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Traditional Domestic Architecture in Al-Baha Region

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Abstract: Al-Baha region embraces a rich area of inherited Saudi traditional architecture that is highly threatened of perishing, and is poorly documented, including a UNESCO world heritage site at Zee Ain Village. In this research paper, different urban fabric patterns of Al-Baha's villages, and building techniques of stone houses are explained and analyzed in relation to the thoroughly discussed contextual conditions. The research clarifies how the environmental and sociocultural context shapes traditional domestic units and arrangement of villages. In addition, full translated description and analysis of exterior and interior stone house architectural elements is made available for the first time in this article. Throughout the study, preliminary plans and digital models have been developed for case studies that required more precise interpretation; fulfilling the documentary goal, and the interpretive approach of the research.

Keywords: traditional Saudi architecture, Al-Baha, traditional domestic architecture, stone houses, Al-Baha villages.

I. INTRODUCTION

After the recently submitted UNESCO world heritage site “Zee Ain village” in 2015, a research interest grew in the field of studying inherited Saudi traditional architecture. Yet the field is still lacking information, in Al-Baha region especially, and it requires pressing studies. Al-Baha's case is significantly critical due to the variety of existing conditions; as a result of its geography. This research focuses on domestic architecture due to its being the main inhabitation unit. It is where guests are received, and cattle (the breeding of which is a main profession in villages) are lodged. Al-Baha's domestic architecture is known to be significantly shaped by the existing topographic dissimilarities, however it also reflects other environmental aspects. Moreover, Al-Baha faced severe warfare aggression that has largely contributed to shaping houses and villages.

The research aims to explain the reasons behind adopting specific themes in traditional domestic units of Al-Baha, and understanding variation of Al-Baha's contextual architecture elements through investigating the exterior and interior elements. Furthermore, the research includes an explanatory approach to how different urban fabrics are found in Al-Baha region, in respect to its regional, environmental, socio-economic, and historical conditions.

A comprehensive governmental study on Saudi traditional village architecture, provided with statistical substantiation, and general description of the regions' conditions affecting mainstream traditional architectural units and building techniques, have paved the way for starting this research study[1].

Currently, there is insufficiency in elaborate academic studies conducted about traditional domestic architecture of Al-Baha region. However, an architectural study in Baida valley, Al-Baha, has been conducted in Arabic, discussing the inherited arts and architecture found in villages in Baida Valley, and how they were affected by Baida's history and social values. *Baida Valley Architectural Archaeological Study* defines main interior and exterior architectural elements, and showcases examples of domestic units of different natures. It however lacked architectural plans for most examples, which was an area of further research and analysis[2].

II. APPROACH

Traditional Domestic Architecture in Al-Baha Region is a descriptive research based on a qualitative approach. The researcher collected and translated data from multiple fields of science in order to analyze and reinterpret data in respect to the context of interest; aiming to answer the research questions and identify and understand the factors which have shaped the traditional domestic architecture and urban structure of Al-Baha region. The study cases have been selected to demonstrate the different themes that appeared in Al-Baha according to different contextual factors.

Basic Information of Al-Baha Region's

a) Regional Conditions

Al-Baha is the smallest of the 13 regions of the Kingdom of Saudi Arabia; occupying 0.59% of the country's area with 13341 acres. It is located in the southwest of the Arabian Peninsula. The region shares its northern and eastern borders with Makkah Al-Mukarramah region, southern and western borders with Aseer region[3]. Al-Baha region is divided into 5 municipalities: Al-Baha, Belgarshi, Al-Aqeeq, Al-Mendaq, and Qalwa. 931 villages are distributed among each of the municipalities[3]. Number of villages vary from 54 villages in Al-Baha municipality to 9 villages in Al-Aqeeq municipality[1].

b) Environmental Conditions

Southern Saudi Arabia is generally distinguished for its natural diversity between high and lowlands. The region is considered the highest above sea level among the kingdom's regions, with Al-Sarawat Mountains being the core of the south's topography, alongside several plateaus. Over 70% of Al-Baha region is occupied by Al-Sarawat Mountains and adjacent plateaus. On the other hand, Al-Sarawat Mountains strongly slope down to meet Tihama Plains; the slopes towards Tihama Plains are called "Al-Asdar". Tihama Plains roughly occupy the remaining topographical area of Al-Baha region[1].

The Kingdom of Saudi Arabia generally falls under an arid and hot climate. Yet, due to the topography of Al-Baha, its climate is moderate during summer months, and relatively cold during winter months, with an average high of 28° and a low of 6° in Al-Baha municipality[3]. Precipitation is high and ranges from 350 ml to 90 ml yearly. Accordingly, humidity as well is high in the region[1]. Moreover, houses and farms were affected or damaged by the heavy floods that were common in Al-Baha region until a number of dams were built[2].

Being a major water resource in the region with 14 dams, valley streams sprung from Al-Sarawat Mountains. Yet, rainwater is considered a main source of water, even though it is characterized with irregular precipitation; whereas Al-Baha region scored a yearly average precipitation of over 200 ml[1].

c) Socio-economic Conditions

Al-Baha region scored 377,900 census in 2004[4], while the conducted census in 1992 was 332,157[1]; displaying a general stable level of habitation. The community of Al-Baha region is a conservative tribal community mainly of Ghamid and Zahran tribes. Also, Al-Baha had a farming community which relied on agricultural products such as figs and tamarisk as a primary source of income. A secondary inherited profession was cattle herding, where the herdsmen maintain the cattle's offspring and milk production, and women of the villages usually take care of the wool work[2].

The richness of Al-Baha's natural resources and uniqueness of its traditional heritage in arts, crafts, and architecture, made it a tourism attraction in the kingdom of Saudi Arabia; an ideal situation displaying all aspects of Al-Baha's beauty exists in Zee Ain village in Al-Makhwat (Fig. 1). Zee Ain village has a unique environmental configuration with a marvelous view of the framing urban fabric and farms; in a matter of fact, Zee Ain village was recognized a UNESCO world heritage cultural site in April 2015[5]. In addition, the mountains' rock formation of Al-Baha not only protects the villagers but also offer sports experiences including walking, hiking, and mountain climbing. Shada Mountain particularly offers ideal camping conditions in some of its locations[6]. As declared by Saudi Commission for Tourism & National Heritage (SCTH) on the 30th of April 2015, "the company will undertake implementation of projects aimed at increasing tourist flows, and create jobs for citizens and promote and support tourism investment across the region"[7].



Fig. (1) Zee Ain Village; Source: [8]

d) Historical Background

Tracing back the history of the land of Ghamid and Zahran tribes will display clear dominance of a Zahran branch tribe called Daws and not much mention about the mother tribes (Ghamid and Zahran). Perhaps Daws's ascendancy goes back to their extensions to vast lands in eastern and northern

directions, as they have created pre-Islamic emirates in Oman and Persia, the remaining of Daws tribe settled in Al-Baha region and the caravan route leading to Yemen.

Tribes of Al-Baha were akin to Arab tribes in adopting Idolatry during the pre-Islamic age. Also, the pre-Islamic age of Al-Baha habitants witnessed numerous tribal warfare events, which were fortunately elapsed when Islam took over[2]. Actually, Al-Baha region tribes gained major pride and respect for being among the first to support and adopt Islam as their religion[2].

Islam's capital of caliphate was relocated several times throughout Islamic history causing parts of the Arabian Peninsula to lose its political importance, and as a result, there has been a gap which lacks documentation of all forms in Al-Baha's timeline[2]. However, in the late 1700s to early 1900s, Al-Baha region was ruled by many local despotic rulers of the south. Yet, an age of political and social security and stability started when the third Saudi State unified modern day Saudi Arabian regions[2].

e) Architectural Structure

The previously-discussed conditions directly affect the variety of architectural styles in Al-Baha region, whether on an urban scale, or individual unit scale. For instance, huts built out of local materials are seen in a scattered pattern in Tihama Plains, while the dominating architectural style in the highlands is the high elevated stone buildings; either in a scattered or adjacent patterns. Adopting the scattered pattern is usually associated with wind or building above agricultural terraces; the more frequent urban fabric in the highlands villages though is the adjacent pattern; arguably to satisfy the habitants' need for security over their territory. Another security measure seen in Al-Baha region is the defensive tower houses, which are usually located by the families' farms[1].

Common Traditional Features of Buildings in the Highlands of Al-Baha Region

a) Stone Buildings

Stone structures are frequently seen in Al-Baha and are usually built on agricultural terraces where materials are made available. Stone buildings are highly sophisticated structures as specific knowledge of stone types is required. Therefore, they are not easily built by any habitant; instead, stone buildings are usually built by three (or more) specialized individuals.

The building process starts by preparing land and material, and determining whether the house is going to take a quadric or cylindrical shape. The perimeter is then divided to spaces by digging a depth of 1.5m (or less in solid lands). For the foundation, largest stones are used. Consequently, stonewalls are built with a decreasing thickness as the building rises; commonly from 100cm to 60cm at the summit. The spaces between the wall stones are filled with mortar with embedded stone flakes, while tall polygonal stones support the corners of the structure. Then, wooden squares called "Al-Asla" are used as a ceiling, topped by a mud roof and lime for rainwater protection. Openings on the wall are typically small for defensive reasons and they are sometime framed by "Marow," which is local white stone. In addition, doors and windows are of two wooden shutters, and it is noted that doors are decorative and vivid. The overall exterior appearance of a house is a simple stone inclined walls, and corner heads (which are sometimes covered with lime) (Fig. 2). In the interior of a stone house, the housewife and her neighbours usually plaster the walls with mud for an even surface, and further decorate it using clover and plaster[1].



Fig. (2) Stone House in Al-Baha Region; Source: [1]

b) Villages' Urban Structure Examples

1. Aal-Ghathian Village

Aal-Ghathian village is located to the south of Tendaha valley in Al-Baha region. It is surrounded by agricultural fields, which provide an occupation for over 800 people distributed to 180 residential units of two to four floors. The village grew in an organic manner causing its alleys to be irregularly-formed and narrow (Fig. 3). Due to the village's context, houses are built out of mud blocks varying from 35 to 300 years old. Most of the older buildings are partially demolished, yet many are still in good condition. Moreover, there are recently-erected buildings, which unfortunately look very odd to the village; however, these buildings provide beneficial facilities. The village has no rainwater disposal system, and water is provided to houses through a simple surface pipe network, originating from 3 different wells[1].



Fig. (3) Aal Ghathian Village Urban Fabric; Source: [1]

2. Zee Ain Village

The UNESCO world heritage site, Zee Ain Village, is located 20km away from the region capital of Al-Baha city[5]. The topography of the village shaped its structure as the houses were built on the levels of a mountain top. The village overlooks vast orchards of high palm trees watered by a constantly pouring spring called "Zee Ain". Typically, the material used was stone supported by wood. The security measure is shown in the forms of Zee Ain houses, as they look similar to defensive citadels. Moreover, military citadels are located on the highest levels of the mountain's contour. Of course, these measures were taken to protect the village against the tribal warfare that was dominant at a particular time[1].

Examples on Domestic Architecture of Al-Baha Region (Al-Jadlan Village and Al-Ghutamiya Village)

a) Traditional Features of Domestic Buildings in Al-Jadlan Village and Al-Ghutamiya Village

The commonly seen domestic traditional features in Al-Baha region reflect two main conditions: traditions and environmental conditions. The case does not differ in Al-Jadlan and Al-Ghutamiya villages, located to the north east of Al-Baha region on Baida valley. Baida valley is among the most important valleys in the Arabian Peninsula of 150km, with a rich historical background. This section defines the local exterior and interior elements of a typical stone house in Baida valley as well as examines two house units in Al-Jadlan, and Al-Ghutamiya villages[2].

1. Traditional Exterior Elements

Several entrances are one of the most noticeable elements on a house's exterior, and their dimensions differ according to the size of the house. Bent entrances are present in many houses to provide privacy for the family. Regarding the door itself, it is usually made of wood from local trees. Doors consist of many components including: Al-Misra' which is the door shutter. Commonly a door shutter has four to six wooden boards tied by a central horizontal piece of wood from the interior. Most doors consist of one shutter, except for the case of significantly large houses. The outer door lock is called Al-Dhabbah, with an associated key of a wooden bow and iron lever cuts in the tip.

The doorframe is locally called Al-'Ubur. A typical doorframe width in the area would range from 20cm to 35cm of wood or selective stone. It is not only for support purposes but this width allows for aesthetic ornamentation[2]. Directly above the entrance, Al-Jabbaha is placed which is a wooden rectangular board protruded from the door's surface. This protrusion protects the interior from rainwater and allows for natural light. Also, above the openings, Al-Ghimama is placed. It is a polished stone placed above the entrance to support the upper stones of the wall. It is usually cut into either a rectangle or a bow, and it differs in color, making a distinct decorative element of the exterior (Fig. 4).



Fig. (4) **Al-Ghimama**; Source: [2]

Windows are distributed on the façade in varied sizes according to function, rather than following a modular distribution. It is noted that the lower a window opening is, the smaller it would be (windows are usually absent in ground floors); because lower floors are used for storage while upper floors are in favor of ventilation, light, and defensive observation. Windows vary in size from 50cm x 50cm up to 100cm x 100cm, containing a wooden central divider, wooden or stone 'Ubur, Jabbaha, and Ghimama. Significance level of local carpentry is visible in the carving on wooden elements of the windows.

Stairs are an exterior element in Al-Baha stone houses. They are supported by either columns and wooden beams or stacked stones. Treads are made of large stones with a width of 1m to 1.5m, and their surfaces are evened with smaller stones and sand mortar.

Other local exterior elements include Al-Ra'ash, Al-Jun, and Al-Sarab. Al-Ra'ash is an assembly of large wooden pieces (2m to 3m long) projecting from walls of upper levels above openings, roofed by palm leaves. Al-Ra'ash works as a shading device in addition to protecting openings from rainwater. Moreover, they are considered a defensive element in the case of warfare[2]. Al-Jun is another multi-purpose element. It is a 1m to 1.5m stone extension crowning summits of the house walls, built on the roof vertically, covered with a band alternating masonry stone and Marow (local white stone). Al-Jun corners are typically higher than the façade level creating pyramidal like shapes. The purpose of that is both environmental and social protection, as and it provides a strategic place to safely look after the household farms. In addition, it is among the most aesthetically appealing elements of simple stone houses[2]. Embedded in Al-Jun, a 1m wooden channel called Al-Sarab is found for the purpose of discharging rainwater. It is essential that the roof level slightly inclines towards every Sarab in order for it to work as a simple water drainage system[2].

2. Traditional Interior Elements

Houses in the area are usually two to three storeys high. The ground floor is used for cattle lodging, first floor for receiving guests, and second floor is the private family floor. Two-storey houses, on the other hand, divide the first floor to receiving guests and family rooms[2].

Ground Floor Interior Elements

Ground floor is a square or rectangular area divided to two unequal parts, entered through one entrance placed in the center of the façade. Al-Sifl is the larger section of the ground floor which is used as a cattle lodging, while Al-'Uyun is smaller section and is used for storing cattle hay and agricultural crops. Al-Raddah, on the other hand, is a stone wall which separates Al-Sifl and Al-'Uyun. It is a 1m thick load-bearing wall, and it is a base for Al-Zufr (columns) in the upper floor.

Windows do not exist in ground floors. However, the following elements like Al-Mithwad, Al-Raqah, and Al-Khawah are typically seen in the ground floor. Al-Mithwad is a rectangular void in the wall through which hay is provided for cattle. It is 80cm above ground level; which is the height suitable for cattle to reach the hay. Another element used by animals is Al-Raqah, which is wooden shelves fixed horizontally and vertically in the wall and specified for birds; therefore, it is usually located near the ceiling. The ceiling is typically featured by a square opening called Al-Khawah, which is used to look after cattle, or as a secret passageway in the case of an attack. In order to use this vertical connection, projected wooden or stone pieces embedded in the interior wall work as stair treads. When needed, Al-Khawah is covered with a wooden board[2].

Upper Floor Interior Elements

Division of the upper floor varies from two to five rooms including Al-'Uliyya (the owner's room). The number of rooms differs according to whether the house is a two or three storey house. Generally upper floors are for family and receiving guests; therefore, they contain varied interior elements. Basic elements of the upper floors consist of Al-Sarrahah, Al-Russan, and Al-Zufur. The term "Al-Sarrahah" means "the ground", and it indicates the house's floor, which is covered with a mat of palm leaves. Al-Russan is the partitions dividing the rooms of the floor; and which are made of the locally available tree branches (such as Jujube tree). The tree branches are tied with its bark and, in some cases, covered with decorative carved wooden boards. A basic structural element is the previously mentioned, Al-Zufur. "Zufur" is the plural term for Zafer, which is a column made of the wood of trees with large-radius trunks, such as Taramix tree.

A typical upper floor encloses Al-Mallah (fireplace) in the main sitting area, and an associate Gutrah Al-Gutrah is an opening in the ceiling position right above Al-Mallah; allowing smoke to escape, and enhancing air circulation. In addition, Al-Mallah's side edges are called Al-Haran, and they protect the house or the room from scattered fire sparks and ashes.

A traditional feature commonly seen in rooms specified for women is Al-Halana; a small square or rectangular void in the in the wall, used to store items like keys, and other personal belongings.

There are interiorly visible components of the structure that support Al-Zufur (Fig. 5), and some work as ornamenting elements. Al-Zufur are protected from humidity by flat, circular-like stones placed under each Zafer, called Sufun. However, above a Zafer, a Wesad is fixed; it is a flat wooden capital that carries Al-Wusuh. A basic structural unit is the wooden beams stabilizing Al-Zufur, and the roof; locally called Al-Wusuh. Consecutively, Al-Bitana layer reinforces Al-Wusuh with thick wooden beams fixed perpendicularly above it. The final phase of the interior roofing process is of thin wooden boards layer called Al Jard, and it is covered by tree bark called Al-Ghelaq; ensuring that mudding slits are blocked. Finally, an iron hook is fixed in Al-Jard and is called Al-Me'laq. This is used to hang clothes, weaponry, or meat[2].

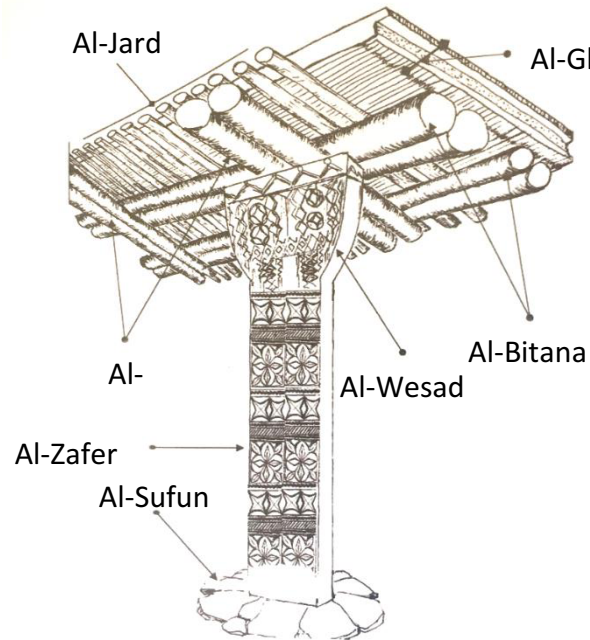


Fig. (5) Main Structural Components; Source: [2]

b) Example 1: Al-Jadlan Village House

Al-Jadlan village is a 150m x 100m village on an elevated downhill contour of Baida valley. It overlooks agricultural lands from the north and east, as well as caravanserais passing by the valley. The houses in Al-Jadlan village are of a similar planning, and they are entangled; causing alleys to narrow. However, there are several entrances and connections within adjacent houses (Fig. 6); reinforcing the social bonds[2].

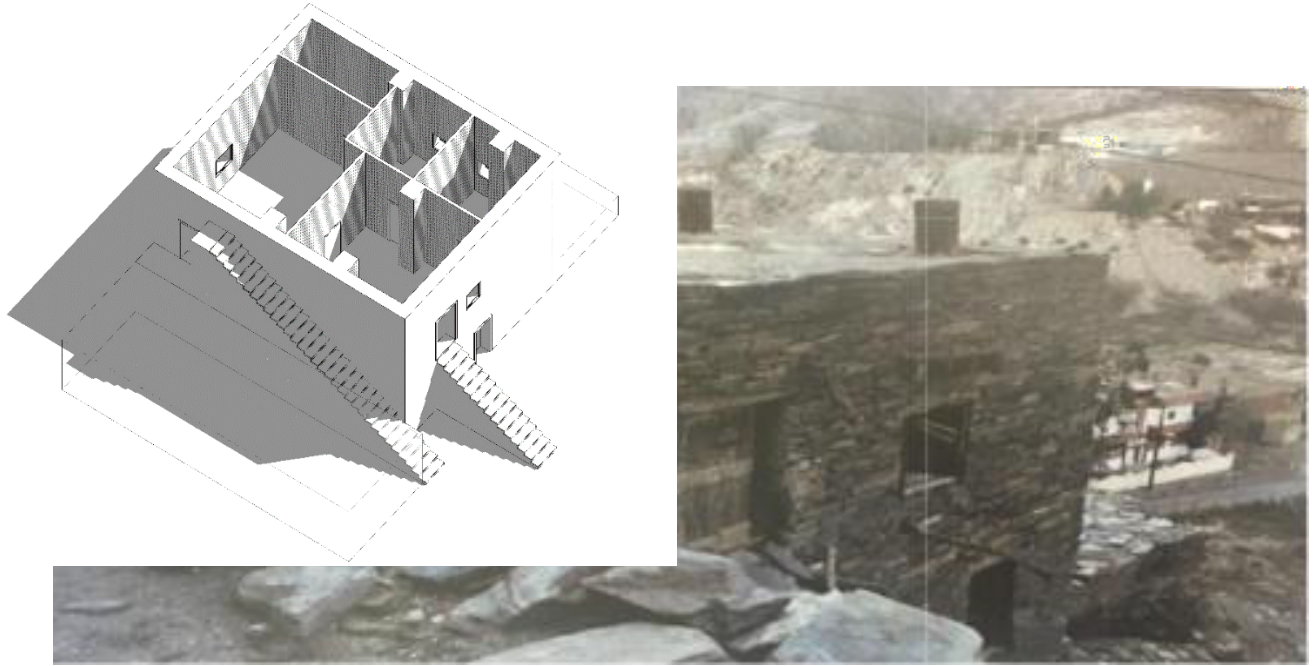


Fig. (6) **Al-Jadlan House** several entrances and connection with adjacent houses (developed by the researcher)

1. Al-Jadlan House Exterior

The house examined in Al-Jadlan village (Fig. 7), is a two storey rectangular stone house. Its exterior is characterized with the presence of many architectural elements; defensive elements for the most part. The main ground floor entrance is centered in the southern façade; it is a wooden door that is decorative, while entrances of other floors are neglected in terms of aesthetics. Also, another entrance seen on the southern façade is the entrance to the first floor, with its exterior stone stairway, supported by wood. Another aesthetic measure is the contrast of Al-Ghimama's color which is placed above the entrance, as well as several other openings of the house. Windows are absent in the ground level (due to its function), and they are square and small in the first floor; which is an aspect reflecting the defensive nature of the area. Moreover, window openings enclose iron grills, protecting the house from robbery; given that the stone racks of the wall make theft easily accessible. Al-Ra'ash of this house is extended around 3m outwards. This is to be used for observation in case of warfare. Uppermost exterior element in the house is Al-Sarab which exists in the northern and eastern facades in this example[2].

Fig. (7) **Al Jadlan House Exterior; Source: [2]**

2. Al-Jadlan House Interior

The house stretches 10m from north to south with a width of 8m from east to west. The ground floor is 2.7m high, divided to two sections; Al-Sifl in the southern section (Fig. 8, room A), and Al-'Uyun in the north (Fig. 8, room B). Al-Sifl is entered through the main entrance in the southern façade, and it is used for cattle lodging. Al-Sifl and Al-'Uyun are separated by a thick wall which carries most of Al-Zufr of the upper floor. This wall also contains a 30cm deep Methwad to provide cattle hay. Al-'Uyun is slightly smaller in terms of area, and it is used to store the agricultural crops, wood, and other family subsistence supplies. The central load-bearing wall has embedded flat stone slabs to enable interior vertical circulation through Al-Khawah, which connects Al-'Uyun to the upper floor.

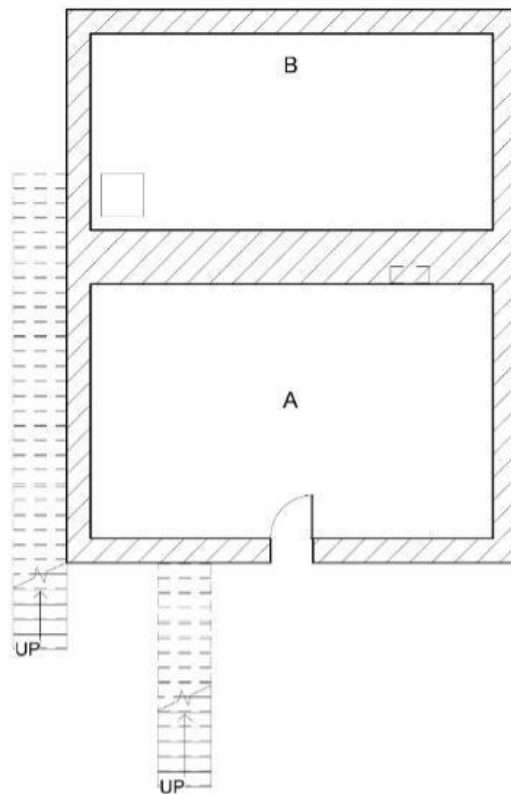


Fig. (8) **Al-Jadlan House Ground Floor Preliminary Plan** (developed by the researcher)

The first floor is 4m high; which is noticeably higher than the ground floor. It is entered through a western entrance leading to the northern section, which is the male section. The northern section consists of a large sitting room used to receive guests (Fig. 9, room A), and a room found in the north-east corner (Fig. 9, room B), used as a male room or sometimes used to store hosting equipment like coffee ware. The southern section is entered through a door in the sitting room, leading to the family's living room (Fig. 9, room C). Nearby one of Al-Zufr of the living room, Al-Mallah is fixed with its opposing Gutrah in the ceiling; to discharge smoke out of the house[2]. To the east, two more rooms are located, women room (Fig. 9, room D), and Al-'Ulliyya (Fig. 9, room E). In the western Russan of the women room, Al-Halana is found, and it is used to store small housekeeping tools[2].

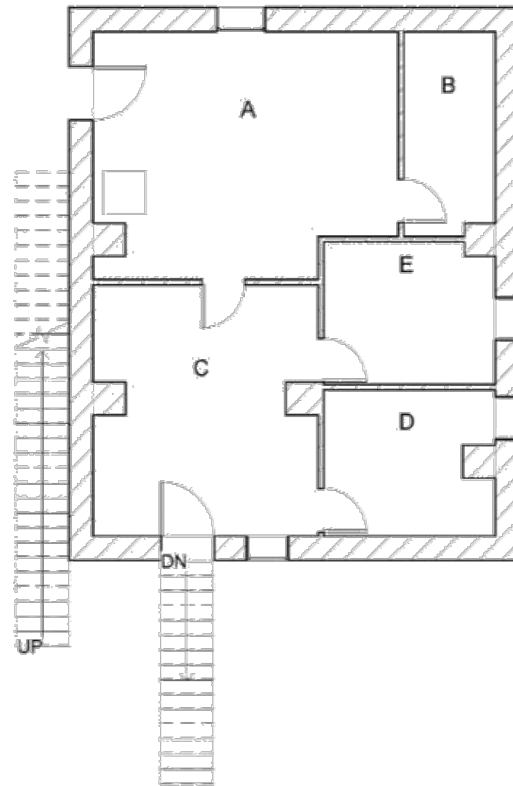


Fig. (9) **Al-Jadlan House First Floor Preliminary Plan** (developed by the researcher)

c) Example 2: Al-Ghutamiya Village House

Al-Ghutamiya is a 110m x 70m low-laying plane village by Baida valley. Just like most of Al-Baha region villages, Al-Ghutamiya has an entangled pattern of stone houses (Fig. 10); strengthening the security level of the village[2].



Fig. (10) **Al-Ghutamiya Entangled Stone Houses; Source: [2]**

1. Al-Ghutamiya House Exterior

The house to be discussed in Al-Ghutamiya village is a three-storey house that is attached to a cluster of two other units separated by an interior stairway and a fort from the south (Fig. 11). The exterior of the house depicts an elaborately defensive appearance; due to the topography of the village which makes it prone to invasions.

The entrances are on the south, east, and north which are the directions leading the main road. These entrances are elaborately decorative with vegetal designs; reflecting the agricultural nature of the area. An unusual observation of the exterior is the absence of Al-Ghimama above openings, which was replaced by wooden pieces.

Al-Ra'ash surrounds the roof from the extroverted facades and they are reached through simple stairways. Al-Ra'ash enables easy transition between the cluster units through the roof, in addition to being conducive to observing the scenery[2].

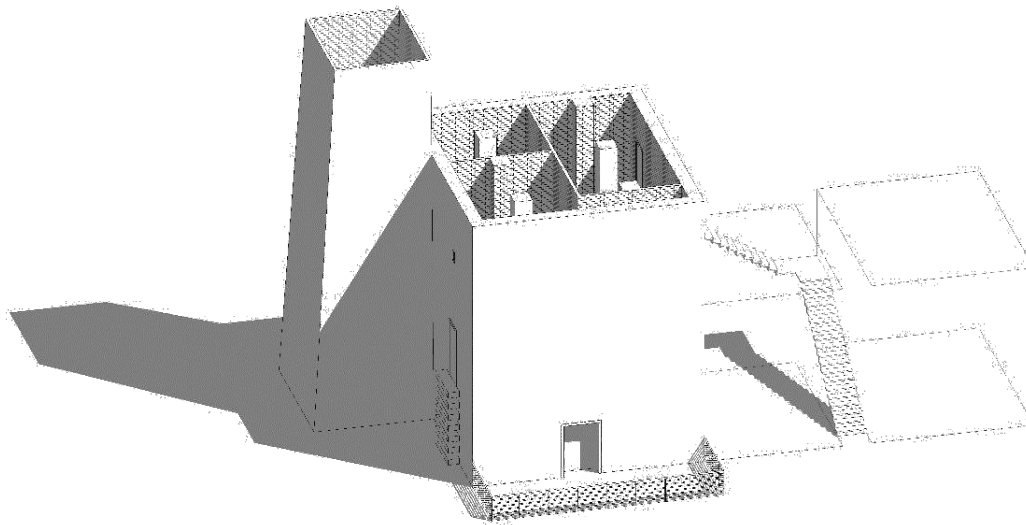


Fig. (11) **Al-Ghutamiya House** (developed by the researcher)

2. Al-Ghutamiya House Interior

The southernmost unit of the cluster is a 7m x 8m three storey house. The ground floor is entered through the eastern façade. In front of this entrance, there is a fenced area specified for animals during summertime. During wintertime, though, animals lodge in the eastern section of the ground floor (Fig. 12, room A). The eastern section also contains a small annex to store relevant tools (Fig. 12, room B). It is noted that such function usually exists in the other section of the ground floor (the westerns section in this case). However, the western section of the house (Fig. 12, room C) is a property of a different owner and entered through a separate entrance.

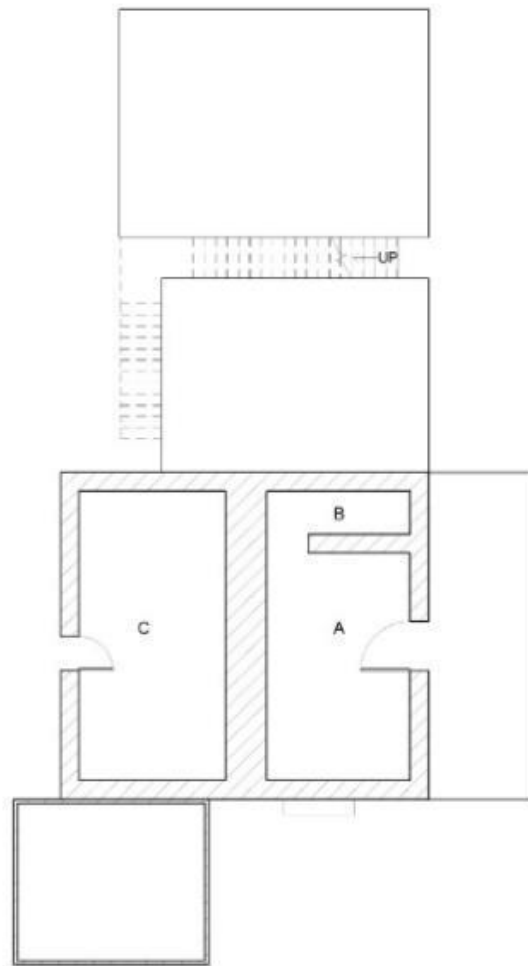


Fig. (12) **Al-Ghutamiya House Grould Floor Preliminary Plan** (developed by the researcher)

The first floor is 3.5m high and divided into 4 rooms; entered mainly from the south. The largest room occupies the south-east corner (Fig. 13, room A). It is a room for men, it is also used to receive women guests sometimes. To the west, a smaller room is specified for sleeping (Fig. 13, room B). Above the previous room, a relatively large multifunctional room takes place (Fig. 13, room C). The last room is Al-'Uliyya (Fig. 13, room D).

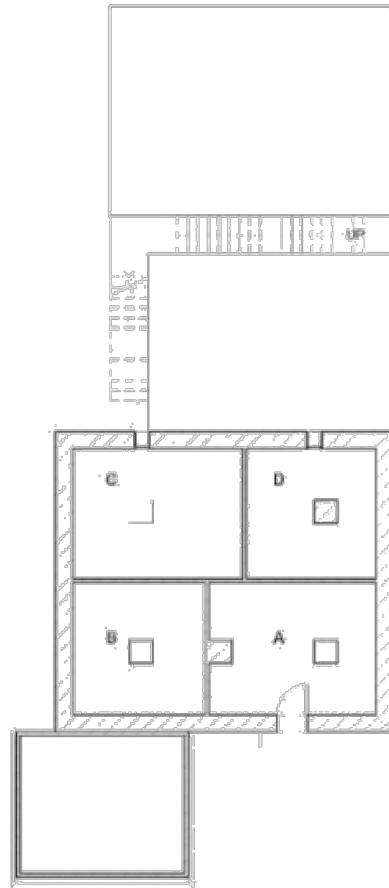


Fig. (13) **Al-Ghutamiya House First Floor Preliminary Plan** (developed by the researcher)

The uppermost floor is planned differently. It is reached through the stairway between the first and second units of the cluster, whereas the stairway tilts to the south to meet the northern façade. The second floor consists of a small room in the south-west corner (Fig. 14, room A). This room opens to the attached fort as well as to the largest room in the floor; which is a sitting area (Fig. 14, room B). Consecutively, the sitting room leads to the remaining spaces in the east (Fig. 14, room C). The Zufur carrying the roof are ornamented with vegetal designs that are not significantly different from the ornaments of the area[2].



Fig. (14) **Al-Ghutamiya House Second Floor Preliminary Plan** (developed by the researcher)

III. COMPARATIVE CONCLUSION

The unique architectural heritage of Al-Baha region depicts its rich timeline of political and social history as well as the direct effect of the regional environmental circumstances. These conditions shaped both the socio-economic lives of the villagers, and the architecture of Al-Baha region, whereas the urban fabric of most villages is intricate; fulfilling the need for defense, and respecting the existing topography. In addition, traditional building techniques and materials differ according to the environmental context. Yet, a certain set of traditions, values, and architectural elements is maintained almost everywhere in Al-Baha.

The domestic architecture in Al-Baha region is perhaps the most important type of architecture, because it is not only the main inhabitation unit but also it is where guests are received, and cattle are lodged. Moreover, houses reflect important standards that they were built to meet, including providing the suitable place for an Arabian lifestyle, natural lifestyle, and religious standards. These standards formed the base and common ground of all domestic architecture in the region.

Stone houses are the dominating type of houses in Al-Baha region. They are sophisticated structures that prioritize security over any other principle. Stone houses promote privacy and cultural conservativeness as the male and female rooms were typically segregated. They also shed light on the importance of the Arabic principle of generous hosting, as the largest spaces of houses were occupied to receive guests. The social bonds were generally strengthened by the entangled pattern of house distribution, and the interior entrances from other adjacent units.

However, there are minor differences which are probably due to the land contour of each village; hence the level of warfare aggression. For example, houses of Al-Ghutamiya were built on a low-laying

land; forcing it to be more defensive than elevated villages, as more fortresses were found in Al-Ghutamiya. Also, in Al-Ghutamiya village, the interior entrances between units are more frequent; whereas they were used as secret passageways creating another security measure. Its plane topography also enabled the houses to grow vertically, as they were generally higher than those seen in Al-Jadlan village. On the other hand, houses of Al-Jadlan village were built on a downhill. The houses used the slope (ground floor) for storing; also, the hill stones supported the structure of the upper floor.

Ornament reflected the villages' agricultural nature, but it was minimal on the exterior, and more elaborate interiorly. Al-Jadlan village had relatively more ornament, such as frequent presence of Al-Ghimama above entrances. Al-Ghutamiya on the other hand had more focus on defensive elements rather than accessories.

A city exists beyond its inhabitants because of its architecture. Actually, architecture creates an irreplaceable physical link to our past; thus, conserving it is among the most essential actions that we are responsible of towards history. The importance of conserving heritage sites lies not only in the physical aspects, but also in the layers of information found about our ancestors' lives. In addition, historically inherited buildings largely contribute to culture and economic well-being. Saudi Arabia is a country which has developed greatly over the past few decades due to the oil boom, as a result, many of its rich historical sites have been urbanized and lost. The Saudi Commission for Tourism & National Heritage (SCTH) has set a conservation program for many architectural sites that unfortunately does not include Al-Baha, even though Al-Baha has been internationally recognized as a world heritage site. Al-Baha sites are highly threatened of perishing because that is actually the case now; urbanization is consuming its lands day by day; making it a crucial case. In my opinion, Al-Baha reflects southern Saudi's history best. The variety found in its architectural styles, and the elaborate details found in the domestic units, are not to be found elsewhere. They reveal inhabitants' lifestyle and the culture that was shared with the rest of Saudi lands. Al-Baha's thoroughly discussed building techniques and domestic units' elements also reflect the essence of vernacularism. Losing these sites would mean losing a part of the Saudi culture and history. Therefore, more documentary studies are recommended while the architecture still stands. Also, conservation measures must be promoted for SCTH and among Saudi community. In order for such measures to be feasible, a collaboration of professional architectural restoration studies, and professional economical and tourism studies should be conducted.

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