STUDYING HABITATS AND DYNAMICAL INTERACTION IN NEOLITHIC EUROPE THROUGH THE MATERIAL CULTURE OF PILE DWELLINGS

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Abstract:
The Early Neolithic in Europe is one of the most dynamic and significant periods of prehistory. However, there are still many questions waiting to be answered. Pile dwellings can shed light on this case as these sites and their material have been preserved exceptionally well due to the humid conditions of their location. Besides from this global aim they also offer the possibility of comparing several settlements extensively, including data such as architecture, tools and diet as well as more traditional ceramic remains. This article proposes a line of investigation in which several Case Studies from different areas (the Alps, Northern Spain and Central Italy) are studied. These Case Studies consist of a specific area, including a lakeside settlement that forms the basis, and nearby contemporaneous sites. The areas are assessed based on the found archaeological record and in terms of their social organization and connections. Secondly, the dynamic relations between said areas are addressed in order to study connectivity and contact in Early Neolithic Europe. Above all this study promotes a different way of investigating, abandoning the single-site perspective, no longer looking exclusively for differences but adopting a slightly different vision and linking different sites and places.

Keywords: Early Neolithic, Pile dwellings, Habitats, Interaction

1. INTRODUCTION
Over 150 years ago Swiss lake levels dropped during a cold and dry winter, revealing the wooden remains of prehistoric settlements for the first time in thousands of years. What followed was a true “lakedwelling fever”, when anyone with a shovel and steady boots claimed their own piece of heritage (Menotti 2004). Ferdinand Keller then inaugurated an era of research dedicated to pile dwellings with his Pfahlbauberichte (KELLER & HEIERLI 1854). Other surrounding countries were also pushed by this sudden impulse in lake dwelling research from Switzerland, and previously ignored materials were reconsidered. As a result, also Germany, Austria, France, Italy and Slovenia were affected by the lake dwelling fever. The romantic idea Keller had created of small wooden villages in the middle of the lake was perceived with enthusiasm. First of all, people were charmed by the idea of their ancestors living a simple life on the lake, surrounded by nature. Also, the bigger public was charmed by the fact that they could not only imagine this “piledwelling lifestyle” but they could even reach out for it easily by dredging up material from the mud (SCHLICHTERLE 1997). Instead of specialized archaeologists it was mainly antiquarians who looked for artefacts at the lake settlement sites (Menotti 2004). Due to this massive plundering of the lakes authorities in several countries, such as Germany, forbade the search for materials and big scale research. This lead to a standstill in the investigation of this topic, until it was picked up
again by several researchers (Reinert 1932; Paret 1942; Vogt 1955; Schlightherle 1997; Petrequin et al. 1998, 2002).

It is interesting to remark that, apart from having an interesting research history, lake dwellings have also been used for political purposes. Archaeology is known to have been used for specific goals and justifications throughout history, which makes it a multi-faceted study. We are not only studying the past, but also the way this past was shaped and applied to different topics historically. To name a related example, Swiss authorities used the pile dwellings as an example of a common ancestor for "the Swiss" when the Swiss cantons were merged in 1848 (Menotti 2004). By creating this common ancestor and common history it was easier to defend the artificial joining of the cantons as a historically justified fact. This use of lake dwellings as Swiss propaganda could still be perceived in research on the topic for a long time, as a certain idea of Pfahlbaukultur had been adopted. These kinds of topics need to be taken into consideration to understand not only the research subject but also the origin of certain tendencies and assumptions.

Nowadays, the research history of pile dwelling has been studied extensively. Although there is still much to be done current research is contributing a lot as the topic is being assessed from a more interdisciplinary point of view and scientific methods are being used. The most recent works concerning pile dwellings are published by Francesco Menotti (Menotti 2004; Menotti & O'Sullivan 2013). The topic also gained popularity when in 2011 the Alpine pile dwellings became recognised as World Heritage by UNESCO. Having woken the interest of researchers as early as the 1850s means that a long tradition of theories and ideas, that we might now regard as archaic or even farfetched, preceded current research. Available literature can be insufficient as the levels of research and investigation are often unequal. We are still in need of new research perspectives, and above all broader research perspectives, unlimited by modern boundaries and language differences. The lakeside settlement research has been extended beyond the Alpine area as evidences of pile dwellings have also been found in Southern Europe, in Northern Spain, Central Italy and Greece.

Nowadays lakeside settlements are integrated in the general archaeological record, they are no longer set aside as they were before. Nonetheless, they could still contribute more to current research. This settlement type is no more than that, another kind of settlement adapted to a specific environment (Menotti & O'Sullivan 2013). Their architecture indicates highly organised societies and the extraordinary preservation qualities provide valuable information regarding the first farmers' diet and lifestyle. This information has been lost at many other surrounding sites that have not been preserved in similarly favourable conditions. However, in the light of mentioned recent research tendencies and publications it may be possible to suggest a stronger link between contemporaneous settlements, giving way to a more extended and detailed investigation of Early Neolithic life in specific areas. Apart from proposing a closer look at this, the present article also aims to address connections between different areas, analyzing the interaction between the people north of the Alps with their southern contemporaries. This might shed light on the dynamics of the Early Neolithic, dealing with sensitive topics such as colonisation and transition. This article, at this point a general proposal for further research, addresses the outlines of this research project, stating the objectives, methodology and preliminary data.

2. OBJECTIVES

The main objective of this project is to gain more and more specific knowledge regarding the dynamic interaction and connectivity in the European Early Neolithic. Hereby I am specifically referring to trade and contact between people from the Alps and people from the Mediterranean area. These regions have been chosen as they present a series of favourable conditions making them good Case Studies, as will be discussed further in the part regarding methodology. On the other hand, focusing on the North of Europe, the Alps, and the South of Europe, the Mediterranean, also permits us to approach the topic of Neolithisation. Although I do not pretend to contribute information to this area, the fact that it has been studied thoroughly and from many different perspectives assures that there is very interesting literature available on archaeological topics from this period.

However, this general aim concerning contact and interaction in the light of the Early Neolithic and processes of neolithisation is preceded by a series of smaller objectives that need to be reached in order to assess the bigger picture. This project starts with the selection of several Case Studies, consisting of a lakeside settlement and several contemporaneous sites surrounding it. The sites as well as the environment are taken into account and are studied so that the internal dynamics of separate areas can be evaluated. These internal dynamics are understood as the set of several sub-topics such as social organization, burial rites, etc. The reason why it is useful to specifically base the study of Case Studies on lakeside dwellings and other nearby settlements is because these sites differ in their preservation of material. This is a great advantage as we can use different materials found at the sites and complement the information.

In order to reach firmer conclusions
regarding not only the relation between different sites in an area, but also to gain knowledge about the Neolithic it is necessary to abandon the current single-site perspective. It is no longer sufficient to study isolated sites and neglect possible dynamical relations. Apart from that, pile dwellings can no longer be regarded as a special phenomenon but should be included more generally in research. This has been accepted in current research (BOSCH LLORET 1994; HAFNER & SUTER 2003; SCHLICHTHERLE 1997). It is my intention to unify these two statements through a study of lakeside settlements in different parts of Europe and their contemporaneous parallels.

3. METHODOLOGY

As said before, the project is divided in two main parts. First of all the individual case studies are selected and assessed. This project includes no more than three areas as it is still in an early stage of research. Every included area is represented by a case study of a lakeside settlement and several contemporaneous open-air or cave settlements. Parameters such as ceramics, tools, diet and environment will be covered extensively so that the sites can then be compared by area and in general on all possible levels. The choice of the included settlements is based on criteria regarding their preservation, documentation and representativeness. In order to choose the most suitable sites, all known European Neolithic pile dwellings were gathered in a database. The presented case studies were selected based on the quality of previously mentioned parameters and on the quality of previous research and documentation. As the pile dwelling sites provide the most extensive and detailed information they are placed in the position of “main habitats”, providing data on topics such as architecture or social organization apart from more common material such as tools and ceramics (Fig. 1).

![Geographical map indicating some of the settlements of the Case Studies. The Alpine Mesolithic/Early Neolithic Case Study is not indicated.](image-url)

**Fig. 1.** Geographical map indicating some of the settlements of the Case Studies. The Alpine Mesolithic/Early Neolithic Case Study is not indicated.
The other settlements are classified in other categories depending on the present material and remains. Some sites are classified as burial sites, others as secondary sites or storage sites. The areas selected for initial evaluation are, naturally, the Alpine area as this is the best-known and most extensively studied environment, the Northeast of Spain, and Central Italy. These areas are home to both representative pile dwellings and contemporaries. In the second part of the project, after mentioned areas have been assessed individually it is my aim to generate a more global vision of the issue. Taking the specific material culture, chronologies and internal organization of each area into account this information will be linked to one another to assess the contact between “North” and “South” and assess its impact.

4. PREVIOUS RESULTS AND DISCUSSION

Currently the project is in an initial stage, but the results of previous work indicate that there will be much to be said regarding the topic. In previous work, leading to the shaping and specifying of the current proposal, several sites were studied, to be specific La Draga (BOSCH LLORET et al. 2000, 2011), La Marmotta (DELPINO 1995, DELPINO & MINEO 1999) and the Swiss site of Zürich Kleiner Hafner Grosse Stadt from the Middle Neolithic (HAFNER & SUTER 2003). As the latter site presented a very different chronology from the other sites another Mesolithic/Early Neolithic case study will be added for the Alpine area. The main difficulties that became obvious during the development and research for this topic were the different chronologies. This is why now the settlement of Zürich Kleiner Hafner Grosse Stadt has been joined by a more chronologically adequate settlement which permits us to make better comparisons and provides a stronger case. Also, as a result of this, the topic of research has shifted naturally to the Early Neolithic and the Mesolithic/Early Neolithic transition in the Alps, touching some delicate but fascinating issues.

The initial question of research was whether La Draga was comparable to the Alpine pile dwellings and if it was possible to distinguish certain relations between them. This led to several observations. For example, it soon became clear that the oldest known Alpine pile dwellings are still hundreds of years younger than the La Draga settlement. On the other hand, it is interesting to see for instance that all dwellings use oak for constructive purposes (BOSCH LLORET et al. 2000, 2011; SAKELLARIDIS 1979). Apart from this, the gradually growing presence of ovicaprines in Swiss sites (SCHIPLER 2006) and presence of Mediterranean shells (HAFNER & SUTER 2003) in the Swiss settlements lead to believe that the areas North and South of the Alps were not isolated from one another. Furthermore, the settlement of La Marmotta in specific presents many foreign features such as oriental painted pottery and a supposedly seaworthy canoe (DELPINO & MINEO 1999) (Fig. 2). And perfect domination of agricultural techniques and husbandry have led researchers to believe that contact with people from another area may have played an

![Figure 2. Table depicting different materials found at the pile dwelling sites of three of the Case Studies.](image-url)
Without using external influences as a sole explanation for change there is a case to be made for mutual interaction and influence in some of the Case Studies. Consequently, in La Draga and later in Zürich Kleiner Hafner we see people who, though still connected to their local roots, suffer important changes. This dynamic idea of groups of people who have their own traditions but also try out different techniques, gradually improve attempts of husbandry, have contacts with other people and keep evolving seems an interesting view of the European Neolithic (SCHIBLER 2006). Moreover, pile dwellings could be a standardised phenomenon that adapted itself to agricultural systems based on the flooding of soils as a way of fertilisation. This points to highly developed techniques and an important degree of specialisation. Therefore, pile dwellings form a good indicator in order to analyse the moment of settlement and specialised development of Neolithic lifestyle in Europe.

The current research proposal takes these previous data and considerations into account and parts from there.

The advantage is that the process of trial and error in research has already started and led to a more consistent and thorough project which has been outlined above, including more chronologically compatible sites and contemporaneous settlements in order emphasize the environment and local dynamics.

The expected results are mainly a closer look at the existing and functioning of the separate areas that are now selected as Case Studies in terms of organization, contact in daily life and cultural evidences. The broader topic of Neolithic life in different areas should be assessed, expanding current knowledge by building a bridge between the splendid material remains pile dwelling provide and the information from other settlements (Fig. 3).

Apart from this the joint analysis of different areas could also provide a new vision of the contacts and dynamics between the first farmers, which might be more elaborate than initially thought. By approaching this topic from a selection of different countries new, international lines of investigation are opened that help us to make more global, but not generalized, observations assessing broader topics such as social organization.

![Figure 3. Table depicting different materials found at the pile dwelling site and surrounding sites from the Case Study of Northeastern Spain, Catalonia.](image)

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REFERENCES


