Religious Structures in Ain Ghazal (East Field) East of Jordan River during Late Pre-Pottery Neolithic B (LPPNB)

Prof. Mostafa Atallah
Professor of Egyptian Archeology - Faculty of Archeology - Cairo University

Lect. Alshimaa Nasser Ahmed Mahmoud
-Lecturer at the Department of Egyptian Archeology at the Faculty of Archeology in San El-Hagar

Abstract:
The study deals with religious buildings in Ain Ghazal site in the Western bank of the Zarqa River in Jordan. The buildings Which were founded were used to practice rituals during the late Pre-Pottery Neolithic B (LPPNB). These buildings had special features concerning their location, plan, architectural elements and also tools. Number of non-residential buildings have been distinguished in the site Ain Ghazal, which is divided into three Parts: The Central and the Northern and Eastern Fields. The research deals in detail with the study of the religious buildings only in the Eastern area, in which two buildings were found for the LPPNB period. They were characterized by unique architectural elements such as the erected stone pillars, the Altar, Hearths, and the designation of an area as "the Holy of Holies", which is considered the oldest appearance of this element in ancient architecture. However, only few ritual devices were found in the buildings that may have been stolen or moved to prevent damage in the event of the collapse of the building. Due to the absence of tools in the buildings of the LPPNB period, it was difficult to recognize the rites practiced inside. At any rate, these buildings refer to the spread out of the development of intellectual life of the society at such phase, both in terms of architectural and religious context and the awareness to practice worship, as well as choice of a specific site, which refers perhaps to the religious importance of such place.

Key Words: LPPNB– Ritual Buildings- East Field- Orthostats -- Three Standing Stones.

Research problem:
the lack of available information as a result of the lack of excavations in these sites, as well as the impact of environmental factors on the architectural remains of the buildings, therefore it is difficult to know the layout and contents as well as the rituals which had been practiced within these buildings.

Objectives: The research aims to make a detailed study and an inventory of the remains of religious buildings in Ain Ghazal especially in the Eastern Field in terms of period and materials used in construction and architectural elements as well as the development of religious thought, which was reflected in the spread out of places of worship. Objectives of the research is to recognize the functions of these places, their purpose, and the rituals which were practiced inside them, as well as the tools used in these rituals.
The importance of the research: Shedding light on the importance of the Neolithic period, which is considered a real beginning for the intellectual development of a prehistoric person in various fields, whether from the architectural or engineering side in choosing the site as well as the religious aspect, thus removing the ambiguity - even to some extent - about the rituals and cults that were common in that period of prehistoric times.

The limits of the study:
Thematic Limits: Dealing with religious buildings in the Eastern field, at Ain Ghazal.

Geographical limits: the Eastern Field of the Ain Ghazal site.

Time limits: The late Pre-Pottery Neolithic B (LPPNB) About (7,250-6,700 B.C)

Research methodology: The study followed the descriptive-analytical method.

Introduction: A number of buildings were found on the Ain Ghazal site that were characterized with several features that indicates their ritual function, among of which are:
- Great effort had been paid in their construction.
- Choice of specific locations for these buildings.
- Different construction styles.
- The presence of distinctive elements and tools for these buildings.

The excavations at the Ain Ghazal site revealed in Jordan, different architectural styles are generally different in type, size, and features from residential buildings. In some cases, we may not rely on the construction method to explain the functional difference of the building, especially when all the buildings share the same residential building planning. In this case, other criteria must be used to recognize the ritual or symbolic function of the buildings, such as the absence of tools that refer to household activities, and the presence of tools with symbolic significance such as human or animal skulls.

Ain Ghazal is located in the northern suburb of Amman on the banks and slopes of the Zarqa Valley, and it is one of the most famous sites of the early Neolithic. (See Map No. 1). The buildings of the early phase of the "PPNA" period are most likely to serve special purposes or general community architecture. These buildings were constructed in high situated areas that can be seen from far distance, as indicated by the Ain Ghazal site in southern Levant, dated to the LPPNB period.
In the Ain Ghazal site, residential and other private buildings were found, and they were distinguished through their plan and the architectural remains. The circular and rectangular buildings were interpreted as ritual buildings (shrines and temples) in addition to tools and "orthostats". (pieces of stones decorated with relief in its upper part) which were found inside the building and pieces of stucco with drawings.

The architectural remains indicated the repetition of the pattern of planning religious buildings during the settlement phase of the Ain Ghazal site, and the planning of the ritual buildings on the site differed from the residential buildings, but at the same time it was similar to that of ritual buildings in Anatolia and some religious sites in the southern Levant.

Patterns of religious buildings in Ain Ghazal (see Map No. 2): During the LPPNB period, a large number of non-residential buildings could be distinguished by a new layout of the floor, including semicircular buildings (the Apsidal Building), two circular buildings, and a rectangular building with internal elements that were not found similar to Ain Ghazal or other sites in the Levant during the Pottery Neolithic about (6,250-4700 BC). Different buildings were discovered in three main parts of the site: the so-called northern field, the central field and the eastern field (see Map. 3).

The religious buildings were characterized by three types:
- Semi-circular buildings (the Apsidal Building): they were named so, because of their rectangular shape that has one semicircular end. Four types of these buildings were found in Ain Ghazal: one in the Central Area, one in the Eastern Field and two in the North.
- Circular buildings: including two buildings in the northern region called Shrine I and II (Shrine I and II).
- Rectangular buildings: in the eastern region, characterized by unique interior items and furniture.
Map No (2) showing the location of Ain Ghazal on the west and east bank of the Zarqa River, the position of the central field, the north field, the south field, and the eastern field at the site of Ain Ghazal.

Schmandt-Besserat, Denise. ‘Ain Ghazal Excavation Reports, Volume 3, Symbols at ‘Ain Ghazal, Berlin (2013), p. 4. Fig. 1.1.1

Figure (3). An probable distribution of religious buildings in the central and northern field and the eastern field at the Ain Ghazal site, where there were two temples for the late Pre-Pottery Neolithic period "B" (LPPNB). Prepared By The Researcher.
Eastern Field:
It is divided into two areas, the first area (Area I) located in the southern side, where a temple was discovered in it in 1995. The second area (Area II) is located near the middle, 70 meters north of the first area.

The First Temple of the LPPNB Period (Area II)
Architectural planning: The building was constructed on a high hill, its western end was destroyed by the slope of the hillside, and the building was distinguished by its special architectural style such as the use of dressed stones and slanted corners of the building, features which dated the building to the LPPNB period (See Figure 4).

The building is about (4 x 5 m), and it played an important role in the ritual of the residents of Ain Ghazal. (See Figure 5), and in the middle of the eastern wall is an oval limestone block placed "orthostat" (Height 1 m × width 50 cm), a protrusion in the upper part of the stone was found in a stereoscopic shape, perhaps as some kind of decoration, or that is the natural shape of the stone. The height of the eastern wall was about 90 cm, and if this was the original height, the place might have been used as an open cabin, and on the other hand, a several stone blocks were found inside the building that may have fallen from the wall.

In the middle of the room there were three stones placed vertically they were about 70 cm high and between the eastern wall and the vertical stones there was a circular hearth of stucco painted in red, and was surrounded by seven flat panels of limestone that showed burn marks (see Figure 6). A floor-level platform consisting of two rectangular stone blocks (75 x 50 cm), on the southwestern side of the room. During the last stage of the building's use, the entrance hole between the vertical stones in the far north and the northern wall was closed. (See Figure 7)
This building was distinguished by the presence of various architectural features, such as the earthen floor, the altar, the three standing stones, the platform and the "orthostat" blocks in the eastern wall, as well as the fireplace surrounded by seven flat panels. It is also noteworthy the frequent use of architectural elements in the building, ranging in number between (3 and 7) (for example, the three upright stones, the seven hearth panels, and this may have a certain significance). In addition to its huge size- compared to the shrines and semi-circular buildings- there is also the location on the location edge of the settlement, as well as the nature of the internal contents, which indicates that it was allocated to the entire community.
Second Temple of the LPPNB-C Period (Area I)

According to the given nature of the building, it is likely that it is dated back to the period of (PPNC), but through the charcoal in the eastern room it was dated by radio-carbonate to about (131 + _7015 BC), which indicates that its migration happened towards the end of the last stage of LPPNB, and it is not clear yet the relationship of this building with the other building (the first temple). I believe that the first dating of the building is based on charcoal in a hearth outside one of the houses for the LPPNB period, dating for the period of PPNC, i.e. about 6133 + _47 BC, due to the fact that it is not logic that two adjacent temples could be built at the same period; only when one of the two buildings was destroyed, only in this case, the inhabitants were forced to build another temple. the Second Temple could also be dated to the LPPNB period; this may refer in this case to the fact that these are two different temples destined for two kinds of worships for each community)

Architectural planning: The temple consists of two rooms, the western room, was destroyed as a result of erosion factors. The interior of the building is rectangular (7.5 m north south x 4.75 m east west). The eastern room was well preserved, its measures approx. (6 meters east-west x 3.5 meters north-south width), the walls are 70-90 cm thick, and the remains of the eastern wall is 1.8 meters high. River stones were used to build the walls. The floor of the building was constructed from a layer of smooth river pebbles covered with a layer of mud obtained during the excavation of a semi-ground storage "F1". (See Figure 8)

Figure (8) a layout showing the temple during the LPPNB phase in the I region of the eastern field, where the eastern room and the western room. Prepared by The Researcher.

Ali, Nabil, op. cit., P.170. Fig.11.
The side room F1: is a semi-subterranean chamber (F1), located outside and adjacent to the southeast side of the weather building, it is about 4 x 1.25 m, and more than a 1 meter deep. Yellow clay was found in the room, which was used of the eastern room of the temple, its function is not clear, it may have been used to store the tools of the building (See Figure 9), but I don’t believe that this room was used to store the tools of the building in order to protect them from theft, but it might be for dumping waste, or store tools that are no longer necessary.
The Altar: Three stone blocks were found, with different measurements, in the Negev desert, which represented the oldest worship, and the oldest massebot was found in Rosh Zin, Negev Highlands, it seems that in the frame of the development of religious thought they wanted to practice the ancient beliefs inside the religious buildings, the floor was covered by laying a base layer of river stones (see Figures 10) and it seems that the three vertical stones were used to support the altar consisting of two huge flat slabs of limestone on the surface with marks for burning, these slabs were placed 1 m high x 60 cm wide above the level of the mud floor and not all of the stones were removed from the wall (TW III) which the altar is topped with.

The Hearth: about 60 cm in diameter; it was found in the center of the floor, consisting of two stone blocks of unpainted lime plaster, surrounded by seven flat slabs of limestone. (See Figure 11)
The Entrance: parts of which were destroyed due to human activities and the erosion, and it is less than a meter, and it was in the wall between the eastern and western rooms to facilitate access to the western room (See Figure No. 12) The closed entrance, leads to a thin wall (45 cm) which leads to the western room, then turns towards the north. Perhaps it was used to prevent anyone outside from seeing the altar, fireplace, or any activities taking place inside the Eastern Room; In this way, the first appearance of The "Holy of Holies", which is considered the oldest example of its kind.

The Aim of the religious buildings for the Ain Ghazal site:
The religious buildings in the Ain Ghazal site was a new beginning for the religion in the Neolithic period in the Levant, in addition to the presence of special features in these buildings represented in: altar, hearth, seats with special tools and other tools used for ritual practice. These buildings reflected the wealth of the community, indicated in the size of the temple itself and in the furniture inside it. Residential buildings may be used to perform rituals at the family level, and in this case it will be difficult to rely on the architectural evidence to know the nature of these rituals that take place in the building. The scholars relied on certain elements to determine the buildings of worship exclusively, namely: size, location and content of the building.
The houses excavated so far during the LPPNB period were in poor condition, and inside the rooms of these houses were distinctive architectural elements and tools that indicated functions of some rooms; For example, in one area of a two-story residence in the North Field, the presence of five pairs of deer horns separated with skull fractures, this may be an indication that part of this upper floor had a special role in ritual ceremonies (See Figure 13)
Conclusion:

- The religious structures under study indicated the spread out of the intellectual and religious development of the people of the Neolithic period, where the beginning of a clear emergence of religious and ritual beliefs, which became more evident during the period of the Bronze Age and then the historical stages.

- The religious buildings reflected the development in various fields, such as the huge buildings, which indicates an economic wealth as well as a community unit among the population represented in a great effort during the construction of these Buildings, as it was not limited to one or two families.

- As well as religious and ideological development that dominated the whole community, which is reflected in the construction of an independent building to worship the god instead of the house cabin, which indicates the transformation from worship restricted to a family to the entire community.

Bibliography:


- Bernadette Drabsch, EX quartery e-journal of atelier in cooperation with uispp-cisnep. international scientific commission on PRESSION the intellectual and spiritual expressions of non-literate peoples N°8 June 2015.

- Kafafi, Zeidan. Upright Stones of the Neolithic Village Ain Ghazal Location and Function (Jordan).


Kaffaa, Zaydan. Tathir Albiyat ealaa Aleamarat Almanzilia fa Aleasr Alhujraa Alhadith ma qabl Alfakhar fa alurdun, mawqie eayan ghazal namudhajaan, nadjahat alinsan walbiyat fa alwatan aleurbaa fa daw alaiktishafat alatharia, Alriyad, 2013.

**Abbreviations:**
- **JFA**: Journal of Field Archaeology.
- **AJA**: American Journal of Archaeology.
- **ANES**: Ancient Near Eastern Studies.
- **JJHA**: Jordan Journal for History and Archaeology.
- **ADAJ**: Annual of The Department of Antiquities of Jordan.