading to the underground water cistern is located left of the door. The rainwater of the roof of the prayer hall is collected via the slit in the wall which is connected directly to the cistern.

located against the interior surface of the northwestern wall, and the water then poured into the tunnels. A narrow open channel is placed against the southern area of the ablution place to discharge water outside the mosque. The entire floor and ablution system is waterproofed by *qadad*, a cement-like locally-produced material used extensively in traditional building. The shower area is located at the southwestern corner of the courtyard. Water is again retrieved manually from the cistern and poured into a small quadrangular basin located at the top northeastern corner of the shower area. A minute faucet discharges the water to the bather at head level.

It is worthy to note that although the two remaining traditional mosques are now supplied with electricity, they do not contain modern plumbing and continue to rely on this indigenous, but effective, system to supply the water needs of the mosque.

A flat roofed *riwaq* colonnade is built against the interior surface of the southeastern wall to shelter the ablution facilities. This structure consists of wooden beams and joists overlaid with a 30 cm thick layer of mud acting as a non-structural mud slab. It is supported by three wooden columns at the northern end and a stone load-bearing wall at the southern end, which also serves as the southern enclosure wall of the courtyard.



Fig. 8. Exterior of Al-Masjid Al-Jamic showing the openings on the eastern facade and the architectural characteristics of the mosque.

The southwestern mosque

The expansion of the settlement in the southern direction for Al-Mubarak moiety, necessitated the building of a new mosque. The building stands on open ground at the foothills of the southern sector of the settlement and is one of the most distinguished buildings in Al-Alkhalaf, with its whitewashed plastered walls standing out sharply against the tower-like adobe houses, defence towers and vividly green fields (Fig. 10).

Although no specific date for the construction of this mosque is known, it is assumed that it was constructed during the later development of the southern residential areas. The mosque again contains three functional spaces: a walled courtyard in the center; a level-roofed prayer hall, located on the northwestern side of the courtyard; and the ablution and bathing facilities located on its southeastern side (Fig. 11).

The whole surface of the southeastern exterior wall along with the upper third of other exterior walls of the prayer hall are plastered with qadad with two courses of *raqaf* (stone slates) decoratively projecting from wall surfaces just below the roof slab level. Raqaf courses are used alternately with mud courses on all traditional settlement buildings to protect the mud from water erosion and sun.

The main door to the courtyard is located in the eastern wall. It consists of a wooden

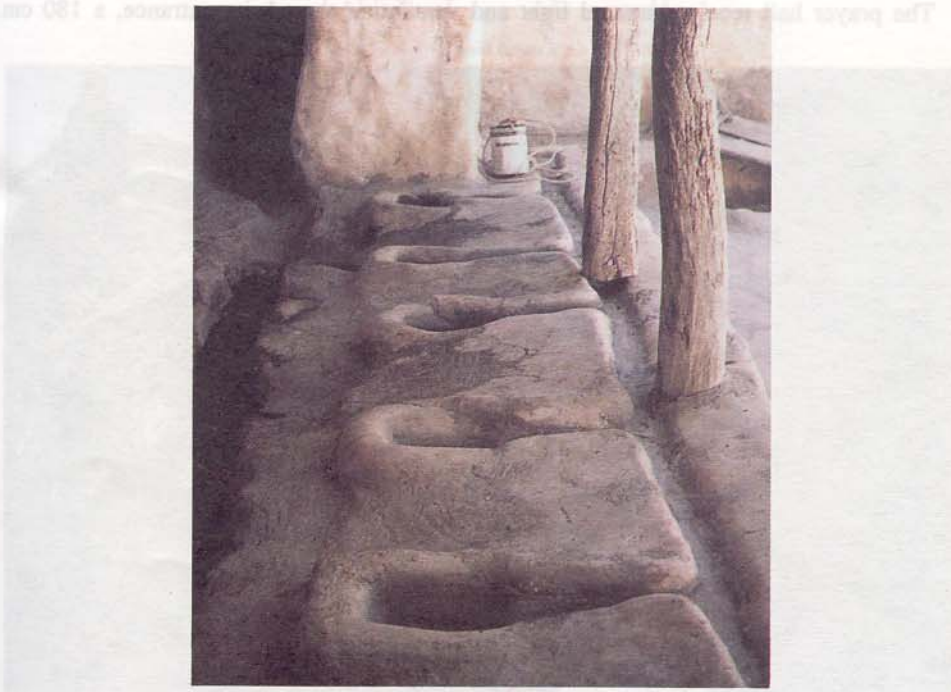


Fig. 9. The ablution facility arcade of Al-Masjid Al-Jami. The plastered runnel and five water receptacles were excavated in the floor of the southeastern wall.

frame and a wooden door leaf made of three hardboard elements, an average width of 30 cm. They are painted green and connected together with three metal elements evenly distributed along the door height, about 180 cm. A wooden lock is installed at the exterior, 130 cm above a stone threshold.

The door opens to a restful entrance area roofed with wood and earthen material, almost square in plan (about 1.5 x 1.5 m.). It is bordered on the south with the courtyard southern wall and a 40 cm rubble stone wall standing against the entrance door, plastered with *qadad* on both sides. Upon entering this space, one turns a right angle to reach the courtyard. This design aims to isolate the courtyard from the outside world.

Ablution facilities are located against the interior surface of the southern courtyard wall. They consist of an underground water cistern, a bathroom with a showering system similar to that described in the northern mosque, and a lift platform with a drainage runnel for the ablution area (Fig. 12). Interior wall surfaces and the floor of the courtyard are finished with *qadad*.

Four tree trunks are cantilevered over the prayer hall entrance door. They project about 60 cm and support a 20 cm thick and 1.5 m. long wood and earth canopy to provide shade and protect the wooden door from rainwater damage and sun.

The prayer hall receives natural light and ventilation though its entrance, a 180 cm



Fig. 10. The southwestern mosque, gateway to the Al-Mubarak residential section.

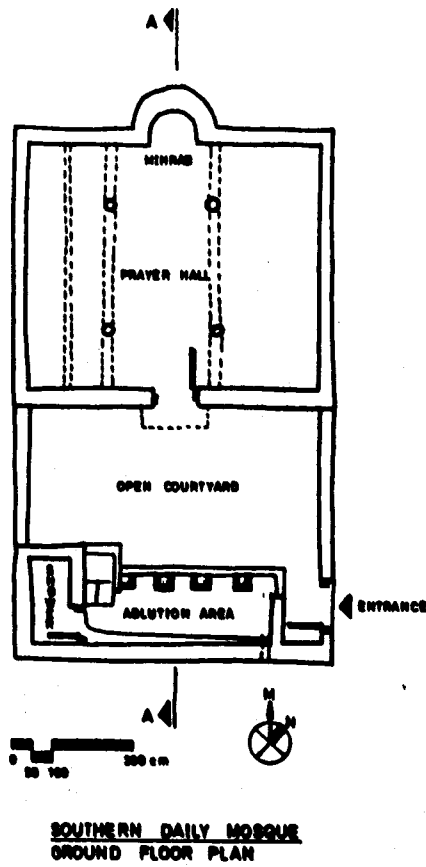
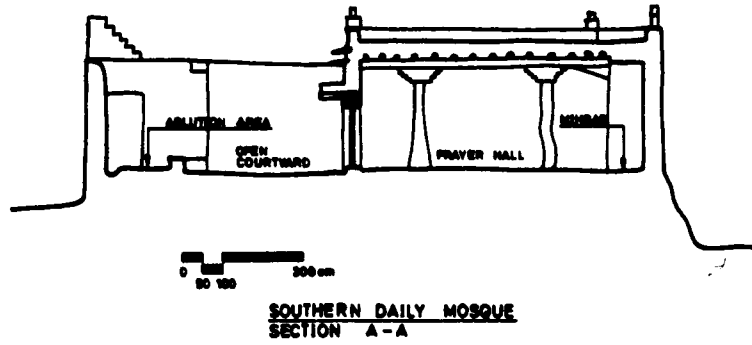


Fig. 11. The plan and section of the southwestern mosque, the second traditional mosque of Al-Alkhaif, showing the basic functional elements, the central courtyard, the closed prayer hall and the ablution facilities.

high door consisting of a wooden frame and two wooden leaves with limited decoration. The width of the narrow one is 40 cm, and the width of the wider is 80 cm.

The mihrab is located in the center of the Qibla (northwestern) wall and is an arched, circular recess. The arch is pointed on the interior and forms a prominent salient curved projection on the exterior of the building rising the full height of the wall (Fig. 13).

Three square niches punctuate the interior surface of the northeastern wall of the prayer hall to hold copies of the Qur'an. The floor of the hall is finished with qadad and covered with carpets.

Conceptually, Al-Alkhalaf traditional mosques were certainly influenced by the architectural design concept of the former building of Prophet Mohammed, excepting the exclusion of the mimbar. Limited traditional areas in Saudi Arabia, such as Al-Alkhalaf, had exempted the existence of a built-in mimbar, the imam usually standing on one moveable step instead. The exemption of the mimbar utilizes the space more effectively as it will accommodate another full line of worshippers. The absence of this built-in element in the traditional Friday mosque of Al-Alkhalaf is due to the lack of necessity for a permanent one because of the smaller congregation.

The minaret is absent in the traditional mosques of Al-Alkhalaf, in conformity with the

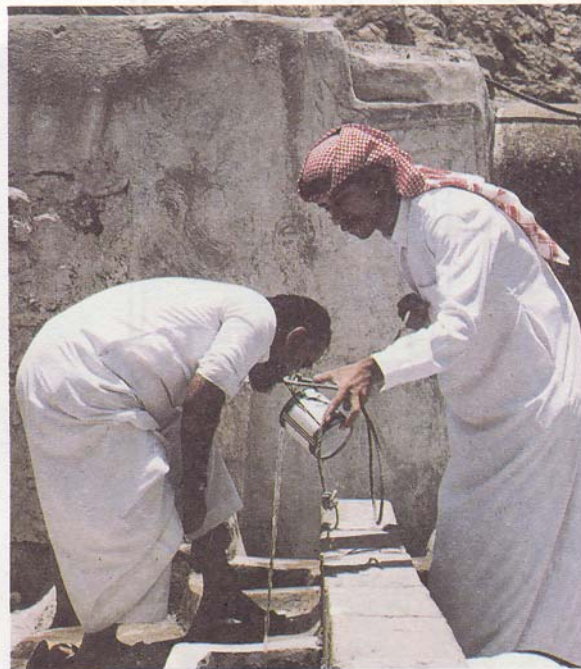


Fig. 12. The ablution facility arcade of the southwestern mosque showing the covered runnel and the water receptacle.

Prophet's Mosque. Its function was served by a raised platform in the courtyard. The minaret is not considered an obligatory element of mosque architecture and can simply be considered a good invention. The specific reason is not known for the absence of the minaret in the traditional mosques of Al-Alkhalaf. It is assumed that the large number of tower-like residential buildings in the settlement, along with the existence of more than 14 high defense towers would hide such an element. Also, the mosques in Al-Alkhalaf were located in reasonable proximity to residential quarters, the Friday market site and the open fields. Experience has proven that Muslims develop a psycho-acoustic sensation with respect to the prayer call, which reached the inhabitants of the community with no need of the minaret. The call to prayer was also not obscured by the noise of the modern world such as cars, machinery, etc. Today Al-Alkhalaf mosques, as most others in the Kingdom, are equipped with loudspeakers over which the prayer call is broadcast.

Since the traditional mosques did not possess minarets, the semantic was the mihrab. The mihrab in Al-Alkhalaf mosques are visible and distinguished even from a distance. It was noted that the mihrab has a remarkable influence on the built form and fabric of the settlement. When inspecting the settlement layout (Fig. 2), one finds that most of the houses were oriented toward *Al-Qibla*, the direction of Makkah, in keeping with the

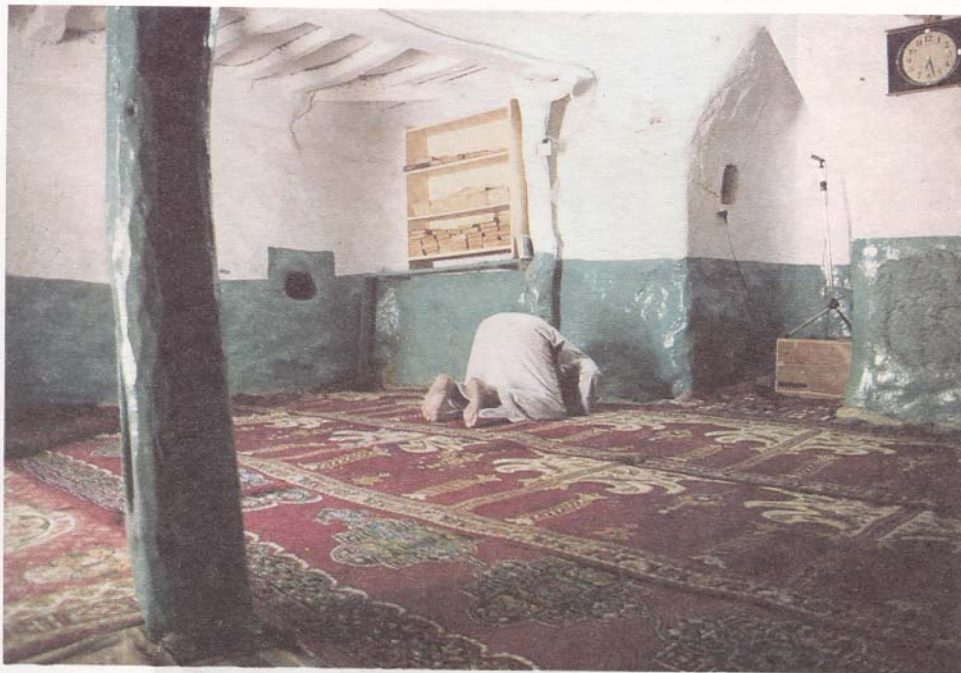


Fig. 13. An interior view of the mihrab of the southwestern mosque, a semi-circular recess to accommodate the imam. From the exterior, the mihrab denotes the direction of *Al-Qibla*, as seen in Fig. 10.

mosque, indicating that the mosque had influenced the directionality of alleyways and passageways in the settlement.

Construction and building material

The location of Al-Alkhalaf on the eastern side of the Hejaz Sarawat mountain chain has enabled residents to use natural material such as stone, adobe and timber. Adobe is processed mud, locally known as *khulb*. It is collected from the flat lands and valleys. In general, adobe was used in conjunction with a plinth of stones at half height of the ground floor. These were the main construction materials for residential and communal buildings in Al-Alkhalaf. Stone and ragaf, the stone slates, were brought from nearby quarries in the mountains west of the settlement

The materials utilized in mosque construction included rubble stone for walls; wood for beams, columns, and girders; and earthen material for roofing. The walls were built of stone with qadad used as a mortar. Interior wall surfaces are then plastered with qadad to give a flat surface. Plastering walls with this material characterized the top edges with rounded, dulled profiles. Exterior wall surfaces are characterized with rubble stone blocks

Roof construction is a principal element of the form classification of traditional

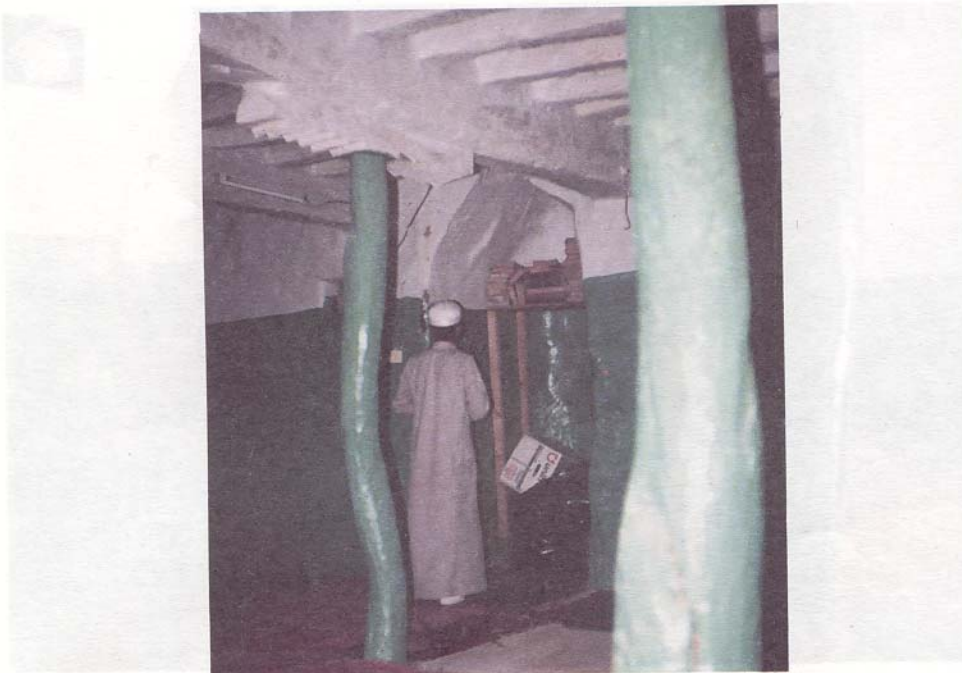


Fig. 14. An interior decoration of Al-Masjid Al-Jami showing two basic colors of mosque decoration, green and white, which symbolize paradise and purity.

buildings. The mosques are flat roofed. Squared tree trunks, covered with a layer of tree branches, vegetable leaves, and a 30 cm thick layer of mud constituted horizontal spanning elements. Roofs are plastered by qadad, sealing slabs against the heavy rainfall frequent in the mountains of Asir.

Horizontal supports are placed in beams, running in right angles to the Qibla wall and joists. They are simply laid without any direct fixation to each other. Beams and joints are embedded in load bearing walls.

Roof support inside the mosque is partly provided by columns made of forked tree trunks. In some cases, wooden stepped drop panels are used to transfer the beam load to the vertical column. Other wooden columns are topped with wooden capitals that transfer beam loads to the column. Al-Alkhalaf used this system of support in most communal buildings.

The wood of the Al-A'a'ar, the juniper, and Al-Tal'h (acacia) is used extensively in the construction of columns and roof structural members. Experiments have shown that this local wood is strong in tensile, torsion and bending moment [9,10]. The wood has also been used for manufacturing doors and window shutters, ladders and furniture such as the shelves for the Qur'an, as well as *na'ash*, a stretcher-like device to carry a deceased

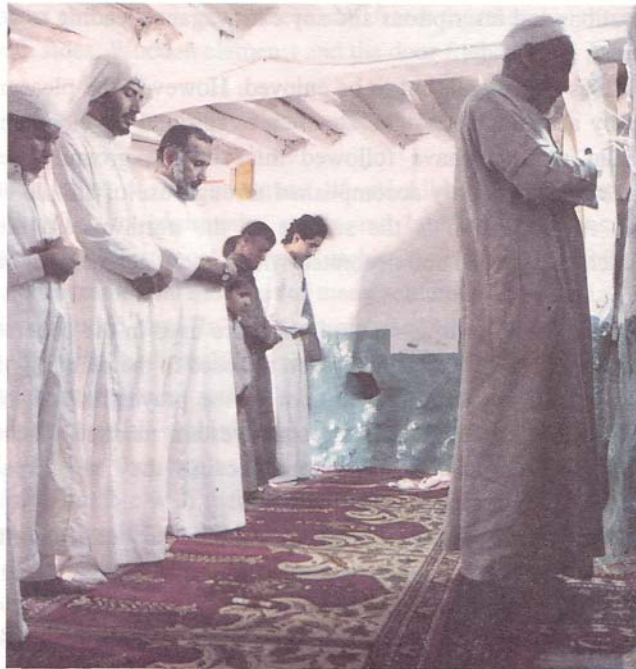


Fig. 15. Interior decoration of the southwestern mosque showing two basic colors of mosque decoration, blue and white, symbolizing heaven and purity.

person, which are stored in the mosques. Building materials and construction were of special concern because of the importance of the mosque to the community. Such care was not given to any other structure in the settlement.

Color, decoration and beautification of mosques

The area for prayer is required to fulfill spiritual purposes and excludes elements that promote physical and psychological distraction, such as exaggerated decoration or furniture. This is in keeping with the Islamic teaching of moderation and simplicity in all one's affairs

The beautification and ornamentation of the mosque is a subject of debate between two schools of thought. The first prefers the absence of these ornaments so as not to distract the people worshipping in the mosque and to preserve the simplicity of the building. They believe the interior of the mosque has always to be rather plain, with the only permanent features, aside from the structure itself, being Al-Mihrab and Al-Mimbar. The other opinion is that it is unbecoming to leave the mosque without beautification and care while most of the everyday living quarters contain much decoration.

Tashkandi considers the decoration of mosques part of the "reprehensible architecture" [11]. Reprehensible architecture in Islam is indicated by the Prophet and his companions as mosque decorations and inscriptions and any extravagance leading to waste of Muslim wealth.

Islam views life as ephemeral, but to be enjoyed. However, the pleasures of life must be accompanied by abstemiousness and attention to spiritual development. The builders of the Al-Alkhalaf mosques have followed this "middle ground" view. While not excluding decoration, it is mainly accomplished through use of simple colors, avoiding elaborate design. An exception is the surface of the northwestern mosque entrance exterior wall, which is plastered and decorated with limited geometrical patterns made in thicker plaster.

While white, green, blue, yellow, red and black are used in the decorative patterns of residential buildings, only white, blue and green are used in the painting of the traditional mosques. Brown is used for the entrance door to the prayer hall of the northwestern mosque, while blue is used for that of the southwestern mosque. The use of red and yellow is discouraged in mosque decoration, because they are expected to attract attention away from the prayer.

White is synonymous with purity of heart and cleanliness, both important elements of Islam. Green is mentioned in the Qur'an to be the color of Paradise, a "garden with rivers flowing beneath." The color blue also symbolizes heaven. In the past, colors used in building decoration were locally produced from natural materials. For example, alfalfa (barsiem) was used to produce differing shades of green.

Decorative treatment of the northern mosque includes the use of color bands on

surfaces of interior walls and a colored ceiling with some whitewashed ceiling elements.

The lower 80 cm of the interior prayer hall wall surfaces are painted green. Above, the walls are white washed. Green is also used to decorate the wooden posts that support the roof and wooden window shutters. This decorative treatment serves to unify the entire wall surface of the interior space (Fig. 14).

The northern mosque also features raised stone crenellations marking the corners of both the prayer hall and the walls surrounding the courtyard. This decorative motif is believed to be a dedication to the Islamic *shahada*, admittance that there is no God but one God and Mohammed is the messenger of God.

Door leafs are painted brown and accentuated with three bands of double line yellow metal pins placed at the top, middle and lower area of the doorway surface. In the southwestern mosque, the lower two-thirds of the interior surface of the northern wall of the prayer hall along with the lower third of other interior wall surfaces and column supports are painted blue. The rest of interior wall and ceiling surfaces are whitewashed (Fig. 15).

The door leading to the prayer hall also contains decorative wood engraving on the wooden post fixed to its narrow leaf. Two hard board elements, with an average width of 40 cm, comprise the second leaf. These are fixed together by three metal elements installed on both sides. Wooden elements and the door frame are all painted green.

Concluding Remarks

The documentation of the mosques of Al-Alkhalaf illustrates that they were constructed according to community needs and building traditions, while preserving inherited principles of historical mosque architecture presented first in the Prophet's mosque and later in traditional mosques of many settlements in Arabia.

Al-Sharawi concluded that "In our contemporary times and with technological and scientific development, both architect and city planners have forgotten the principles which respect the environment and calls for adaptation with it. Some designers go to the extreme of considering all architectural form and elements derived from heritage no longer useful. By this they try to ignore that for every population there is a special architectural form suitable with their environment, beliefs, customs, and traditions" [12]. The traditional mosques of Al-Alkhalaf are an outstanding example of how a beautiful, uncomplicated design, strategically located, perfectly met community requirements functionally and spiritually.

Because of their value, it is imperative that traditional structures be preserved and lessons for contemporary design and planning be drawn from them. This is especially important for planners of Islamic architecture designed for Muslim populations. Recently,

Almansouri concluded that Al-Jami (the Friday mosque) was able to unify early Islamic cities physically, socially, and culturally and that today's planning of Islamic cities lacks the utilization of this characteristic [13].

In the modern world where Muslims are striving to regain unity and peace in a complicated time, it is important that many avenues be taken, including the allocation, design and use of mosques.

The inhabitants of Al-Alkhalaf built their traditional mosques in a simple way, according to their instinct, Islam. Their architecture made them landmarks and notable examples. In our contemporary practice of building and designing mosques, we must learn from the simplicity attained in the traditional structures. The planning principles which govern the mosque allocation and the architectural manifestation of elements should be implemented. Such may transmit psychological and visual expressions of such traditional structures. This makes it easy to integrate into the modern planning and design criteria of mosque design.

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عمارة المساجد في المناطق المعزولة : قرية آل الخلف (حالة دراسية)

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ملخص البحث . جذب المسجد انتباه الكثير من العلماء نتيجة لخواصه الملموسة ودوره الفكري والديني في المجتمع المسلم كما رَسَخ المسجد المعتقدات الإسلامية بإيجاده بيئة ملموسة تهتم بالتهذيب النفسي للمجتمع المسلم . وتتفحص الدراسة المساجد التقليدية في مجتمع قرية آل الخلف بجنوب غرب المملكة العربية السعودية .

وجد أن للتطور التاريخي والإنجازات لهذه المباني الثقافية والدينية أهمية معنوية لعمارة وتخطيط قرية آل الخلف في محيطها المعزول .

يصف البحث العلاقة بين المفاهيم الإسلامية والاجتماعية وخاصة الزمن عند اختيار الموقع للمسجد وأثناء تصميمه وتشيدته واستخدامه . كما يوثق البحث عناصر التصميم للمسجدين التقليديين القائمين في القرية، كما يقوم تأثرهما بمسجد الرسول (ﷺ) . وكذلك يوثق تأثيرهما على الترتيبات الفراغية والنمط العمراني للقرية .

توصلت الدراسة إلى توضيح أن البساطة التي تميز تصميم المساجد المحلية يجب ألا يتخلى عنها بحجة السرعة لإنشاء مساجد جديدة بعمارة حديثة مستوردة . كما توصي الدراسة بأنه يجب على معماري ومخططي اليوم مراعاة التقاليد التي تسهم في عمارة المساجد وتفي بمتطلبات الجماعة وظيفياً وروحياً .