



SETTLEMENT PATTERNS AND LAND USE DURING NINEVITE 5 PERIOD "3000-2500 BC" IN THE KHABOUR BASIN

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ABSTRACT

The period extended between the end of the fourth millennium BC, i.e. Chalcolithic Age, and the beginning of the third millennium BC, i.e. Early Bronze Age, was characterized by the existence of a transition phase that did not exceed five hundred years. That period called Ninevite 5 and it lasted from 3000 to 2500 BC. Radical changes had happened during that period before the shifting to build the big cities and the establishment of the Akkadian Empire around 2500 BC. After the settlement expansion across the last stage of the fourth millennium that named LC 5 "Late Chalcolithic 5" territories that extended from the south of Iraq to the north of the Syrian Jazireh, we notice that, at the end of the fourth millennium and the beginning of the third one, a recess had occurred to that expansion and the number of inhabited sites, which were dwelled in high population density, had drastically decreased to only reach 30%. Except of some small rural sites in north of Iraq and Khabour Basin in the north-east of Syrian Jazireh, this period was marked _ although it lasted for a short time _ by several features, at top of it all, is its unique and distinguished pottery that it had not been found anywhere before Ninevite 5 and which characterized by its shape, color and decoration. Distinctive pottery is not the only feature that characterized this period but also work specialization in Khabour Basin sites where the Upper Khabour Basin specialized in rain-fed agriculture to grow grains and then transfer them to the Middle Khabour Basin where they used to be cleaned processed and stored in specific facilities. These stored grains used to be either shipped to other sites along the Khabour river, like Mari, or be consumed locally by residents of the sites in Khabour Basin or served as fodder for animals.

KEYWORDS: Early Bronze Age, Ninevite 5 period, Khabour Basin, settlement expansion, pottery, work specialization.

1. INTRODUCTION

Khabour basin, in the north-east part of Syria, is one of the country's widest agricultural lands where its fertility made it a pivotal center for an ancient human settlement which had led to establish many villages on the Khabour banks as well as its tributaries. Ninevite 5 has been seen as a mysterious and, surprisingly, a distinctive period in Upper Mesopotamia. After the Uruk urban expansion - Uruk was named after a city site in south of Iraq, founded in the late fourth millennium BC where it revolutionized the idea of settlement expansion that extended from south of Iraq up to the north of Syrian Jazireh, and it was characterized by two cultural features, the primitive pottery works which were mass-produced and Tripartite structures - Ninevite 5 period identified the region between Nineveh in north of Iraq to Khabour Basin. Although it was restricted in a small area, it offered cultural and economic examples regarding well-made and massively-produced pottery where no previous patterns were found in the above-mentioned area before this period, in addition to the organization of settlement, work specialization, and tasks allocation among the sites which had to be governed by a kind of an authority.

2. THE CHRONOLOGICAL AND GEOGRAPHICAL EXTENSION OF NINEVITE 5

Ninevite 5 discovery can be tracked back to the 30s of the 20th century where the British archaeological expedition in Nineveh, supervised by Campbell Thompson and Max Mallowan, dug a sounding in Tell Kuyunjik to find out about the ancient phases that Nineveh had experienced (Christie, 1970). Mallowan believed that if a sounding was dug to reach the depths of the virgin soil, each pattern of pottery found in each layer would help to establish a chronological order for north Mesopotamia. That had been the starting point that paved the way to classify five distinctive periods starting from Ninevite 1

which goes parallel with Hasouna period in the Bottom, then Ninevite 2 which had three distinctive phases. The oldest one was characterized by simple polished pottery, the middle phase was known as Samuraa, and the newest phase was Halaf, above it Ninevite 3 which goes parallel with Obeid period, and Ninevite 4 where red potteries characterized the Uruk and Jemdet Nasr period were found, and finally Ninevite 5 on the top (Mallowan, 1978). Ninevite 5 which extended from 3000-2500 BC was divided into three stages the early stage (3000-2700 BC) where only the Painted Ware prevailed (Fig. 1), the middle stage (2700-2600 BC) where the Incised Ware replaced the Painted Ware and the late stage (2600-2500 BC) where the Incised Ware and Excised Ware co-existed (Figs 2, 3) (Wilkinson and Tucker, 1995).



Figure 1 The Painted Ware of Ninevite 5

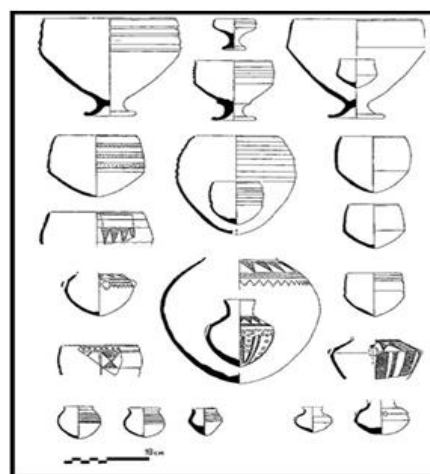


Figure 2 The typical pottery of Ninevite 5 period "Incised and Excised Ware". (forest, 1996)

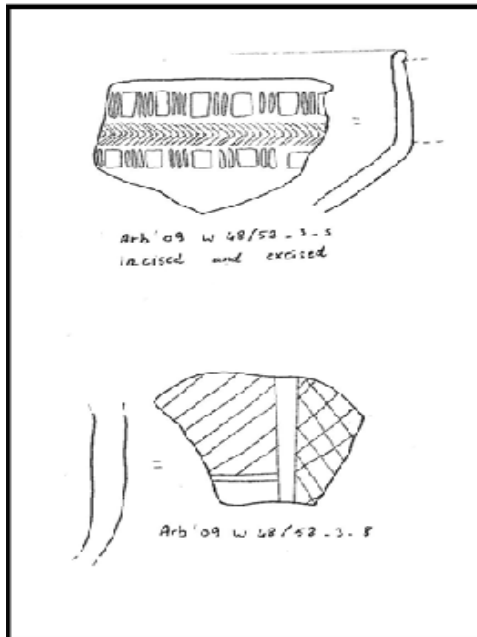


Figure 3 incised and excised pottery form Tell Arbid 2009/sector W

As for the geographical expanse (Fig. 4), Ninevite 5 is identified from Al-Jazireh plains in north-west Iraq to Khabour Basin in north-east Syria through tracking back its pottery. Zarqan Valley, the seasonal tributary of Khabour River, forms the farthest frontier in the west, whereas Sinjar Mountain and Abdel Aziz Mountain both act as the southern border of that period. It is well noticed that the further west we go, the lower the Ninevite 5 effect becomes until it completely disappears in Balikh Basin sites on the Euphrates River (Wilkinson, 2004).

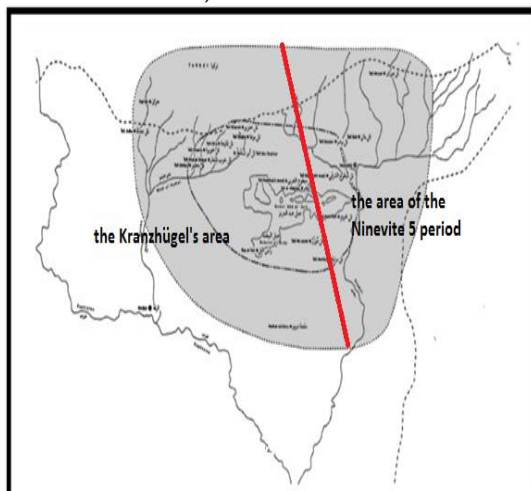


Figure 4 Areas which the civilization of Ninevite 5 that had spread on.

3. A GEOGRAPHICAL GLIMPSE OF THE KHABOUR BASIN

The Khabour River is one of the most important Upper Jazireh rivers and a major tributary for the Euphrates. It springs as a small stream in the south of Anatolia, and it is fed by rains as well as the snow melted from Taurus Mountains in south-west of Turkey. It enters the Syrian territories at Ras al Ein village in AL-Hassake governorate where the river is fed by different creeks (Abdelsalam, 1989-1990). The Khabour River passes through plains and small Tells on the both sides of its banks, and is divided into three main sectors (Fig. 5), the upper sector which stretches from its source to the city of Hassake "115 Km long", the middle sector which extends from Hassake to Tell Mashnaqa "230 Km long", and the lower sector which runs from Tell Mashnaqa to its confluence with the Euphrates River at the town of Bsireh "100 Km long". And the Jaghjagh is considered the biggest tributary of this river (Abdelsalam, 1973).

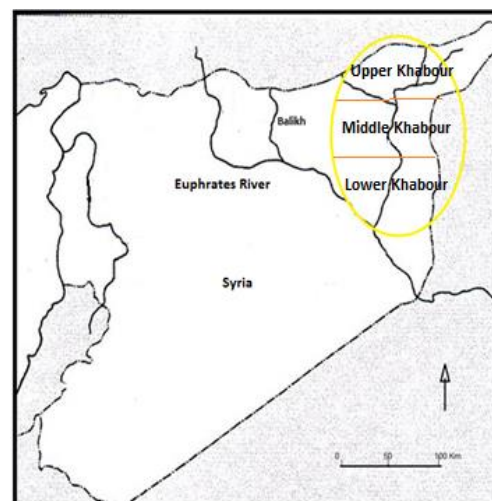


Figure 5 The Upper, Middle and Lower sector of the Khabour Basin.

4. SETTLEMENT PATTERNS AND ECONOMIC SPECIALIZATION

The urbanization process in north-east Syria started at the beginning of the Early Bronze Age and two cultural aspects characterized that period. The first one is oriental and it is called Ninevite 5, and the

second one is western and it is called the "Kranzhügel" culture which appeared in the west to Khabour River.

When identifying settlement patterns in a given area, the following should be scrutinized:

4.1 *The size and the distribution of sites:* during Ninevite 5 period, it is noticed that big sites are concentrated in Upper Khabour River, while smaller sites are found in Middle Khabour Basin.

4.2 *The function of sites:* Upper Khabour Basin sites served as administration, residences and worship places where an administrative structure was found in Tell Arbid, and in Tell Khazna the Ziggurat temple was discovered - a big structure built on circular terraces and resembles the temples which were built in Iraq - as well as different residential homes in other sites like Tell Abou Hafour and Tell Abou Hjeira. For Middle Khabour, distinctive architectural structures were identified which were equipped in a way that shows they were employed in specific purposes like cleaning, processing, and storing grains like Tell Gudeda, Tell Raqai, Tell Atij, Tell Ziyadeh and others (Al-Quntar, 2008).

This organization in settlement with specialized function clearly suggests that there was a kind of authority which organized and ruled that region, but in spite of that, the settlement during this period was of rural pattern depended on the rural chiefdoms system in their administration.

5. THE MAIN PATTERNS OF STORAGE FACILITIES

The sites in the Khabour Basin showed great similarities regarding the site, small, and the functions, cleaning, processing and storing the grains. There were two prominent patterns of storage facilities where in the early stage of Ninevite 5, the facilities took a grid shape with reed mat floor used as grain silos like Tell Atij and Tell Ziyadeh (Ristvet, 2005). In Tell Ziyadeh (Fig. 6) a building found that consists of several terraces of clay which

form separate parallel rows, and in each row big jars containing grains.

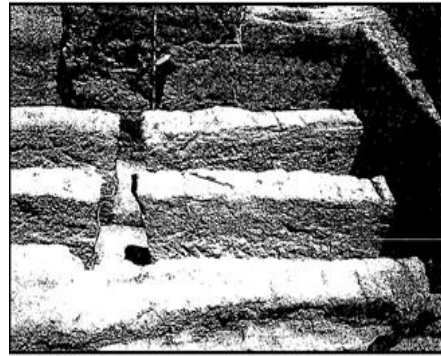


Figure 6 The grid building in Tell Ziyadeh (Hole, 1999)

This pattern was repeated in other sites like Tell Kneidej (Fig. 7) where several rooms at level 5-17 with a grid pattern that do not contain doors were located, and the entrance often was from a hole in the roof.

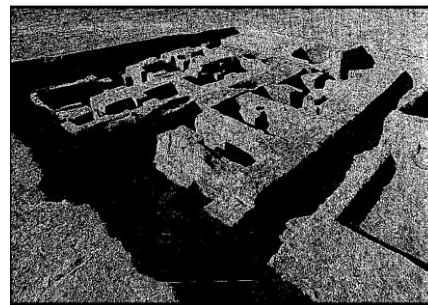


Figure 7 The storage facilities at Tell Kneidej with access from the roof (Weiss, 1991)

These patterns existed also in Tell Raqai (Fig. 8) in levels 5-6-7 of the circular structure where several rooms with a grid pattern were discovered and bore the function of storing grains.

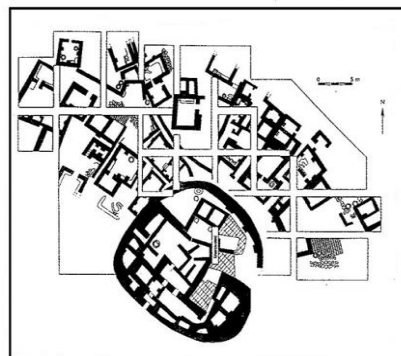


Figure 8 The circular building at Tell Raqai

As for the middle and late stages of Ninevite 5 the size of these storage and silos facilities increased and vaulted building came into existence as well as the semi-vaulted ones beside the grid structures. Some of these structures were surrounded by walls to protect them which indicated the important role they played (Weiss, 1994).

At Tell Atij (Fig. 9) two types of storage facilities, the grid building and the vaulted silos, were discovered to the north of the Tell, in the middle part of the Tell rectangular grid structures built of mud were found, and inside this rectangular building and *in situ* set of large jars containing some grains were discovered. At the fourth level of the circular structure in Tell Raqai several rooms were discovered, some of them served as administrative purposes, and some others used for storage where big jars were found in the vaulted silos (Ristvet, 2005).



Figure 9 The grid building at Tell Atij (fortin, 1998)

Storage was not the sole function of these sites in the Middle Khabour Basin. For example, there were some sites specialized in grain processing like Tell Gudeda and Tell Raqai. In Tell Gudeda, a structure "structure 500" was found containing an internal area with plastered walls (Fig. 10) and a group of plastered basins used for washing and preparing the grains before storing them. Moreover, a few ovens were located near the above-mentioned structure

where burned grains were found near them. That indicates that there was a roasting and grilling process before transferring and storing the grains in other sites like Tell Bderi, Tell Mulla matar, Tell Mashnaqa and Tell Melebyie. In other areas of the Tell, some ruins were found consisting of square rooms "2x2m" aligned to an east-west axis. One of the small rooms is open into a courtyard equipped with ovens and a plastered basin (Sanchez, 2011). What makes Tell Gudeda distinctive is the long plastered canal that might be used for emptying these plastered basins from the liquid starting from the upper basin to the lower one. All that suggests large-scale economic activities. Also, in Tell Raqai, some places that equipped with ovens and plastered basins were found next to storage areas and administrative rooms where they seem to be used for processing the grains before storing them (Weiss, 1994).



Figure 10 The plastered basin used for cleaning grains at Tell Gudeda (fortin, 1990)

6. STORAGE THEORIES

The crucial question that arises in this context is why those storage facilities appeared and what purpose they served? There are two theories that explain the above-mentioned inquiry. The first argues that these facilities were built for grains preparations and storage before being shipped to other areas, where Schwartz and Fortin see that Khabour Basin

communities served as stations in which the shipped grains of the north were transported, through the Euphrates to the south (Fortin, 1998). Moreover, Schwartz (Schwartz, 1994) indicates that the vaulted silos and the grid structures were able to accommodate a great amount of grains that exceeds the local consumption.

The second theory, according to McCriston, suggests that those storage facilities were built for local consumption and the grains were used as food for local residents, nomads and as fodder for the animals (Hole, 1999).

All the previously-mentioned theories are still considered hypotheses. The real reason behind building storage facilities remains unclear, especially that most of middle Khabour Basin sites were submerged under water due to the construction of Euphrates Dam. A lot of emergency excavation rescue operations

were done, but unfortunately they were not adequate to reach a conclusive answer.

7. CONCLUSION

We can infer that Upper and Middle Khabour Basin sites formed a network that is connected administratively, or perhaps all Middle Khabour Basin sites were administratively appended to Upper Khabour Basin sites. All that was done to serve one purpose which was collecting, cleaning, processing, preparing and storing grains in order to be consumed locally or as needed, or to be shipped to other places along the Euphrates for trade. At the end of this period, around 2500 BC, the storage facilities had disappeared and villages had lost its importance, that's why they were abandoned before the establishment of the Akkadian Empire where the area was subject to a remapping process and new city-state emerged.

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REFERENCES

- Abdel Salam, A. (1973) *Geography of Syria*, Damascus.
- Abdel Salam, A (1989-1990) *SYRIAN GEOGRAPHICAL REGIONS, DAMASCUS*.
- Al-Quntar, S. (2008) *Urban reformation of the dry farming plains of north Mesopotamia, tracing the ninevite 5 at Tell Hamoukar*, PHD dissertation non published, Liverpool University.
- Christie, A. (1970) *The excavation at Nineveh, Arpachiyah, Chagar Bazar and Tell Brak, 1931-1939*, the British museum, session3, 13
- Forest, J.D. (1996) *Mésopotamie, l'apparition de l'état VII-III millénaires*, Paris.
- Fortin, M. (1990) Rapport préliminaire sur la 2ém campagne de fouille a Tell Atij et la 3ém a Tell Gudeda sur le moyen Khabour, *Syria*, Vol. 67, No.2, 170-85.
- Fortin, M. (1998) New horizon in ancient Syria, the view from Atij, *Near Eastern Archaeology* Vol. 61,1, 115-121.
- Hole, F. (1999) Economic implication of possible storage structures at Tell Ziyadeh, NE Syria, *Journal of Field Archaeology*, Vol.26, No.3, 16-20.
- Mallowan, M. (1987) *Memories of Max Mallowan*, Baghdad.
- Ristvet, L. (2005) *Settlement economy and society in the Tell Leilan region, Syria*, PHD candidate in Assyriology near east archaeology, University of Cambridge.
- Sanchez, C. (2011) *Vallée du Khabour quartiers d'habitation et premiers moments de l'urbanisme en Mésopotamie du nord*, Vol. I, Madrid.
- Schwartz, G. (1994) Before Ebla, Models of Pre-State Political organization in Syria and Northern Mesopotamia in Chiefdoms and early states in the Near East the or-

- ganizational dynamics of complexity, *Monographs in World Archaeology*, Vol.18, 153-74.
- Weiss, H. (1991) Archaeology in Syria, *American Journal of Archaeology*, Vol. 95, no.4, 683-740.
- Weiss, H. (1994) Archaeology in Syria, *American Journal of Archaeology*, Vol. 98, no.1, 101-158.
- Wilkinson, T. and Tucker.D.J. (1995) Settlement development in the north Jazireh, *Iraq*, Vol. XXI, 95-115.
- Wilkinson, T. (2004) Settlement and land use at Tell Es-sweyhat in the upper Lake Assad area, *Syria*, Vol. 110, 87-110.