Plans and architecture of buildings north of Mesopotamia (Ca.10,000-7,000BC)

Since ten thousand years B.C., the environment control process has significantly done by residents of the northern part of Mesopotamia as well as other areas of the ancient Near East. By the Neolithic period gatherers and hunters, had become to farmers and villagers. They lived in permanent buildings in the village societies, as the "domesticated" societies, and the domestication is the effect of living in houses, within villages. [1]

Up to present , However, the relevant sites in Upper Mesopotamia have been broadly lumped together under a vague nation" Transition" , roughly dated to end of the Epi-palaeolithic through the beginning of the pottery Neolithic of the area, namely , to the time range from 10,000 to 7,000 B.C. [2] [Fig.1]

Modern usage of the term " Upper Mesopotamia" applies to the watersheds of the rivers Euphrates and Tigris, namely, North Republic of Iraq, with much smaller areas in northeast Syria and southeast Turkey. [3]

Here try to review the some of the Neolithic sites in the Upper Mesopotamia in term techno-typology of the remains architectural, and to place them , on the basis in similarities in several aspects of the material remains.

The open village site Zawi Chemi is situated in Shanidar Valley, a part of the rugged Zagros mountain chain un northern Iraq[4].It has principal feature, it is a circular structure, called structure 1. was built by dry stone which roughly circular plan of ca. 2,20 m diameter. Structure 1 is presented the earliest known architectural construction from Mesopotamia [5]. In M'lefaat site , Small mound lies on a gravel hill immediately north of the Erbil-Mosul road, which is located north- east Tigris , have been revealed , series of round or oval houses, some of them were built by the earliest known bricks from Mesopotamia. These houses, often with hearths, some of structures are built of pise(Called in Arabic tauf), while others employ cigar-shaped bricks up to 70 cm long. At least some of these are semi-subterranean, with stone packed floors. In the

centre of the settlements were large open area with pebble floors in which grinding stone, mortars and hearths were located, clearly indicating communal use of this area for a range of open-air activities. [6]

In Syrian on the Euphrates, there were two sites have add much information about the occurrence and nature of Communities in this region. The large site is Abu Hureyra[7], is located on the right bank of the Euphrates , Has an early occupation of Natufian culture and some features of virgin soil include pits, hearths , post holes and floors, perhaps from semi- permanent structures. More substantial evidence for this period has come from Mureybet[8], some 45 km upstream from Abu Hureyra .the Upper Level consists of round semi- subterranean huts of clay with exterior wooden support.[Fig.2]

Hallan Cemi Tepesi, in eastern Anatolia, has yielded the remains of small permanent village. The architectural Buildings are circular and semi-subterranean, arranged around an open central area ca.15 m in diameter. Some of contain distinctive features, in the form of a semi-circular stone bench/platform that is set against the wall of each structure. The floors each structure were resurfaced multiple times with a distinctive thin yellow sand and plaster mixture over a layer of relatively sterile dirt fill and were generally devoid of material and objects commonly associated with domestic activities. [9]

P re-pottery Neolithic A:

The Neolithic sequence in Upper Mesopotamia begins with the PPNA in the end tenth millennium BC**.** In several directions**,** the communities of this era were little different from their Epi - palaeolithic forebears**.** The transition from the Epi-palaeolithic into the Neolithic was a gradual process over many centuries and generations, rather than a momentous break with the past. [10]

The architecture was continues to develop in the tradition of round houses inherited from previous period. They can be more spacious (6 m in diameter) , semi-subterranean or constructed with of pise on the surface[11] . In the best –preserved house(in Mureybet), a raised sleeping area is occupies the whole of the far end, opposite the entrance, while in the front part, to the right and lift of central corridor , low internal walls

divide the space into small rectangular cells. On of these contains a hearth while in others, too small to serve as living space, must have been storage facilities for foodstuffs. [1] [2]

The site Qermez Dere, is located in the north-western outskirts of the town of Tel Afar ,some 60 km west Mosul, is witnessed on a community evidence likely to e permanently settled over a period of centuries in village format, with elaborate architectural concerns[1] . The semi- subterranean structures have features , such as their extreme cleanliness and the presence of human skulls and upstanding pillars, which may suggest a supra-domestic element in these buildings .The houses constructed below ground level and egg-shaped in outline[1] . At Nemrik, is located in the southern part of the Dohuk governorate, the developments in the architecture can be observed through the three main phases. [3]

The oval houses were built of tauf blocks covered with clay plaster. One house had sub-floor human burials. Some of structures were made of sun-dried cigar-shaped bricks, measuring 51by 12 by 6 cm. Interior surfaces were plastered, and various fittings were incorporated, such as sleeping platforms and benches . Four post holes showed where wooden roof supports had once been placed. Some of floors are painted with red ochre[1] . At the northern end[5] of Mesopotamia, the site of Cayonu is uniquely informative on early developments.Its Located in southeast Anatolia, the earliest level consists round or oval buildings (huts): some have stone-laid foundations, while others are of wattle and daub with any foundations[1] . The Grill buildings[6], of which at least five examples have been excavated . The appearance of Grill buildings might also have resulted from a need for larger closed living spaces partitioned for different functions. In contrast to previous structures, the inner space of the buildings (10x 3,5 m) was arranged in three different sections[1] . In level 4 various building types were in use ,include the broad pavement plan, channel building, cell building and large room building[Fig.3]. There are large area was covered with cobbles and then leveled, and this resulted in the creation of a large, open pebble-covered area, namely, the first “Pebbled Plaza” of the site. [1] [8]

Further, within the Neolithic period was a shift from round to rectilinear houses. Both at Mureybet and Sheikh Hassan, in north Syria , sees the beginning of an important change in the architectural domain. It is appear at this point that the first rectangular constructions known in the Near East, or in the World. It was built of lumps of soft chalk chipped into a cigar shape and bonded with mortar, these constructions are divided internally into little square cells which are often scarcely more than a meter square.[1] [Fig.4] 9

In the site Jerf el Ahmar, northeast of Aleppo,one can see another form of building transitional between a round structure and a building with rectilinear wall: these are rectangular house with rounded corners, their walls constructed of chalk blocks chipped into cigar shapes[2] . Some 0
scholars explanation use rectangular structures in this period is that easier to add to or divide a rectilinear house than a round one, so the transfer may point to increasing household size and complexity. Also very different mental concepts are involved in circular and rectilinear architecture. A round house has two units, the continuous wall and a roof. A rectilinear house involves a minimum of five units, four discrete walls and a roof. The investment in a rectilinear house, no matter what size, was higher than in a circular one. [2] 1

Others are suggested that the circular plan connotes very straightforwardly nomadic or semi-nomadic communities, and indeed those at the very beginning of becoming sedentary ,while the rectangular plan characterizes farming villages that are fully sedentary. [2]

Pre-pottery Neolithic B:

The pattern of settlement in northern Mesopotamia in the PPNB phase, ca. 8600-7000 BC, was little different from that of the preceding period, with only a handful of perma nently occupied sites known so far. Some sites were newly founded in this period (although not all at the same time), such as Jarmo and Maghzaliya in northern Iraq and Bouqras , Dja'de el Mughara in northeast Syria and Nevali Cori , Gobekli Tepe in southeast Turkey. Many sites were grew up into sizeable villages in the course of time, assumedly comprising up to 7-8 hectares at about 7500 BC, perhaps inhabited by several hundred People. Moreover, many of the newly founded sites tended to become settlement mounds, with a rather

ordered lay-out, uniform structures, frequent rebuilding, and repeated occupation over long spans of time. [2] [3]

The development of some of these settlements in terms of population and architecture is impressive. This is when Abu Hureyra, for example, attained its greatest size and new complexity. Its area was almost 12 hectares, thus attaining a new threshold since the maximum extent of villages of PPNA and middle PPNB period did not exceed 3 hectares. The houses were densely packed: only a few courtyards and some narrow passages separated the houses. These, built of sun-dried, mud bricks and furnished with plaster floors, comprised five rooms, or more , with frequent internal doorways between them[Fig.5]. They have been proposed as the first known example, destined to be developed widely throughout the whole Mesopotamian region, of the " multi-cellular complex plan". [2] [4]

At the same period in the site Jerf el Ahmar, as we said above, may observe begins that are more or less rectangular, but the corners are rounded, thus avoiding to the some extent " the problem of the right angle". [2] [5]

All structures at Jarmo, in north Iraq, are rectilinear. They was constructed of tauf, or pressed lumps of clay or mud, with walls averaging 40 cm in thickness. Stone foundations were used in later phases. Floors are generally of compacted earth, but in some cases deliberately laid floors either of limestone cobbles or of reed with overlying clean clay occur. All structures, usually oriented to the points of the compass, comprising several small rooms with courtyard, covering a total area for each building of some 60 m². Access between rooms takes the form of waist-high opening in walls. In one level foundations of grill- type plan , as known at Cayonu, are found , and stall-like structure also occur [2] [Fig.6].The site Maghzaliyh [6] lying on the lower slopes of the Sinjar Valley. A particular feature of much of the architecture at Maghzaliyh is the use of smooth limestone socles at the base of tauf walls. These stone footings are not sunken foundations, as they stand 50-60 cm proud of ground surface, and would have given a strength and durability, especially as regard protection against rain and rising damp, to the Maghzaliyh architecture. In the first occupation at the

latest phase, a surrounding wall was constructed, which was traced for a length of 60 m. [2] [7]

The public buildings, communally constructed if not necessarily community- accessible, also appeared in the early Neolithic and may be seen as indicators of increased attachment to a place [2] , The discovery of [8] the astonishing "Cult buildings" at Nevalı Çori [2] , and Göbekli Tepe[93] [Fig.7], in southeast Turkey, in the late 1980s and 1990s, drew world-wide attention to Anatolia as the region where the earliest forms of ritual architecture were constructed, adding to the importance of buildings constructed specifically to house religious ceremonies that had earlier been unearthed at Çayönü[3] . These building may have been exclusive elite advertising, or they may have been communally-owned religious structures. But other way, they might have been intended as prominent visual cues of landscape ownership. [3] [2]

Conclusion

It is very difficult illustrate the perfect scenario of the architecture of the Upper Mesopotamia, because the architecture in this region is a vast subject.

The domestic structures increased in solidity and size during the Epi-palaeolithic and early Neolithic . Neolithic way of life in the Upper Mesopotamia, which was thus identified as the birthplace of Neolithic . Increasingly, Neolithic innovations are being identified in the Upper Mesopotamian region, such as the Farming and herding, organized religion, public art and rectangular structures and ritual architecture.

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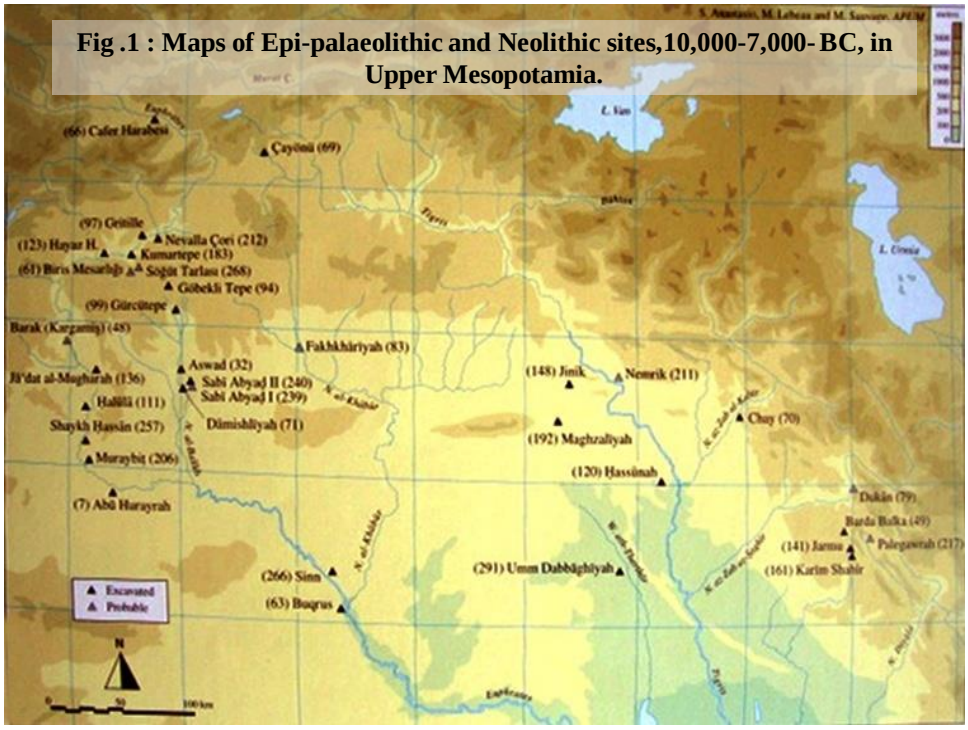


Fig .1 : Maps of Epi-palaeolithic and Neolithic sites,10,000-7,000- BC, in Upper Mesopotamia.

[Fig.1]

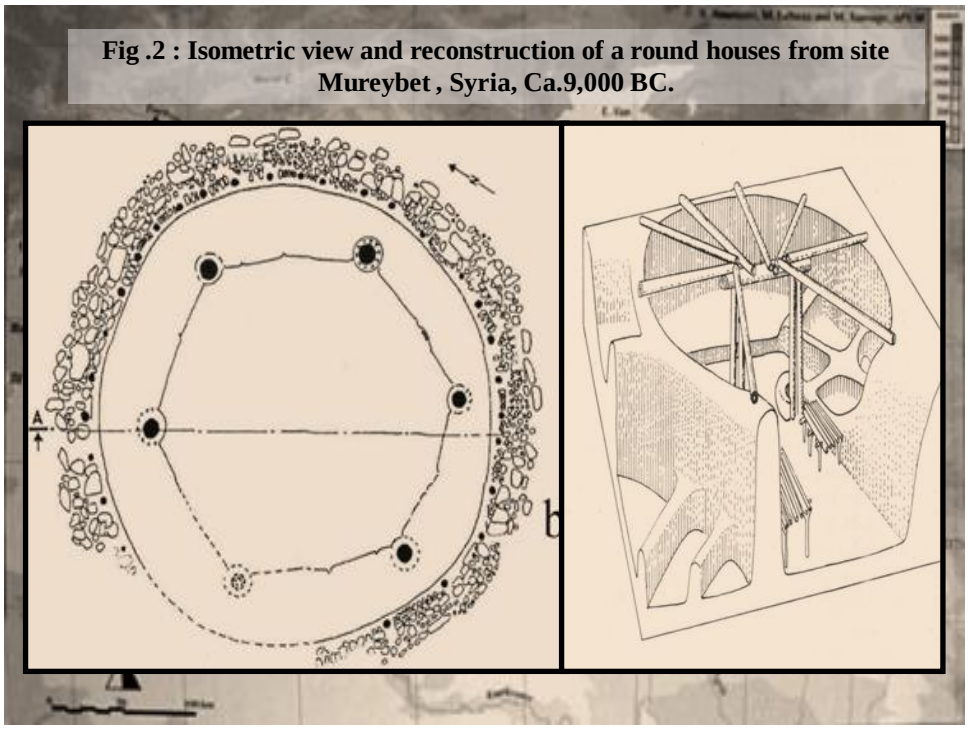


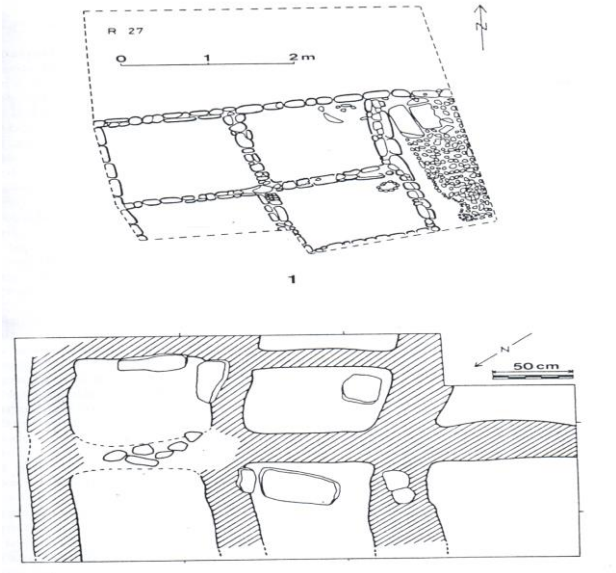
Fig .2 : Isometric view and reconstruction of a round houses from site Mureybet , Syria, Ca.9,000 BC.

[Fig.2]


Fig.3 : Various buildings from Neolithic in site Cayonu , Southeast Turkey.

[Fig.3]

Fig.4. The first rectangular structures.



[Fig.4]

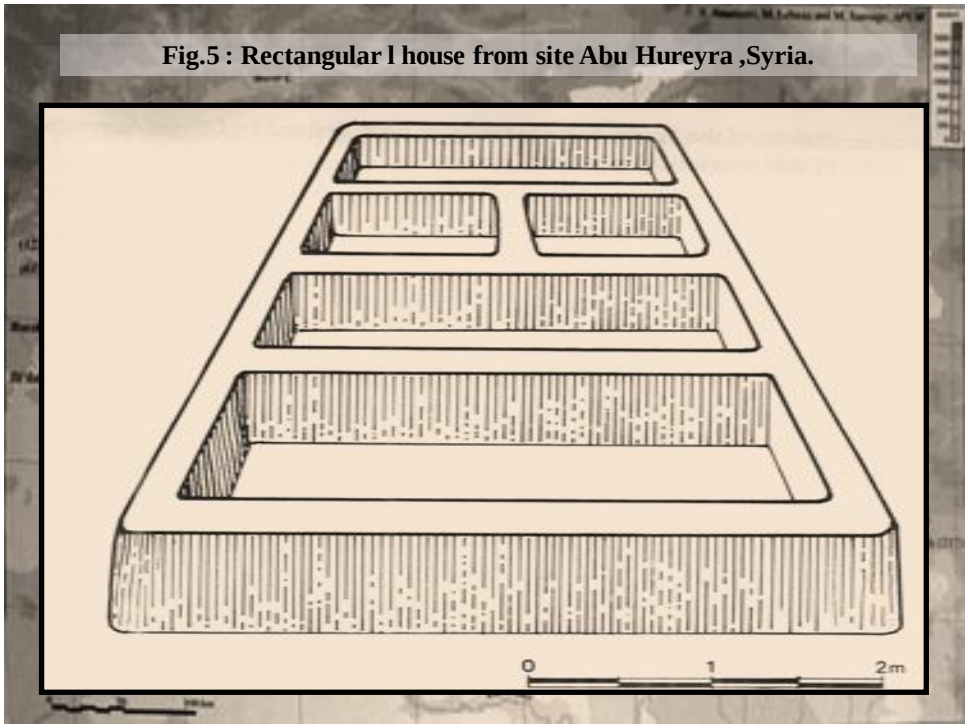


Fig.5 : Rectangular l house from site Abu Hureyra ,Syria.

[Fig.5]

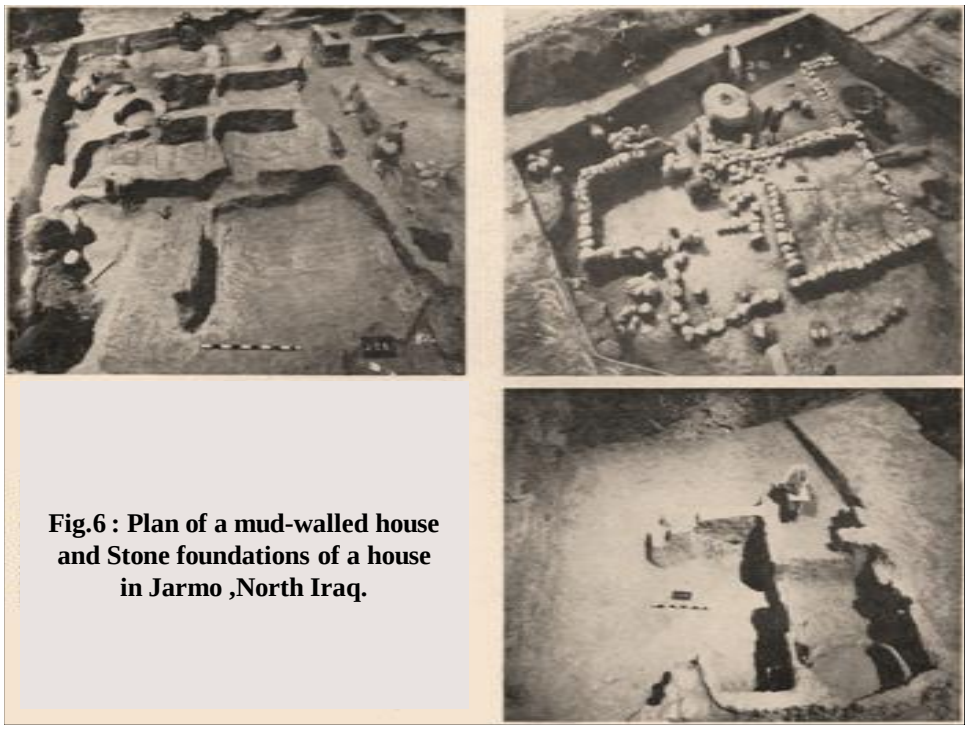


Fig.6 : Plan of a mud-walled house
and Stone foundations of a house
in Jarmo ,North Iraq.

[Fig.6]

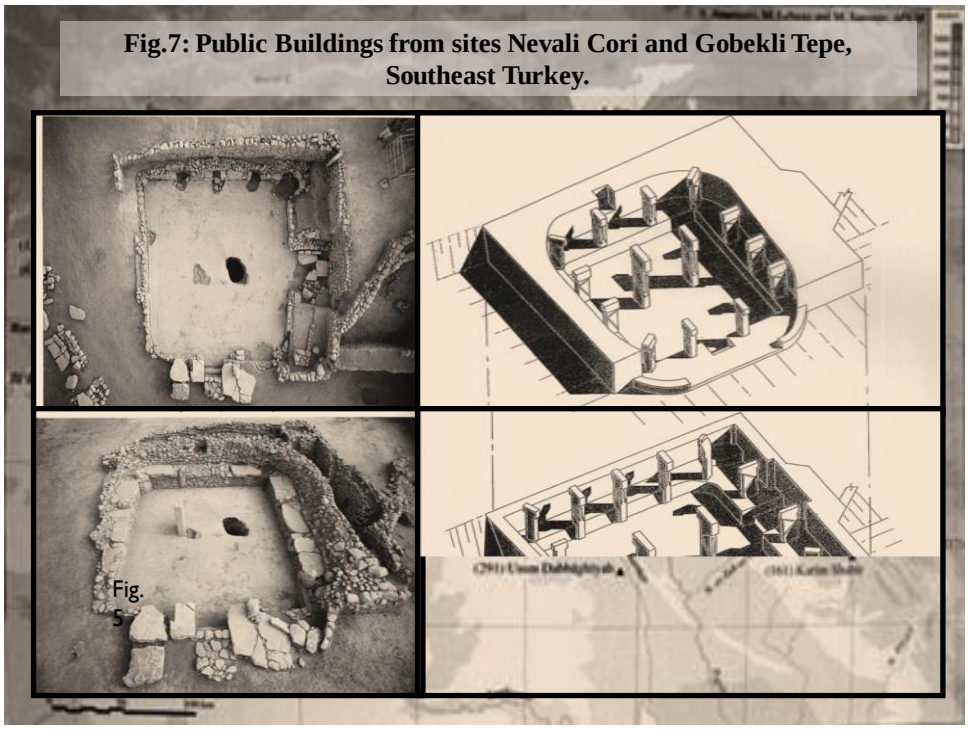


Fig.7: Public Buildings from sites Nevali Cori and Gobekli Tepe,
Southeast Turkey.
Fig.
5

[Fig.7]