

Mediterranean Archaeology and Archaeometry, Vol. 3, No 2, pp. 73-79 Copyright © 2003 MAA Printed in Greece. All rights reserved

# THE MAN AND THE LAKE: LIVING IN THE NEOLITHIC LAKESIDE SETTLEMENT OF DISPILIO, KASTORIA, GREECE

**KOSMAS TOULOUMIS** 

Agiou Dimitriou 150, 546 35 Thessaloniki, Greece e-mail: ktoul@otenet.gr

ANASTASIA HOURMOUZIADI

lviskou 12, 543 51 Thessaloniki, Greece e-mail: nassiah@otenet.gr

Received: 11-10-2002 Accepted: 20-4-2003

# ABSTRACT

The relation between man and water is well established in prehistoric Balkans, as the marshy wetlands of the lakes constituted an advantageous environment for human settlements. In 1992 the University of Thessaloniki, under the direction of Professor G. Hourmouziadis, began systematic excavations in the lakeside Neolithic settlement located at the bank of Kastoria's lake.

This paper is an attempt to approach the Neolithic life way in this particular ecosystem. The site was inhabited from the Middle Neolithic until the Hellenistic era. The scientific study is determined by the abundance of the wooden piles and other wooden elements themselves, as the taphonomic conditions favour their preservation.

The Neolithic man in Dispilio seems to be primary a farmer and, especially, a stockbreeder. Fish bones and fishing tools are not lacking, especially in the later Neolithic, but they do not necessarily reflect a community of specialized fishermen.

Contacts with other settlements are suggested from archaeological and geological investigations in the direct and indirect vicinity.

The finds represent a dynamic society that managed to live in an imponderable, due to the wetland ecosystem. Dispilio, therefore, is a good example against approaches that regard Neolithic man as an 'occasional' human being who has lived under the fear of his environment and its seasonal variations and shortages.

KEYWORDS: dynamic society, economy, ideology, pile dwellings, wooden posts

#### INTRODUCTION.

The lake is Orestis, next to the modern Greek city of Kastoria, in North- western Macedonia. The man settled the place 7500 years ago. In 1992 a team from the Aristotle University of Thessaloniki, under the direction of Professor G. Hourmouziadis, "settled" again next to the lake and started excavating the traces the Neolithic inhabitants left in place and time (Hourmouziadis 2002).



Fig 1: Excavating the Neolithic lake side settlement of Dispilio.

The above study is concentrated on the question whether the choice to settle in direct and crucial vicinity to the lake reflects the fully elaborated decision to exploit a certain environmental system. Thus, the research aims neither to the collection of primitive works of art, nor to the recording of morphological and constructional peculiarities. On the contrary, the main strategy focuses on the ways in which the Neolithic «lake-man» responded to the challenges this decision resulted. In other words, the archaeological team tries to determine how a typical Neolithic community came into catalytic contact with the lake and, without production specialisation, dealt successfully with these challenges, collectively invented techniques, skillfully combined a Limited number of raw materials, and finally planned and constructed a multiform and multifunctional space.

# THE EXCAVATION AND THE STRATIGRAPHY

During the last eleven years archaeological elements have been located throughout an area of approximately 40 acres, on a former island now completely unified with the main land. The excavational area consists of a concrete block of 30 trenches that cover an area of 750m2 and most of them have reached a depth of approximately 2m under soil surface. During the last five years, a new group of another 10 trenches covering an area of another 200m2 are being excavated, but they have reached only the upper archaeological levels. In addition, by several trial trenches we try to determine, the spatial limits of the main excavation features. Finally on the northern part of the site a quite posterior, extended stone construction (a palisade?) is excavated, during the last three years. This construction is dated in Early Iron Age.

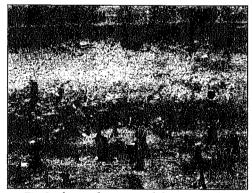


Fig. 2: The wooden posts and the stratigraphy

The Neolithic excavational data led us to the distinction of three main successive phases, as far as the constructional methods are concerned. The latest one consists of structures, which combine piles and mud bricks on a rather solid surface, conclusion supported by the appearance of postholes, diverse clay floors, storage bins and foodpreparing constructions founded. Usually the posts are shallow but well supported by clay or stones. The second phase is characterised by numerous deep founded piles and the rarity of horizontal elements, facts that refer to platforms on a muddy, wet soil. Finally the third (earliest) phase has the main characteristics of the second one in addition to the appearance of wooden horizontal elements and steadier constructions, founded in the earth (Schlichtherle & Wahlster, 1986, Petrequin, 1984).

These phases are dated (according to the chronological frame of the Aegean region and the Balkan Peninsula) from the final stages of the Middle Neolithic (5500 - 5000 BC) up to the Final Neolithic (3000 BC). This conclusion comes from the study of the finds and is verified by the dating obtained by the wood samples, posts and waterlogged wooden elements, measured in <sup>14</sup>C Laboratory of Dimokritos (Athens) and cross-checked in the <sup>14</sup>C Laboratory of Heidelberg University.

The main problem while interpreting the stratigraphy of a lakeside settlement) organised on more or less elevated platforms, lies on the fact that the successive construction phases and even the successive cultural ones, do not provide clearly separated horizontal stratigrafical zones. This, first of all, is the

result of the two levels of spatial use during each life period of the settlement: on to the platform and on the soil surface level, that is under the platform of in the open unconstructed space. This "osmosis" of the human deposits in a lake side settlement is also the result of the intense post-depositional behaviour due to the water movement. Furthermore, each post extend to more than one successive stratigraphical zones, that is, apart form the zone of the constructional phase in which it belongs, penetrates into the few preceding ones.

Scanning horizontally the excavated area it is obvious that the posts are not uniformly distributed. We find areas with few posts or no posts at all. These areas apparently correspond to areas with weak constructional activity. This differentiation leads us to conclusions regarding the close and open spaces. But since we have to do with settlements organised on platforms we must always have in mind that even part of the open space has a fully constructed floor. Consequently, in such a settlement the lack of clear boundaries as it is the case of terrestrial settlements, makes it harder to distinguish the "inside" from the "outside".

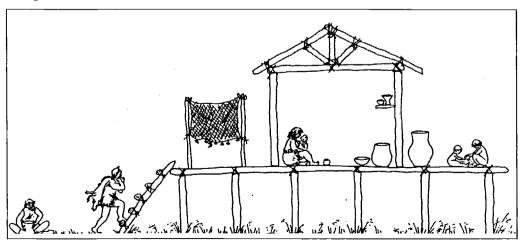


Fig 3: The peculiarity of a neolithic house constructed on a platform, leads to complicated excavational impression, which makes it difficult to distinguish the 'inside' and the 'outside' space.

#### WHY THE LAKE SETTLEMENT?

In prehistoric Macedonia the settlements in the marshy wetlands were a rather usual phenomenon, taking into consideration the abundant lakes of the era (Sivignon 1982). We should therefore seek the reasons for such lake settlements between the geographic "fate" and conscious choice, in an amazing conspiracy of geography and history (Braudel 1985).

The Neolithic community could exploit multiple assets that the lake the microenvironment offered. Apart from hunting and fishing, the wetlands favored the cultivation of small "gardens" among the houses, which was the case in Dispilio, according to the paleobotanological and palynological studies (Hourmouziadis, 2002). The same bushy lands, partly covered by shallow water are, even today, used for stockbreeding. In addition, communication and transportation of people and goods was immensely facilitated, as crossing the lake by boat would be far more quick and easy than walking round the lakeshore. Finally, the lake water could provide, if ever needed, a natural barrier that protected the community from the hostile wild animals that lived in the neighboring dense forests. These oak and pine as the anthracological and palynological studies of the site has indicated - forests would be partly cleared by the community in order to "produce" land for cultivation, while the timber was used as the primary building material.

#### LIVING BY THE LAKE

The definition of a lakeside settlement with the terms of an ecosystem leads to a multidimensional approach of its specific archaeological characteristics. Therefore, the term 'lake side" does not correspond to a spatial attribute - i.e. the vicinity to the lake – but refers to the adaptation to and the exploitation of a given natural environment. The habitation needs of Dispilio settlers were

not supported by a unique architectural solution, but regarding the conditions varied from huts on high platforms in the lake, pile dwellings on the solid soil of the shore, to constructions founded on the muddy coastal zone temporarily covered by the water of the lake.

An elaboration of archaeological data strictly limited to the structural elements, cannot lead to a "secure" interpretation of the organization of space in a Neolithic lakeside settlement. The spatial distribution of all other kinds of archaeological material should be taken into consideration, as well, in order to approach space as an essential aspect of a "water" culture.

The study of the structural elements in the case of Dispilio excavation focuses on the hundreds of well-preserved wooden posts and the numerous clay fragments with imprints of organic building material. The information derived from the morphological features, the composition of the raw materials, the signs of treatment and usage underpin the construction practices. On the other hand the spatial distribution of the main structural elements contributes to the clarification of the use of space in the settlement.

Pursuing, among the numerous finds, the elements that constitute the specific character of the settlement's economic identity, we established the critical role of agriculture and stockbreeding upon the great number of sickle flint blades, the stone, bone and antler digging tools, the numerous animal bones, few millstones etc. The specialised archaeological and geological study has correlated the stone tools with the different human activities and has located most of the raw material sources in the wider area (Hourmouziadis 2002).

On the other hand, the relevant research project, carried out by paleobotanologists, has already ascertained the cultivation of two kinds of wheat (einkorn and emmer), and at a smaller scale of barley, lentils etc based on the

extended presence of carbonised seeds. Furthermore, the storage pits and clay constructions, as well as the pithoi found in the excavation, not only support the previous remarks, but they also indicate the existence of a limited surplus as well, a fact that corresponds to a well managed agricultural production.

The important role of stockbreeding is also implied by the presence of the impressive clay. Goat head, and the zoomorphic figurines found in the lower strata. In the upper phase of the Neolithic two animal clay figurines depicting the transportation of huge liquid vessels indicates the multiple productive uses of the homebred animals in the later Neolithic.

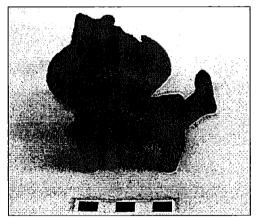


Fig 4: Clay figurine depicting an animal carrying a huge vessel.

Regardless the direct contact of the settlement with the lake, our finds showed that fishing was a non spesialised, complementary productive activity, though permanent and definitely not incidental. This remark is supported by the large quantity of fish bones and is reinforced by the variety of high quality fishing equipment (hooks, spears, fishing weights etc), which, moreover, alter throughout the settlement's lifetime. Thus, in the upper strata we find mostly stone net- and clay fishing weights and flint spears,

while in the lower strata abound the bone hooks and the spears. This fact Indicates a successfully carried out fishing plan, mainly targeted to the larger species in the lower strata, whereas covering a wider spectrum of techniques and species in the upper strata.

Finally, based on the presence of artifacts made of Spondylus Gaederopus and sea shell ornaments and taking into consideration some pottery characteristics and raw materials that are not until now identified as local, we can assume that Neolithic Dispilio had developed exchange relations with neighbouring and remote communities all over the Balkan Peninsula and the Aegean region.

These neighbouring relations, at intra-site

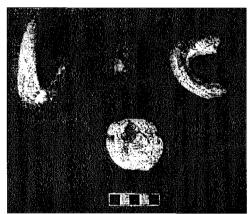


Fig 5: Objects and ornaments made of Spondylus Gaederopus.

and inter-site level, can be regarded either friendly or competitive (Halstead 1999) and they potentially constitute an exchange network in the frame of a wider unified social area (Kotsakis 1996).

## A DYNAMIC SOCIETY

Since the Neolithic settlers of Dispilio have successfully solved their survival problems, it is not astonishing that numerous nonfunctional elements and artifacts were found, corresponding to the level of the ideological development. In this frame, the presence of decorated vessels, with inscised, painted and plastic motives or with the depiction of human faces on their clay surface, is quite informative. Special attention should be paid at the numerous boat-shaped vessels revealed in the excavation so far. Apart from their obvious functional role, their special features are quite informative about the Neolithic shipbuilding techniques.

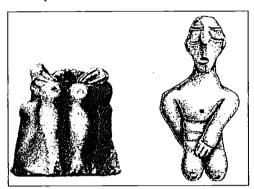


Fig 6: Clay figurines from Dispilio.

Furthermore, the small number of figurines found until now shows an impressive typological variety. Among them a realistic representation of a cripple and deformed male, an oversized naturalistic figurine of a seated female, whose characteristics remind the relevant finds from Middle East, and a schematised goat head that was probably a kind of architectural decoration can be distinguished. Reference must be made to the

numerous micrographic vessels and the stone, bone or seashell jewellery. Finally, special attention should be paid to the three bone flutes found at Dispilio, and the early, maybe the earliest in South-eastern Europe, communication efforts with inscriptions organised on a wooden tablet (dated by calibrated <sup>14</sup>C at 5260 BC) and other clay ones.

#### CONCLUSION

The preceding brief description reflects the main aspects of our reading of the past. Definitely there are many others, depending on who is the "reader", that is his/her relation with the "raw" archaeological material and what are his/her worldview and intentions. We can evaluate, enrich or modify "our" theory in the field of the archaeological discussion, we "show" our materialised beliefs in museum cases, though we hardly have the opportunity to exchange ideas with the wider public. Nevertheless, we will never be able to fully understand the Neolithic perception of the world. We can only carefully follow its traces, which indicate that the life in the Neolithic community was definitely not characterised by inertia and indolence. We have to do with a dynamic society that interacts with nature and succeeds to survive, in spite of the multiple non-predictable factors originating from the wet environment, and manages to transform the practical knowledge into an integrated worldview.

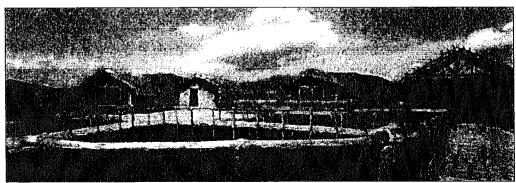


Fig 7: The reconstruction of Dispilio lake side settlement.

## REFERENCES

- Braudel M., (1985) La Mediterrannee L'espace et l'histoire, Flammarion.
- Halstead, P. (1999) Neighbors from Hell? The Household in Neolithic Greece. In Halstead, P (ed.) *Neolithic Society in Greece*. Sheffield Studies in Aegean Archaeology 2 Sheffield Academic Press.
- Hourmouziadis, G. (ed), (2002) Dispilio 7500 chronia meta (*Dispilio*, 7500 years after), University Studio Press, Thessaloniki
- Kotsakis, K. (1996) Exchange and Relations. In Papathanasopoulos, G. (ed.) *Neolithic Civilization in Greece*. Goulandris Foundation. Athens.
- Petrequin, P., (1984) Gens de l'Eau, Gens de la terre. Ethnoarcheologie des Communautes lacustres, Hachette, Paris
- Schlichtherle N. & Wahlster B. (1986). *Archaeologie in Seen und Mooren*. Den Pfahlbauten auf der Spur, Theiss Verlag, Stuttgart.
- Sivignon M., (1982) I geographiki eikona tis Makedonias (The geographic image of Macedonia). In *Makedonia*, Ekdotiki Athinon, Athens. (In Greek).