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Social spaces during the Neolithization process in Southwest Asia: a habitat representation from a microstratigraphic approach/ Los espacios sociales durante el proceso de neolitización en el sudeste asiático: una aproximación microestratigráfica a la representación del hábitat. (Working title).

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This ongoing thesis aims to characterize the organization and use of social spaces as well as their evolution contributing to the technological, social, and economic knowledge of human groups through settlement strategies and their management during the Neolithisation process. Specifically, we will analyse social places according to their architectural features from a technological and functional perspective, focusing on occupation surfaces to understand how space was occupied and, moreover, gain insights into social organization and social relations.

The methodology used is based on the principles of geoarchaeology and, more specifically, soil micromorphology (Bullock *et al.* 1985; Courty *et al.* 1989; Stoops 2003; Stoops *et al.* 2010; Nicosia and Stoops 2017). Therefore, we focus on the study of anthropogenic sediment (intra-site scale), that is, the result of a mixture

of biotic and abiotic components derived from human activities as well as natural processes (Schiffer 1972; Butzer 1982; Berger *et al.* 1999; Karkanas and Goldberg 2018). This approach defines the site formation processes since its planning, use and its fossilization.

In this sense, the study follows the reference models established for Neolithic sites in the southwest of Asia previously studied (Wattez and Courty 1996; Matthews *et al.* 1997; Stordeur and Wattez 1998) from which it is possible to carry out a technological, functional and taphonomic analysis of the sedimentary records (Fig. 1). Furthermore, these studies also proved the value and potentials of these types of investigations and the need to continue exploring this field. A particular emphasis will be placed on architecture regarding floor sequences, where a technological study is being made to characterize the different techniques employed and their variability to understand the arrangement of social places and, consequently, the variations and changes of space use. This model follows the patterns established from micromorphological studies in Protohistoric (Cammas 2003; Roux and Cammas 2010) and Neolithic (Wattez 2003, 2009) sediment. They allow us to understand the mechanisms and construction methods used after the preparation of the raw materials for their implementation and degradation.

The study set comprises samples from sites of different geographical regions and chronologies, where the attention focuses on the middle valley of the Euphrates River and, more specifically, the site of Tell

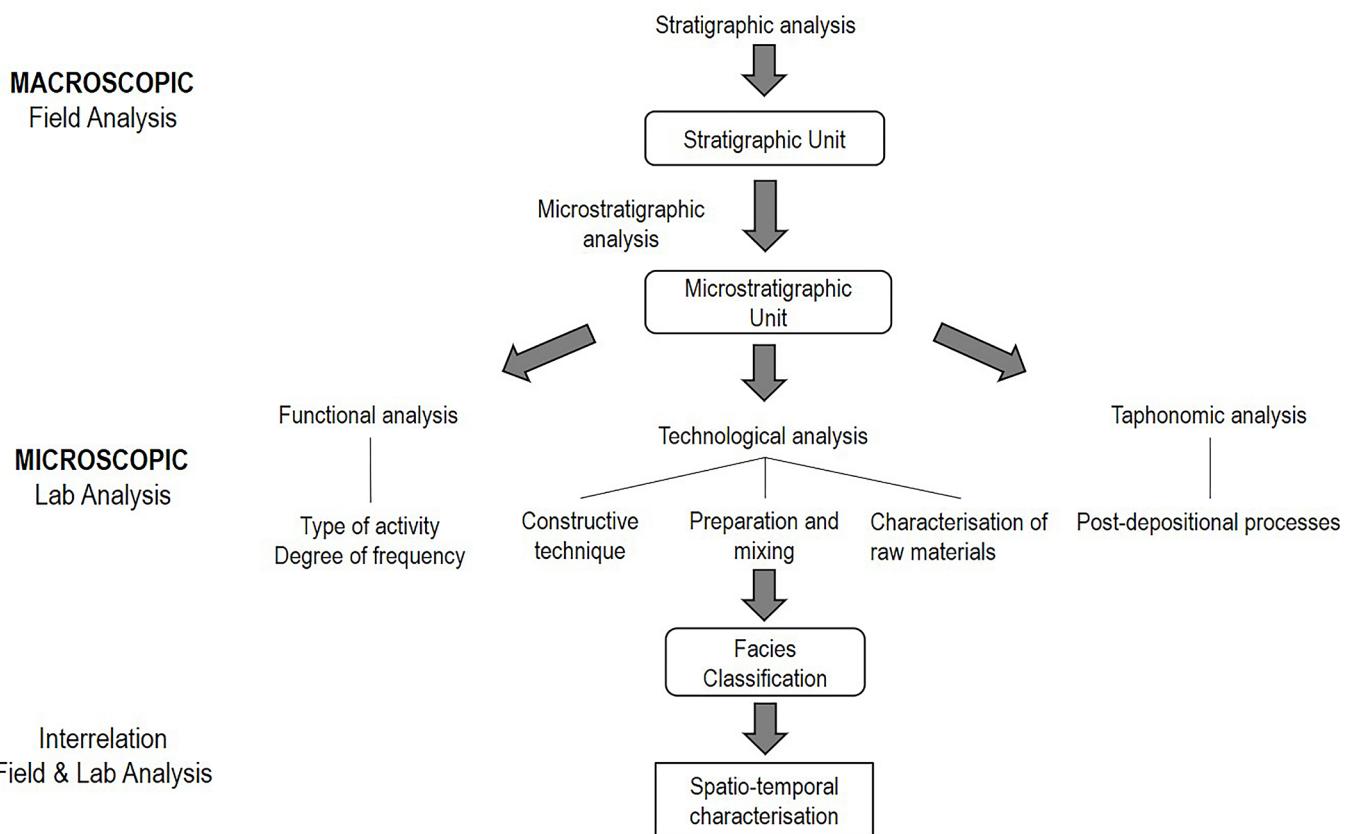


Fig. 1 Summary scheme of the methodological approach. (Graph: Sisa-López de Pablo after Cammas and Wattez 2009)

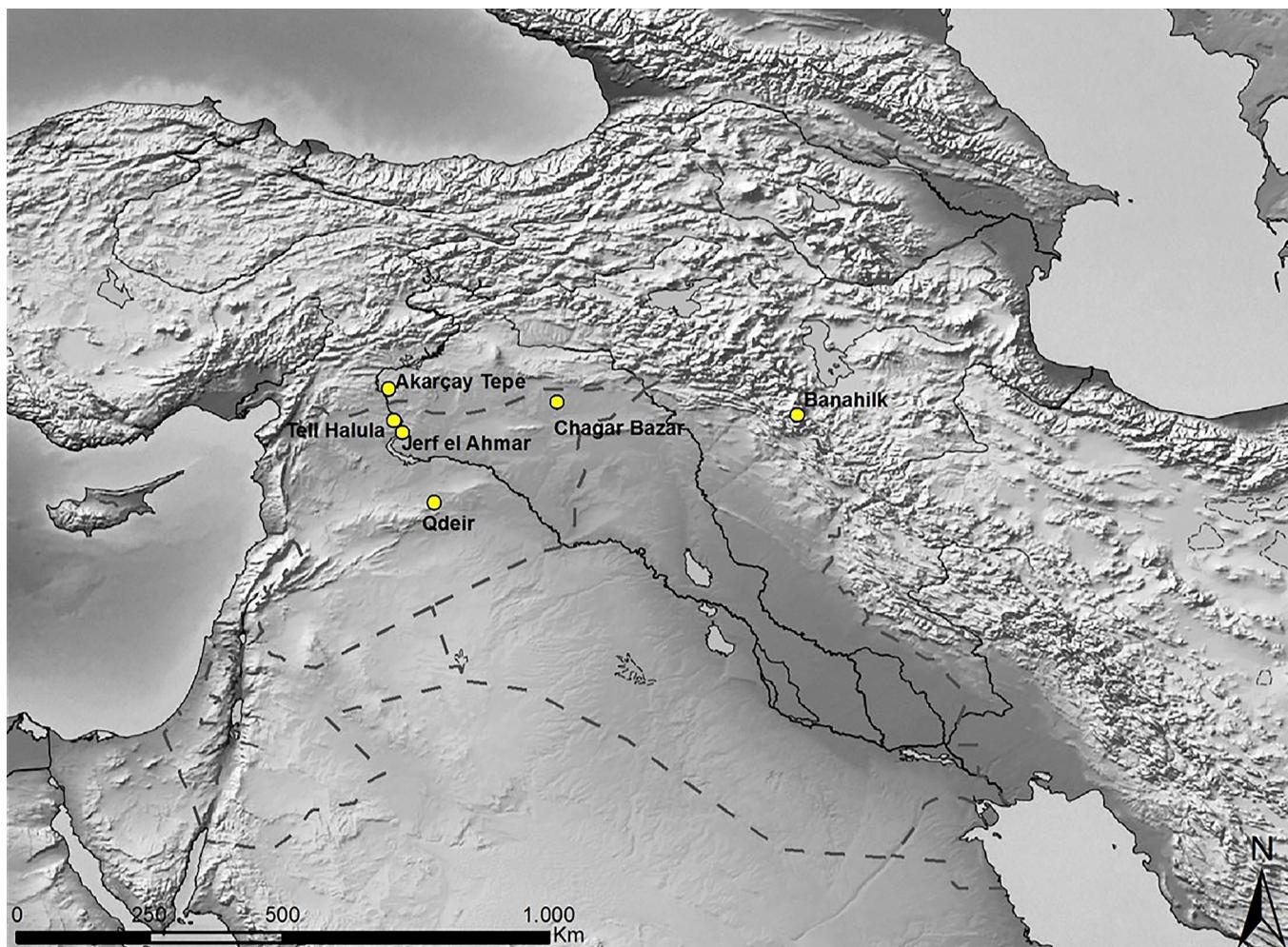


Fig. 2 Location of the sites included in the study. (Map: Sisa-López de Pablo; ArqueoKurd Project)

Halula (middle PPNB - PN). This vision is complemented by the analysis of other archaeological sites such as Jerf el Ahmar, Qdeir, Akarçay Tepe, Chagar Bazar and Gird Banahilk (Fig. 2).¹ Thus, a wide chronological range is covered from the PPNA to the Halaf period, then completing both diachronic and synchronic views of different regions of Southwest Asia (middle valley of the Euphrates River, Jazira, El Kown oasis and Upper Zagros mountains).

It should be noted that this geographical area concerns different environmental settings, although most of the sites are located in alluvial contexts, some of them are more arid than others. This factor has to be taken into account since the used methodology (pedology) allows us to evaluate how these environments were, how they affected the archaeological deposits and which post-depositional processes took place. It is interesting to add that if we know how the soils were in the past, we can make inferences about the suitability of the construction materials (Houben and Guillaud 2001).

Considering the spatial and temporal framework, a differential series of technological and social changes took place which involved the use of new economic and symbolic practices by human groups. Linked to architecture, some of the most significant traditional changes are variations in the planning of the buildings (from circular to rectangular), the use of new construction

materials (lime, plaster), the trend towards greater uniformity, or the emergence of large “community” structures as they require a large investment of labour (Aurenche 1981; Kuijt and Goring-Morris 2002; Banning 2003, 2011; Stordeur 2015; among others). Consequently, the broad scenario could influence the different production techniques and strategies adopted during the transition into the origins of the Neolithic. Therefore, the social space can be modified over time to satisfy new or changing community needs.

In summary, the variability, recurrence, and different strategies adopted concerning the construction techniques and raw materials used in the different regions will be discussed, as well as the spatial organization to identify possible patterns between the duality represented by the interior/ exterior – private/ public spaces. Likewise, we will emphasize the architectural variability between households to see possible differences within the villages.

Preliminary results show a different executions and treatments of occupation surfaces which go beyond the conventional classifications like “beaten earth floors” or “earthen floors” (Fig. 3). They are only observable on a microscopic scale, as well as the maintenance repairs. These reflect a series of distinct technical procedures that, in turn, correspond to an intentional structural organisation.

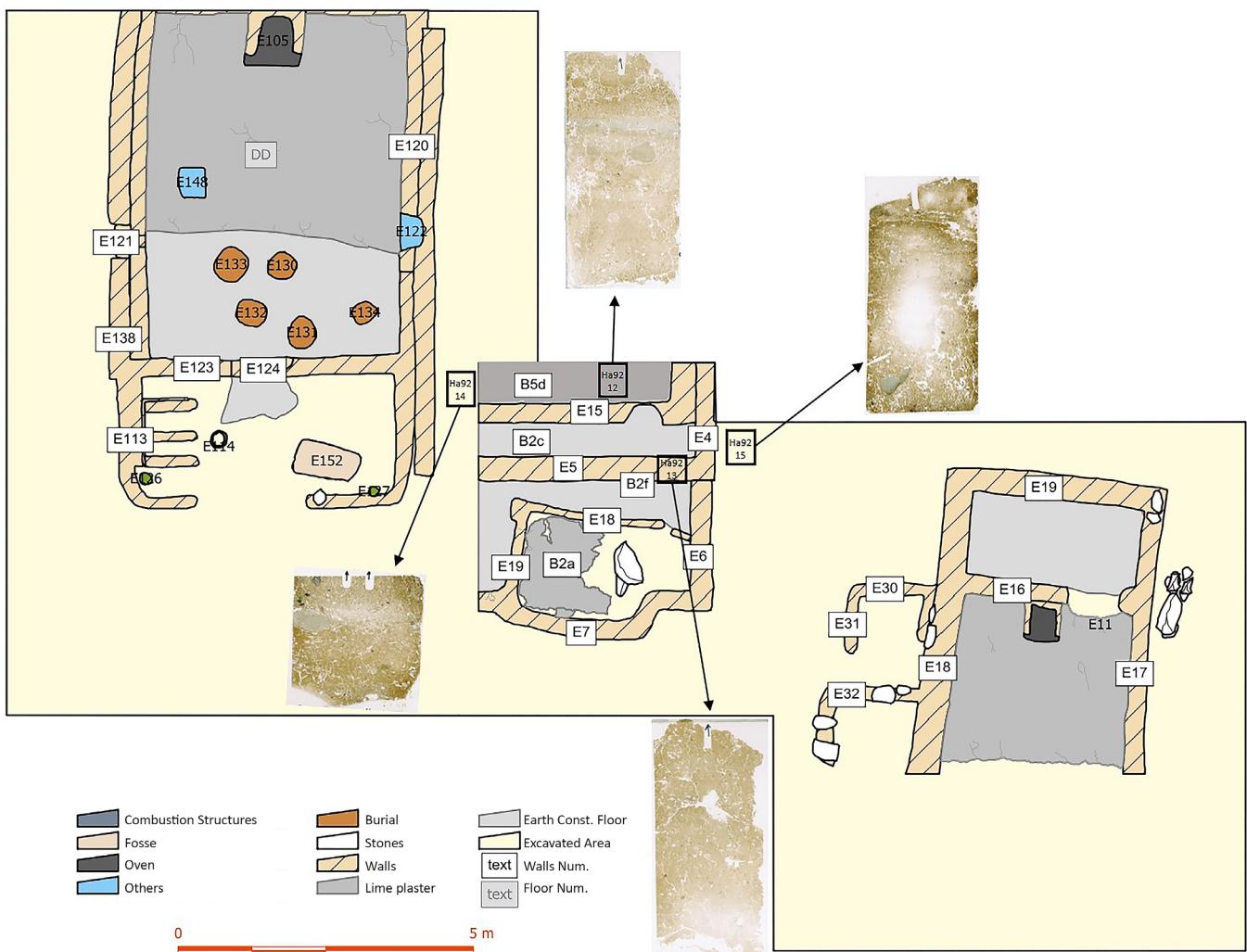


Fig. 3 Example of the detailed sampling in different spaces at Tell Halula, Sector 4C, occupation phase 8 – Middle PPNB. (Drawing/ Photos: Sisa-López de Pablo/SAPPO-GRAMPO; Tell Halula Project)

Finally, we consider that before carrying out a study about social relations we must spatially articulate the different activities. Thus, we must first recognize the global social space and its implications to understand the physical environment in which a given society developed, based on the relations of production and consumption.

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Endnote

¹ We are working on unpublished samples. In the cases of Tell Halula and Qdeir where there is already published data, it is also reviewed.

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