

PRIMARY DOCUMENTATION AND ARCHITECTURAL ANALYSIS OF THE RURAL HOUSES IN AL-YAZEEDIYEH VILLAGE, AS-SALT, JORDAN¹

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Abstract

This research represents a primary documentation of the rural houses at one of As-Salt municipality districts called Al-Yazeediyeh. Al-Yazeediyeh is a village located at a distance of 8 km to the east of As-Salt. The significance of this research is that these houses represent the first image of Arab rural houses which established in most of Jordanian villages.

The condition of these houses in general is good for the main architectural elements. The research begins by visiting the site, then a manual documentation process was applied to each house.

The aims of this research are: to study the special relationships in Al-Yazeediyeh's rural houses, the interaction with the agricultural surroundings, and to highlight the structural system used.

According to the literature reviews, this special character of the houses has been common to all Arab rural houses in the Bilad Asham region. As a result, this research represent the stable structure of these houses which can be conserved for future projects with community involvement base. These rural houses and the village have a natural, cultural, and historical values it should conserve.

Keywords: Arab rural houses, Bilad Asham Villages, the Emirate of Transjordan settlements, Jordanian villages

МАТЕРИАЛЫ ОБСЛЕДОВАНИЙ И АРХИТЕКТУРНЫЙ АНАЛИЗ СЕЛЬСКИХ ДОМОВ В ДЕРЕВНЕ АЛЬ-ЙАЗДИЙЕ, АС-САЛТ, ИОРДАНИЯ

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Аннотация

В статье содержатся материалы обследований сельских домов в одном из муниципальных районов Ас-Салта под названием Аль-Йаздийе. Аль-Йаздийе – это деревня, расположенная на расстоянии 8 км к востоку от г. Ас-Салта. Важность этого исследования заключается в том, что эти дома представляют собой прототип арабских сельских домов, которые в дальнейшем строились в большинстве иорданских деревень.

Основные архитектурные элементы этих домов в целом находятся в хорошем состоянии. Исследование начинается с рекогносцировки местности, затем вручную обследуется и документируется каждое здание.

¹ The article is published in the author's vocabulary.

Целью данного исследования являются изучение специфических связей в сельских домах Аль-Йаздийе, их взаимодействие с деревенской окружающей средой, а также сама структура этих домов.

Согласно литературным источникам, этот особый тип домов был общим для всех арабских деревень в регионе Билад Ашам. В результате, в исследовании выявляется устойчивая структура домов, которая должна быть сохранена для применения в будущих проектах. Делается вывод о том, что сельские дома и деревни должны быть сохранены как объекты природного, культурного и исторического наследия.

Ключевые слова: арабские сельские дома, деревня Билад Ашам, Трансиорданские поселения периода Эмиратаов, иорданские деревни

Introduction

For twenty-five years (1921-1946), Jordan was known as the Emirate of Transjordan, previously known as Transjordan, and Amman was its capital. It was a British protectorate established in April 1921. There were many urban settlements beyond the Jordan River, one in As-Salt city and at that time the largest urban settlement and villages east of the Jordan River. (Dakwar, 2013) (www.roughguides.com)

More villages in east of the Jordan River and villages in Bilad Asham, characterized like other villages in the world, the beauty of nature and the purity and clarity of its air atmosphere, and most of these villages are characterized by mountainous nature, and few of them located in a desert environment.

Bilad Asham villages famous for the cultivation of olive, especially in Jerusalem, Damascus, Aleppo, Ramallah, Alkalil, Beirut, Ajloun, Irbid, some villages of As-Salt and other mountainous areas. (Dakwar, 2013)

As-Salt is an ancient agricultural town and administrative center in west-central Jordan. It is on the old main highway leading from Amman to Jerusalem. Situated in the highland, about 790–1,100 meters above sea level, the town is built in the crook of three hills, close to the Jordan Valley. One of the three hills, Jabal al-Qal'a, is the site of a 13th-century ruined fortress. It is the capital of the Balqa Governorate. The Greater As-Salt Municipality has about 97,000 inhabitants (2006). (Great Salt Municipality, 2004)

The Greater As-Salt Municipality is divided into nine districts and villages that dates from the 1890s to 1930s, a period in which most Jordanian villages were built. (www.khammash.com) One of the smallest of the Great Salt Municipality villages Municipality is Al-Yazeediyeh.

Al-Yazeediyeh is a village near the town of As-Salt, in west-central Jordan. Modern municipality had been established in the area which rises between 850-950 meters above sea level. Al-Yazeediyeh is at a distance of 8 km from As-Salt city and an area of 1 km and 83 square meters, and 1.4% of the area of As-Salt, with a population of 1344 in 2013, and it was founded in 1972 the village council in this region. (Great Salt Municipality, 2013)

This region that belongs to the Umayyad periods, "It was said that the village was named after the Umayyad caliph Yazeed Ibn Muawyah, who had stayed there, his place completely destroyed and old mosque was in the village and has been named after him.." (Great Salt Municipality, 2004))

In the heart of this small village, there are a number of rural houses made of lime and white stones with wooden doors and windows and numbers of tombs banded in beautiful combination

facing a natural charming view. Which could we have known by the residents of the village that these rural houses and tombs that we see in Al-Yazeediyeh now go back to the early period of the 20th century and they have known that they were built above the caves that filled the area and used as a place to live and stability.

Its architecture, like most of the Jordanian highland, was built with stone, forming simple rectangular geometry with internal arches, in some houses, made to outspread large spans and support ceilings. The condition of these houses in general is good for walls, roofs and openings. The floors suffering from the dirtiness of livestock life. Some of the missing parts like doors found on the site.

This research represents a primary documentation of the rural houses of Al-Yazeediyeh village. The significance of this research is these houses represent the foremost image of Arab rural houses which established in most of Jordanian villages especially in a period of the 20th century. These rural houses had been built for two main reasons, agricultural purposes and for the livestock care purposes. Al-Yazeediyeh's rural houses represent some of the last examples of architectural self-sufficiency, the ability of villages to produce houses that are "homemade".

The lone reason of the ruins that happened to some houses was the weather conditions, that is showing the stability of these houses. Dirtiness caused by the wrong acts of some people for the livestock care purposes. These houses and the site have a natural, cultural, and historical values.

Objectives

The aims of this research are: to study the special relationships in Al-Yazeediyeh's rural houses, the interaction with the agricultural surroundings, and to highlight the structural system used.

Literature Reviews

a. Arab rural house

The Arab rural house of Transjordan belongs to the 'family' of the Palestinian rural house, which in turn belongs to the 'clan' of the Eastern Mediterranean rural house. Much was written on the subject of the Palestinian rural house. Nineteenth and early twentieth century travelers and observers have left many descriptions of indigenous Palestinian dwellings.

During the period of British rule (1917-48), two studies were published that are still cited as the standard sources on the subject: Taufik Canaan's *The Palestinian Arab House: Its Architecture and Folklore* (1932-33) and the volume dedicated to "the House" in Gustaf Dalman's seven tome compendium, *Arbeit und Sitte in Palästina* (1939). (Fuchs, 1998b)

According to Fuchs (1998a) the Palestinian rural house, followed two general principles:

1. The whole house consisted of an all-purpose rectangular room where all household activities – living, sleeping, work, and storage of produce – took place. The nuclear family and their dependents, sometimes as many as 25 persons, as well as their livestock, all shared this single space.
2. The space was divided into two zones by a difference in level: a lower "soiled" area (usually called *qa' al-bayt*) near the entrance, and an elevated space reserved for living and sleeping (*mastaba*). Using those two determining principles, a great variety of layouts were possible.

An essential feature of each living space was a large niche (*matwa*) that contained mattresses, which would be unrolled on the floor when the family retired to sleep. (Fuchs, 1998a)

The Transjordanian rural house abided by the same principles as its Palestinian counterpart. But it expressed much less elaboration for the reason that it didn't get the same chance to develop.

Unlike Palestine, Transjordan consists primarily of desert lands. These factors combined to diminish the numbers of skillful mason builders capable of achieving such structural elements as vaults and cross vaults.

The most common type of structure in the Transjordanian rural house was the repeated arch structure.

Upon constructing a house, the rectangular exterior walls were built before the interior arches to act as pre-existing buttresses for the arches. (Khammash, 1986) Specialized skill was required for constructing the arches.

The most common method of construction in rural Amman, was through building small spans, using thick bearing walls, covered by wooden beams or I beams, then with a layer of straw and mud and topped initially with mud, then by asphalt substance and later with cement.

In rural houses through Transjordan, storage was treated as a very crucial element to the life of the farmer. He had to be able to store as much produce as needed to support his family till next year, for trade did not reach all extents of Transjordan yet and insufficient storage meant starvation. Storage bins were a common feature of the rural house of Transjordan.

The wall structure of such houses consisted of two layers of stone, whose degree of smoothness depended on the wealth of the house's owner. (Shawash, 2003)

b. Maain, a village above the wheat lands

Maain Village overlooks the plain of Madaba and has a commanding 360 degree vista. It crowns an elevated breezy summit surrounded by a landscape of deep-red soil; the western edge of Balqa plateau, one of Jordan's most fertile wheat lands.

The village is almost immediately spotted after leaving Madaba heading southwest.

As you approach the traditional village center only 7 km from Madaba, the road climbs up and passes just north of the old village core. Most visitors pass by on their way to the hot springs paying little notice.

Although traditional Jordanian villages are not prepared as or considered a visiting destination, exploring them reveals, in many cases, a special charm and a sense of authenticity.

Maain was built on top of churches from the Byzantine and Umayyad periods. Traditional houses used mostly stone of these periods, with few alterations and sometimes ornamentation added (Figure 5). Maain, like most other traditional villages, was built during a construction boom that happened all over rural Jordan between 1890 and 1930. (Khammash, 2002)

When these houses were built, the Byzantine structures were in ruin for the last 1,000 years. In Maain, until the 1980s, fragments of Byzantine architecture were still scattered in some of the abandoned courtyards.

The traditional Maain house has been shaped by the availability of stone, in plenty, and a limited supply of wood. Stone was used to build the walls of a simple rectangular house intercepted by a few big arches acting as main beams. With the outer walls, the arches carry a ceiling made of wood and earth.

Wheat and other grains almost completely shaped the interior. With large grain silos built of mud and proudly placed as a centerpiece facing the main door, the house functioned as a shelter for wheat and people; enough wheat should be stored to provide for the year-long period between harvests.

Typically, Maain's traditional houses were built around courtyards used for circulation and works such as weaving or food drying. The courtyards also serve the function of water harvesting, along with the surrounding roofs, gathering rain water during winter and securing it into underground cisterns mostly still functional from the Byzantine times. (Khammash, 2002)

Methods

The research begins by visiting the site, then a manual documentation process was applied on each house by taking the dimensions and pictures. Some interviews have been done with the residents.

The first visit of the site is goal for:

- 1-Get familiar with the site
- 2- visual connectivity
- 3-First impressions
- 4-Deside the focal point of the study
- 5-Deside the project description
- 6-Executive summary of the project

a. Site analysis

Al Yazeediyeh village located at a distance of 8 km to the east of As-Salt city (Fig. 1).

The main entrance of the village located on the road between Amman and As-Salt, close to Amman Private University.

Olive farms spread around the area and there are caves filling the area and used as a place to live and stability.

The main entrance of the village at a distance of 1.75 Km from the main entrance of Amman Private University on the road toward As-Salt. And the distance from main entrance of village to the houses equal to 2.61 km. (Fig. 1).



Fig. 1. Location of Al Yazeediyeh village (right) and an arial view of Al Yazeediyeh village shows the site of rural houses (left) (www.mapsofworld.com, google maps)

b. Description houses

Which was known by the residents, the construction method of all these houses starting by clustering the stone on the bounds of the cave, which already exists, and then move outward to bring the appropriate height of the walls.

The houses have a rectangular layout with dimensions ranging between (20* 6) meters and (7* 6) meters oriented east-west and north-south. It is located on a different levels of the slope that facing the valley.

Most walls of houses are around 0.5 meter thickness and the height sloping from 0.6 meters to 3.75 meters. Stones were cut and arranged in regular blocks.

There are two structural systems for the ceilings used in these houses:

- Cement and I beam system (Fig. 2).
- Repeated arch system (Fig. 3).



Fig. 2. A ceiling structural system of cement and I beam (Author, 2016)



Fig. 3. Structural Arches support the ceilings, the pictures are for house No. 1 Block 1 (right) and house No. 3 Block 3 (left) (Author, 2016)

There are two essential features founded inside the houses:

- *Matwa*: it is cabinet for storing woven items. There are two size founded; large *matwa* is used for storing bedding; small *matwa* is used for storing household items such as clothes (Fig. 4).
- *Kawayer*: are storage facilities made from clay or wood and used to preserve grain (Khammash, 1986) (Fig. 5).



Fig. 4. The large size of *matwa* (left) and the small size of it (right) inside house (Author, 2016)



Fig. 5. Two types of *Kawayer*; made of clay on the left, and made of wood on the right inside the houses (Author, 2016)

c. Houses analysis methodology

In this research, the houses were divided into three blocks depending on the clustering of houses with one front yard: Block 1, Block 2, and Block 3 (Fig. 6).

The condition description of the four main architectural elements of each block: ceilings, walls, openings, and floors were listed and their damage categories (Tables 1, 3, 5). An illustrative table shows abstraction of the elevations and plans of each house (Tables 2, 4, 6).


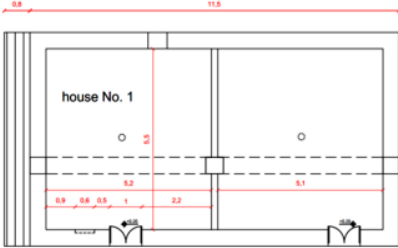
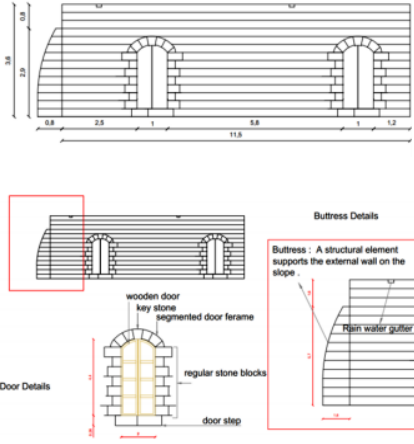


Fig. 6. Al Yazeediyeh rural houses, Block 1, Block 2, Block 3 (Author, 2016)

Table 1. The condition description of Block 1 and its damage categories (Author, 2016)

ARCHITECTURAL ELEMENT(Block 1)	CEILINGS	WALLS	OPENINGS	FLOORS
CONDITION AND DESCRIPTION DAMAGE	Good condition except house No. 1 has a partly downfall close to the interior arch.	Good condition except the house No. 3 has a partly downfall wall.	The doors and window shutters are exits on their places or lying on the ground.	Good condition made of mud.

Table 2. An abstraction of the plans, elevations and details of each house in Block 1 and its damage categories (Author, 2016)

Block 1	Plan	Elevation
 <p>House No. 1</p>	 <p>This house has a butress as special structural element to support the external wall on the slope.</p> <p>Area = 57.75 m²</p>	 <p>Details</p>

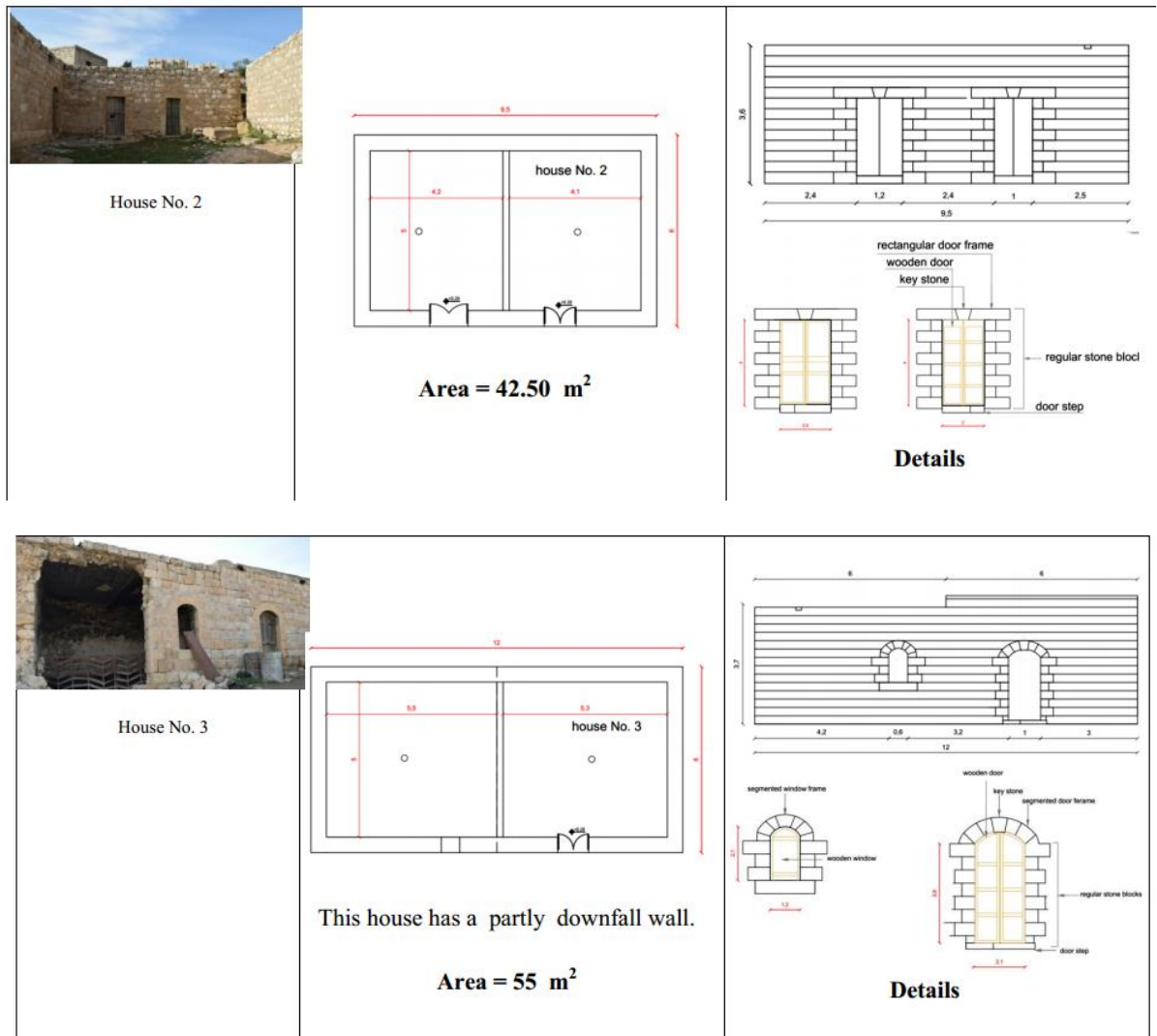


Table 3. The condition description of Block 2 and its damage categories (Author, 2016)

ARCHITECTURAL ELEMENT (Block 2)	CIELINGS	WALLS	OPENINGS	FLOORS
CONDITION AND DESCRIPTION DAMAGE	Good condition.	Good condition except house No.3 has a falling of external wall.	The doors and window shutters are exit on their places.	Good condition made of mud.

Table 4. An abstraction of the plans, elevations and details of each house in Block 2 and its damage categories (Author, 2016)


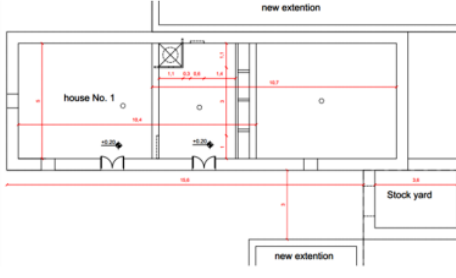
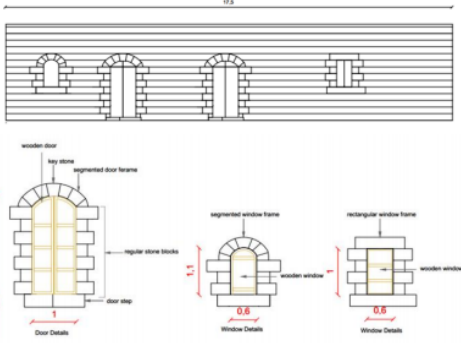


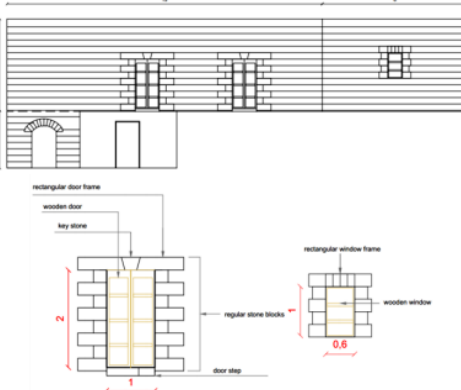

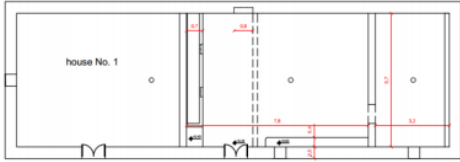
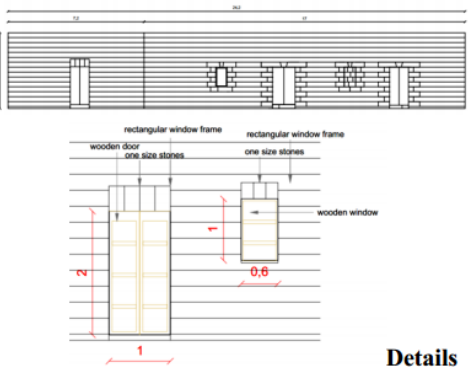

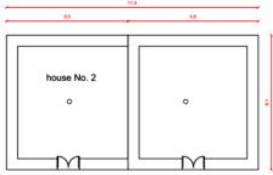
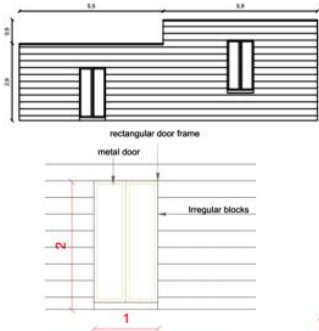

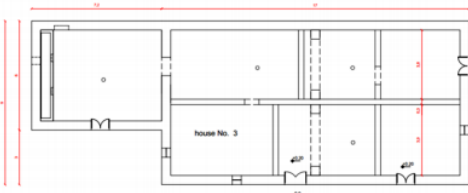
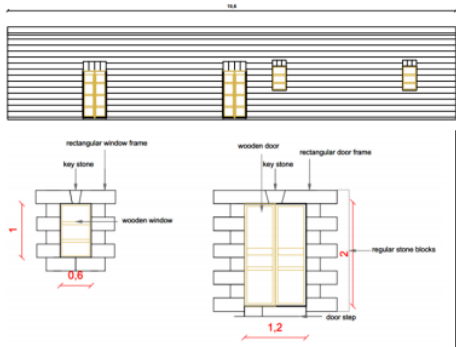
Block 2	Plan	Elevation
 <p>House No. 1</p>	 <p>Area = 82.50 m²</p>	 <p>Details</p>
 <p>House No. 2, House No. 3</p>	<p>House No. 2 and House No. 3 are attached and it rising from the first level of house No.1 by 2.30 m.</p>  <p>Area = 94.20 m²</p>	 <p>Details</p>

Table 5. The condition description of Block 3 and its damage categories (Author, 2016)

ARCHITECTURAL ELEMENT (Block 3)	CIELINGS	WALLS	OPENINGS	FLOORS
CONDITION AND DESCRIPTION DAMAGE	Good condition.	Good condition.	The doors a window shutters are on their places except house No.3 two doors shutters are missing.	Good condition made of mud.

Table 6. An abstraction of the plans, elevations and details of each house in Block 3 and its damage categories (Author, 2016)

Block 3	Plan	Elevation
 <p>House No. 1</p>	 <p>Area = 106 m²</p>	 <p>Details</p>
 <p>House No. 2</p>	 <p>Area = 53 m²</p>	 <p>Details</p>
 <p>House No. 3</p>	 <p>Area = 164 m²</p>	 <p>Details</p>

Conclusion

According to this research, the houses in Al Yazeediyeh village has a common character. It has been shaped by the availability of stone, in plenty, and a limited supply of wood.

Stone was used to build the walls of a simple rectangular house and the ceiling was constructed by using two different structural systems; interior repeated arches structure as found in house No. 1 Block 1, and I beams with cement to achieve a flat stable roof as found in most of the houses.

According to literature reviews, that special character of these houses has been common to all rural houses in the Jordanian villages and Bilad Asham villages, whether in house form,

distribution of the internal spaces, construction processors, structural methods and elements, and raw materials used.

According to the documentation processes, it is found that these houses have a stable structure which can be restored and conserved for future projects related to the people of the village themselves. The damage could be expected on these houses because of current use it as a place for livestock.

It is recommended to introduce effective maintenance for these houses and community involvement to achieve the awareness of the architectural heritage conservation of the rural villages, and to know the needs of the people and their demands and try to achieve through preservation projects.

As a result, these rural houses and the village have a natural, cultural, and historical values it should conserve.

References

1. Dakwar, R; Froud, K. (2014), Perspectives on Arabic Linguistics XXVI: Papers from the annual symposium on Arabic Linguistics. New York, (2012). John Benjamins Publishing Company, p. 31.
2. Available at: <http://www.roughguides.com/destinations/middleeast/jordan/amman/circassians/>
3. Great Salt Municipality. (2004), Brochure issued by the Cultural Department.
4. Available at: <http://www.khammash.com/projects/dana-village-restoration>
5. Available at: <http://www.salt.gov.jo/> Greater Salt Municipality, (2013).
6. Shawash, J. (2003), Architecture In Amman During The Emirate Of Transjordan, 1921-1946, Unpublished Master Thesis, University of Jordan.
7. Fuchs, R. (1998), "Palestinian Vernacular Architecture - the Ottoman Connection" in S. Ireland & W. Bechhoefer eds. The Ottoman House, British Institute of Archaeology at Ankara Monograph no. 26, The British Institute of Archaeology at Ankara and the Center for Eastern-Roman Studies, University of Warwick, UK, pp. 54-74.
8. Fuchs, Ron, (1998), "The Palestinian Arab House and the Islamic Primitive Hut," Muqarnas - an Annual for Islamic Art & Architecture 15, pp. 157-177.
9. Khammash, Ammar, (1986), Notes on Village Architecture in Jordan, Lafayette, University of Southwestern Louisiana, Louisiana.
10. Khammash, Ammar, July (2002), The Jordan Times Weekender.

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