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Field Report

Sixteen Years of Archaeological Investigations in the Euphrates Valley and the Djezireh: Tell Halula, Tell Amarna, and Chagar Bazar

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In 1991, a new line of investigation concerning the study of the first agricultural societies in northern Syria was begun by the Autonomous University of Barcelona (UAB). After working in the Syrian arid steppic region (El Kowm –Palmyra area) during the 1980s, our main objectives were to investigate the process of Neolithisation in the more arboreal steppic region. The excavations at Tell Halula (middle Euphrates Valley), carried out within the framework of the rescue archaeological works of the cultural heritage threatened by the con-

struction of the Tishrin Dam (Euphrates Valley), have allowed us to develop different research projects that mix both the archaeological excavations and the analysis and historical interpretation of the site from the archaeological remains. Later, we expanded our archaeological works to other sites from northern Syria including Tell Amarna (Euphrates Valley), from 1996 to 1998, and Chagar Bazar (Djezireh), from 1999 to present, both of them in the framework of our cooperation between the UAB and the University of Liège (Prof. O. Tunçca).

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The PPNB Period – Tell Halula

Concerning the scientific research carried out and the results obtained so far at a chronological level, we first emphasize the PPNB. For this period the main results come exclusively from the site of Tell Halula (levels 1 to 20, with a chronology from 7,600 to 7,000 calBC), where it has been possible to develop extensive excavation and extensive research in order to make an approach to the historical and archaeological description of the site. Consequently, it has been possible to characterize the prehistoric occupation in terms of the standardization of the houses, with one house close to another and all of them arranged on an east-west axis, with the door on the south and with little paths between them. At the same time, in front of each of the houses there is a large open space where most of the production activities (such as animal butchering, lithic tool manufacturing, cereal drying, etc.) were carried out. Very significantly, during the last few archaeological seasons we also increased our understanding of the domestic buildings. In general, they are houses with a rectangular plan, three or more rooms and with a total area from 30 to 50 m². The construction techniques used (walls made with mudbrick or pisé, stone or mudbrick foundation depending on the surface, lime plastering of the walls, *etc.*) suggest both the homogeneity of the domestic buildings and the skills of the builders. As the excavated areas have been enlarged, we have also corroborated the presence of paintings on some of the floors and on some of the walls of the houses that combine geometric and more schematic but figurative motifs (Fig. 1).

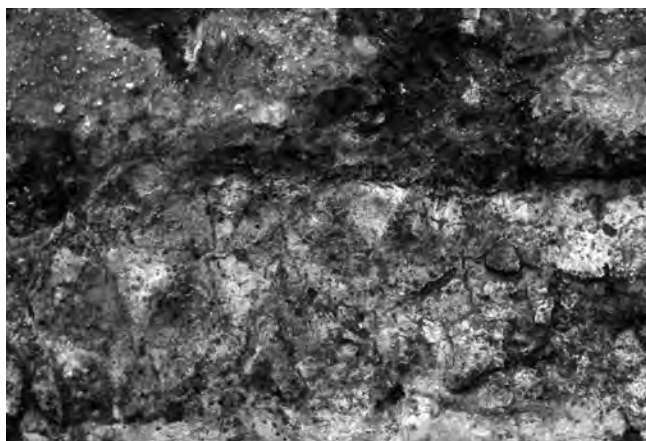


Fig. 1 Detailed view of geometric motifs of the paintings documented on the southern wall of a PPNB house at Tell Halula.

In the last few years at Tell Halula, we have made an important effort to excavate and to study the mortuary practices, and we have now documented more than 130 burials belonging to the PPNB period, which reflect an unchanging mortuary ritual that connects the living space with the space of the dead. Most of the graves are indi-

vidual and primary burials, and all of them are located inside the houses. The current excavation has shown us how the treatment of the dead is equal among all the houses, and that both the mortuary practices and ritual are very homogeneous: The burials are pits directly under the floors of the main room of the houses, where the skeleton is in a flexed position and wrapped in a kind of mat; we have documented in some of the burial pits the linen textile that was used (Fig.2). More than 50% of the burials have grave goods; their composition is variable, including lithic and bone tools or personal ornaments depending on age, sex, or specific houses. The forthcoming definitive study of the burial practices, will allow us to make an approach not only to the population characteristics, but also to the social organization of the inhabitants of the site. Concerning the population at Halula, we have made important progress on the anthropological study, including some DNA analyses and, finally, we have carried out an analysis in the framework of a more general paleodemographic study in the whole of the Levant.



Fig. 2 View of one of the PPNB burials from Tell Halula, showing the burial pit and the skeleton within it in a seated and flexed position.

One of the most investigated subjects regarding the first agricultural societies in Near East is the economic practices and the subsistence. The continuity in the paleobotanical analysis suggests the existence of well established domestic agriculture at the site, where the most exploited species are cereals and pulses from the earli-

est occupation phases. The incorporation and development of stable isotope analysis has allowed us to know the environmental and productive conditions of the crops. Additionally, the study of the animal resource management has helped us to know and to understand the animal domestication process all along the continuous stratigraphic sequence on the site.

The Late Neolithic or Pre-Halaf and the Halaf Periods – Tell Halula, Chagar Bazar, and Tell Amarna

The second main goal of our archaeological and analytical works is the period of the so-called ceramic Neolithic, including both the “Late Neolithic” or Pre-Halaf period, and the Halaf period, with a chronology from the 7th to the 6th millennia. In this case, the information comes from three sites where we have developed our archaeological research: Tell Halula, with a continuous chronological sequence from the first pottery production to the Late Halaf (levels 20 to 36, from 7000 to 5500 calBC); the prehistoric levels from Chagar Bazar, in eastern Syria, with more than 9 meters of stratigraphic sequence and more than 15 archaeological levels from the Proto-Halaf period to the Late Halaf; and, finally, the site of Tell Amarna, in the Euphrates Valley, where our archaeological work allowed us to document the remains of a settlement belonging to the Middle Halaf period.

The main results obtained in relation to these periods so far contribute significant insights. The intrasite spatial organization at Halula differs from the one defined for the Pre-Pottery periods: during the Pottery Neolithic we can observe evidence of large open areas where most of the domestic structures (mainly cooking and storage structures) are found, while houses are dispersed and spread all over these areas. Although some of the houses continue to be rectangular and pluricellular, some buildings with circular plan, traditionally so-called *tholoi*, are found and used as domestic spaces. One of the innovations of the site has been the discovery of this kind of building, normally associated with the Halaf period, in one of the earliest levels of the Pre-Halaf period (Fig. 3).

Another of the subjects intensively investigated are the technological differences between the Late PPNB and the earliest levels of the “Late Neolithic”. The findings at Tell Halula have allowed us to recognize a very different lithic raw material management between them, with important changes ranging from the raw material supply to the knapping system and the tools manufacturing techniques. But the most important technological innovation during these periods is the appearance of pottery. The excavation of Tell Halula has shown us the progressive technological stages of the first pottery production, and the analysis currently being carried out suggests that most of the ceramics are produced at the

same site, although some of them are the result of foreign production. The archaeological and paleobotanical analyses show the consolidation of the new economic practices during the Pre-Halaf period. Currently, the emphasis on the paleoeconomic studies is focused on the establishment of the vegetal and animal resources management. Concerning the animal resources, we are working on the application of the stable isotope methodology in the analysis of the faunal remains from Tell Halula in order to make an approach to such topics as animal nourishment, seasonal movements, *etc.*



Fig. 3 General view of Tell Halula, showing the coexistence of houses with both rectangular and circular plan (*tholoi*) belonging to the Pre-Halaf period.

Our efforts for the Halaf period have been very significant too, especially because we have excavated, as mentioned above, three different sites that give us a wider spatial view to our research. These excavations have allowed us to document different and successive occupation phases and their chronological and stratigraphic correlations, both within each of the sites and among all of them regarding morphological and typological features of the archaeological record and, basically, of pottery.

At a historical level, we would like to underscore the findings and studies carried out concerning two different significant stages for this period. On one hand, the origins and development of the Halaf pottery manufacture clearly show the progressive transition to the high quality and decorated standard production that characterize the Halaf pottery. This brief period, the so-called “Proto-Halaf”, has been archaeologically documented both in the middle valley of the Euphrates (Tell Halula) and in the Djezireh (Chagar Bazar), so, it would be a good indicator of a larger geographical area in relation to the one previously defined as the area where the Halaf culture began. Moreover, the origins of this culture are reaffirmed as an evolutionary process within the Late Neolithic communities from north-eastern Syria themselves, with some external contributions as a result of exchange and contact with other more Mesopotamian communities.

On the other hand, we are also presently working on the Late Halaf period, a period, in general quite unknown and poorly defined archaeologically. For this analysis, the information and findings in process of study and excavation in Chagar Bazar are exceptional: the stratigraphic sequence defined from more than 15 occupation levels has allowed us to make an approach to the architecture and, more importantly, to the analysis of the artifactual record from this period, and this represents a unique documentation for the northern area of Syria.

In fact, for the study of the Halaf period, we have paid attention in the definition of some pottery production, only poorly known in this area, from a more interdisciplinary analytical perspective, including raw material, technology, morphology and use. This methodological aspect of our work can be applied not only to this kind of more “classic” record, as pottery, but also to others such as the lithic industry, paleobotanical and faunal remains, grave goods, and others in order to know the economic, social and cultural aspects of this “classic cultural human group” belonging to the historical period characterized by the full consolidation of agriculture and animal husbandry.

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Field Report

Aruchlo: A Neolithic Settlement Mound in the Caucasus

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Introduction

The process of dissemination of the agricultural form of economy can be followed relatively clearly onwards from the seventh millennium BC in its spread westwards from core areas in the Fertile Crescent. By contrast, modern research in areas to the north and east of the Fertile Crescent is lacking. As a result, this vast geographic area which includes the Caucasus as well as Central Asia is often omitted in distribution maps. Thus, even more scientific research must be carried out, particularly in these regions, in order to attain a comparative perspective, and in this respect the excavations in Aruchlo should be seen as a part of this endeavour.

State of Research

In the south of the Republic of Georgia a specific group of settlement mounds situated along the Chrami River is representative of an agricultural subsistence economy that was practised during the sixth millennium BC (Lordkipanidze 1991: 29f.; Dsaparidze 2003: 272ff.). In the west of Georgia there seems to be an older phase of the Neolithic, but thus far evidence of the earliest Neolithic has been found only in the south in Kvemo-

Kartli, with the settlements Šulaveris-Gora, Imiris-Gora, Chramis Didi-Gora and Aruchlo (Masson and Merpert 1982: 100ff.). These and other settlements in Azerbaijan, for example Šomutepe and Toirtepe, can be joined together under the designation “Šulaveri-Šomutepe-Group”. An authoritative source on the state of research there is supplied by the monograph of T. Kiguradze (1986).

As of the 1960s and onwards excavations were conducted in several settlement sites in the south and west of Georgia. According to the results, relatively small circular structures built of mudbrick are typical; rectangular structures were seldom found. The small structures stood unusually close together, and the walls often overlapped. Apparently an internal division of the structures has not been observed so far. Structures in the settlement of Šulaveris-Gora could be ordered into three groups, as follows: the largest buildings with a diameter of 2.5-5 m, medium-sized buildings with a diameter of 1.25-2 m, and small ones measuring less than one meter in diameter. The small structures have been interpreted as a means for water storage, the middle-sized ones as buildings for working activities, and the large buildings as dwellings (Kiguradze 1986: 14). In comparison, circular structures disclosed in Aruchlo measure between 1.80 and 4.60 meters in diameter (Chelidze/Gogelia 2004: 46).