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Broadening

Horizons **5**

Civilizations in Contact

**Proceedings of the 5th “Broadening Horizons” Conference
(Udine 5-8 June 2017)**

VOLUME 1

**From the Prehistory
of Upper Mesopotamia
to the Bronze and Iron Age
Societies of the Levant**

**Edited by
Marco Iamoni**

Verità e Giustizia per Giulio Regeni, ricercatore appassionato

Truth and Justice for Giulio Regeni, passionate researcher





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Preface

With the proceedings of the 5th edition of the “Broadening Horizons” Conference we have the pleasure to open the monograph series of the electronic journal “West & East” to the publication of international congresses and workshops whose topics fall within the main themes covered by the journal (for a presentation see <https://www.openstarts.units.it/handle/10077/10886>). We believe that West & East, although a mere youngster compared to other more renowned and prestigious journals, offers an appropriate (perhaps even ideal!) base for the promotion and diffusion of – in particular, though not only – the work of early career researchers. Thanks to the possibility of publishing with a “Gold Open Access” policy – i.e. immediate access to the articles or other features that can be downloaded from the website of the publisher EUT – and adhesion to the international rules of high quality standards for academic work – double peer review (which for West & East is also blind, i.e. the reviewers do not know who the author is) – we think that West & East is a scholarly journal well qualified to publish work that makes a significant contribution to the advancement of archaeological research in the Mediterranean basin and the Levant/Near East. The three volumes of the “Broadening Horizons” Proceedings undoubtedly belong to this category, and their publication opens the journal to stimulating future developments.

The editors of West & East

*M. Iamoni
L. Rebaudo
F. Zanini*

Foreword

It is a special pleasure for me to write this preface, and not only because of the number and quality of the contributions, 21 in all, that are contained in this volume of the 5th Broadening Horizons proceedings. The greatest satisfaction – that I know the co-organizers of the conference, Katia Gavagnin, Costanza Coppini, Rocco Palermo and Francesca Simi, share with me – is due to the success that it enjoyed. In January 2016 we decided to take on the responsibility of organizing “Broadening Horizons” (BH) in Udine – but with some trepidation, since the previous edition had been held in Turin in 2011 and two subsequent opportunities (2013 and 2015) had been missed, with the result that at the time the BH series seemed “abandoned” and destined to be forgotten. However, we organizers believed that the idea of an international academic meeting aimed especially (though not only) at young/early career researchers, offering a more relaxed than usual environment to present and discuss the results of new work, was definitely a good idea that deserved to be kept alive. The previous editions (Ghent, Lyon, Barcelona and Turin) had been successful and we are indebted to the organizers and founders of the BH conferences who created the basis of the series. We also felt that BH could be further enhanced, convinced that this type of conference was essential in an academic world where harsh competition may complicate the presentation and discussion of work that in some cases offers brilliant insights into the past of human societies.

We thus took the organization of the conference as a challenge, and believe that – with the participation of 122 scholars (more than the double the number attending Turin 2011) and 104 papers presented by researchers from Europe and elsewhere, including renowned specialists – it has been a great success. This confirms the importance of the BH conferences and spotlights the positive effect of constant confrontation between young and experienced generations of archaeologists. We are convinced that this dialogue permits the former to consolidate and improve their research methods and offers the latter the stimulation of being continuously in touch and experimenting new lines of research.

A further, particular gratification is that at the time of writing, the following BH6 has been held in Berlin with an even greater number partaking (159 participants and 114 papers given) and the 7th edition has been announced in Rome. For me, the continuation of the conference together with the regular publication of the proceedings was of special importance, so I am therefore glad to know that, after Udine, the BH has been and will be organised in prestigious academic centres such as Berlin and Rome.

The present volume contains the papers of the two sessions that I followed more closely (Session 1 – The Neolithic-Chalcolithic transition in Upper Mesopotamia. Subsistence strategies, economy, society and identity; Session 2 – The Levant in the Bronze and Iron Age: crossroad or frontier between

different cultures?). Personally I enjoyed them very much and I take the opportunity to thank all the participants for the brilliant contributions that were submitted. We are particularly indebted to the two keynote speakers, M. Frangipane and A. Maeir, who agreed to come to Udine and present papers that gave clear-cut views on themes that are fundamental for Upper Mesopotamia's prehistory and the Bronze and Iron Ages in the Levant. I hope that this volume will repay them and all the participants for the time spent preparing their papers. The publication of this volume has been a long and difficult task in which I have been helped by a number of people: the former (B. Callegher) and current (F. Zanini) director of the Inter-University School of Specialization in Archaeology (SISBA), the EUT staff, in particular G. Clabot who worked painstakingly on the digital editing of the volume, Francesca Minen, Maddalena Scattini, Sara Zampa and Giulia Toniato have helped me to correct the proofs. Their assistance was invaluable. A special thank-you goes to the Scientific Committee and the colleagues who accepted to review the 21 contributions in accordance with the editorial line (double blind peer-review) that we use for the

electronic journal *West & East* and its monograph series, within which the current proceedings appear. We believe that this is the second, but by no means less crucial part of the "BH spirit", i.e. to follow the international rules of high quality research.

The organization of BH5 in Udine was possible thanks to the constant support given by my university and the economic help received from the Friuli Venezia Giulia Regional Authority: to all the people in my department who were involved – colleagues and those in administration–, and to the direction of the university and the Friuli Venezia Giulia International Cooperation Office I wish to express my personal thanks. I hope that the present volume will be a reward for the time and effort we put into the BH5 together.

A final thank-you to my friends and colleagues Katia, Costanza, Rocco and Francesca with whom I organised this conference. BH5 has been a great adventure that has enriched us personally – and also, I believe, will continue to bestow professional benefit.

January 2020, University of Udine

Marco Iamoni

**The Neolithic-Chalcolithic transition
in Upper Mesopotamia. Subsistence strategies,
economy, society and identity**

Changes in Upper Mesopotamian societies from the Halaf to the Late Chalcolithic period. A comparative analysis of different Neolithic and Chalcolithic developmental models in the Near East

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ABSTRACT

The paper tries to apply a developmental and comparative approach to the analysis of the processes bringing to the first hierarchical societies in Upper Mesopotamia by focusing on their Neolithic roots and analysing the structural similarities and differences with the contemporary societies in two other regions of the Near East: South Mesopotamia and Central Anatolia. This comparison is aimed at evidencing, on the one hand, similarities and differences with an area – South Mesopotamia– whose features differed widely in the sixth millennium BCE but with which the Upper Mesopotamian communities were closely related for millennia. On the other hand, the author examines the profound structural differences with Central Anatolian communities, where the subsistence strategies, environmental contexts, and the resulting economic, social, and political organization seem to have differed substantially from the Mesopotamian ones. Whereas the comparison with Central Anatolian developments therefore essentially focused attention on structural features and differences, the analysis of the relationship with Southern Mesopotamia also considered the nature and effects of the intensive “contacts” that linked together the two Mesopotamian regions and were relevant to the developments of both societies.

KEYWORDS

Upper Mesopotamia, Southern Mesopotamia, Central Anatolia, Neolithic, Chalcolithic, local developments, cultural contact, socio-political changes

1. Introductory Remarks

In order to face the question of the deep social and economic changes that took place in Upper Mesopotamia in the fifth and fourth millennia BCE, it is necessary to focus first on the characteristics of the societies that occupied this region in the course of a long time span, during the seventh and sixth millennia, preceding the rise of any hierarchy, in order to highlight the roots of this crucial change.

Today, the increasing wealth of available archaeological data has shown that models borrowed from anthropology and used to rank societies in a succession of evolutionary steps often understate the complexity of human history, reducing the impact of a number of variables and partly obscuring the diverse trajectories through which human societies have evolved in different natural and social environments. The “formative” processes and their outcomes are indeed exhibiting increasingly greater variety as more information is gathered on societies of archaeological interest in which these processes took place for the first time. And the different historical conditions and events within which they occurred have had a substantial impact in determining the features of their emergence and the following developmental processes.

The Near East provides a number of very interesting cases with which to build up a comparative analysis with the aim of shedding light on the main trajectories and pathways leading to social change. On the one hand, a number of parallelisms and close similarities between regional developments in the wide Mesopotamian and peri-Mesopotamian world may have had their roots in the extensive interaction network linking the communities along the vast mountainous belt and hilly flanks of the “Fertile Crescent” during the long period of the “Neolithic revolution” and in the successive intensive and continuous mutual relations connecting the Southern and Northern Mesopotamian communities in the sixth and fifth millennia BCE.¹ On the other hand, substantial differences in the structure of societies and their developmental processes are observable between these regions

and other relevant areas in the Near East, which can be traced back to specific and different environmental conditions, subsistence strategies, related social systems, and historically determined phenomena.

1.1 Applying a comparative approach to highlight structural features of Upper Mesopotamian societies

Bearing this in mind, this paper aims at identifying and better highlighting the peculiar features of the socio-economic and political developments in the prehistory of Upper Mesopotamia by comparing them with two other regions of the Near East. This comparison is aimed at evidencing, on the one hand, similarities and differences with Southern Mesopotamia, whose features differed widely in the sixth millennium BCE but with which the Upper Mesopotamian communities were closely related for millennia, and, on the other hand, the profound structural differences with Central Anatolian communities, where the subsistence strategies, environmental contexts, and the resulting economic, social, and political organization seem to have differed substantially from the Mesopotamian ones. Whereas the comparison with Central Anatolia will therefore essentially focus attention on structural features, the analysis of the similarities and differences with Southern Mesopotamia will necessarily also consider the nature and effects of the intensive relationships that linked together the two Mesopotamian regions and were relevant to the developments of both societies.

The most significant aspects I shall consider when drawing comparisons between the involved Neolithic and Chalcolithic societies are the following:

- The features of the domestic architecture (houses, equipment, space-use);
- The presence or absence of public or communal buildings and their features (dimensions, monumental character, function);
- The overall layout of the settlements (agglutinative, scattered, in blocks or neighbourhood complexes) and the use of free common spaces;

¹ CARTER, PHILIP (eds.) 2010.

- The type and forms of food storage (domestic, collective, centralised);
- The management of staple goods (domestic, collective or centrally directed);
- The symbolic or ideological expressions in funerary customs;
- The evidence of territorial organisation, and the extent of external relations;
- The basic choices of subsistence economy. This aspect is unfortunately more difficult to compare in detail due, in most cases, to the difficulties of retrieving the necessary data to sufficiently understand the actual “economic role” played by each of the various subsistence activities performed by the communities.²

2. Upper Mesopotamia and South-East Anatolia in the seventh and sixth millennia BC

There are clues which suggest that Upper Mesopotamian and South-Eastern Anatolian societies, each one in their own manner, may have had a strong “community-based” form of governance, from the Pre-Pottery Neolithic onwards and through the various and substantial changes that occurred in these areas in the course of the seventh, sixth, and fifth millennia BC. We must of course distinguish between what has been observed in the earliest Pre-Pottery Neolithic and the later developments of the Jezira societies, in particular those of the Hassuna and Halaf period. But I think that in both cases – PPNB and EPN –, albeit in a totally different way, the communities may have been managed on a cooperative basis: a close structural relationship between the domestic units may have resulted from the strong social and probably economic needs for cooperation, while there was a clear symbolic and ideological prominence of the collective instances.

² Whereas finding basic information on plant or faunal remains is more or less easy, very rarely is indeed possible to reliably reconstruct specific agriculture practices or the prevailing animal breeding patterns and their mutual economic role in the life of the communities.

2.1 The premises in PPN villages in the Taurus region

The most symbolically important communal activity in PPNB contexts seems to have been the management of the sacred, which, judging by the imposing sanctuaries with their furnishings and the great concentration of collective work needed to build them, must have required some sort of central coordination. The sanctuaries were transformed from being probably places of pilgrimage for several communities in PPNA (as is the case of Göbekli Tepe)³ to become sacred places linked to individual settlements in PPNB, where a single sanctuary has been documented in each village, but they always remained central places in one way or another around which the social life and presumably the religious life of the whole community revolved.⁴ These sanctuaries certainly expressed a symbolic and ideological world that held these societies together⁵ and enabled them to limit the potential conflicts in a period that showed a complex and very gradual transition from mobile hunter-gatherers to food-producing and more stable communities, in a very varied environment both in terms of topography and climate (from the Jezira plain and foothills to the Taurus mountains). And Göbekli was exactly located on an environmental border.

In these PPNB villages, the houses, besides being all very similar in shape and dimensions, as one would expect in what were essentially egalitarian societies, were extremely standardized and the changes in their form and layout in the course of time were applied to all the buildings in the same way at the same time,⁶ indicating that the entire community uniformly complied with strict social rules shared by everyone and evenly conformed to meet new common needs. This behaviour is not motivated by the agglutinated arrangement of the settlements and the continuity in the individual family “histories”, as it may have been in Central Anatolian

³ SCHMIDT 2006, 2011.

⁴ HAUPTMANN 1993, 2011; ÖZDOĞAN 1999; ÖZDOĞAN M., ÖZDOĞAN A. 1998; ERİM ÖZDOĞAN 2007.

⁵ VERHOEVEN 2002.

⁶ SCHIRMER 1990.

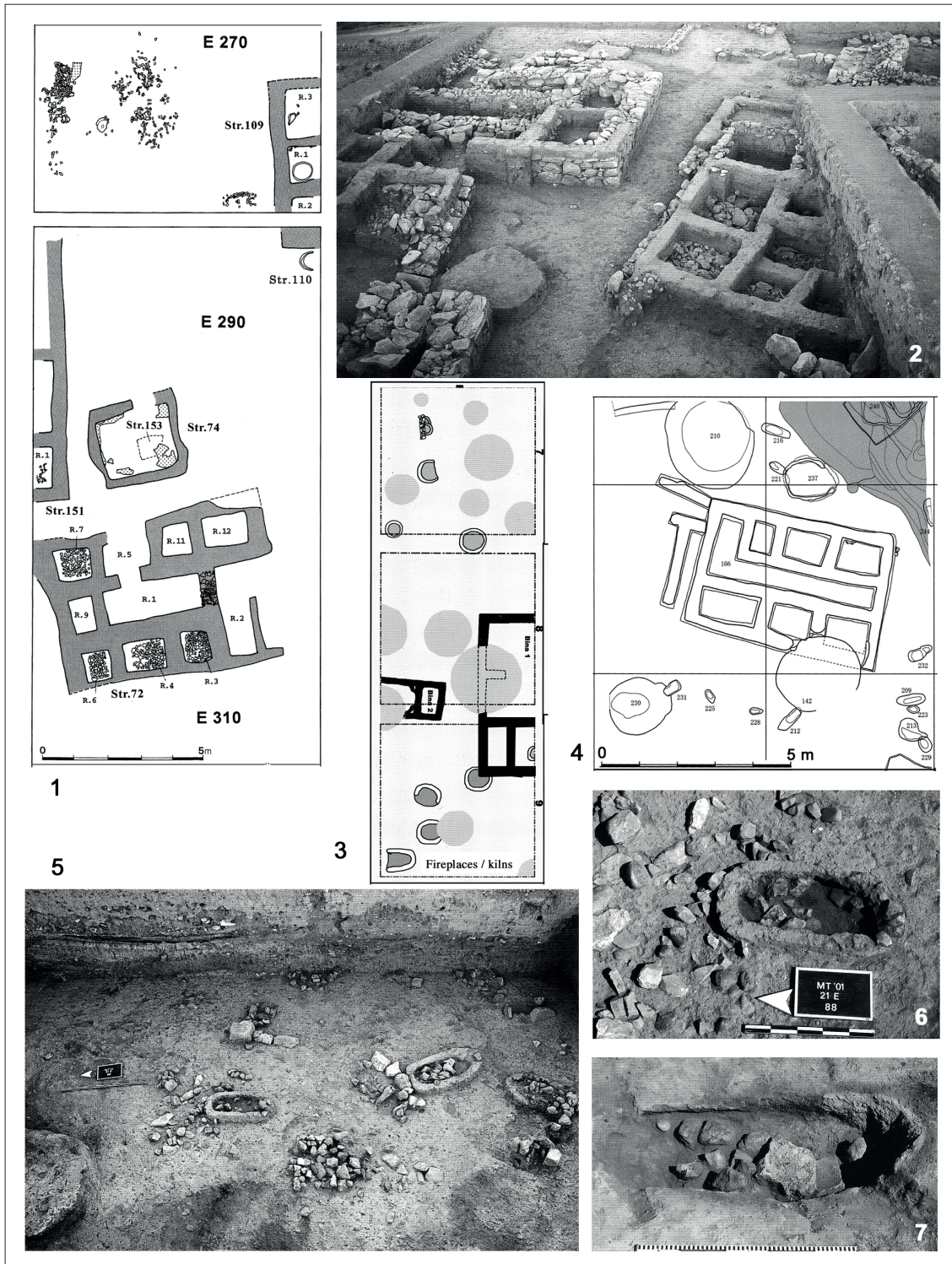


FIGURE 1

Dwelling areas from Neolithic sites in Eastern Anatolia and north-western Syria: houses with similar layouts (“corridor”/ “cell” plans) and open areas with external domestic features. 1: Tell el-Kerkh (from TSUNEKI ET AL. 1998); 2, 5, 6: Mezraa Teleilat, phases IIB2 and III (from ÖZDOĞAN 2011, figs. 39, 9, 12); 3: Hakemi Use (adapted from TEKIN 2007, fig. 3); 4 and 7: Salat Cami (from MIYAKE 2011, fig. 2, and 2007, fig. 10)

villages,⁷ since (a) the houses were built at some distance from each other and separated by spaces,⁸ and (b) the villages were regularly abandoned before being rebuilt and re-occupied again.⁹

The dead, finally, were not usually buried in connection with the houses, whereas some special burial rituals took place in the sanctuaries (see the Skull Building at Çayönü)¹⁰ and were therefore performed in a community environment.

2.2 The Jezira settlements in the seventh and sixth millennia BC

The scattered arrangement of the dwellings also characterized the settlements subsequently occupying the whole northern region of Greater Mesopotamia, in the later Pottery Neolithic. The seventh and sixth millennium sites both in the Middle Euphrates and Upper Tigris valleys, as well as in the whole Jezira, show an intense use of the open spaces among the dwellings: numerous hearths and equipment for cooking and processing food were in fact almost everywhere scattered around in the open spaces between the houses and were not unequivocally ascribable to any individual dwelling (fig. 1). The recent excavations at Mezraa Teleilat and Akarçay on the Turkish Middle Euphrates, and those of Salat Cami and Hakemi Use on the Upper Tigris are good example of this.¹¹ Even though these sites exhibit differing aspects of the material culture and the ceramic productions on the Middle Euphrates Valley sites partly differ from the typical Hassuna/Samarra pottery on the Tigris sites,¹² they nevertheless share numerous common features, perhaps of Pre-Pottery origin; these include the shape of the houses with their rigid rectangular

outline subdivided into standardized small spaces, now usually consisting of small cells on either sides of a central space (fig. 1: 1-4). Generally speaking, the rooms have not revealed numerous internal domestic equipment, which have conversely mostly been found outside the houses, as already mentioned, in positions that are difficult to relate to any specific dwelling (fig. 1: 5-7).

Very few adult burials have been documented inside the houses in Pottery Neolithic. In the whole Jezira and SE Anatolia infants and children were more commonly buried in the houses, whereas the rare adults buried within the settlements are usually not in close connections with any specific dwelling; they moreover often had dismembered bodies, presumably suggesting particular events or rites, also probably with collective connotations. This applies to the westernmost Early Neolithic sites, such as Tell el Kerkh,¹³ to the Hassuna sites of Eastern Jezira (Tell Sotto, Yarim Tepe I), and to the Halaf sites (Yarim Tepe II, Domuztepe, the death pit).¹⁴ The rarity of adult burials may have been due to the existence of extramural cemeteries, not found so far in the early Neolithic phase, but well documented in the Halaf (and partly Hassuna) period, when a variety of funerary rituals includes either actual cemeteries in the vicinity of settlements or at any rate adult burials within the villages on the outskirts of the inhabited area (Arpachiyah, Gawra).¹⁵ The rites connected with the death therefore do not show any strong and well-rooted relationship with the “house”, but rather with the whole community.

Significant changes had occurred in Pottery Neolithic with respect to the previous PPN period, the most remarkable of which is the disappearance – at least as far as the visibility of any material remains is concerned – of all forms of “dominant” ritual, to use Verhoeven’s definition to describe the symbolism expressed by the sanctuaries in PPN.¹⁶ The arrangement of settlements and dwellings as well as the remains of material culture however give

⁷ DÜRING 2005; HODDER, PELS 2010.

⁸ The spaces between houses may have marked the distance between dwellings more than being open work areas linked to them. It is not clear, indeed, if any activities were performed in these spaces.

⁹ ÖZDOĞAN 2018.

¹⁰ ÖZDOĞAN M., ÖZDOĞAN A. 1998.

¹¹ KARUL, AYHAN, ÖZDOĞAN 2004; MIYAKE 2007; ÖZBAŞARAN, MOLIST 2007; TEKIN 2007; ÖZBAŞARAN, DURU 2011; ÖZDOĞAN 2011.

¹² TEKIN 2005.

¹³ TSUNEKI ET AL. 1998.

¹⁴ MERPERT, MUNCHAEV 1993b; CARTER, CAMPBELL, GAULD 2003.

¹⁵ MALLOWAN, ROSE 1935; TOBLER 1950.

¹⁶ VERHOEVEN 2002.

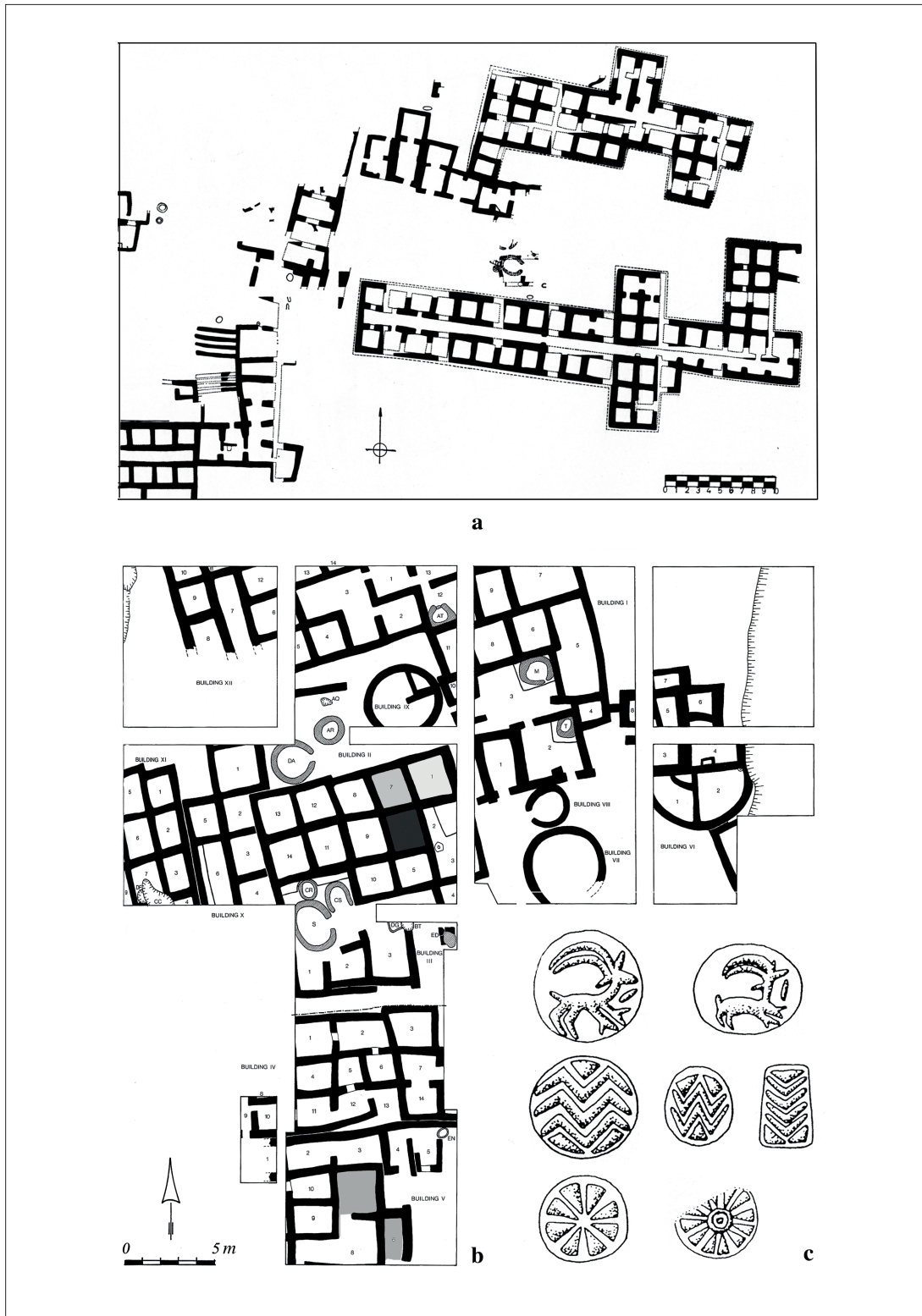


FIGURE 2

Large communal store buildings from 7th millennium sites in the Jezirah. *a*: Umm Dabaghiyah (from KIRKBRIDE 1975, Pl. I); *b*: Sabi Abyad, lev. 6, the “Burnt village” (adapted from AKKERMANS [ed.] 1996 fig. 2.7); *c*: Seal designs from Sabi Abyad level 6 *cretulae* (from DUISTERMAAT 1996 figs. 5.3 and 5.4)

the impression of a still strong, or even stronger cooperative way of conducting the village life.

The presence of very large storage structures, certainly not referable to individual nuclear families, found in various pre-Halaf Neolithic sites of the Jezira, both in the western region (Sabi Abyad) and in the eastern/south-eastern area (Umm Dabaghiah, Yarim Tepe I), is an unequivocal proof of the existence of such a system¹⁷ (fig. 2). In particular, the example of the pre-Halaf “burnt village” of Sabi Abyad level 6, where the large storage building complex was associated with hundreds of seal impressions grouped together in substantial assemblages in some rooms (fig. 2: b-c), clearly suggests the collective management of the community’s food supply, or part of it, which only can justify the need for the administrated regulation of access to this food (perhaps harvested crops) by the village population or large sectors of it.¹⁸

This impression of a collective organization of the community life is further confirmed when looking at the sixth millennium BC societies, when the wide expansion of the Halaf culture created the basis for a marked cultural and organizational homogeneity in all regions of Upper Mesopotamia and South-Eastern Anatolia.

The layout of the settlements changed; the houses changed shape, dimension, articulation and space-use. But the scattered arrangement of the dwellings and the intense use of the open spaces with hearths, ovens, and various equipment for processing and storing food, continued to be distinguishing features of these communities (fig. 3). The Halaf settlements, which were usually small or very small, have been interpreted as probably occupied by tightly related kinship groups (clans or lineages) governed collectively.¹⁹ This communal government may have also concerned some kind of coordination of primary economic activities, which may have been organised on a fairly large territorial scale, as is suggested

by the existence of specialised occupations for specific purposes, such as the hunting of selected animal species (perhaps on a seasonal basis) observed in sites as Umm Qseir and Shams ed-Din Tannira.²⁰ This kind of organization may have been related to the policies adopted to best exploit a varied environment of semi-arid plains, hilly steppe zones, and relatively well-watered mountainous lands, which may have driven the communities of the Jezira and Taurus-Zagros foothills to diversify their subsistence activities according to the environmental potential. The faunal remains reveal a mixed animal-rearing system with sheep/goats, pigs and cattle, flanked by a flourishing hunting activity, and a rich agriculture.

Large, probably communal buildings made of several small rooms have also been found at Halaf sites, as in the case of Sabi Abyad level 3;²¹ these buildings may have been used – as the seventh millennium ones – for the collective storage and perhaps the redistribution of goods between the members of the group. Even though no *cretulae* have been found in the large level 3 building at Sabi Abyad, a number of tokens and numerous clay “missiles” and balls have been found there that may have been related to some sort of accounting or administrative practices. The practice of managing the storage and circulation of food through some forms of administrative regulation is also suggested by the large number of seals found everywhere in the Halaf sites, sometimes accompanied by a few clay-sealings of various types²² (fig. 4).

The Sabi Abyad large building architecture of the Halaf period – which was also in the same area as the large storehouses of the earlier level 6 “burnt village” – is not an isolated case, since other examples of special large rectangular buildings are documented in other Halaf sites, even though, for various and different reasons, we do not have enough information to be able to correctly interpret these buildings: this is for example the case of the partially uncovered structure at Khirbet esh-Shenef²³ or the well-known “burnt house” at Arpachiyah.²⁴ They at

¹⁷ KIRKBRIDE 1975; MERPERT, MUNCHAEV 1993a; FRANGIPANE 1996, pp. 51-68; 2007.

¹⁸ AKKERMANS (ed.) 1996; AKKERMANS, DUISTERMAAT 1996; DUISTERMAAT 1996; VERHOEVEN 1999; FRANGIPANE 2000, 2016.

¹⁹ FRANGIPANE 1996, pp. 69-87; 2007, 2013; FOREST 1996, pp. 27-35.

²⁰ TSUNEKI, MIYAKE 1998; AL-RADI, SEEDEN 1980.

²¹ AKKERMANS 1993, pp. 56-66.

²² VON WICKEDE 1990.

²³ AKKERMANS, WITTMANN 1993.

²⁴ MALLOWAN, ROSE 1935.

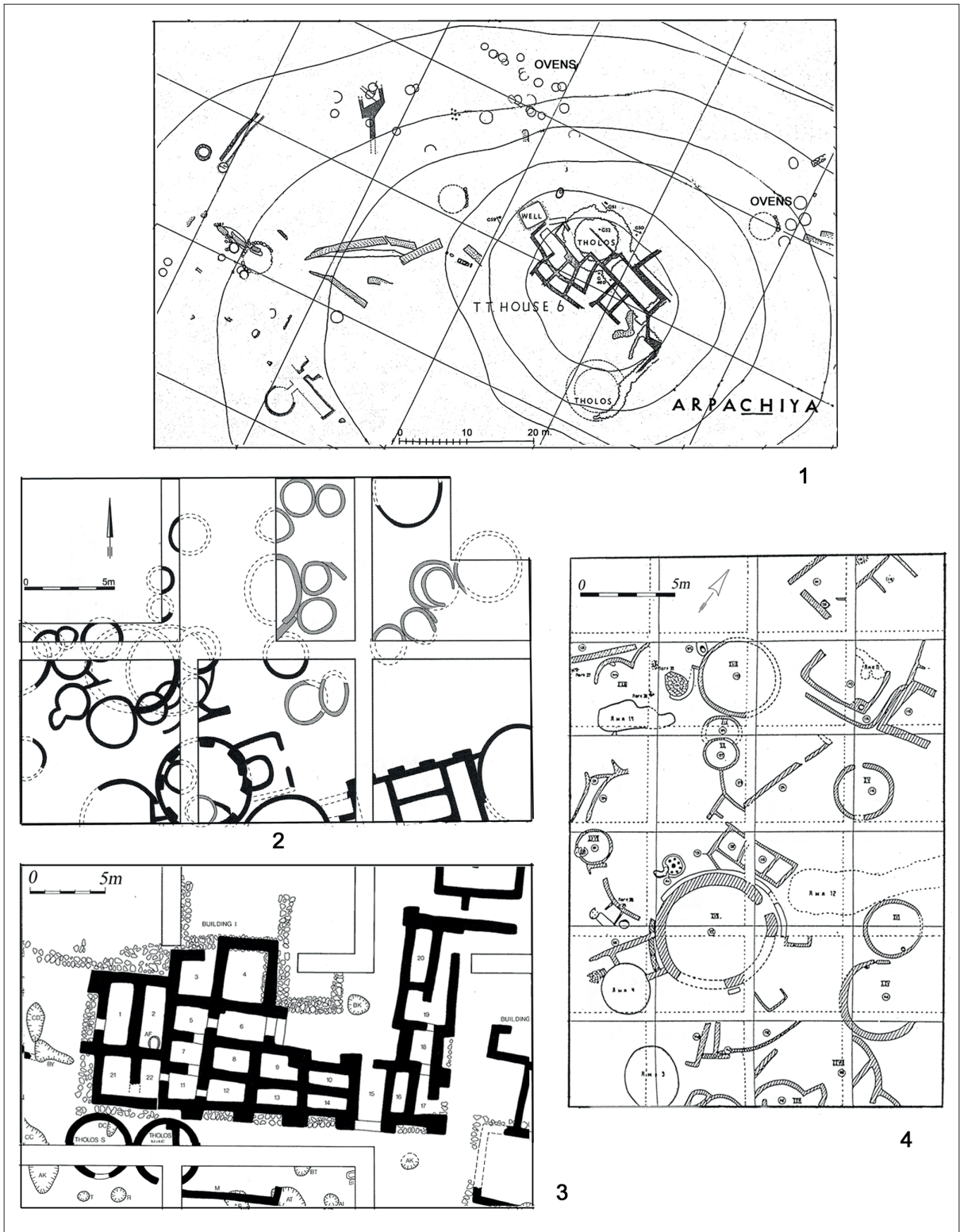


FIGURE 3

Plans of some Halaf settlements. 1: Arpachiyah (from MALLOWAN, ROSE 1935, fig. 3); 2: Khirbet esh-Shenef (adapted from AKKERMANS, WITTMANN 1993, fig. 5); 3: Sabi Abyad, lev. 3 (from AKKERMANS [ed.] 1996, fig. 2.25); 4: Yarim Tepe II, lev. 5 (from BRENIQUET 1996, Pl. 36)

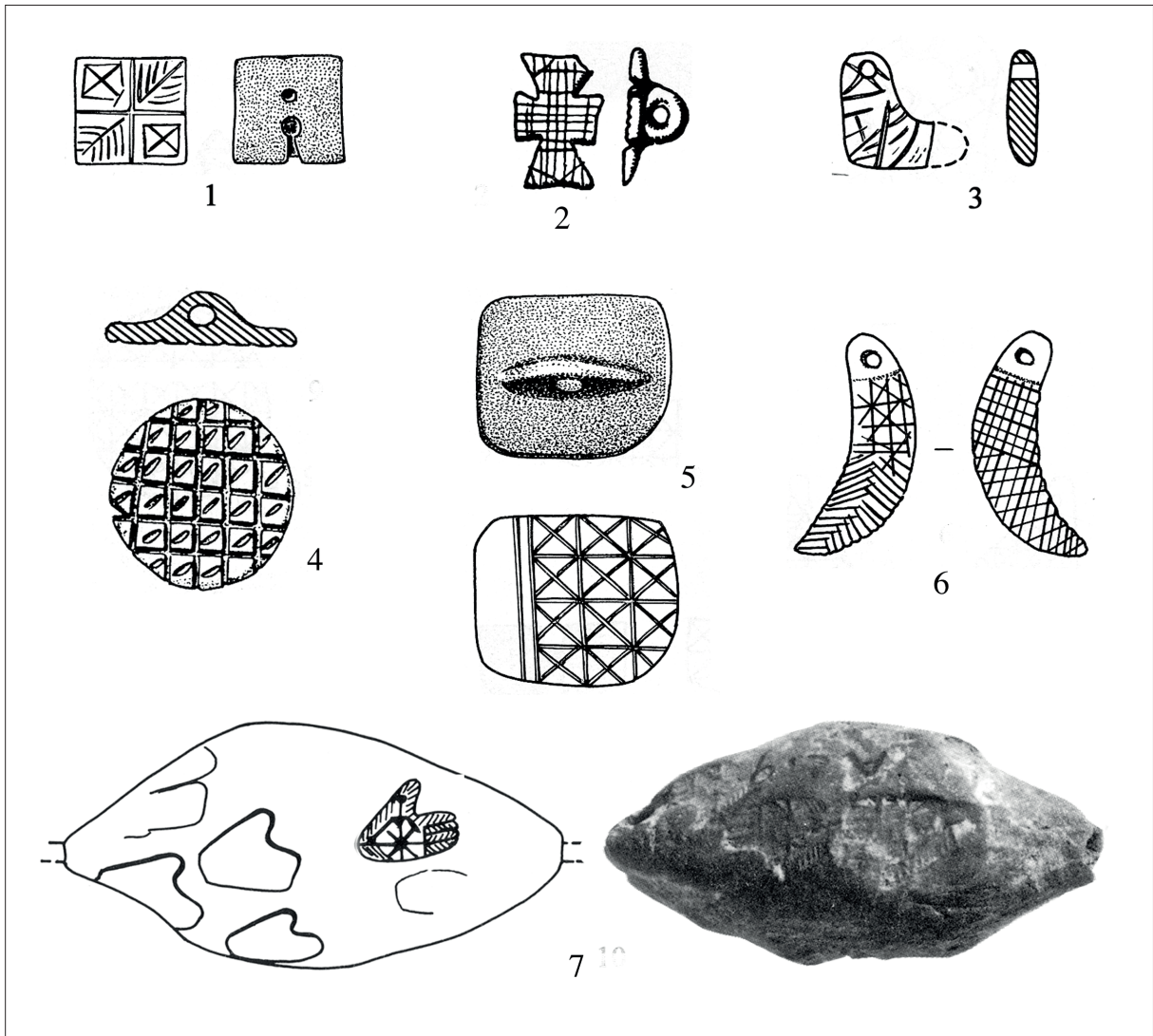


FIGURE 4

Various seal types and a *hanging ovoid cretula* from the Halaf period (from VON WICKEDE 1990, Pls. 54, 154, 155, 167, 183, 186, 200)

any rate suggest the existence of buildings intended for “public” or communal purposes also in the Halaf period; and their possible connection with storage or redistribution functions might plausibly be inferred from the general organizational similarity of the Halaf communities with the Jezira groups of the previous Hassuna and pre-Hassuna periods.

The Halaf societies must have been profoundly egalitarian in character, but such an organisation would have required forms of coordination and gov-

ernance of the community. This appears to have been managed at a community level for a long time, by maintaining small cohabiting groups, probably contrasting the archaeologically well-documented population increase by means of fission mechanisms. The whole Jezira, and the Taurus/Anti-Taurus foothills and mountains, were very densely populated by a huge number of small villages in the Halaf period (fig. 5), which form a dense network of closely related communities sharing the same very homogeneous culture.

The communal management of storage and good circulation may have required the presence of individuals who took charge of the tasks of regulating the access to basic resources in a socio-economic context based on a collective management of staple goods and their intra- and inter-community circulation, whose survival depended on the sound functioning of this organisation. The same existence of very few special large multi-roomed buildings (perhaps one per village) may be in keeping with this interpretation.

This widespread organisation of intra-group relations within and between the villages must have also created wide-ranging relations over a vast territory, covering an area previously occupied by various Neolithic groups, related each other but distinct, and marking the beginning of that cultural *koiné* which was later to form the basis for the spread of the South-Mesopotamian model throughout all the regions touched by the Tigris and Euphrates basins.

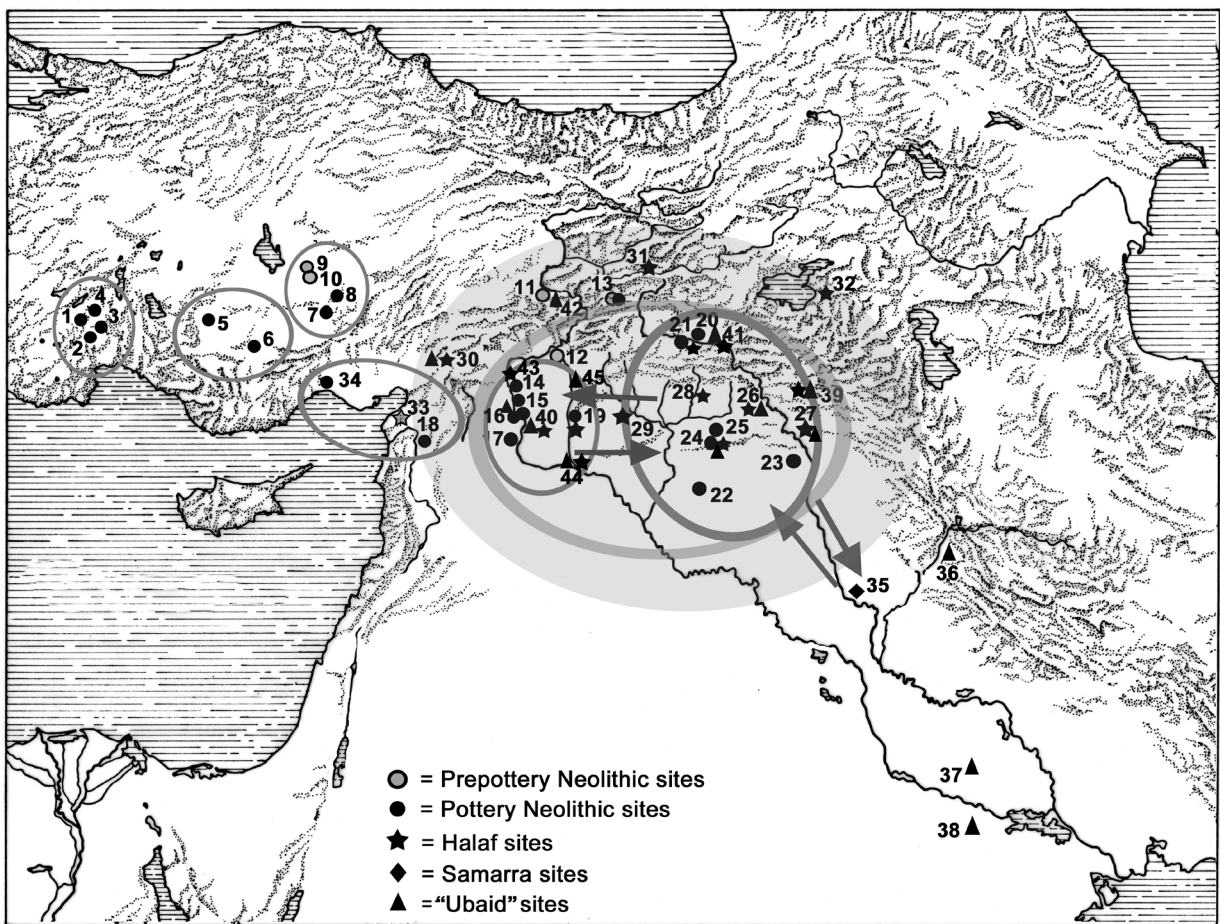


FIGURE 5

Map of the Near East with the approximate extension of the main cultural areas in Anatolia and Upper Mesopotamia in the 7th/6th millennium BC. 1 Hacilar, 2 Bademağacı, 3 Höyücek, 4 Kuruçay, 5 Çatal Höyük, 6 Can Hasan, 7 Kösk Höyük, 8 Tepecik Çiftlik, 9 Aşıklı, 10 Musular, 11 Cafer H., 12 Nevalı Çori, 13 Çayönü, 14 Mezraa Teleilat, 15 Akarçay, 16 Tell al 'Abr, 17 Halula, 18 Tell el Kerkh, 19 Sabi Abyad, 20 Salat Cami, 21 Hakemi Use, 22 Umm Dabaghiyah, 23 Hassuna, 24 Yarim Tepe, 25 Tell Sotto, 26 Telul eth Thalathat, 27 Arpachiyah, 28 Chagar Bazar, 29 Tell Halaf, 30 Domuztepe, 31 Girikihaciyan, 32 Tilki Tepe, 33 Tell Kurdu, 34 Mersin Yumuktepe, 35 Tell es Sawwan, 36 Tell Abada, 37 Tell Oueili, 38 Eridu, 39 Tepe Gawra, 40 Koshak Shamali, 41 Kenan Tepe, 42 Değirmentepe, 43 Çavı Tarlası, 44 Tell Zeidan, 45 Hammam et-Turkman

3. Central Anatolia: A different Neolithic society

In this area the excavated sites of the seventh and sixth millennia BC have revealed the existence of “cultural” areas of limited extension, each defined by distinctive features, though being related each other²⁵ (fig. 5): the Southern Plateau, with the famous site of Çatal Höyük;²⁶ Cappadocia, with its remarkable Pre-Pottery Neolithic premises in sites such as Aşıklı;²⁷ the so-called “Lake region”, in the South-West, with sites such as Hacilar, Kuruçay, Bademağacı, Höyücek.²⁸ Though clearly distinguishable from one another in terms of the specific traits of their domestic architecture, pottery, figurines, and other features of the material culture, structural similarities are shared by all these communities, in terms of their subsistence economy, domestic life, and symbolic expressions, which mark the difference from the Upper Mesopotamian communities. Whereas the houses on each of these sites differ in terms of their particular layout and arrangement in the settlement, they all comprise a small number of rooms and a number of domestic furnishings, such as fireplaces, ovens, and bins, that, differently from the Jezira settlements, can be either inside the house, or somehow related with them (fig. 6).

In extensively excavated sites such as Çatal Höyük or Hacilar, the houses are variously clustered in neighbourhood groups of buildings and arranged in sub-units according to a strictly agglutinative pattern,²⁹ with no substantial differences between them. Even though the buildings are grouped in clusters, each organized around a courtyard, as in the case of Çatal Höyük, or arranged around common open spaces, as in the settlements of the Lake region or Cappadocia, the basic unit seems to be the house and the nuclear family occupying it, even when these families were most probably linked into larger household structures by kinship and social re-

lations.³⁰ The Çatal Höyük society indeed appears to have been organized by relatively autonomous families, which perhaps variously acted as either smaller or larger households according to different occasions, activities and social events.

This impression is confirmed by the presence of the well known richly decorated rooms, Mellaart’s “shrines” or Hodder’s “elaborated houses” (fig. 6: f), which were adorned with extraordinary wall paintings and relief decorations. These rooms do not show any correlation with a larger size or particular functional peculiarities of the houses of which they form part, and were widespread and dispersed throughout the settlement in various building clusters, to which each of them perhaps belonged (fig. 6: e). The only recognisable link these richly decorated structures shows is with a larger number of burials often found below their floors, which, according to Hodder, indicate that more people than those living in these houses were buried there.³¹ And, even though Düring points out that the association between “elaborated houses” and concentration of burials was not so close, since the rooms with paintings are more numerous than the ones with many interments below them,³² it must be noted that many of the other undecorated rooms had no burials under their floors. Numerous individuals of both sexes and various ages were buried in the same interment as primary burials, then moved aside when other bodies were added to the pit, suggesting that various members of possibly related families were repeatedly buried in connection with these special places in the houses in the course of time. These special rooms with ritual and memory elements were probably used as a sort of home “shrines” or symbolic places by each large household or residential group living in a cluster of architectural-related small houses, whereas the individual nuclear families composing these clusters probably performed their daily life activities independently. All houses have indeed a similar functional arrangement and evidence of domestic storage.

²⁵ ÖZDOĞAN 2002, p. 253.

²⁶ MELLAART 1967, 1970; HODDER 2006.

²⁷ ESIN 1991.

²⁸ MELLAART 1970; UMURTAĞ 2000; DURU 2008.

²⁹ MELLAART 1967, 1970; DÜRING 2006, 2011; HODDER 2006, pp. 109-140; HODDER, PELS 2010.

³⁰ PILLOUD-LARSEN 2011.

³¹ HODDER, PELS 2010.

³² DÜRING 2011, pp. 107-111.

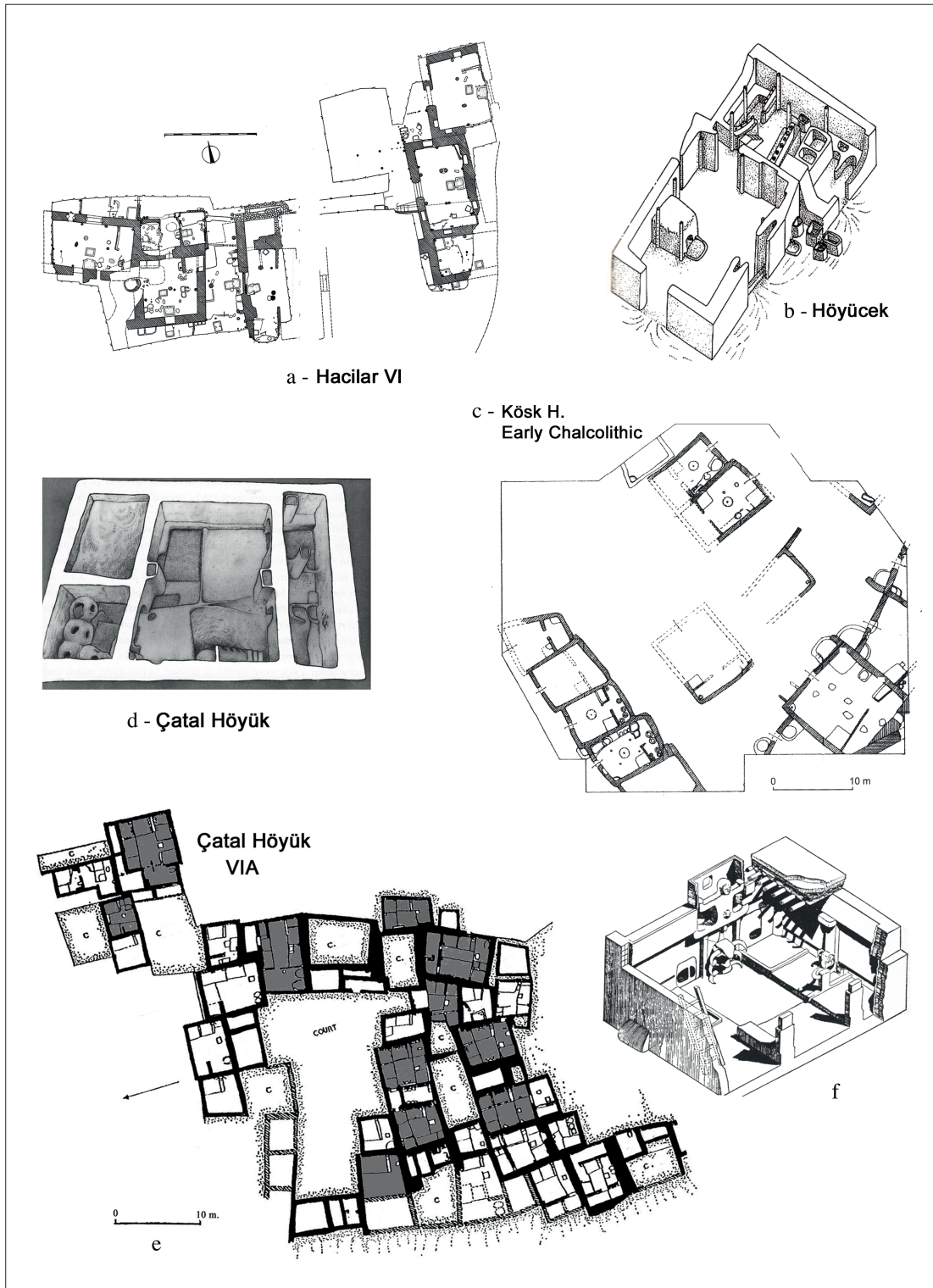


FIGURE 6

Examples of house arrangement with related domestic features in some Neolithic and Early Chalcolithic sites in Central and South-Central Anatolia. *a-b*: from DURU 2007 figs. 7 and 31; *c*: adapted from ÖZTAN 2007 fig.5 and DÜRING 2011 fig. 6.11; *d*: from HODDER, PELS 2010 fig. 7.1; *e*: adapted from MELLAART 1967, fig. 8; *f*: one of the 'elaborated rooms' at Çatal Höyük (from MELLAART 1967, fig. 40)

A similar organisation of society can be seen both in the Late Neolithic sites of the “Lake Region”,³³ and in Early Chalcolithic Cappadocia,³⁴ even though the settlements are not agglutinative. In these regions too, the role of the individual houses is not unlike that of the Central Anatolian environment, although they had a different layout (fig. 6: a-c).

The presence of some burials beneath the houses, though mainly of infants and children and only occasionally of adults, indicate that the inhabitants of Neolithic/Early Chalcolithic Central Anatolia must have shared the feeling of the existence of some connection between the dead and the house, both in the case of an emphasized relationship with special rooms or “lineage houses”, as in the case of Çatal Höyük, and in more simple and dispersed distribution, as can be seen in the Lake region and Cappadocia sites. One may suggest that, in all these cases, the dead in some way continued to form part of the household, and it was in the house that the idea of the perpetuation and continuity of the group must have taken shape through a close linkage between its occupants, both living and dead.³⁵

A rich repertoire of figurines and symbolic representations in pottery and other materials expressed the domestic transmission of the group ideology.³⁶

No areas for communal use and no communal buildings have been found in these villages in either the agglutinative village of Çatal Höyük, or in settlements with free spaces such as Hacilar, Bademağacı or Kuruçay.³⁷ The subsistence activities appear to have once more performed at household level and the staple products were produced, stored, and consumed domestically. And these groups do not show any indication of an organized and large-scale communal work.³⁸

In these societies real *cretulae* (clay-sealings) are almost absent and it is not proven that the few “seals”, which were often made of *terracotta* and usually bore fairly simple geometric designs – the

so-called *pintaderas* –, were used for administrative purposes. A support to the hypothesis that the stamps of Central Anatolian Neolithic were not real seals comes from the finding of geometric patterns applied to wet plaster in the upper levels at Çatal Höyük East, which are well comparable to motifs on the contemporary stamps.³⁹

These basic features of the central Anatolian societies appear to have been well in keeping with the environmental conditions of this region⁴⁰ consisting of well watered valleys or plateau areas where agriculture and other subsistence activities may have been easily carried out at a domestic level. A rich and varied agriculture, producing a wide variety of cereals and pulses,⁴¹ was accompanied by mixed animal breeding patterns mainly based on sheep and goat but also combined with cattle and pig rearing and an intense hunting activity.⁴²

In conclusion, the organization of food production and consumption, as well as that of social life, must have revolved around the family in the Neolithic and Early Chalcolithic communities of Central Anatolia, and the “house”, i.e. the family, seems to have been the basic unit of production and consumption, and have had a material and symbolic dominance over the village as a whole. Following the Lévi-Strauss’s definition, these societies may be defined as “house-based” or “family-based” societies.⁴³

This does not mean that there was little or no sense of the community as a wider social system linking together contiguous and interrelated households. The compact agglutinative layout of the houses in settlements such as Çatal Höyük, or the earlier Aşıklı and the later Can Hasan, may be considered a proof of the self-perception of these communities. But the way people lived and settled suggests a markedly autonomous management of the basic activities by essentially egalitarian individual domestic units, which were the focus of social relations and in which the group survival and reproduction was symbolically represented.

³³ MELLAART 1970; UMURTAĞ 2000; DURU 1999, 2008.

³⁴ BIÇAKÇI ET AL. 2007; ÖZTAN 2007.

³⁵ BLOCH 2010.

³⁶ VERHOEVEN 2002.

³⁷ DURU 1994, 2007.

³⁸ ÖZDOĞAN 2002.

³⁹ DÜRING 2011, p. 131.

⁴⁰ ÖZDOĞAN 2002.

⁴¹ ASOUTI, FAIRBAIRN 2002.

⁴² MARTIN, RUSSEL, CARRUTHERS 2002.

⁴³ LEVI-STRAUSS 1979; GILLESPIE 2000; BLOCH 2010; HODDER, PELS 2010, pp. 180-181.

4. East and West: A comparison

The seventh and sixth millennia societies in Upper Mesopotamia and South-Eastern Anatolia could be defined as “community-based” societies in contrast to the contemporary “family-based” societies of South-Central Anatolia, which showed profoundly different structural features.

The differences between Anatolian and Upper Mesopotamian Neolithic communities highlight the very specific and distinguishing features of the Jezira societies:

- Small houses, with spaces between them and with equipment scattered outside in the open areas, as opposed to the clustered houses of Central Anatolia designed to host all the domestic activities inside them;
- Buildings to be used for collective functions (sacred buildings in the PPN and buildings for storage and redistribution in the PN), which are conversely absent in central Anatolia;
- An ideological and symbolic relations of the world of the dead with the whole community rather than the individual homes;
- A subsistence economy based on group specialisation and coordination over a vast and ecologically varied territory requiring forms of administrative management, versus a probably independent management of the subsistence activities and products by individual families and villages in Anatolia;
- The progressive enlargement and integration of a shared cultural network over vast territories as the result of intensive inter-site relations in a diversified and integrated subsistence system, as opposite to the Central Anatolian cultural areas of limited or very limited extension, which I believe were the result of independent village economies (fig. 5).

I believe that the cooperation system developed within the Upper Mesopotamian communities and the wide-ranging sharing of cultural and organizational traits over increasingly larger areas that characterized the Upper Mesopotamian societies, together with their long-lasting relations with the

South (and particularly the Samarra area in Central Mesopotamia during the Neolithic), constituted the foundations for the transmission of the South-Mesopotamian society model to the Jezira communities in the course of the fifth and fourth millennia BCE, determining the emergence of, albeit different, hierarchical societies in the two areas.

5. Central and Southern Mesopotamian societies

Both the Samarra and Ubaid societies, notwithstanding the differences existing between them, on the whole may have constituted a third organizational model,⁴⁴ differing from both the other two. Both in Central and Southern Mesopotamia the settlements were characterised by the well-known very large tripartite houses, which, in each of the two regions, had very standardised shapes and were scattered in separated blocks, at a distance from one another. As in the north and unlike central Anatolia, almost no internal furnishings, except for fireplaces, have been found inside the houses, and the few ovens and other structures for domestic activities found in open spaces in sites as Tell-es-Sawwan or some Hamrin settlements do not seem to have been evidently connected with any individual dwelling.⁴⁵ This may suggest an organization at more than household level, albeit we do not have any clear indication in this respect. The outstanding architecture of the houses, whose clear distinction suggests a strong role of the families, goes side by side with the emergence of one or two of these buildings that detached from other dwellings in the same village for their size and features. The most famous case is that of the large House A at Tell Abada, in the Hamrin valley,⁴⁶ which, due to its size, special architectural features, and associated objects appears as a special home, probably belonging to the dominant family in the social hierarchy.⁴⁷ The presence of another large house close to it (House B), which however lacks some of the House A features,

⁴⁴ BRENIQUET 1991; OATES 2004.

⁴⁵ POLLOCK 2010.

⁴⁶ JASIM 1985, 1989; BRENIQUET 1991.

⁴⁷ FRANGIPANE 2007.

does not contradict this hypothesis, but conversely supports the idea of a stratified society with families of different status.

A large storehouse consisting of a series of small cell-rooms and repeatedly rebuilt in successive layers at Tell Oueili, was interpreted as a possible granary.⁴⁸ But this peculiar structure was smaller than the large communal storehouses in the northern Neolithic villages and does not show any seal or sealings and any other accounting device or evidence for redistribution activity. This structure might be perhaps interpreted as a storehouse used for storing the harvest of some sectors of the community, more probably large elite households or kinship groups.

Burials were, as in the North, not directly related to individual houses, except for some cases of infants and children, whereas the adults were usually buried in cemeteries. It is, however, interesting to note that particular concentrations of infant burials are found under the floors of the largest and most important house in the village, probably the “chief’s” house. This practice has clearly been recorded at Tell Abada in House A, and is perhaps also attested in the earliest phases (I-II) of Tell-es-Sawwan, though some doubts still remain as to the dating of the infant interments at Sawwan, which might be ascribed to a phase preceding the founding of the settlement. Burying dead infants from various families under the floor of the main house of the village, perhaps the home of the highest rank family, may have had a strong symbolic meaning, emphasizing the role of the leaders as representatives of the whole community and custodians of the continuity of the group.

The existence of a rank society in Southern Mesopotamia at least by the fifth millennium BCE and the role of a sort of central authority from the earliest phases of the Ubaid period is also suggested by the appearance of the first “temples” or public ceremonial buildings at Eridu, which were very likely the seat of redistribution practices and the centres where basic economic, social and political transactions were performed in the name of the community. The development of central institutions, which, at the beginning, were probably embodied by the

high rank families, though perceived as a symbolic and effective reference for the whole community, may have met the important need to coordinate the subsistence production, rich and varied, but subject to risk in the southern Mesopotamian difficult environment.⁴⁹ The ceremonial function performed in the temples may have ideologically supported the political and economic role of the increasingly powerful leaders in the southern Mesopotamian environment, giving rise to a process that would have led to a progressive attraction of the population in and around these centres, which generated an extraordinary urban phenomenon.⁵⁰

The southern societies, therefore, appear to have combined a structure based on competing hierarchically organized extended families and the need for coordinating and centralising resource management, in the name of the whole community.

6. South-north interaction and the formation of hierarchies in the Mesopotamian environments

The recent archaeological information, although it is still too small to provide any real understanding of the far-reaching transformations undergone by the Neolithic societies in Upper Mesopotamia and SE Anatolia in the fifth millennium BCE, and it is far from offering the tools to clarify the nature of the “Ubaid phenomenon” in the North, has increasingly revealed the constant interaction between the various regions of the so-called “Greater Mesopotamia” dating back to the Neolithic. Not only Hassuna but also Samarra wares have been found in various sites throughout the Jezira⁵¹ and are unexpectedly attested on the Upper Tigris in Southeastern Anatolia, as is shown by the findings at Hakemi Use;⁵² this far eastern Anatolian site was also reached by the *Dark Faced Burnished Ware*, whose home was mainly to the west, in Cilicia and the regions west of the

⁴⁸ HUOT (ed.) 1991; FOREST 1996.

⁴⁹ ADAMS 1966, 2004.

⁵⁰ ALGAZE 2018.

⁵¹ OATES 2010.

⁵² TEKIN 2005.

Euphrates;⁵³ *husking trays*, once considered diagnostic of the so-called “Hassuna culture”, have been found in the Middle Euphrates and as far as Tell el Kherkh near the Orontes River.⁵⁴ The wide circulation of ceramics in the seventh and sixth millennia,⁵⁵ far from being the result of trade or the simple exchange of exotic objects, in my opinion reflects the framework of open and highly permeable societies, which tended to interact with the neighbouring communities, either because they had an organization that exploited different territories and ecological zones for their own subsistence, as was probably the case with the Hassuna and Halaf communities in the North, or because they tended to expand their sphere of interaction in the hope of establishing alliances or obtaining greater resources and “human labour”, as was perhaps the case of the southern Ubaid societies. Indeed, from their origins the societies in Lower and Central Mesopotamia, as I have suggested, seem to have had an intrinsically hierarchical social structure which I have proposed to call a “*vertical egalitarian society*”.⁵⁶ This, together with the rather severe environmental constraints, must have led to increasing the tasks and enhancing the privileges of the social élites, leading to an early process of formation of central institutionalized authorities.

Both the Hassuna-Halaf and the Ubaid communities were to a certain extent “community-based” societies, differing widely from one another but both built up around the management of collective interests, whether they were really collective, or they were, to a great extent, the interests of the high-ranking figures representing the community that were somehow perceived to be in the collective interest. The Ubaid temples and the emergence of the redistribution system bear witness to this coexistence and combination of concentration of goods and reallocation of them, of “private” interests and “public” interests, in a system that could not be managed at the household level, but in which the whole of society was really and ideologically involved.

⁵³ BALOSSI-RESTELLI 2006.

⁵⁴ TSUNEKI ET AL. 1998, fig. 13.

⁵⁵ OATES 2004.

⁵⁶ FRANGIPANE 2007.

The two types of Mesopotamian societies, northern and southern, for differing reasons, seem to have been driven to open up to the outside world and this must have also led people to travel around, encouraged by the lack of any defined political boundaries. I am not trying to hypothesise migrations, let alone any colonial or trade-motivated movements, but the archaeological evidence leads me to suggest that the borders were very indefinite and that small groups must, at times, have moved away into areas with which they had already long-established intense relations.⁵⁷ There is little data available, as we have already said, but the tripartite houses of the Hamrin type found at Tepe Gawra XV,⁵⁸ and then re-proposed at Degirmentepe later in the Terminal Ubaid period⁵⁹ (fig. 7), in my opinion suggest the possible actual intrusion of people of non-local origin. The house shape and layout, as well as the distribution of variously sized spaces inside it, reveal specific ways of using those spaces and conducting home life, which must have been closely linked to specific cultures and society customs, and unlikely to be simply imitated.

At the same time it is obvious that there was no replacement of populations or colonisation. Recent data on the contrary show that on most of these sites the domestic structures seem to have retained what were essentially traditional features, as seems to have been the case at Kenan Tepe to the east/north-east,⁶⁰ or Koshak Shamali, Tell al-‘Abr, and Tell Zeidan to the west.⁶¹ On the other hand, the presence of Halaf-type painted motifs on Ubaid fabrics at Tell al-‘Abr, or, conversely, of Ubaid-style painted patterns on Halaf ware at Domuztepe,⁶² both dating back to the end of the sixth – beginning of the fifth millennium, shows that there were contacts with the Ubaid world even in the westernmost areas in a very early phase.

Yet the outcomes of the second half of the fifth and fourth millennia show that the Chalcolithic

⁵⁷ FRANGIPANE 2001, 2013.

⁵⁸ TOBLER 1950.

⁵⁹ GURDIL 2010.

⁶⁰ PARKER 2010.

⁶¹ NISHIAKI, MATSUTANI 2001; YAMAZAKI 2010; STEIN 2010, 2011.

⁶² CAMPBELL, FLETCHER 2010.

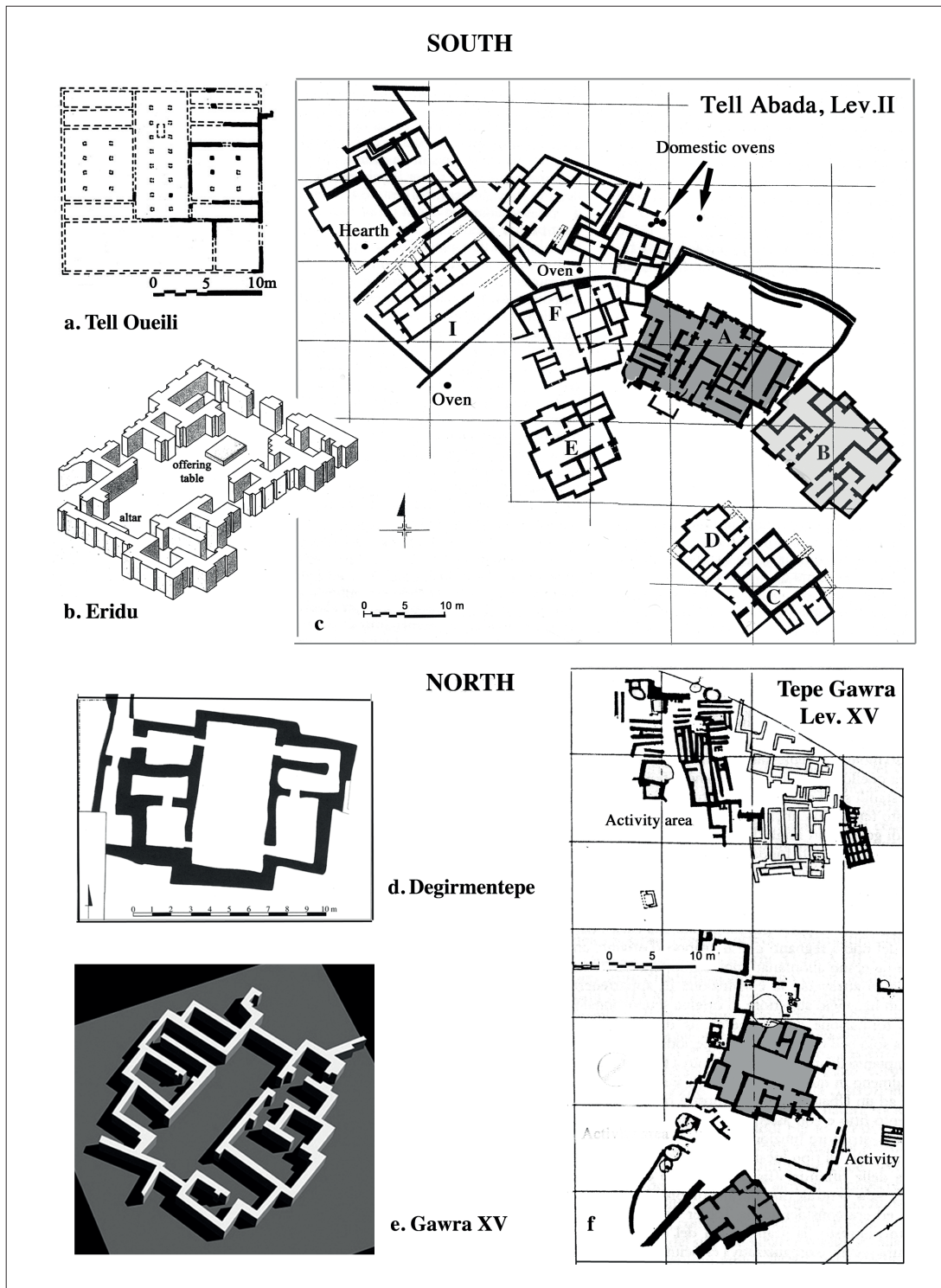


FIGURE 7

Mesopotamian villages and “tripartite” houses and temples from southern and northern Mesopotamia: *a*: Tell Oueili tripartite house (from HUOT 1991); *b*: Eridu, the level VII ‘temple’ (from FOREST 1996 fig. 84); *c*: Tell Abada, lev. II (adapted from JASIM 1989 fig. 2); *d*: A tripartite house from the Değirmentepe Late Ubaid village (adapted from GURDIL 2010 fig. 22.7); *e*: 3D drawing of the main tripartite house from Gawra XV (elaborated by C. Alvaro); *f*: Tepe Gawra, the level XV village (adapted from TOBLER 1950 Pl. XV)

societies in the North developed towards hierarchical systems exhibiting close structural similarities with the southern communities: see, as examples, Gawra XIII-XII for the Late Ubaid period, or Tell Brak TW 20-18 for LC1-2.⁶³ In the course of the fifth millennium, typical southern structuring features must have been adopted, which were to change the look of the northern societies in a “southern-like” sense.

What I would like to propose here is that it was precisely the structure of both societies based on the essential strong relationship among their components as well as their similarly structural opening to the exterior that stimulated and made it possible this interaction, which brought about real and radical change in both regions. According to N. Yoffee, «An interaction sphere [...] refers [...] to the systematic, consistent, and normative set of activities that link people in such a way that a significant part of their identities are defined by such interactions».⁶⁴ It was not the importation of a “superior” model in the North, but the adoption there of new systems of social relations with which the northern populations had been in long-standing contact, and which probably offered better solutions for meeting the new needs and dealing with the structural difficulties that Halaf society must have found in the final phase of its development.⁶⁵ The new system was certainly a hybrid of favourable experiences from the history of the northern communities, such as the wide use of administrative procedures, and the new hierarchical relations that were originally specific to the southern world, while each society largely retained their basic local subsistence economy and settlement patterns. Urbanisation, for instance, one of the main distinguishing traits of the southern societies, is little recognizable in most of the northern areas, except for the wide and well-watered Khabour basin.

I think that it is no coincidence that a strongly structured hierarchical system was established in “community-based” societies, and that it was also the outcome of their wide-ranging and long-lasting

links. The existence of solid systems for the governance of the community can lay the foundations for strengthening a sort of central authority, while at the same time the management of wide complex relations, which were structurally necessary to the same survival and reproduction of the systems, could have further strengthened that authority.

7. Concluding remarks

Whatever the mechanisms underlying the North-South hybridization might have been, it is significant that the development of the highly hierarchical socio-political and economic systems recorded in the Mesopotamian world as early as the end of the fifth or the very beginning of the fourth millennium BCE did not occur in the more inward-looking and self-sufficient societies that occupied the ecologically more favourable territories in Central-Southern Anatolia.

In Central and Western Anatolia, it was only at the beginning of the third millennium (possibly at the end of the fourth), with the establishment of the so-called “Troy culture”, that full-blown élites with their own seats are recognisable,⁶⁶ and even in this case, I do not think these élites were able to fully control and interfere in the economic life of the population. There is no evidence of any central administration of the movement of basic goods, or the accumulation and redistribution of foodstuffs, or control over labour. But there is evidence of the accumulation of non-perishable wealth, often in the form of metal.⁶⁷ The settlements generally remained fairly small, and the cultural areas – probably at least partially coinciding with political entities – remained limited in extension. On the other hand, a network of wide trade relations was established among the Anatolian communities in the Early Bronze Age, perhaps in connection with the development of new exchange circuits, also using maritime routes. These societies appear as small polities, may be often in conflict, as is shown from the spreading of town-walls and the defensive layout of many settlements.

⁶³ TOBLER 1950; OATES 2005, pp. 14-28; McMAHON, OATES 2007, pp. 148-155; OATES ET AL. 2007.

⁶⁴ YOFFEE 1993, p.258.

⁶⁵ BRENIQUET 1996; FRANGIPANE 2007.

⁶⁶ EFE 2003; KORFMAN (ed.) 2006.

⁶⁷ EFE 2002; BACHHUBER 2009; FRANGIPANE 2010.

In other words, it seems to me that, in western societies, real hierarchies developed later than in the Mesopotamian environment, and the new emerging élites mainly concentrated prestige and “wealth” in the form of non-perishable goods, which also probably functioned as a social amplifier of their prestige. This may have led these élites to somehow control, or influence craft activities and exchanges, perhaps also providing protection of the trade routes, but they do not seem to have interfered in the primary economic activities of the population. Town-walls, weapons and metals were the emblems of the third millennium Anatolian societies.

The archaeological evidence conversely shows the capacity of the early Mesopotamian élites, both south and north, to exercise an increasing economic control over staple production and labour, perhaps as the result of the original needs

for coordination of subsistence activities in complex, variously productive, and, to varying degrees, difficult environments, which developed a strong, though differently manifested, sense of community. The centralized control over the basic production of the population that had primarily developed in the south appears to have also offered an effective model to the heads of the northern communities at the beginning of the fifth millennium BCE, becoming the basis for the development of a strong centralized power in the hands of the rulers all over the Mesopotamian regions in the fourth millennium BCE.

Large cities (where there were the conditions for these to develop), imposing public areas, food accumulation and redistribution, administration and bureaucracy were the emblems of the fourth millennium societies in the whole Greater Mesopotamia.

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The role of the husking tray in the late Neolithic communities of Northern Mesopotamia. A first experimental analysis

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ABSTRACT

The subject of this paper is the study of a pottery shape known as the “husking tray”, whose functional interpretation is the main topic of my doctoral research.

The husking trays are usually very large trays, made of a coarsely straw-tempered clay, characterized by a very wide oval base and low sides; they were used by the communities living in Northern Mesopotamia during the seventh and the first half of the sixth millennium BC.

The most interesting feature of this kind of vessel is the presence of incisions and impressions on their interior surface.

Several scholars have suggested various hypotheses about how the husking trays could have been used and what specific function they could have had, but these suggestions have remained merely theories so far.

In the paper it will show a first experimental analysis which has revealed that the husking trays could have been pans used to bake bread and the incisions/impressions on their inner surface could have been anti-adhesive arrangements.

KEYWORDS

Late Neolithic, Hassuna, Pottery, Experimental Archaeology, Cereals, Oven, Bread

1. Introduction

According to the archaeological literature, the term husking trays refers to trays, belonging to the Late Neolithic Period (ca 6 900-5 300 cal. BC), usually very large in size, which present an interior surface crossed by incisions/impressions (fig. 1).

Shards belonging to this pottery shape were found in the archaeological sites since the 1940s in Upper Mesopotamia and particularly in contexts related to the Hassuna pottery horizon. They were found here in so many amounts that the husking trays were for a long time considered as a fossil key of this Culture.¹

Then, with the spread of archaeological excavations, fragments of husking trays were found in all of the Near East and for periods before and later than which the Hassuna Culture had supposedly developed.²

Despite the wide area interested by their presence, the husking trays represent a homogeneous ceramic group for technological characteristics.³ Even though often in a fragmentary state, generally these are large oval trays that could reach up to 60 cm in length and 40 cm in width, on the contrary of the quite low sides (c. 10/15 cm). Both the base and the sides were almost always extremely thick and done in a rough way. The rim most of the times is very irregular so that the height is rather variable within each vascular shape.

The husking trays belong always to the most coarsely group of the ceramic assemblages in which they were found.⁴ The clay appears to be tempered with plant inclusions usually in large amount and of large size. The presence of this kind of temper, that disappear during firing, and made the pottery surface very porous.

In general, the surfaces of the husking trays are so poorly finished, that fingerprints left during the phase of shaping, are visible as well as the attach-

ment of coils. In general, the surfaces are just roughly smoothed and less frequently scraped.

On the contrary to their outer surface, that usually did not show any kind of decoration or superficial treatment, the interior surfaces were crossed by incisions, impressions or grooves. These characterized the husking trays in a wide variety of patterns (parallel lines, criss-crossed lines, impressions, etc). These marks could be carried out with tools or with the finger and could also have a different depth in the same vessel.

These marks entirely covered the inner surface of the husking trays and have always caught the curiosity of scholars, who suggested throughout time, various hypotheses about their functionality and/or meaning.

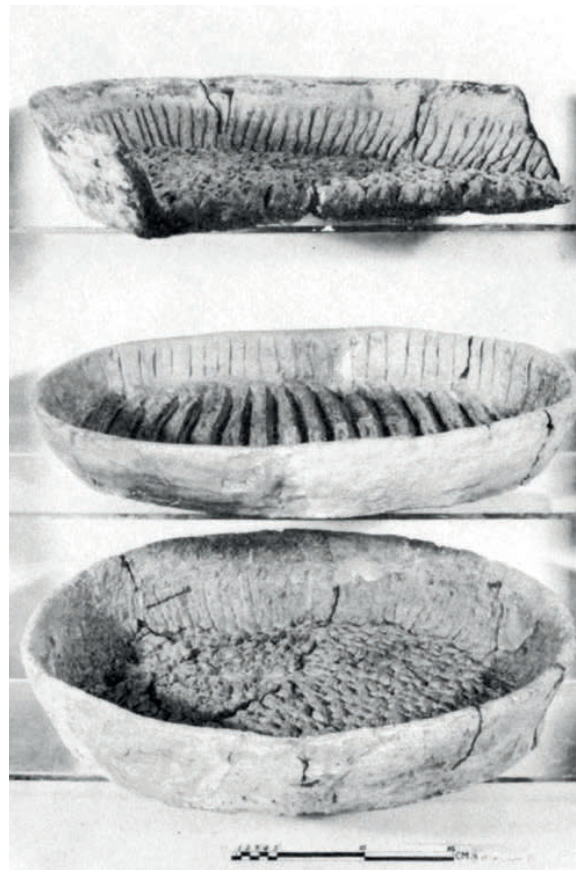


FIGURE 1
Husking trays found in Tell Hassuna
(LLOYD, SAFAR 1945)

¹ CRUELLS, MOLIST, TUNCA 2004, p. 2.

² LE MIERE, NIEUWENHUYSE 1996, p. 146; TSUNEKI, MIYAKE 1998, p. 75; CRUELLS 2013, p. 96.

³ NIEUWENHUYSE 2008, p. 116.

⁴ NIEUWENHUYSE 2008, p. 116.

In the present paper the hypotheses suggested until now about the possible function of the husking trays will be briefly summarized.

The two most commonly agreed of them will be critically assessed by a first experimental analysis. In the conclusion the results will be discussed.

2. Functional Hypotheses

Since the excavations of one of the first archaeological sites where fragments belonging to the husking tray group were found, archaeologists attempted to explain the peculiarity of this pottery shape by its presumed function.

The first attempt dates back to 1943-44 when Lloyd and Safar⁵ found fragments of husking trays at the site of Tell Hassuna. They, «for want of a better explanation of its purpose», supposed that these kind of trays were used for separating the grain from their husks. The idea was probably that the husking trays could have been used like large graters where spikes would have rubbed against them. For this reason, they referred to this peculiar kind of vessel as a husking tray which later became their definitive name.

In 1983 M. Voigt,⁶ who found husking tray shards at the archaeological site of Hajji Firuz Tepe in Iran, questioned the previous interpretation of Lloyd and Safar.

Voigt stated that it is unlikely that the trays were used for husking, given their size and weight, suggesting instead that they could have been portable ovens used to bake flat bread. This hypothesis was proposed on the basis of a comparison with a kind of oven used nowadays in Iran called *sangak*. The name of these ovens refers to the presence of a bed of pebbles at their base; when heated during baking they serve as a method to avoid the adherence of the bread to the base of the oven.

Thus, Voigt suggested that the husking trays, thanks to their textured, matte inner surface would have prevented a thin layer of dough from sticking during baking.

⁵ LLOYD, SAFAR 1945, p. 278.

⁶ VOIGT 1983, p. 159.

Moreover, Voigt noted that on the contrary to the husking tray shards, the domed ovens of Hajji Firuz Tepe do not belong to earliest levels. This fact would have provided support to the idea that the husking trays served as portable ovens before the appearance of the domed oven.

Since then, the majority of scholars have preferred Voigt's explanation,⁷ tempting to support this idea with ethnographic comparisons⁸ of vessels used to bake bread but, it has always just remained a theory.

On the other hand, other hypotheses related to the proposal of Lloyd and Safar were proposed; the husking trays were used for similar activities but to manage softer foods⁹ or to produce wine.¹⁰

Moreover, it was also proposed that the husking trays could have been used as "parching trays"¹¹ to roast grains.

Finally, a similarity in shape has been noted between the husking trays and the vessels currently used in Anatolia to elaborate dairy goods.¹²

3. Experimental Analysis¹³

To verify if the suggested hypotheses about the function of the husking trays were actually feasible, a first set of experimental tests were carried out.¹⁴

In particular, these experiments focused on verifying the hypothesis that the husking trays were used to separate the cereal grains from their husk (Lloyd and Safar's hypothesis) and the idea that they were used in bread baking (Voigt's hypothesis).

⁷ BALOSSI, MORI 2014, p. 53.

⁸ TEKIN 2015, p. 25.

⁹ Unpublished thesis of KILIÇBEYLİ 2005 quoted in NIEUWENHUYSE 2008, p. 117.

¹⁰ Hypothesis suggested by Bahman Kargar quoted in AJORLOO 2013, p. 39.

¹¹ CLAYTON 2004.

¹² Cf. GÜNER 1988; KOŞAY 1957.

¹³ For a brief summary of the experimental analysis see also TARANTO 2018.

¹⁴ The data presented here are the results of the master thesis from the author of this paper.

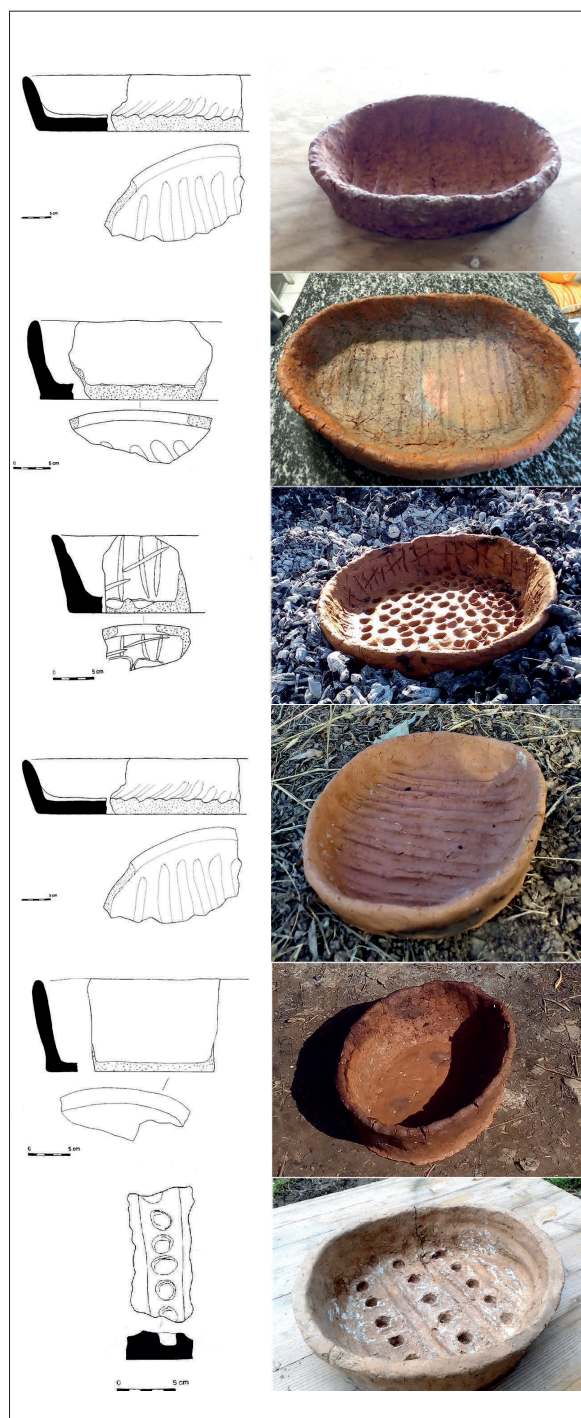


FIGURE 2
Experimental functional replicas of the husking trays
of Tell Sabi Abyad
(NIEUWENHUYSE 2008)

The first step was to reproduce functional replicas of husking trays¹⁵ (fig. 2). This work was based on the drawings and the data of the husking tray fragments found at Tell Sabi Abyad in Syria.¹⁶ During the shaping phase, a coarse, refractory clay was tempered with a large amount of straw fragments. Both the pinching and the coiling techniques were used to shape the trays.

According to the data of the husking trays of Tell Sabi Abyad, the surface of the vessels were simply, roughly smoothed¹⁷ and their inner surface was scored in different patterns both with the fingers and with tools.

After more than a month of drying some of the experimental replicas were fired in an earth-oven and others in a modern kiln.

3.1 Husking Test

The hypothesis that the husking trays were used as large graters for husking the spikes was at first submitted to experimental analysis¹⁸ (fig. 3).

The experiment has revealed that the husking trays could have hardly been used for that work. In fact, the incisions and impressions were an obstacle to that kind of activity because of their size and depth: often whole fragments of spikes filled them without breaking. Moreover, the ceramic surface (characterized by high porosity) is unsuitable to endure the mechanical stress caused by the rubbing of hard grains.

Finally, the other characteristic of this pottery shape like the remarks relative to the size and the weight suggested by M. Voigt would remain unexplained.

¹⁵ Cf. MATHIEU (ed.) 2002. The major part of the husking tray replicas was carried out during the course of experimental archaeology maintained by professor C. Lemorini in the 2015/16 at the Sapienza University of Rome.

¹⁶ NIEUWENHUYSE 2008; AKKERMANS ET AL. 2014; LE MIÈRE, NIEUWENHUYSE 1996.

¹⁷ NIEUWENHUYSE 2008, p. 116, pp. 330-337.

¹⁸ In the experiment hulled barley spikes were used.



FIGURE 3
Husking experimental test

3.2 Baking Tests¹⁹

To be able to perform the experiments related to the hypothesis that the husking trays were used for bread baking, it was necessary to build the three kinds of fire installations that were supposedly present in the Late Neolithic contexts.

A domed oven, a tannur-like oven²⁰ and a fire-place were replicated on the basis of archaeological remains of fire installations²¹ (fig. 4).

They were shaped by superimposing strata of rough clay mixed with a fair amount of large straw fragments. The dough consisted of stone-ground flour, roughly sieved, of two kinds of cereals: the wheat and the barley.²² Wood-coals were used as fuel.

Fourteen tests were executed for this first set of experimental analysis. For every one of them, variables such as the kind of fire installation, cooking

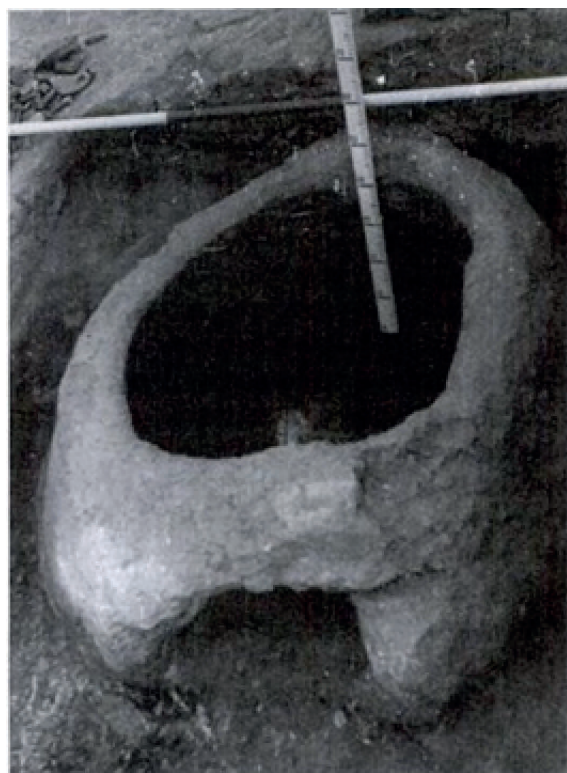


FIGURE 4
Round oven found in Yarim Tepe II
(MERPERT, MUNCHAEV 1993, p.77)

¹⁹ Vv.Aa. 2010; GIORILLI, LIPETSKAIA 2017.

²⁰ The presence of this kind of oven during this period is doubtful. In fact the upper part of the oven in the archaeological examples was not found leaving its missing part uncertain. BALOSSI, MORI 2014, pp. 48-49.

²¹ The replicas were based on examples from Yarim Tepe: MERPERT, MUNCHAEV 1993, p.77, p. 84; MULDER-HEYMANS 2002.

²² Wheat and barley generally are the most common crops resulting from the paleobotanical analysis in the Near Eastern, Late Neolithic sites such as at Tell Sabi Abyad (AKKERMANS ET AL. 2014, p.239).



FIGURE 5
Baking experimental test with tannur-like oven



FIGURE 6
Baking experimental test with the fireplace

time, baking temperature,²³ presence/absence of sour-dough, consistency of the dough (liquid, semi-liquid or solid) were changed.

3.2.1 Experiment with the tannur-like oven

The baking tests performed with the tannur-like oven have revealed that this kind of fire installation is unsuitable for baking bread with the husking trays (fig. 5).

In fact, an attempt was made to put the vessel filled with the dough at the top of the upper opening of the tannur-like oven²⁴ but:

- if the fire inside the oven was lit, its flames produced burn traces on the external surface of the tray that are not present on the archaeological shards of husking trays. Moreover, the resulting bread was burnt at the bottom and completely undercooked at the top.
- if the fire inside the oven was extinguished, baking was impossible because the remaining heat from the preheating stage of the oven, was not high enough to allow the bread to bake.

3.2.2 Experiment with the fireplace

Also, the attempts to bake bread with such a large pottery shape in a simple fireplace did not work (fig. 6). In this case the large size of the husking trays prevented the oxygen from feeding the burning-coals under it which resulted in extinguishing them. Thus, the heat did not arrive from the top because the baking was in the open air, neither from the bottom because once the husking trays were put in, the coals became extinguished in a short time. As result, the bread remained totally raw.

²³ The cooking temperatures were recorded with a pyrometer TE/XF0600F3F, AM&C.

²⁴ Today the tannur ovens are used to bake bread by putting the dough discs against the heated inner walls. In the experimental analysis an attempt was made to bake by placing the tray over the upper porthole since it is the only possible way to bake with a husking tray in this kind of oven. However, nowadays in the Near East sometimes pots are also put at the top of the tannur to cook.

To facilitate the baking of the dough the idea of using lids was taken into account, however, this idea was discarded because they are not present in the archaeological record.

On the basis of ethnographical examples²⁵ putting hot coals also at the top of the husking tray was tested, however, this attempt did not work either. The upper part of the dough turned into a hard crust that stuck to the sides and instead the bottom part remained totally undercooked.

3.2.3 Experiment with the domed oven

In the first experiments conducted by baking bread with the husking trays in the domed oven positive results were not obtained.

Initially many experiments failed due to the use of semisolid dough. Once again the upper surface of the dough in contact with the high temperature of the oven, turns into a very hard crust while the lower part of the dough, when in contact with the ceramic surface, remains quite raw and wet (fig. 7).

Subsequent work made it clear that the consistency of the dough was a critical variable, and this crucial insight ultimately led to positive results.

Finally, since this variable of the dough was changed in which more solid forms were used, the experiments began to work, and baking bread became possible (fig. 8). In fact, using a very solid dough, prevented the incisions/impressions on the surface of the vessel from being filled. With this method the scoring on the pottery's surface had a function: it created a bumpy surface that prevented the dough from adhering well to the vessel therefore facilitating the extraction of the bread after baking.

In conclusion the experiment worked:

- by simply putting the husking tray filled with a very solid dough in the preheated domed oven directly on the burning coals;
- with the preheating technique of the tray.

²⁵ There are many ethnographic examples of pots used for baking by burying them (usually covered with a lid) in hot coals. Cf. for instance DJORDJEVIC, NILOLOV 2013, p. 54.



FIGURE 7
Baking experimental test with domed oven



FIGURE 8
Baking experimental test in the domed oven and preheating of the tray

The technique of preheating the vessel was suggested by an ethnographic comparison: the Crepulja.²⁶ These are pottery trays more or less of similar size to the husking trays still in use in the Balkans for bread baking. They usually have a hole in the middle of the tray, or as it appears in some examples, the inner surface scored by a few incisions.²⁷ Usually they are heated in a fire or in a domed oven, filled with the dough and covered by a lid at the top, in which burning coals are put to allow the dough to continue baking.

In the experimental tests, once the domed oven reached a temperature of 400°C, an empty husking tray was placed onto the burning coals. Leaving it there for 15 minutes allowed the vessel to reach a temperature of 180°C²⁸ and retain the heat. Successively the husking tray was pulled out and filled with a very solid dough. This action permitted the surface of the dough to come in contact with the tray's heated surface immediately turning into a thin crust that prevented the bread from sticking to the vessel surface. Once filled with the dough, the husking tray was left inside the oven to continue baking for about 2 hours. In this lapse of time, the dough received heat from both the oven and from the husking tray thanks to the heat that it had previously retained.

In fact, inside the dough, due to a series of physical and chemical transformations, the proteins connected with each other to create a network so that the dough could become unified: the loaf of bread. The ability to create networks inside the dough depends mainly on the type and the percentage of gluten present in the flour. Every kind of cereal has a different kind and amount of gluten and consequently, this characteristic could reveal what kind of cereal could be potentially more suitable to bake with in the husking trays.

4. Concluding Remarks

In conclusion this first set of experimental tests allow us to consider that Voigt's hypothesis is actually feasible with some adjustments:

- the husking tray would not be portable ovens, but pans used with a domed oven;
- the bread would not be so thin because the presence of incisions on the inner surface of the husking trays would indicate the height of the hypothesized bread (ca 4-5 cm).

Furthermore, if the husking trays were used in this way many of their characteristics would have had an explanation.

The general shape of the husking trays with a wide base and low sides qualify them as the perfect pan to cook in a domed oven: their shape in fact allows a large quantity of food to homogeneously distribute so that it could arrive to a similar temperature at the same time (taking modern pans into account).

The ceramic composition of the husking trays (coarse, plant-tempered clay) is suitable for cooking in an oven because it minimizes the thermal stress.²⁹

Finally, the incisions/impressions present on the inner surface would be explained: they would be anti-adhesive arrangements.

This should explain why the incisions/impressions often looks to be done in a careless way, the reason they have different depths throughout the same vessel and why they were distributed regularly and repeatedly on the surface of the trays. In regards to the interpretation of the pottery shape, this work suggests that the "husking tray concept" could shift towards a more functional sense related to an adaptation of the pans for bread baking. However, the fact that the incision/impressions could have a functional purpose, it does not exclude that the different "decorations" could have also had a meaning.

Moreover, the cereal is a very good candidate as a main ingredient to be cooked with in the husking trays; in fact, it was one of the staple foods of these kinds of communities.

²⁶ BALOSSI, MORI 2014, p. 53; see also DJORDJEVIC, NILOLOV 2013.

²⁷ http://muzejknjazevac.rs/naselja_en.html 13/04/2018.

²⁸ This temperature was recorded with a non-contact infrared thermometer PCE-889B.

²⁹ EILAND 2003, p. 321.

Finally, it should be remembered that for later periods of the Near Eastern history there are parallels for baking bread in pots; the scenes depicted in the Old Kingdom Tomb of Ty³⁰ and by the so-called “bread moulds” of the Zimri Lim palace in Mari³¹ are evidence of this.

In conclusion, this research gives insight to the functional interpretation of the husking trays and

broaden the horizons about the understanding of the Late Neolithic communities in the Near East. Nevertheless, the experimental analysis indicate a possible direction, but should be considered a first step. Only future experimental analysis in conjunction with the archaeological data could provide more precise and solid suggestions of the role played by this pottery shape.

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³⁰ CHAZAN, LEHNER 1990.

³¹ MARGUERON 2004, p. 492.

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The Halaf tradition in Upper Mesopotamia: some questions about socio-economic background and identity

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ABSTRACT

The paper focuses on the analysis of the so-called tholos, a circular building widespread – but not exclusively – during the Halaf period. Taking into account most of the remains of tholoi present at many Halaf sites (31 in all), including data relating to the transitional periods (Proto-Halaf and Post-Halaf/HUT), in the first section a classification of types of tholos is proposed and their possible functions are discussed, with reference to previous work. The second section deals with some related socio-economic issues, considering settlement layout and the distinction between sites with long and short occupation, and small and larger villages. Particular attention is given to: family structure or pattern, that is the arrangement in extended or nuclear households; storage facilities, i.e. the adoption of communal or domestic storage practices; the type of mobility, namely the compatibility of the current interpretations with models of long-term and short-term mobility on one hand, or with certain models of ‘nomadism’ and pastoralism on the other. A final question concerns to what extent these aspects are related to differences in pottery production recognizable, in part, at local and regional scales – and therefore to the issue of ‘socio-cultural identity’.

KEYWORDS

Halaf, Late Neolithic, Architecture, Society, House/Household, Family Pattern/Structure, Storage, Mobility, Pastoralism

1. Introduction

This paper presents a summary of the results of the analysis of more than 250 tholoi, widespread across Upper Mesopotamia, from Turkey to Iraq via Syria, and throughout the Halaf period, including the transitional stages, Proto-Halaf and Post-Halaf/Halaf-Ubaid Transitional.¹ The analysis aims to build a typology on a more complete and systematic database than in previous works, and to identify and discuss the possible functions of these round buildings during the period and context considered.²

It will therefore focus on some problems and (open) questions, mainly various relevant socio-economic aspects, as illuminated by the analysis of (domestic) architecture and settlement layout in the Halaf and Proto-Halaf contexts. The key issues are:

- a) Family structure
- b) Storage practices
- c) Nature of mobility

Regarding these points, might different contexts and situations be seen in different sites and villages? Are these possible differences related in some way to differences in pottery production, regional variations, and to question of 'identity'?

¹ Data come from the sites considered in BENITTI 2008 (references can be found there for excavation reports, both for sites treated here and others): Yarim Tepe II and III, Tell Arpachiyah, Kharabeh Shattani, Tell Hassan, Tepe Gawra, Tell Hassuna, Tell 'Azzo I, Hajiluk I, Khirbet Derak, Tell Der Hall, Kudish Saghir, Tell es-Sawwan, Bagum, Tell Sabi Abyad I, Tell Tawila, Tell Umm Qseir, Khirbet esh-Shenef, Shams ed-Din, Chagar Bazar, Tell Aqab, Yunus, Tell Halula, Domuztepe, Fıstıklı Höyük, Çavi Tarlası, Girikihacıyan, Kurban Höyük, Tell Turlu, Nevalı Çori, Kazane Höyük. Since then, little has changed (especially concerning the Halaf and Proto-Halaf tholoi – perhaps a little more is now known of Pre-Halaf times), other than the availability of new Tell Halaf excavation data, that was not yet published at that time.

² Reviews of the Halaf round buildings are mainly BRENQUET 1996 and TSUNEKI 1998. See also AKKERMANS 1989; FRANGIPANE 1996, 2007, 2013. For complete literature with generic references to tholos typology and functions see BENITTI 2008.

2. Chronological Framework

The Halaf period is traditionally divided into three phases: Early, Middle and Late Halaf.³ Excavations and research over time, especially beyond what had initially been considered the central core in Northern Iraq, led to the identification of a further phase preceding the Traditional Early Halaf, as well as transitional stages at the end and beginning of the Halaf (Proto-Halaf and HUT-Halaf-Ubaid Transitional). The period considered here, from the end of the seventh millennium BC to the second half of the sixth millennium, is therefore divided as shown in the table (tab. 1).

Naturally, this chronology is periodically subject to discussion, verification and revision: major issues are not limited to the transitional phases.⁴ It was thus decided to also include data from the transitional levels of the examined sites. Regarding the pottery, the Proto-Halaf levels see the appearance of what has come to be considered the typical Halaf Fine Painted Ware, but at relatively low percentages compared to other ceramic classes. One may therefore legitimately ask whether it is possible to speak of Halaf or not, and, if so, to what extent. However, much as the pottery analysis requires us – at least partially – to blur boundaries, so too the architecture analysis leads us to go beyond the traditional cultural boundaries.

3. Tholoi

In particular, one of the architectural forms considered characteristic of the Halaf tradition and examined here, the so-called tholos, is not exclusive to the Halaf period (and is not, in the Halaf context, the only architectural form). Similar circular buildings and round houses are already present in Pre- and

³ MALLOWAN, CRUIKSHANK ROSE 1935; PERKINS 1949.

⁴ E.g. BERNBECK, NIEUWENHUYSE 2013; CAMPBELL 2007; CAMPBELL, FLETCHER 2010; CRUELLS, NIEUWENHUYSE 2004; MIYAKE 1998. For a more extensive and critical discussion by the current author about the history of studies and Halaf chronology in the Late Neolithic context: BENITTI 2016, pp. 4-9, pp. 244-255.

TABLE 1 – Halaf Chronology

(after CRUELLS, NIEUWENHUYSE 2004, tab. 2; BERNBECK, NIEUWENHUYSE 2013, tab. 1.1; NIEUWENHUYSE, AKKERMANS in press, tab. 1)

Proto-Halaf Hassuna III	Early Halaf Halaf Ia	Traditional Early Halaf Halaf Ib	Middle Halaf Halaf Ila	Late Halaf Halaf IIb	Post-Halaf HUT
6100/6000	5950/5900	5850	5700	5550	5300

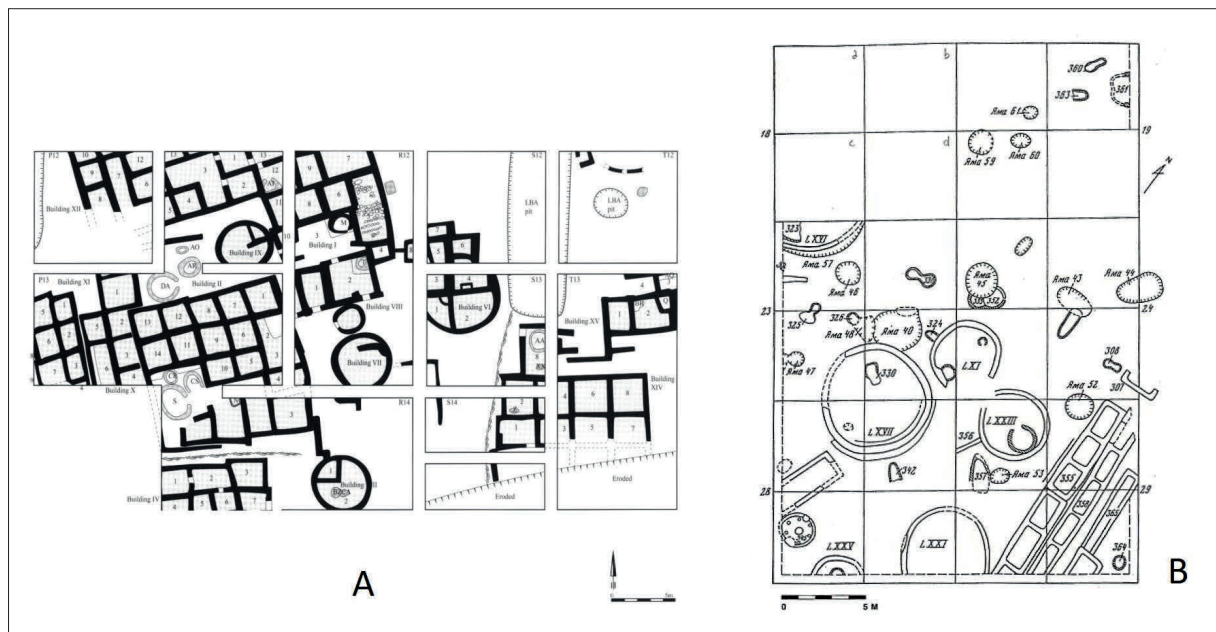


FIGURE 1
Tell Sabi Abyad – Proto-Halaf Level 6 (A) and Yarim Tepe II – Level IX (B)
(after CRUELLS, NIEUWENHUYSE 2004, fig. 2, p. 51; BRENIQUET 1996, pl. 37)

Proto-Halaf contexts during the seventh millennium (Sabi Abyad, Tell Halula, Tell Hassuna, Yarim Tepe I) and do not disappear completely even in the subsequent period.⁵ It therefore seemed interesting to include the data from the transitional levels and thus provide an extended overview in order to better assess the existence (or not) of differences.

As mentioned above, the Halaf architecture, and also the Proto-Halaf at more than one site, consists of

rectangular and circular buildings, the so-called tholos (plural: tholoi). The former vary from large multi-cell structures, such as those in the Proto-Halaf level 6 (Burnt Village) of Sabi Abyad (fig. 1), to smaller and sometimes elongated ones, as at Yarim Tepe (fig. 1). These kinds of buildings, with some exceptions, are frequently considered unsuitable for habitation, due to the small size of the rooms.⁶

⁵ AKKERMANS 2010; BENITTI 2008 and references therein.

⁶ Cf. BENITTI 2008; FRANGIPANE 1996, 2007, 2013; VERHOEVEN 1999. A summary and discussion of the big rectangular buildings is not the aim of this paper. In addition to

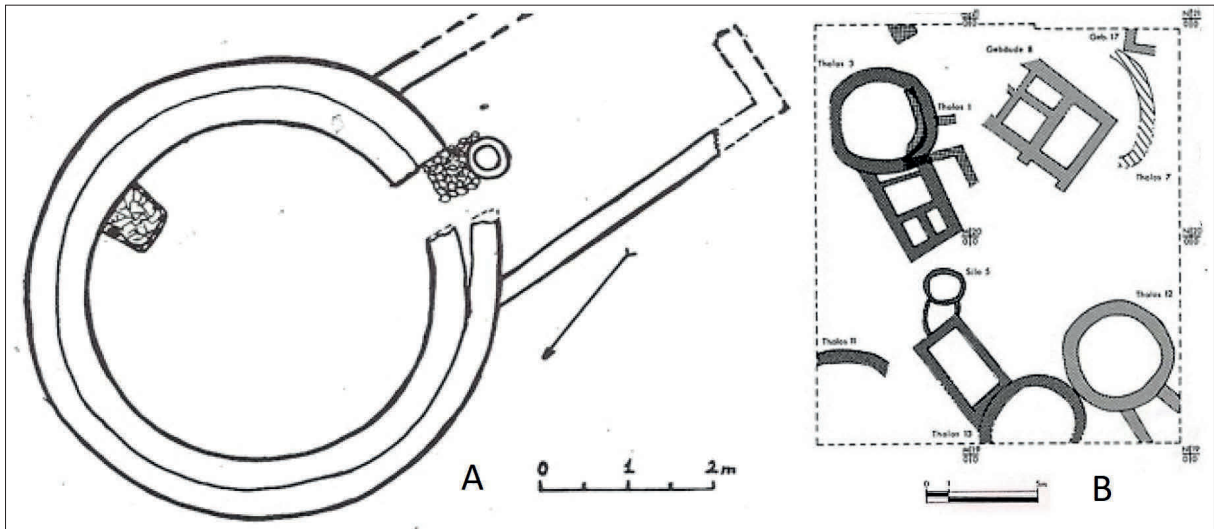


FIGURE 2
Tholos with antechamber (A: Yarim Tepe II) and tholoi with auxiliary structures (B: Çavi Tarlası)
(after MERPERT, MUNCHAEV, BADER 1976, pl. XX; VON WICKEDE, HERBORDT 1988, fig. 2)

3.1. Typology

Tholoi too can be subdivided into different types (not mutually exclusive, except for the simplest type). The main distinction is between the simple tholos with only the circular room (fig. 1) and those with connected structures, the nature of which can vary. Amongst these, it is useful to stress the difference between antechambers and auxiliary structures, sometimes quite similar in shape and size but not placed in front of the tholos entrance and accessible only from the outside (figs. 2, 6, 8).

Unfortunately, it is not always possible to distinguish between them, since often the entrance cannot be detected, especially where there remain only stone foundations. For instance, among the tholoi of Arpachiyah, considered by many scholars to have antechambers,⁷ there is no trace of passages between

the round and rectangular rooms. In this case it is, in fact, impossible to distinguish between the two types.⁸

To these three main types (simple tholos, tholos with antechamber, tholos with auxiliary structure) one may add another three: tholos with annex, tholos with internal partitions (figs. 1, 10) and 'agglutinated' tholoi. The first are equipped with a small quadrangular compartment (or semi-circular or more irregular) accessible only from the circular room and are not very common (the only certain examples come from Yarim Tepe II). The tholoi with internal partitions can be connected to auxiliary structures or not, and are subdivided into compartments and rooms that are generally small and unsuitable for habitation in most cases. The agglutinated tholoi, which are leaning against each other, are also rare while tholoi that are adjacent to one another are more frequent, especially amongst the smaller tholoi.

FRANGIPANE and VERHOEVEN, in this regard see in particular the bibliography on Sabi Abyad: e.g. AKKERMANS 1989, 1993; AKKERMANS (ed.) 1996; AKKERMANS ET AL. (eds.) 2014; AKKERMANS, DUISTERMAAT 1997.

⁷ BRENIQUET 1986, p. 237; 1996, p. 86; TSUNEKI 1998, p. 165.

⁸ Cf. BENITTI 2008, p. 85; MALLOWAN, CRUIKSHANK ROSE 1935, p. 30.

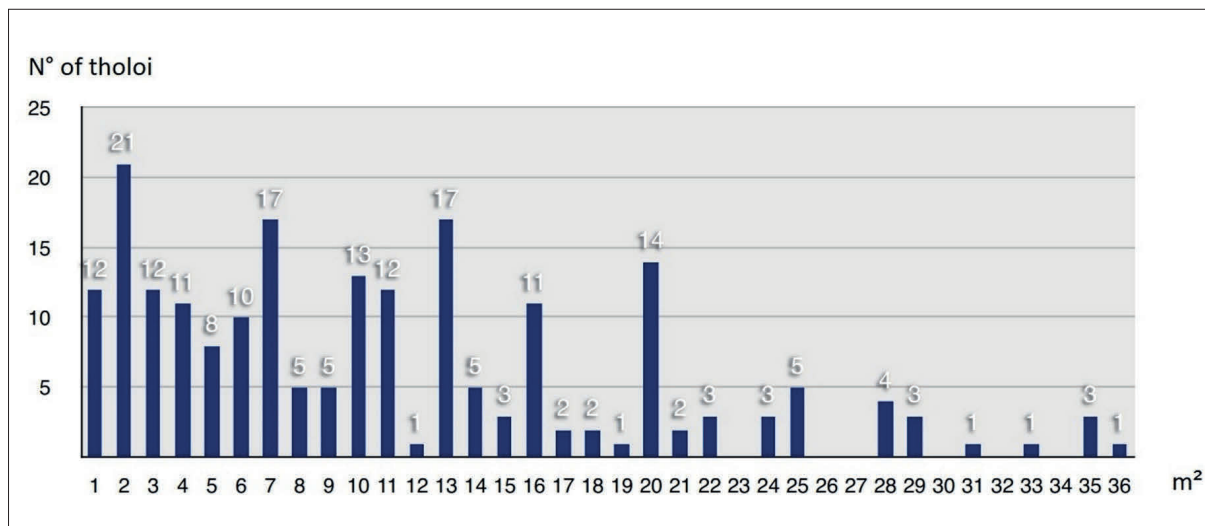


FIGURE 3
Distribution of tholoi grouped by area (sq m)

3.2. Functions

Architectural data from Proto-Halaf and Halaf sites are not particularly uncommon but, with some exceptions, it is difficult to know much about the internal settlement layout, due to a lack of extensive excavations or problems related to specific levels or building phases. There are several problems relating to the identification of the relations between tholoi and rectangular buildings, between buildings and open areas (of activity or not), and between the tholoi too. Moreover, it remains difficult to establish the possible functions, especially for the tholoi. However, taking into account the size, type, some ethnographic cases and various characteristics such as installations (e.g. benches, fireplaces and hearths, ovens), finds, building techniques and the context in each settlement, we can say something about the possible functions.⁹

⁹ For features, dimensions and measurements (wall thickness, entrances...), finds, building techniques, and all the data related to each tholos and linked structures, as well as for each typological and functional attribution: BENITTI 2008, tab. 1-25 for a summary and quick consultation.

Considering the distribution of tholoi according to their size (internal diameter) expressed in square metres, we can identify some peaks (fig. 3). The first is around 2 sq m, which corresponds to a small tholos, maybe a silo, with an inner diameter of about 1.6 m. Indeed, all the tholoi with area less than 7 sq m are quite small, with an internal diameter of less than 3 m. Further peaks are located at: 7 sq m, corresponding to an internal diameter of 3 m, 10-11 sq m (diameter of 3.5-3.7 m), 13 to 16 sq m (diameter of 4-4.5 m), and 20 sq m (diameter of about 5 m). In the chart (fig. 4) the tholoi are grouped together in dimensional and functional classes with the related typology.¹⁰ Not all the tholoi without apparent structures are necessarily simple, since several tholoi are only partially excavated, perhaps a half or a quarter of the total tholos area being uncovered. For these it cannot be said for sure whether they are connected to some other structure or not.¹¹

¹⁰ From these charts we exclude all the tholoi without measurements, and we consider only the inner diameter.

¹¹ This is one of the reasons for the absence of Type A/Simple tholos in the chart. In other words, type A is simply equal to the total number of tholoi (first bar) minus the others

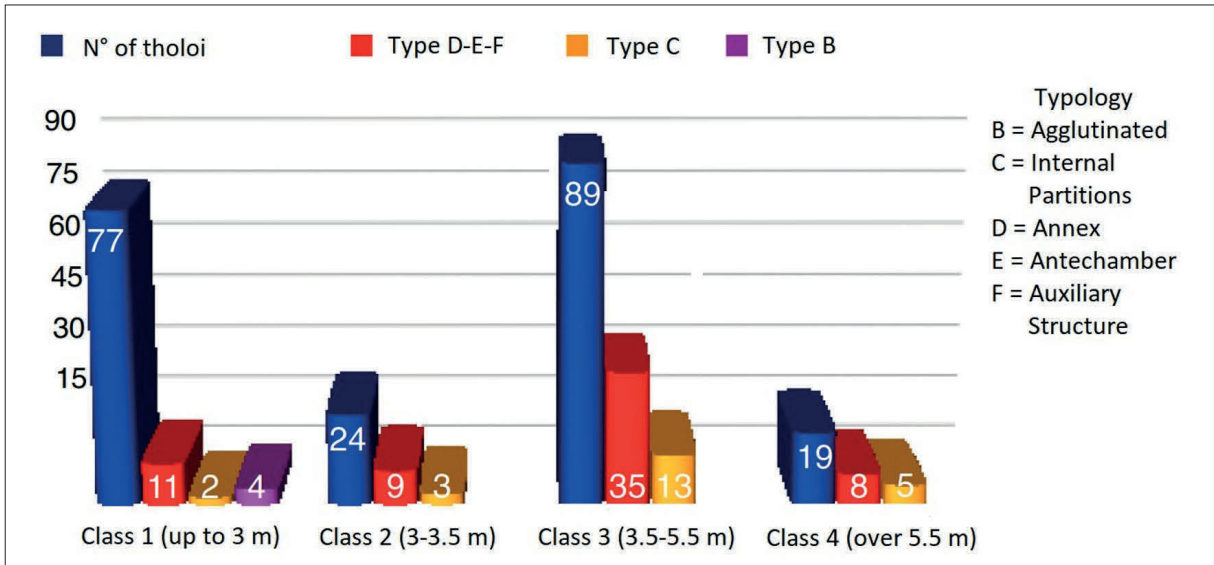


FIGURE 4
 Tholoi grouped by typological and functional/dimensional classes

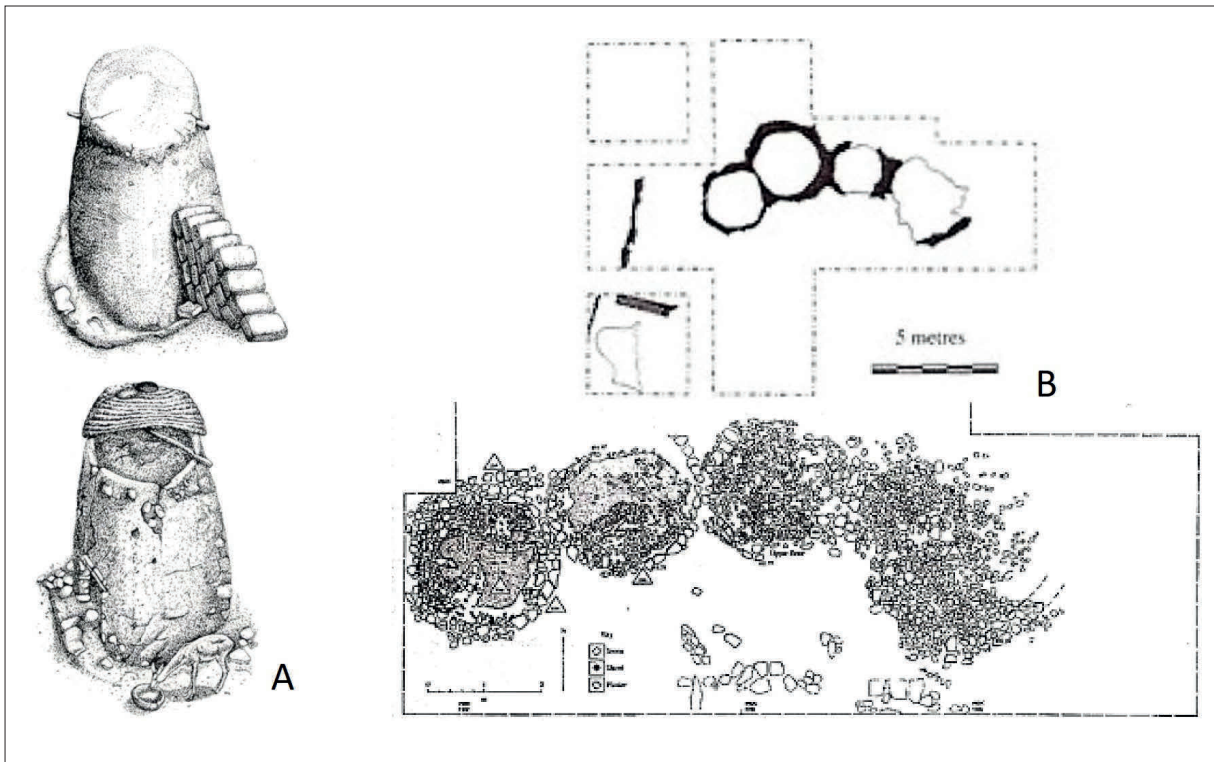


FIGURE 5
 Hypothetical primary and secondary use of a small tholos (A: Shams ed-Din) and small tholoi grouped together (B: Domuztepe) (after CARTER, CAMPBELL 2000, fig. 3; CARTER, CAMPBELL, GAULD 2003, fig. 7; SEEDEN 1982, fig. 77)

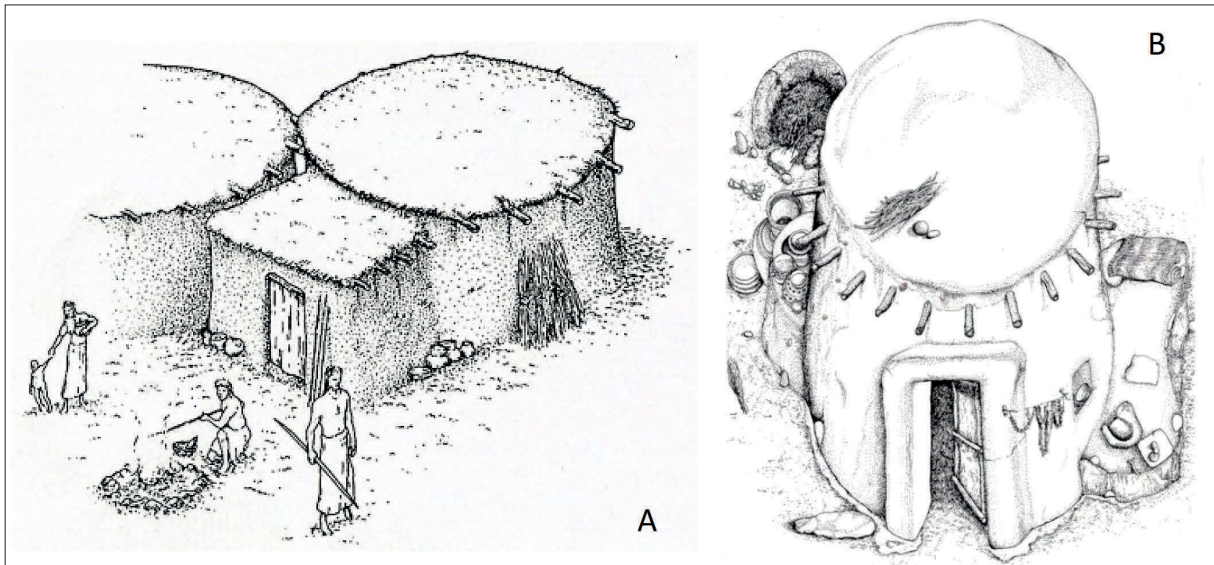


FIGURE 6
Tholos with antechamber (A: Khirbet esh-Shenef) and with benches outside (B: Shams ed-Din)
(after AKKERMANS, SCHWARTZ 2003, fig. 4.12; SEEDEN 1982, fig. 79)

The tholoi with a diameter up to 3 m (about one third of all the tholoi analysed) can be considered to be storage buildings, granaries, maybe stables and someone kitchens (fig. 5). Possibly, a distinction can be made between primary and secondary use, i.e. re-use when the building was in state of decay.¹² Sometimes they are close to, or even connected to, a larger tholos. Others are placed in groups next to one another (and all the agglutinated tholoi are in this class) or near one or more bigger tholoi. In such cases, it is not easy to establish a hypothetical auxiliary function related either to one or more tholoi of greater size, or to the whole community or some part of it.¹³ Their small dimensions are not suitable for habitation, almost none is connected with rectangular structures but, in some cases, they have an oven or a fireplace inside, especially the larger ones, with a diameter between 2 and 3 m.

types, subject to the uncertainty explained above.

¹² SEEDEN 1982, p. 72, p. 74.

¹³ Cf. also BRENQUET 1996, p. 60, p. 87, p. 90; FRANGIPANE 1996, pp. 74-76; 2007, pp. 155-157; HIJARA 1997, p. 20; POLLOCK, CASTRO GESSNER 2009.

Tholoi from 3 to 3.5 m in diameter at some sites seem to function as granaries, at others as dwellings, depending on the characteristics of each.¹⁴ Tholoi with a diameter of more than 3.5 m are the most suitable for habitation (fig. 6). This class includes most of the type with antechamber or auxiliary structures, with oven, hearth or fireplace, with installations such as benches inside or outside and so on. Some distinctions can be made for tholoi with a diameter of more than 5.5 m, not because they have special features but because their distribution is rather localized, mostly at Yarim Tepe III (Late Halaf), Arpachiyah (Middle Halaf) and Sabi Abyad level 6 (Proto-Halaf).

Sometimes it has been suggested that larger tholoi had special functions, such as a chief's residence or some kind of community-related functions, not always defined in detail.¹⁵ Such suggestions have been based not only on the larger size itself, but also

¹⁴ Cf. BENITTI 2008, pp. 131-134; pp. 255-256.

¹⁵ BRENQUET 1996, p. 94; TSUNEKI 1998, p. 172. See also FRANGIPANE 2013, p. 96. Cf., in other context, FLANNERY 1972, p. 31; 2002, p. 417.

on a supposed association of size and type – that is, a link between the bigger tholoi and the ones with antechamber – as well as on a supposed trend of increasing size over time.¹⁶ The data collected and analyzed, however, do not clearly show either of these two trends. Putting together Proto-Halaf and Halaf I on one side and Halaf II on the other, the average size is essentially the same (about 10 sq m) in both periods. While special functions cannot be ruled out, it seems perhaps more prudent to consider possible dwellings as lying along a range of sizes. At some sites, the size distribution clusters towards the lower end of the range, at others towards the upper.

4. First question: nuclear or extended households?

These abstract data would be more useful in the specific context of each site and the internal settlement layout but, as has been noted above, it is not always so easy to have a general overview of the settlement. Here we address the first question about the model of nuclear or extended families and households. In 1972, and later revisited about 15 years ago, Flannery proposed the model of African compounds in the interpretation of the circular structures of the Natufian.¹⁷ The compound is made up of an extended family, generally polygamous, consisting of an average of about twenty people. Everyone has their own home, except for the youngest children, while the other structures (kitchens, granaries, stables) are in common. This model was rejected for the Natufian by Breniquet and Forest, who instead use it in the Halaf context (fig. 7).¹⁸ According to them, the circular buildings of the Natufian are more or less of the same size and inhabited by a nuclear family, while in the Halaf context, different sizes and functions of the tholos would fit with the model of a compound. In this way, the various tholoi are parallel to the various rooms of a rectangular house, and

the settlement would coincide with the compound and the family that lives in it.¹⁹

Some years later, Ted Banning also rejected the model of a compound for the Natufian and PPNA contexts but on the basis of opposite arguments.²⁰ According to him, the circular structures do not have the same sizes and, except for the smaller ones (no more than 3 sq m) which function as storage buildings, the others have sizes between 9 and 25 sq m, and would have been large enough to accommodate a nuclear family. Moreover, he states that the arrangement of circular structures does not support the model of a compound and that there are no examples showing the grouping of circular structures around a courtyard, as is often the case with compounds, nor evidence that each person had his or her own dwelling.

The general context is not so different from the Halaf, and the range of about 16 sq m (from 9 to 25 sq m) proposed by Banning for the Natufian and PPNA houses is virtually the same as can be seen in the possible Halaf dwellings. At the lower end of the range, dwellings have areas between 10 and 24 sq m; at the upper end, at the sites where there are larger dwellings, the sizes range from 20 to 35 sq m. The circular structures of the Natufian and PPNA, like the Halaf tholoi, are often considered too small for more than one person, an argument that also draws support on Naroll's proposal of about 10 sq m (7 sq m according to LeBlanc) of 'living space' per person.²¹ It has been noted, however, that these numbers will contain statistical error and, above all, that the 10 sq m number results from considering all the buildings in a settlement, including storage facilities, stables and so on, overestimating the square metres per person and underestimating the number of possible occupants of a dwelling.²² Hypothesised numbers of inhabitants per structure can, of course, vary across researchers. For the Halaf period, Seeden, for instance, argues for 8 people liv-

¹⁶ BRENIQUET 1986, p. 237; 1989, p. 331; 1996, p. 87, pp. 90-96, pp. 117-118. See also HUOT 1994, p. 146; TSUNEKI 1998.

¹⁷ FLANNERY 1972, 2002.

¹⁸ BRENIQUET 1986, p. 237; 1989, p. 331; 1996, pp. 92-94; FOREST 1996, pp. 27-31.

¹⁹ Cf. also AKKERMANS 1989, pp. 63-64; AKKERMANS, SCHWARTZ 2003, p. 151; FRANGIPANE 1996, pp. 76-77; 2007, pp. 155-157; 2013; HUNTER-ANDERSON 1977; HUOT 1994, pp. 147-148; VERHOEVEN 1999, p. 219.

²⁰ BANNING 1998, 2003.

²¹ LEBLANC 1971; NAROLL 1962.

²² BANNING 2003, pp. 12-13; KAMP 2000, p. 86.

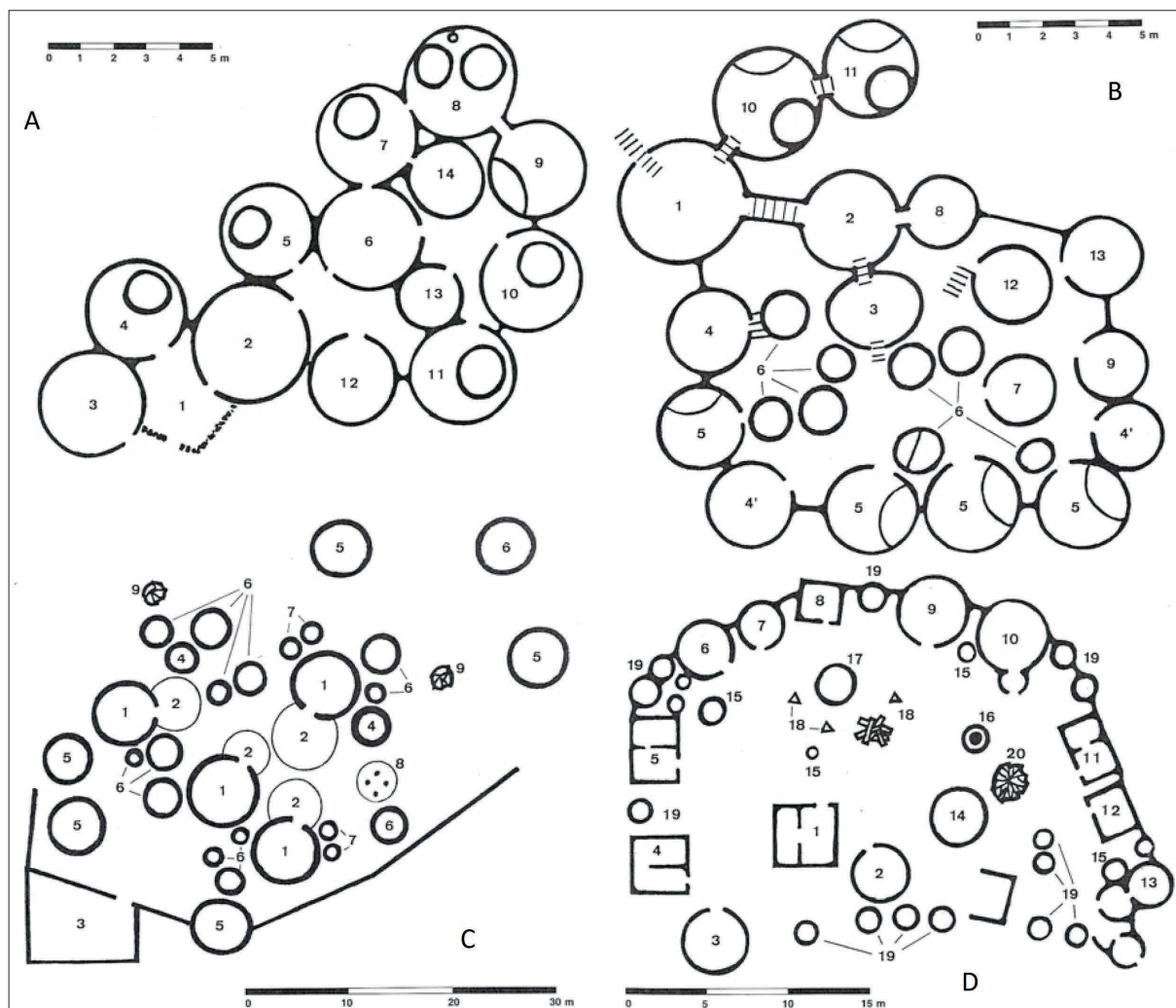


FIGURE 7
Compound Matakan (A), Muktele (B), Songhai (C), Senufo (D)
(after BRENIQUET 1996, pl. 47, 48, 50, 53)

ing in a tholos with a diameter of 3.7 m (and thus an area of about 10.75 sq m);²³ Verhoeven places 10 people in some tholoi of Sabi Abyad level 6, with a diameter that varies from 5 to 6 m (area between about 20 and 28 sq m).²⁴ Hours and Copeland stress that the size of tholoi and their arrangement suggest a social organization founded on the autonomous life of nuclear families.²⁵

²³ SEEDEN 1982, p. 71.

²⁴ VERHOEVEN 1999, p. 211.

²⁵ COPELAND, HOURS 1986, p. 218.

Breniquet considers some tholoi with connected structures from Yarim Tepe II and, more generally, the tholoi with auxiliary structures from Middle Halaf onward, as dwellings suitable for more than one person. She relates this interpretation to the evolution of the tholos, consisting of an increase of size and the adoption of connected structures.²⁶ It has been noted previously that this evolution is actually not so clear: tholoi with auxiliary structures

²⁶ BRENIQUET 1986, p. 237; 1989, p. 331; 1996, pp. 94-96, pp. 117-118.

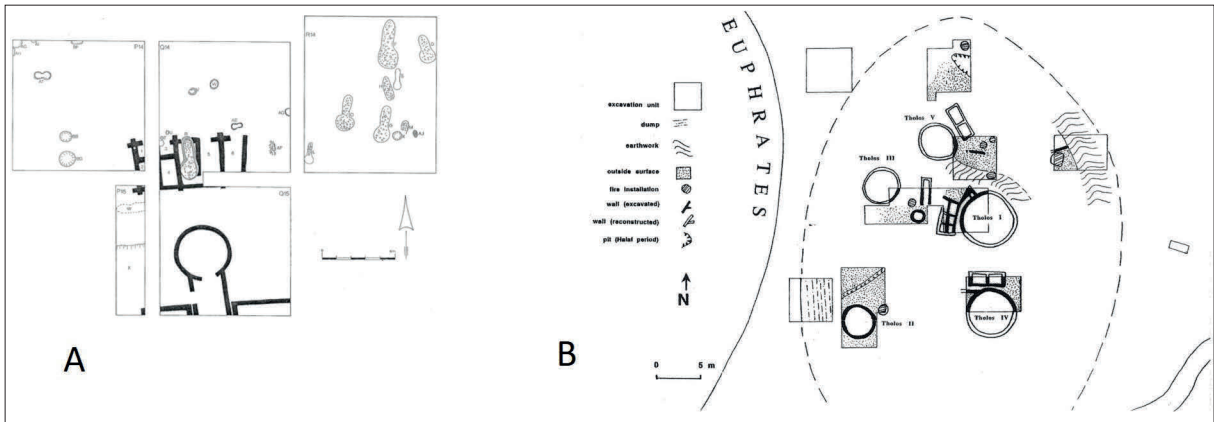


FIGURE 8
 Tell Sabi Abyad – Tholos with antechamber (A) and Fıstıklı Höyük – Levels IV-IIIa (B)
 (after AKKERMANS [ed.] 1996, fig. 2.22; BERNBECK ET AL. 2003, fig. 2)

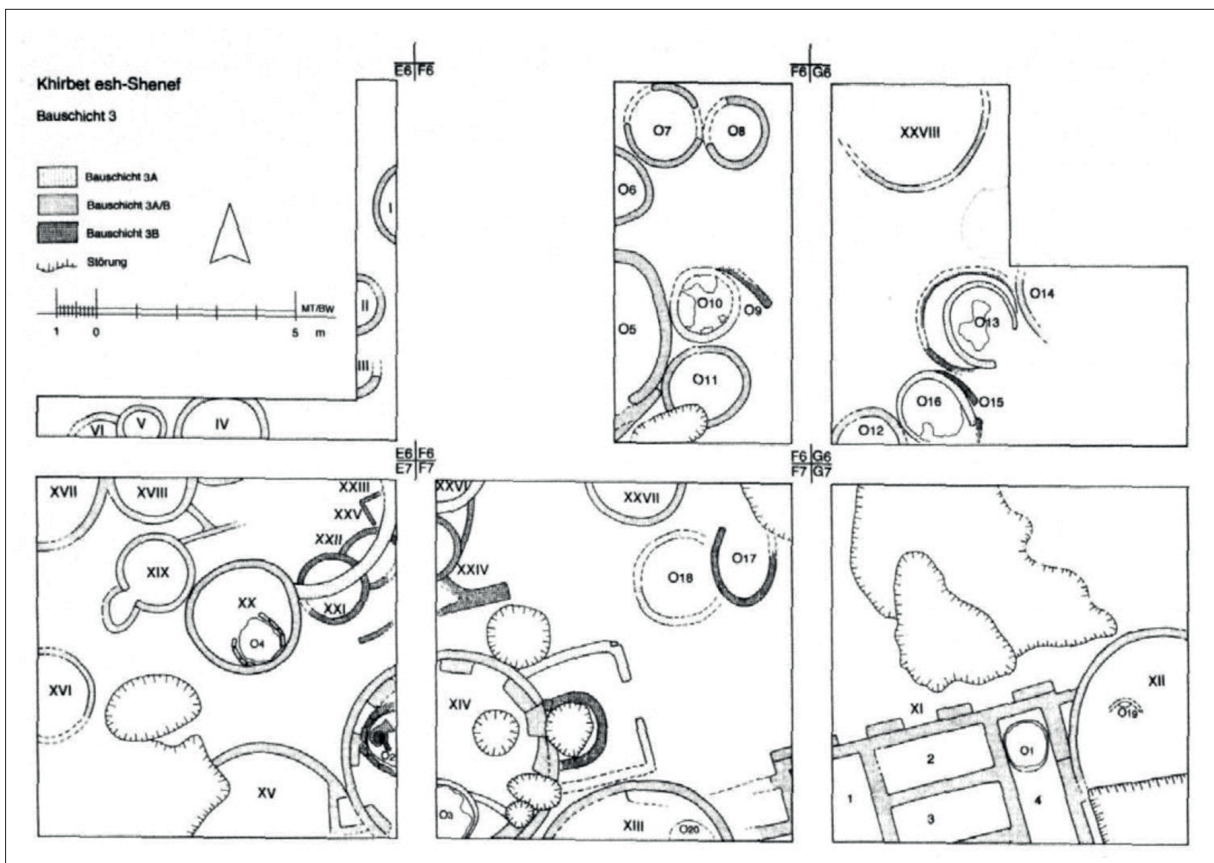


FIGURE 9
 Khirbet esh-Shenef – Level 3
 (after AKKERMANS, WITTMANN 1993, fig. 5)

and antechambers are present from the Proto-Halaf onward (fig. 8), perhaps in smaller numbers but we must remember that several tholoi are only partially excavated, and it is difficult to know whether there were any connected structures or not. Therefore, the model that Breniquet proposed as holding from the Middle Halaf onward could, in fact, also fit earlier periods. Furthermore, the tholoi from Yarim Tepe, which Breniquet refers to, are not so large and the connected structures are divided into small cells not suitable for habitation.

We cannot completely exclude the model of the compound, nor should we suggest a sort of ‘regression’ from the Halaf to the Natufian and PPNA periods. Rather, one might wonder if there may be different contexts at different sites and villages. At Fıstıklı Höyük, a small short-lived site, it has been noted that the arrangement of tholoi fits a situation in which there are independent residential units rather than a household made-up of several tholoi (fig. 8).²⁷ Such a situation may also occur at sites with similar characteristics such as Kharabeh Shattani, Shams ed-Din or Tell Umm Qseir (figs. 11, 12). These are all small and short-lived sites, and seem to be less densely built-up than the larger and longer-lived ones, such as Yarim Tepe II or Sabi Abyad.²⁸

However, the distinction is not so simple. Khirbet esh-Shenef is a small and short-lived site but the excavated area is quite densely built-up with adjoining houses (fig. 9). On the other hand, Yarim Tepe II and III have some levels with unbuilt areas and, if you consider the buildings to have been contemporary in use, the resulting image is quite different from what it may at first seem. In Yarim Tepe II levels VI and V (fig. 10), not all the structures belong to the same building phase and probably some buildings and some tholoi were under construction when others were already in a state of decay.²⁹ As a result, the possible dwellings in use at the same time are not always so many, and their location and distances between them are not always so different

from those at Fıstıklı Höyük. Even when the excavated area is sufficiently extensive to determine the placement of some bigger tholoi apparently around an open area or a courtyard, the entrances, where they can be detected, do not face onto the courtyard as the compound model would suggest, but rather face in different directions (including away from the courtyard itself).

5. Second question: domestic and/or communal storage?

Whether families consisted of nuclear or extended households, considering the placement of the buildings, the open activity areas and so on, a context appears in which the individual households seem to be tied together by close relations of cooperation, and the community as a whole seems to have precedence over the single household or family.³⁰ At this point, there arises the second question, regarding storage facilities and the practices of communal and ‘public’ storage or domestic and ‘private’ storage. In the context of a compound and extended households, it is not a key question because the border between domestic and communal is less well-defined, especially in the small sites, inhabited by no more than one extended family. However, taking into account the nuclear household hypothesis or the possibility of different ways of life at different sites, the issue becomes one of some importance.

Some scholars, from Akkermans to Frangipane, especially on the basis of level 6 (and 3) of Sabi Abyad, stressed the importance of communal storage.³¹ Others, such as Kiert Costello, consider the rectangular buildings of Sabi Abyad and the sealings found inside, as an index of ownership or accountability at a ‘private’ and familial level – extended family in this case, in the context of a village community organized along the lines of Samarran society – and not at a communal level.³² Kiert Costello regards the

²⁷ BERNBECK ET AL. 2003, pp. 69-70.

²⁸ Cf. also BAIRD, CAMPBELL, WATKINS 1995, pp. 187-188.

²⁹ Cf. BENITTI 2008, pp. 16-53; BRENIQUET 1996, p. 82.

³⁰ Cf. FRANGIPANE 1996, pp. 69-87; 2007, 2013; POLLOCK 2013; POLLOCK, CASTRO GESSNER, 2009. Cf. also AKKERMANS, SCHWARTZ 2003.

³¹ AKKERMANS, DUISTERMAAT 1997; FRANGIPANE 1996, pp. 76-81; 2007, pp. 157-159; 2013; VERHOEVEN 1999.

³² KIERT COSTELLO 2002.

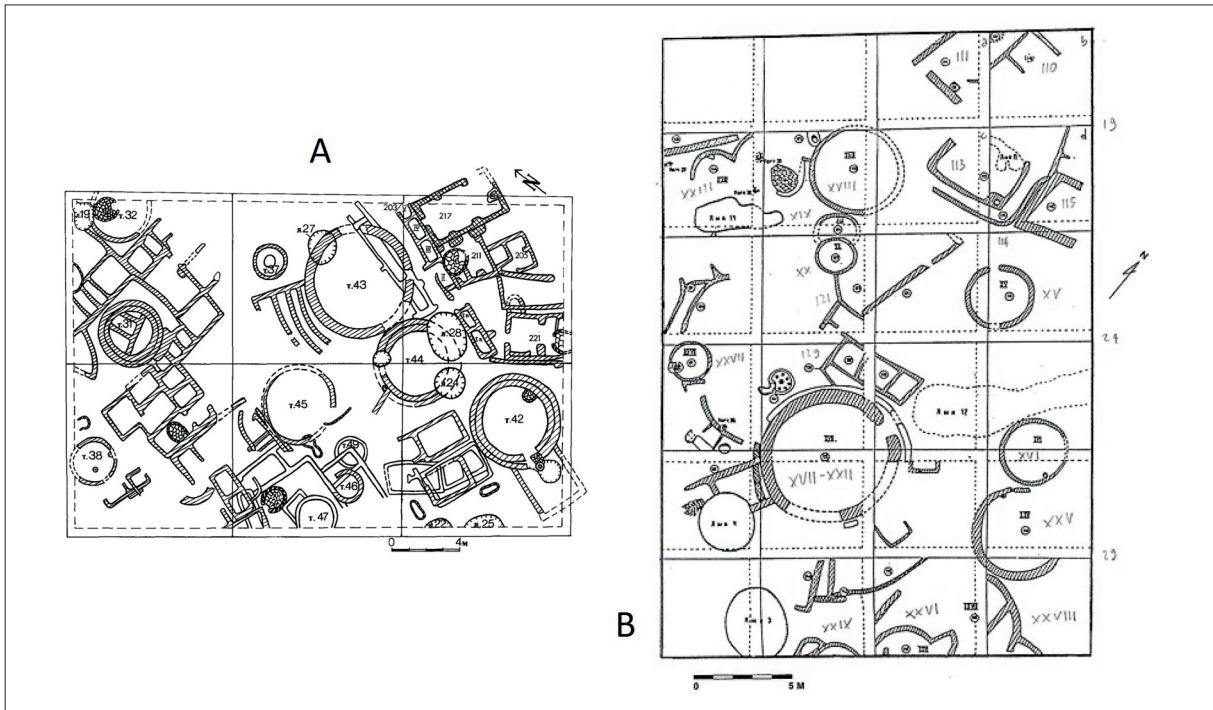


FIGURE 10
Yarim Tepe II – Level VI (A) and Level V (B)
(after MUNCHAEV 1997, fig. 3, p. 73; BRENIQUET 1996, pl. 36)

communal arrangement as more typical from the Early Halaf onward.

The best-known example, well studied and documented, is precisely the Proto-Halaf Burnt Village of Sabi Abyad, with its extended rectangular buildings. However, other, sometimes smaller rectangular buildings, perhaps with similar functions, are present at other sites during the Halaf period: at Sabi Abyad level 3, Yarim Tepe, Khirbet esh-Shenef and Çavi Tarlası (figs. 2, 9, 10).³³ Other times, there are narrow and elongated rectangular structures (seen quite often at Yarim Tepe) that could serve, perhaps, only certain parts of the community and certain dwellings (fig. 1).³⁴ Finally, there are the rectangular structures connected to tholoi, sometimes

made up of several small cells, which can be considered as a kind of domestic storage.³⁵ To sum up, we can assume the existence of different forms and practices of storage according to the needs and the context of each site, from communal storehouses to domestic storage associated with the home, to an intermediate form common to more than one house.³⁶

6. Third question: what kind of mobility?

The third point, linked to the previous ones and to the possible differences between short and long-lived sites, concerns mobility. Proto-Halaf and Halaf society and its way of life seem to be charac-

³³ AKKERMANS 1993; AKKERMANS (ed.) 1996; AKKERMANS ET AL. (eds.) 2014, AKKERMANS, SCHWARTZ 2003, p. 117; FRANGIPANE 2007, p. 157.

³⁴ Cf. BRENIQUET 1996, p. 60, p. 87, p. 90; FRANGIPANE 1996, p. 74; 2007, pp. 156-157; 2013, p. 96; HIJARA 1997, p. 20.

³⁵ BERNBECK ET AL. 2003, pp. 69-71; BRENIQUET 1986, p. 237; 1989, p. 331; 1996, p. 95; POLLOCK, CASTRO GESSNER 2009.

³⁶ Cf. also FRANGIPANE 2013, p. 91.

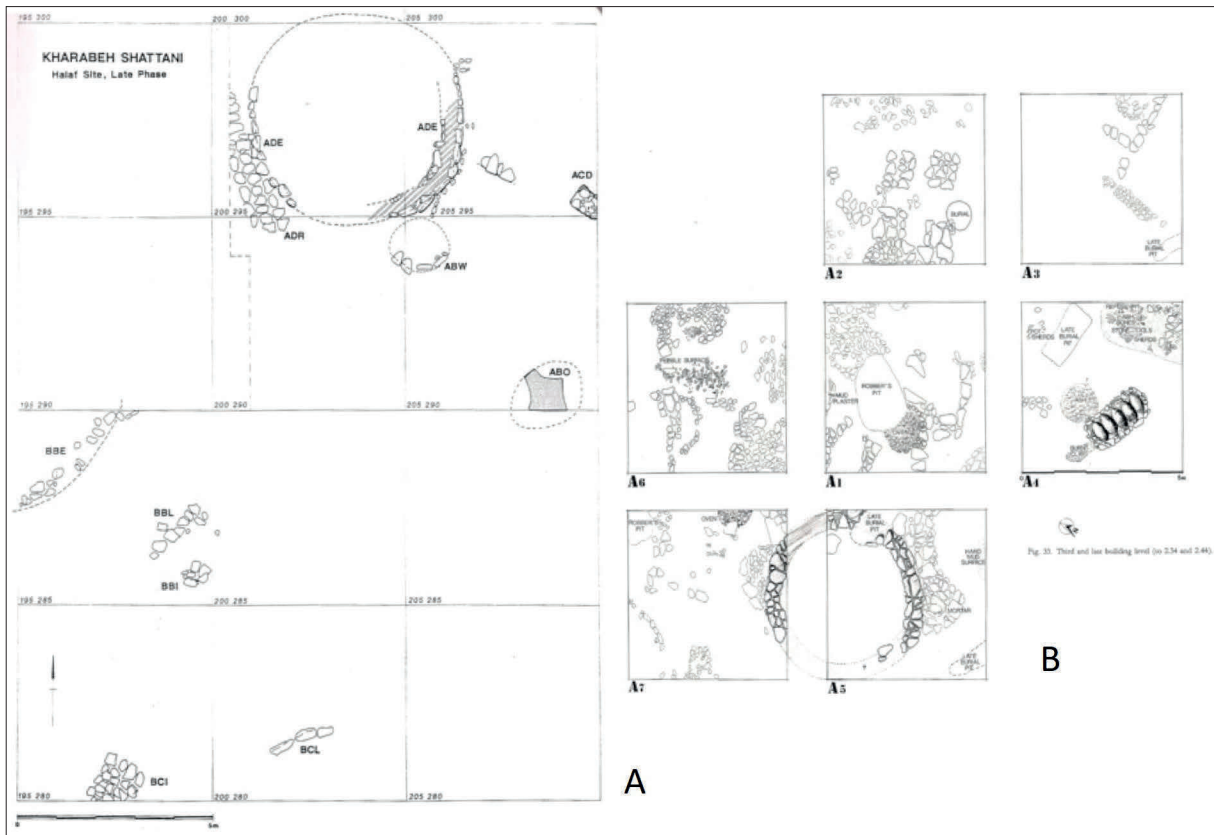


FIGURE 11
 Kharabeh Shattani – Level 3 (A) and Shams ed-Din – Level 4 (B)
 (after BAIRD, CAMPBELL, WATKINS [eds.] 1995, fig. 10; AL-RADI, SEEDEN 1980, fig. 33)

terized by some degree of mobility. What kind of mobility? Short or long term? What are the reasons behind it? Some of the possible reasons proposed as related to mobility are the fissioning or segmentation of groups (a possible process by which communities reproduced themselves within the territory), cyclical agriculture and pastoralism. Such reasons may also explain the settlement pattern and ‘expansion’ during the Halaf II period.³⁷ The settlement pattern of the Late Neolithic in Upper Mesopota-

³⁷ AKKERMANS 1993, 2013; AKKERMANS, DUIS-TERMAAT 1997; AKKERMANS, SCHWARTZ 2003; AKKERMANS, WITTMANN 1993, pp. 162-165; BAIRD, CAMPBELL, WATKINS 1995, p. 189; BERNBECK ET AL. 2003, pp. 11-12, pp. 71-72; BRENIQUET 1996; CASTRO GESSNER 2008; FOREST 1996, pp. 27-36; FRANGIPANE 1996, pp. 69-87; 2007, 2013; HIJARA 1997; HUOT 1994, pp. 132-152; NIEUWENHUYSE 2000, p. 183, pp. 193-194; TSUNEKI, MIYAKE (eds.) 1998, p. 176; VERHOEVEN 1999. For a ‘classical’ view of Halaf expansion: COPELAND, HOURS 1986.

mia, during the Proto-Halaf and Halaf periods but not only then, seems to be characterized by a mix of villages with longer occupation and shorter lived sites, maybe inhabited on a seasonal basis – it being difficult to distinguish seasonal encampments with little or no architecture. Proto-Halaf and Halaf settlements are often less than 1 ha and only a few are larger than 2 ha. Sabi Abyad is about 5 ha but is the result of progressive shifting of smaller villages, and this could also be the case for bigger sites (about 20 ha) as Domuztepe, Kazane Höyük, Samsat, Nisibeen, Mounbateh and Takyan Höyük.³⁸

³⁸ AKKERMANS 1993, p. 199; 2013; AKKERMANS ET AL. 2006, pp. 151-152; AKKERMANS, SCHWARTZ 2003, p. 103, pp. 118-119; BERNBECK, POLLOCK, COURSEY 1999, p. 110; CASTRO GESSNER 2008, p. 84; FRANGIPANE 2007, p. 155; 2013; MATTHEWS 2000, p. 108; NIEUWENHUYSE 2000, p. 183; YILDIRIM, GATES 2007, p. 286. Cf. also HOLE 2000.

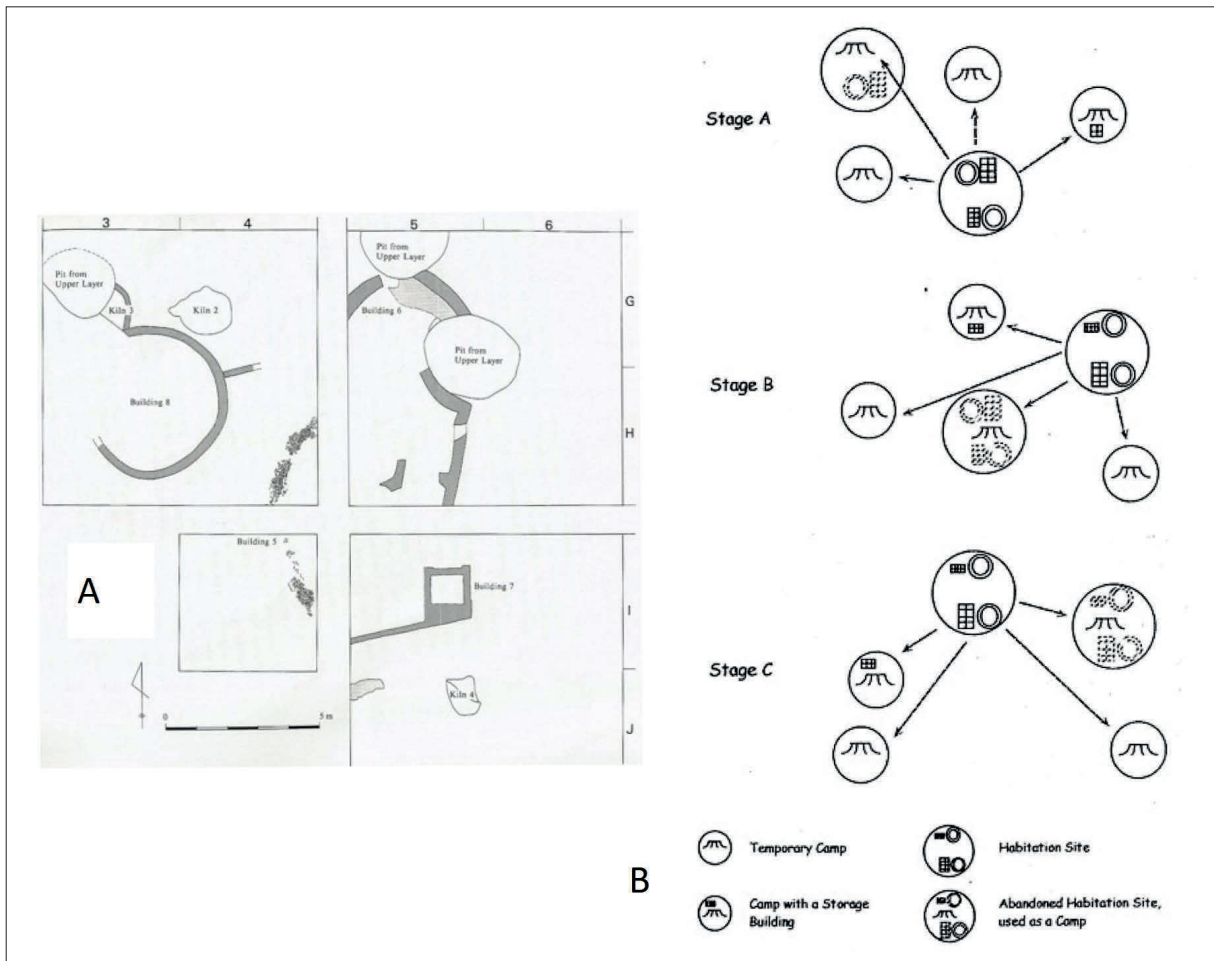


FIGURE 12

Tell Umm Qseir – Level 1 (A) and mobility and settlement pattern around Fıstıklı Höyük (B)
(after BERNBECK ET AL. 2003, fig. 45; TSUNEKI, MIYAKE [eds.] 1998, fig. 19)

Short occupation, with possible breaks in stratigraphy, shifting of settlements, small sites with limited architecture and sometimes an emphasis on hunting activity, have led researchers to consider some small and short-lived sites as seasonal (and specialised) camps related to activities such as herding and hunting.³⁹ Possible breaks in stratigraphic sequences and in site occupation are not always simple to detect, especially in sites where we cannot exclude the shifting over time of functional and built-up area.⁴⁰ This kind of shifting is present at many

³⁹ Cf. studies cited in note 37.

⁴⁰ Cf. BENITTI 2008; BRENQUET 1996, p. 68; CASTRO GESSNER 2008, p. 82. See also AKKERMANS 2013.

Halaf sites, also at long-lived sites as Yarım Tepe II, whose first traces of occupation are not so different from the stratigraphic sequences found at short-lived sites like Umm Qseir, Kharabeh Shattani and Shams ed-Din (figs. 11, 12).⁴¹ The model of long term mobility proposed for Fıstıklı Höyük, might explain these stratigraphic sequences (fig. 12).⁴² On the other hand, the case of Tell Umm Qseir shows that it is too simplistic to assume for all smaller sites

⁴¹ Cf. BAIRD, CAMPBELL, WATKINS 1995, pp. 187-188; BENITTI 2008. See also FRANGIPANE 2013, p. 92.

⁴² BENITTI 2008, pp. 276-277; BERNBECK ET AL. 2003, pp. 11-12, pp. 71-72. See also AKKERMANS 2013; BERNBECK 2013.

a seasonal occupation when, instead, from a careful and integrated analysis of paleobotanical and archaeozoological remains, Umm Qseir seems to have had a year-round occupation.⁴³

Regarding pastoralism: what are we talking about in Proto-Halaf and Halaf contexts? It is not always clear whether the model refers to a kind of specialized pastoralism that involves whole segments of the society or community, entire families and villages that maintain relations with the agricultural and sedentary villages; or to a type of pastoralism common in the ethnographic literature, that is, within the same village and the same family.⁴⁴ For instance, according to the interpretation of the Burnt Village of Sabi Abyad proposed by Akkermans and Duistermaat and followed and extended by Verhoeven, the community would have consisted of two groups, one of 'nomadic' pastoralists and the other one of sedentary people.⁴⁵ The big rectangular storehouses and the sealings inside them would be explained by the need to preserve the goods of a large number of people who were not physically present in the village. The two groups would also explain, at least in part, the differences in architecture, with the tholoi related to sedentary residents and the rectangular buildings related to the 'nomads'. The roles, however, would be interchangeable, with the groups of pastoralists becoming sedentary farmers after a short period of time and vice versa.

It is difficult to establish whether this model fits or does not fit with the Burnt Village or with Proto-Halaf and Halaf society as a whole.⁴⁶ Perhaps it would be simpler to imagine a situation in which the possibility of 'strong' specialisation into two groups is regarded as the alternative to a 'weak(er)' specialisation with interchangeable roles. That is, one could see either the existence of specialised groups or sufficient specialisation as reason enough to 'structure'

the differences in the architecture and to make it necessary to maintain social relations (marriage, ritual, political, etc.) between the two groups.⁴⁷ Otherwise, if there was not such 'strong' specialisation, rather than the rotation of two distinct groups it seems more likely that there would have been the ethnographically known situation where, within the same family, there are transhumant herders and sedentary farmers. We will mention only one case of a well-known pastoral society (cattle in this case, not sheep and goats as in the Halaf): the Nuer studied by Sir Evans-Pritchard, which is exactly of this type.⁴⁸ The settlement pattern has some resemblance to that of the Halaf (and to that of many pastoral societies), with sedentary larger villages during the rainy season and more dispersed encampments during the rest of the year. Inside the family itself there are young males and adults who move around with the herds and females, children and older males who stay in the village to undertake farming and other activities.

7. Conclusions and a final point: a question of identity?

This paper has tried to ask questions rather than give answers. Further, it has tried to argue for the possibility of nuanced and not necessarily univocal answers to certain issues. It has been seen that closer study and comparison of certain local contexts, settlements and villages, could support the possible hypothesis of a family pattern based on the nuclear family without, on the other hand, excluding the extended household and compound model. It has also been seen that the existence and adoption, at least in part, of collective storehouses does not exclude the possible presence of other storage facilities and practices on a domestic level.

It has been noted that the question of mobility and related issues in the Proto-Halaf and Halaf periods involves potentially complex issues of interpretation: settlement patterns and the mecha-

⁴³ Perhaps the question remains open. Anyway, cf. HOLE, JOHNSON 1987; MCCORRISTON 1992; TSUNEKI, MIYAKE (eds.) 1998; ZEDER 1994.

⁴⁴ See references in note 37.

⁴⁵ AKKERMANS, DUISTERMAAT 1997; VERHOEVEN 1999.

⁴⁶ Cf. discussion at the end of AKKERMANS, DUISTERMAAT 1997.

⁴⁷ «Structuring Structures» is the (sociological) definition used by VERHOEVEN 1999, p. 213.

⁴⁸ EVANS-PRITCHARD 1940.

nisms by which communities reproduced themselves within the territory, social practices and subsistence strategies, stratigraphic sequences and use of space.⁴⁹ Again, we focused mainly on the identification of possible differences between sites, without taking for granted univocal strong distinctions between small and large settlements, long- and short-lived ones, year-round and seasonal occupations.

There remains another question: Even within a context that, like the Halaf, is on the whole rather homogeneous there are possible distinctions that result from studies on pottery production, comparing data between local and regional scales.⁵⁰ Dimensions include more or less slight differences in the appearance, adoption and diffusion of certain types or decorative modes, and hence also relative chronology. Not only are there differences between Proto-Halaf, Samarra and Hassuna, but also within the Halaf period too.

It is not the aim of this paper to treat the aspects related to pottery production and chronology. Nevertheless, what are the possible reasons behind these differences? Consider this example: the differences

between the Halaf Ib assemblage typical of the Upper Tigris and Sinjar and the 'Intermediate phase' of the Syrian Jazira.⁵¹ In some levels belonging to the latter and more-or-less contemporaneous with Halaf Ib levels, one finds pieces of pottery both from the Halaf Ib assemblage and from the traditional Middle Halaf (Halaf IIa) assemblage (such as large cream bowls).⁵² Differences may be a question of identity or social practices or both. What kind of identity and social practices might these be: cultural and ethnic, related to social groups, different families, different sites and geographical areas, different skills and abilities in pottery production and decoration?

So, the last question is: what are the relationships (if any) between these supposed local or regional differences in pottery production and the three main points discussed above (family structure, storage and mobility)? Generally speaking, the question is that of Halaf 'identity' and Halaf as a 'cultural – and maybe social – umbrella'.⁵³ There are probably no easy and definitive answers, not even regarding how family structure determined house size and design. However, it is definitely worth continuing asking the questions!

⁴⁹ However, these issues concern the whole Late Neolithic in Upper Mesopotamia.

⁵⁰ E.g. SPATARO, FLETCHER 2010.

⁵¹ Cf. CAMPBELL 2007; CASTRO GESSNER 2008. Intermediate phase (Halaf Intermediate), used in particular by Cruells, refers to CB III at Chagar Bazar, Balikh IIIC at Sabi Abyad and the Balikh, HL VI at Tell Halula and the entire production of Tell Amarna. Cf. AKKERMANS 1993; CRUELLES 2004, 2006a, 2006b, 2009, 2013; NIEUWENHUYSE 1997, 2010.

⁵² An analysis of these aspects and a more complete bibliography in BENITTI 2016, in particular pp. 244-255.

⁵³ AKKERMANS 2000, p. 51. See also AKKERMANS, SCHWARTZ 2003.

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Insights into the use of late Halaf vessels. Organic residues in pottery from Tell Halula (Syria)

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ABSTRACT

Halaf pottery is one of the core elements defining Late Neolithic Middle Eastern societies. This article presents the preliminary results of organic residue analyses performed on a small set of Late Halaf painted and plain Fine wares from Sector 49 in Tell Halula (Syria). Data obtained from lipids embedded in the clay matrix suggests the existence of type-content variation possibly related to food display and commensality practices.

KEYWORDS

Late Halaf, Organic Residue Analysis, Pottery use, Acidified Methanol extraction, Tell Halula

1. Introduction and objectives

At the onset of the sixth millennium before the common era (BCE), innovations in pottery technology and changes in the production processes introduced what archaeologists have named the Halaf traditions.¹ Except for large settlements with continuous occupation sequences, this Late Neolithic society inhabited small sites with short and intermittent occupations with sometimes an absence of built structures, suggesting the shelters were of perishable materials. This picture supports a shifting settlement pattern coherent with communities that relied on animal husbandry to accumulate wealth and status, and control production relations.² The recovery of clay sealings suggests the existence of a certain degree of private property structured in an egalitarian social order³ when burial treatment is considered. Amidst this situation, Halaf pottery was extensively decorated and produced per distinct stylistic conventions, which could have symbolised group membership and many small communities participating in a wider cultural framework. Therefore, it has been considered that many painted vessels would have been used for the display and consumption of foods and drinks, while others would have been involved in storage and food preparation.⁴ Consequently, culinary practices resulting in the consumption of products from animal husbandry in feasting contexts could have played a significant role in the production and reproduction of the Halaf social structure.

On the study of pottery use, several pieces of evidence such as use-wear or the existence of macroscopic and microscopic remains (phytoliths and pollen) attached to the inner surface of the pot can offer valuable information. At the molecular scale, the analysis of hydrophobic organic matter (lipids, resins and waxes) preserved in clay pores (putative Organic Residue Analysis, ORA) is another one of the complementary tools archaeologists apply

to understand pottery use. Since the beginnings of this analytical technique pioneered by Condamin et Al.,⁵ methods for the detection of fats preserved inside pottery and interest in this area of investigation have been steadily growing. When taking only into account sites from the Middle East, less than 10 papers on organic residues in pottery have been published before 2006.⁶ Nevertheless, just between 2008 and 2009 at least 7 new studies and 1 Ph.D. have been written⁷ and, from that date onwards, the slow but steady methodological improvement⁸ has facilitated at least 19 more papers published exploring the organic remains preserved inside pottery.⁹

One striking characteristic shared by the over 30 studies published to date is the scarcity of vessels which reveal significant quantities of lipids. As an example, an extensive project by Evershed and colleagues comprising 2225 pottery vessels from 23 sites in south-eastern Europe and the Middle East revealed that only 12% of them contained lipidic residues.¹⁰ Such a figure is significantly lower than the results obtained in other regions of the world, such as the western Mediterranean or northern Europe.¹¹ Low preservation and degradation factors can be related to pottery age, choice of clay and the seasonal variations in temperature and precipitation that characterise the climate in the Middle East.¹² Alternatively, residues might not be originally present, thus suggesting that vessels did not participate in activities incorporating lipids in the clay matrix. But, were prehistoric Near Eastern societies less dependent on organic products such as fats, resins and waxes? Is a high recovery of organic residues implausible in a period and region where environmental, temporal and technological factors might not be favourable to their preservation?

⁵ CONDAMIN ET AL. 1976.

⁶ COPLEY ET AL. 2005a; SHIMOYAMA, ICHIKAWA 2000; KIMPE ET AL. 2004.

⁷ TÜKERKUL-BIYIK, ÖZBAL 2008; MATHE ET AL. 2009; NAMDAR ET AL. 2009.

⁸ CORREA-ASCENCIO, EVERSLED 2014.

⁹ EX: ÖZBAL ET AL. 2011; MAYYAS ET AL. 2013; CHOVANEC ET AL. 2015; STEELE, STERN 2017.

¹⁰ EVERSLED ET AL. 2008b; THISSEN ET AL. 2010.

¹¹ BREU 2017.

¹² GREGG, SLATER 2010.

¹ NIEUWENHUYSE 2009.

² AKKERMANS, SCHWARTZ 2003.

³ FRANGIPANE 2007; GÓMEZ-BACH, CRUELLS, MOLIST 2018.

⁴ NIEUWENHUYSE 2013; HOPWOOD, MITRA 2012.

Taking these limitations into account, organic residue analyses from the Late Halaf layers in Tell Halula aim at providing, for the first time, insights into the products possibly cooked, displayed and consumed in Late Halaf Fine wares. To overcome preservation difficulties, more aggressive extraction methods developed by Correa-Ascencio and Evershed¹³ and successfully used in pre-Halaf pottery¹⁴ will be applied to a small selection of sherds from Sector 49 in Tell Halula.

2. Archaeological context and sampling strategy

Tell Halula is a site in the Syrian Euphrates valley. It conceals a settlement presenting a wide chronology that extends from the first phases of the pre-ceramic Neolithic (PPNB) to the ceramic periods (Halaf), in which the consolidation of the first agro-pastoral communities can be studied.¹⁵

Samples for this study have been collected from Sector 49, which comprises a wide excavation space featuring an open-air area with exterior floors associated with negative structures. Habitats are constructed of mudbrick and stone and have had four occupation phases dated to the Late Halaf period.¹⁶ The chronological adscription and the technological strategies involved in the ceramic production (more than 3700 ceramic minimum number of individuals) detected in this context have been published elsewhere.¹⁷ These studies reveal an assemblage including small containers with features intended for the individual consumption of liquids or semi-solid foods and medium/large pieces ideal for storage and transport of liquid and solid provisions. Dish covers, collar-rimmed jars (with an inside depression in the neck) and large bowls, amongst others, all show cooking practices requiring either covered¹⁸ or un-

covered pots, such as boiling and stewing. Given that previous research suggests fats in aqueous solutions accumulate in the upper part of the vessel, for this study, rims (n=6), necks (n=1), upper body wall sherds (n=4) and one base were sampled.¹⁹

A sample of 12 ceramic vessels from Sector 49 including straight walled bowls (n=2), closed bowls (n=2), hemispherical bowls with a flat base (n=4), hole-mouth bowls (n=1), cream bowls (n=2) and pots (n=1) was selected for this study (see Table 1). Although other types such as Plant Tempered ware and Mineral Tempered ware (both coarse wares) were present in the assemblage, monochrome painted Late Halaf Fine ware (n=9) and Plain Fine ware (n=3) were exclusively chosen. Complementary with previous research,²⁰ this approach intends to maximise data gained from vessels related to said Halaf feasting and commensality activities.

3. Materials and methods

Lipids trapped in the clay pores within the ceramic fabric were extracted following the technique developed by Correa-Ascencio and Evershed.²¹ After discarding the vessel's inner surface, 1g of ceramic powder was sampled using an electric drill with a tungsten bit. After adding 4ml of methanol to the ceramic powder, the mixture was subjected to an ultrasonic bath for 15 minutes and acidified with 0.8ml of concentrated sulphuric acid. The mixture was heated at 70° C for 4 hours and then left to cool. Lipids were extracted from the acidified methanol mixture with 2ml of hexane (x3). The hexane extracts were desulphurised with copper pellets and then vacuum dried. Finally, the samples were dissolved again in 100ml of isooctane and transferred to gas-chromatography (GC) vials, which had been spiked with 10mg of n-tetratriacontane as the internal standard.

To analyse each sample, 1µl was injected in splitless mode to a 782A Agilent Gas Chromatograph coupled to a Flame Ionisation Detector (FID) and

¹³ CORREA-ASCENCIO, EVERSLED 2014.

¹⁴ BREU ET AL. 2018.

¹⁵ MOLIST, VICENTE 2013.

¹⁶ GÓMEZ-BACH 2011.

¹⁷ GÓMEZ, CRUELLS, MOLIST 2014; GÓMEZ-BACH 2013; GÓMEZ-BACH ET AL. 2012.

¹⁸ GÓMEZ-BACH 2013.

¹⁹ CHARTERS ET AL. 1993.

²⁰ NIEUWENHUYSE ET AL. 2015; HOPWOOD, MITRA 2012.

²¹ CORREA-ASCENCIO, EVERSLED 2014.

Table 1 – Ceramic and biomolecular characteristics of the analysed sherds

Id	Sherd shape	Ware type	TLE ^a	P/S ^b	Vessel shape	Molecules	Residue interpretation
7	Base	Plain Fine Ware	98.2	2.01	Not determined	FFA: C ₈ -C ₂₆ ; Branched FA: C15, C17; Diacids: C9	Degraded animal fat
10	Rim	Plain Fine Ware	34.95	1.3	Straight walled bowl	FFA: C ₉ -C ₂₈ ; Diacids: C9	Degraded animal fat
12	Rim	Painted Fine Ware	10.68	1.1	Hemisferic flat bowl	FFA: C ₉ -C ₁₈ ; Alkanes; Pthalate plasticisers	Degraded animal fat
13	Neck	Painted Fine Ware	7.3	1.3	Pot	FFA: C ₉ -C ₁₈ ; Alkanes; Pthalate plasticisers	Degraded animal fat
16	Rim	Painted Fine Ware	3.79	1.17	Hole-mouth bowl	FFA: C ₁₂ -C ₁₈ ; Alkanes; Pthalate plasticisers	Non significant residue
18	Wall	Painted Fine Ware	6.2	1.7	Cream bowl	FFA: C ₁₂ -C ₁₈ ; Alkanes	Degraded animal fat
20	Wall	Painted Fine Ware	6.68	1.04	Closed bowl	FFA: C ₁₄ -C ₁₈ ; Alkanes	Degraded animal fat
25	Rim	Painted Fine Ware	4.73	1.62	Hemisferic flat bowl	FFA: C ₉ -C ₁₈ ; Pthalate plasticisers	Non significant residue
32	Rim	Plain Fine Ware	6.6	2.31	Straight walled bowl	FFA: C ₉ -C ₁₈ ; Alkanes; Pthalate plasticisers	Degraded animal fat
35	Wall	Painted Fine Ware	5.41	1.55	Cream bowl	FFA: C ₆ -C ₂₄ ; Alkanes; Pthalate plasticisers	Degraded animal fat
46	Wall	Painted Fine Ware	8.32	1.49	Hemisferic flat bowl	FFA: C ₉ -C ₂₆ ; Alkanes; Pthalate plasticisers	Degraded animal fat
52	Rim	Painted Fine Ware	8.1	0.92	Hemisferic flat bowl	FFA: C ₁₂ -C ₁₈ ; Alkanes; Pthalate plasticisers	Degraded animal fat

^a Total Lipid Extract (µg·g⁻¹)
^b Palmitic acid/Stearic acid relative abundance ratio

eluted through an HP-1 capillary column (60 m length, 250 µm internal diameter, 0.25 µm film thickness) using hydrogen as the carrier gas. The oven temperature was initially set at 50°C for 1 minute and then increased by 6°C/min to 320°C, where it stayed for 20 minutes.

When the compounds were not identifiable by their retention time, samples were then analysed by mass spectrometry. Consequently, 1 µl was injected into an Agilent 7890A GC coupled to an Agilent 5975C Mass Spectrometer. The GC was fitted with a DB-5MS column measuring 30m length x 250µm internal diameter x 0.25µm film thickness. The GC injector was operated in splitless mode and helium was used as the carrier gas. The oven temperature was set at 50°C for 2 minutes and then was increased by 15°C/min until reaching 170°C. Next, the temperature was further increased by 5°C/min until reaching 320°C and maintained for 6 minutes. The Mass Spectrometer was run in electron impact mode and masses were acquired in full scan mode between 50 to 800 m/z. Detected molecules were identified using the NIST 4.0 library.

4. Results

Out of the 12 samples, 83% contained lipid residues above the 5µg/g threshold commonly used to detect archaeologically significant amounts of residues.²² Developed as a highly aggressive procedure able to retrieve lipids that hitherto were strongly bound with the clay matrix, the acidified methanol extraction²³ might help explain the high success rate compared to earlier studies. Previously, this technique had been successfully applied to pre-Halaf pottery²⁴ and, for the Late Neolithic in the Middle East, it has resulted in a 50% increase in the total quantity of residues recovered.

In terms of the recovered fats, all 12 potsherds contained octadecanoic acid (C18:0) and palmitic acid (C16:0) with a series of other minor fatty acids such as tetradecanoic acid (C14:0), pentadecanoic acid (C15:0), heptadecanoic acid (C17:0)

²² NIEUWENHUYSE ET AL. 2015.

²³ CORREA-ASCENCIO, EVERSHERD 2014.

²⁴ BREU ET AL. 2018.

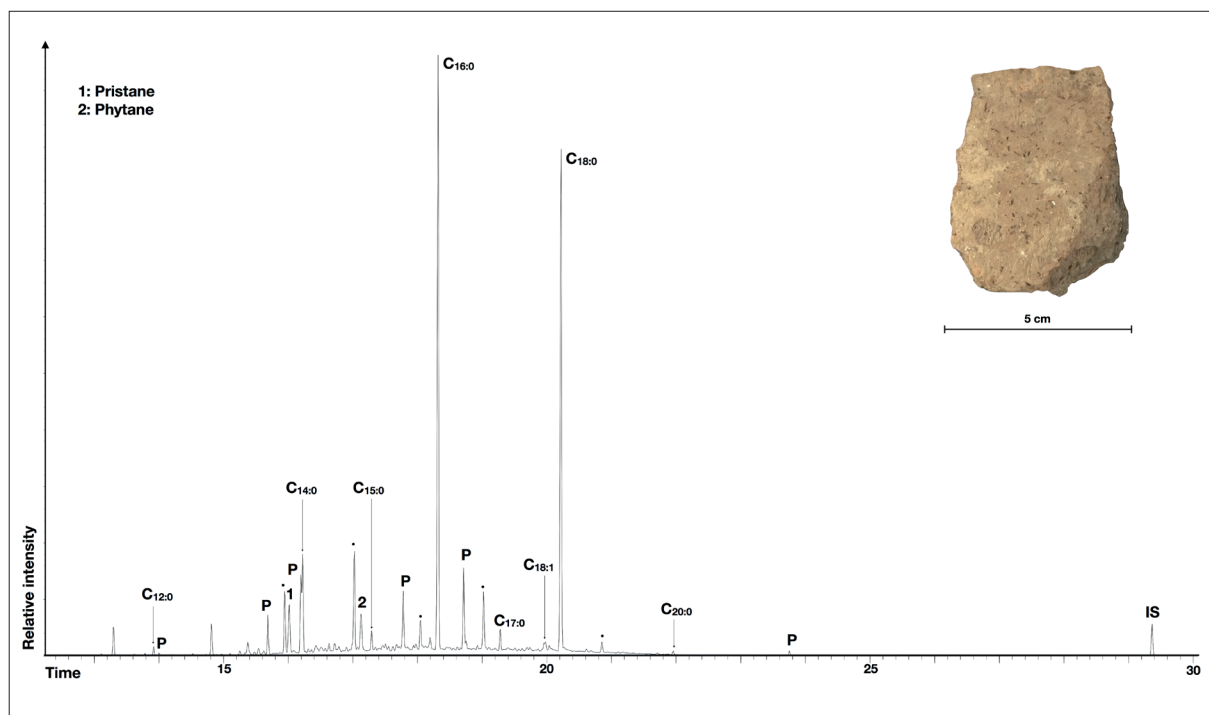


FIGURE 1
Chromatogram showing a common degraded animal fat resulting from the hydrolysis of triacylglycerols; P: phthalate plasticisers, IS: Internal Standard

and eicosanoic acid (C20:0). In consequence, although there is a certain variability between samples, it is not clear whether this can be explained by differences in vessel content. Long-chain ketones (16-hentriacontanone, 16-tritriacontanone and 18-pentatriacontanone)²⁵ and ω -(*o*-alkylphenyl) alcanoic acids²⁶ indicate thermal-specific degradation related to specific cooking techniques. Moreover, a range of specific isoprenoid acids (pristanic acid and phytanic acid)²⁷ are regarded as biomarkers which can suggest fish-related oils. Given that the Euphrates river is less than 2km away from the site, freshwater resources could have been easily accessible by Tell Halula's inhabitants. Nevertheless, none of these biomarkers were detected, suggesting either they were never in contact with the analysed sherds, or the difficult preservation conditions in the Mid-

dle East made their detection difficult. Furthermore, the ratio between the abundance of Palmitic acid versus the abundance of Stearic acid has been used to interpret the possible origins of the recovered lipidic residues. In the case of the sherds analysed from Tell Halula, samples 18 and 7 presented Palmitic/Stearic ratios (P/S) higher than 1 (1.7 and 2.1 respectively) and an almost equal amount of oleic acid with octadecanoic acid (fig. 1). Sample 32 presented the highest P/S ratio in the assemblage (2.3) with barely any traces of oleic acid. Although similar profiles have been assigned to fats of plant origin,²⁸ in this case, the inner variability of animal and dairy fats across different seasons or foraging strategies²⁹ could still explain the obtained octadecanoic acid relative quantities.

Therefore, the detected fatty acid profiles can be interpreted as being most coherent with hydro-

²⁵ EVERSLED ET AL. 1995.

²⁶ HANSEL ET AL. 2004.

²⁷ EVERSLED ET AL. 2008a.

²⁸ DUNNE ET AL. 2016; COPLEY ET AL. 2005b.

²⁹ CHILLIARD ET AL. 2007; LIU ET AL. 2017.

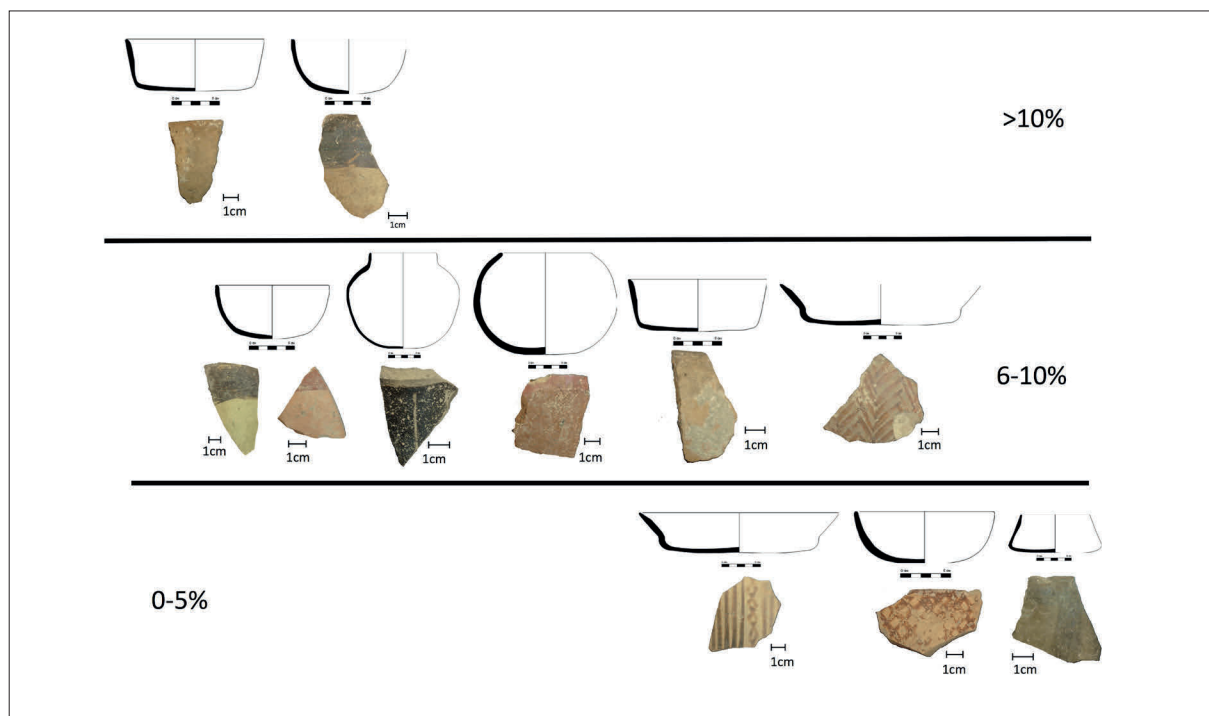


FIGURE 2
Photos and drawings from the analysed sherds ordered by the relative amount of lipids recovered

lysed triacylglycerols from animal fats. In 7 cases, the detection of phthalate esters, molecules associated with modern plastics, is coherent with an assemblage excavated in 2007 and until now stored in plastic bags. No other molecules attributed to modern contamination, such as cholesterol and squalene, were found. Further investigation of these fats for the presence of dairy products is conditional on the acquisition of compound-specific isotopic data from the palmitic and stearic fatty acids.

Although the small biomolecular variation seems to suggest content homogeneity between vessels, certain potsherds present infrequently high and low quantities of fatty acids. Quantification of the amount of archaeological residue recovered after analysis is a highly complex task carrying a significant amount of uncertainty. The presence of phthalate esters and co-elusions from other modern contaminants, and the possible unaccounted losses during laboratory sample preparation, can significantly increase the margin of error associated with the total lipid extract (TLE) value. Consequently, archaeological interpretations based on the TLE

must take these limitations into account. In the attempt to minimize uncertainties, TLE absolute values were not used to report lipid quantities in this study. Instead, samples from Tell Halula were classified into 3 groups related to the relative amount of lipids recovered as a percentage the sum of the TLEs from all 12 analysed samples (the assemblage's total). The first category incorporated samples yielding 0 to 5% of the total amount of lipids in the assemblage, samples with 6 to 10% were placed in the second group and, finally, the third group integrated samples containing more than 10% of the total amount recovered. Given that every compared sherd was sampled in a similar position (the upper body close to the rim) it can be assumed that residues would have been generated as a result of similar pottery uses.

One possibility that could describe why different quantities of lipids would be found in the analysed assemblage could be the vessel's involvement in repeated food preparation episodes. The vessel shapes associated with each group are presented in fig 2. Cream bowls and the Hole-Mouth bowl are associ-

ated with the lowest amounts of lipids, while one of the two analysed straight walled bowls alone yielded 34% of the total quantity. Other shapes such as the pot and the closed bowl similarly presented significant amounts of residues. As shown in previous studies,³⁰ the incorporation of lipids into the ceramic matrix is improved when a certain amount of heat helps mobilise them outside the actual food. Additionally, other factors such as boiling water and/or other fats in liquid form may promote the transfer into the clay matrix. Therefore, it could be speculated that non-cooking pottery types would less frequently encounter the ideal conditions for residue incorporation, thus absorbing lower amounts of fats comparatively. Nevertheless, this pattern associating tableware with fewer lipid quantities needs to be carefully evaluated given that this case study only analysed 12 samples out of the thousands that were excavated in the site.

5. Discussion and conclusions

As outlined by the research objectives in section 1, it can be concluded that the acidified methanol extraction has successfully recovered significant amounts of lipids in 83% of the analysed pottery. Nonetheless, the use of this aggressive extraction must be cautiously evaluated given that it imposes several limitations to the interpretability of the results when the preservation of organic matter is good. In the case of the Middle East, previous extensive research has already demonstrated that recovered organic matter is scarce and poorly preserved. Therefore, chemical reactions such as hydrolysis generated by sulphuric acid only minimally compromise the integrity of the sample. This is because the organic matter has already been fully hydrolysed by the passage of thousands of years under an environment with high temperature and humidity fluctuations. In the case of Late Halaf analyses from Tell Halula, it seems that this choice of method has facilitated the acquisition of interpretable results.

³⁰ CHARTERS ET AL. 1997; EVERSLED 2008; HAMMANN, CRAMP 2018.

Although many studies have investigated the possible uses of pre-Halaf and early Halaf pottery with great success,³¹ research on organic residue analyses from the second half of the sixth millennium BCE has only been practiced in archaeological sites located at the edges of the area of the Halaf tradition (the south and north of the Taurus mountain range, the north of the Jesireh and the plain ending in the Zagros foothills). On the Mediterranean coast (Israel and Jordan), the sites of Newe Yam, Tabaqat al-Bûma, al-Basatîn³² and Ein Zipori³³ have offered insights into the uses of ceramic types such as cups, bowls and jars with various degrees of success and, in northern Iran, analyses from Hajji Firuz Tepe might suggest resinated wine was already consumed at this early age.³⁴

Specifically, 14 out of the 80 samples analysed in the aforementioned sites³⁵ yielded mainly animal fats. Where isotopic analyses were performed (al-Basatîn), results suggested the presence of mixtures of non-ruminant (probably porcine) and ruminant fats, although the researchers did not rule out the presence of dairy products.³⁶ Furthermore, an amphoriskos and two jars from the Late Neolithic/Early Chalcolithic layers in Ein Zipori presented residues interpreted as originating from olive oil and other undetermined plant oils.³⁷ Many of the sherds analysed from these sites are associated with the Wadi Rabah cultural group, which is contemporary with the Halaf phenomenon.

In Turkey, residue analyses were practiced on pottery from Çayönü found in the layers directly above the PPN occupations and reported as chalcolithic³⁸. These represent the closest parallels to the analyses presented in this paper. Out of 18 sherds, six contained lipid residues which were interpreted as

³¹ E.g.: NIEUWENHUYSE ET AL. 2015; HENDY ET AL. 2018; EVERSLED ET AL. 2008b; GREGG 2009.

³² GREGG 2009.

³³ NAMDAR ET AL. 2015.

³⁴ MCGOVERN ET AL. 1996.

³⁵ Samples were extracted using conventional solvent extractions, EVERSLED ET AL. 1990 and microwave-assisted extraction protocols, GREGG, SLATER 2010.

³⁶ GREGG ET AL. 2009.

³⁷ NAMDAR ET AL. 2015.

³⁸ GREGG 2009.

being derived from plants and, in one case, animal fats.

Therefore, for the second half of the sixth millennium BCE, research so far suggests the combined presence of both animal (60%) and plant fats (40%). In this matter, Tell Halula stands out (similarly to the results from al-Basatīn) for only revealing animal fats. Plant residues are thus far absent possibly because of two factors.

Firstly, the quantity of fats in plants is significantly lower than fats in animals, which suggests a single use of a pot to cook an animal product would produce a comparatively higher lipid signal. Therefore, it should not be ruled out that biochemical signals from plant fats were present in Tell Halula's assemblage but hidden below strong animal fat signals. A hint supporting this line of thought can be found in some samples where the abundance of Palmitic acid is two times higher than Stearic acid.

The second factor possibly preventing the detection of plant fats is their weak resistance to degradation. Mono and polyunsaturated fats are the major compounds in plant triacylglycerols and are also more easily oxidised than saturated fatty acids, which are significantly more abundant in animal fats. In consequence, the apparent absence of plant biomarkers in such a small sample size (12 sherds) should not be interpreted as strong evidence for the absence of such products in the Halaf cooking traditions given that previous research succeeded in detecting them.³⁹

Concerning possible food management practices, samples extracted from rim sherds on straight walled bowls (samples 10 and 32) and hemispheric flat bowls (samples 12 and 52) present archaeologically significant amounts of lipids in a part of the vessel not usually exposed to foodstuffs. One explanation for this phenomenon is that these vessels were repetitively filled to the top with a fat-rich food. Sauces and meat juices can be the components with the highest amount of fats, but these elements are usually liquid or viscous and they would, therefore, tend to concentrate at the lower part of the

vessel body. This explanation seems to fit well with sample 7 (a base with the highest detected amount of lipids) but does not seem to work for sample 10 (a rim with the second highest amount of lipids recovered). Alternatively, it must be considered that animal fats are lighter than and not soluble in water. Therefore, in an aqueous solution, they will tend to be in the upper part of the vessel body. Experimental studies⁴⁰ based on this premise succeeded in correlating high relative amounts of fats in the rim with boiling episodes. Consequently, vessels 10, 12, 32 and 52 could have been involved in the production and consumption of boiled foods and broths, which both involve aqueous solutions, but the former should be considered highly unlikely given that painted and plain fine ware is most generally associated with food consumption rather than food preparation. More work is needed to understand the likeliness of each possibility.

When considering that vessel sizes are small (as depicted in Table 1), it seems that the presence of animal fats in them, the fact that a certain degree of heat would have been applied, and the quantity of residues found close to the rim suggests that food could have been prepared as well as consumed in relatively small portions. This interpretation suggests a possible scenario where food is used to negotiate and compete for individual positions of leadership⁴¹ and it implies that, amongst many other possible foodstuffs, animal products were of significant importance.

In conclusion, the organic residue analyses performed on 12 Late Halaf pottery sherds from Sector 49 in Tell Halula have revealed that pottery was involved in the management and consumption of products with some animal fat in their composition. A comparison with the knowledge gathered so far on the contents in pottery from the late sixth millennium BCE in the Middle East has helped confirm the use of certain pottery shapes as tableware and suggest Late Halaf pottery in Tell Halula took part in the transformation, display and consumption of animal products.

³⁹ HOPWOOD, MITRA 2012.

⁴⁰ CHARTERS ET AL. 1993.

⁴¹ NIEUWENHUYSE 2013.

Acknowledgements

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Evolution as a way of intertwining: regional approach and new data on the Halaf-Ubaid transition in Northern Mesopotamia

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ABSTRACT

The Ubaid represents a fundamental phase for the emergence of social complexity and is the first cultural phenomenon having spread throughout almost the entire Fertile Crescent. A long-lasting debate exists about the modalities of this expansion, while its chronology – around the last quarter of the sixth millennium BC – is generally considered as well established. However, recent reassessments of some ancient radiocarbon dates and ceramic data from the whole Ubaid sphere clearly suggest that the chronology of the emergence of the Ubaid is as controversial as the modalities of this process. On the basis of new data from northern Mesopotamia and the northern Levant, this paper focuses on the Halaf-Ubaid Transition, as well as on the contact between the Ubaid and other cultural entities in Levantine areas generally considered as external to the Ubaid sphere. Technical and morpho-stylistic analysis of some sixth millennium assemblages seems to suggest that the Ubaid expansion could have begun much earlier than generally imagined and could have implied very frequent and deep cultural relations with other Mesopotamian and Levantine cultures.

KEYWORDS

Ubaid, Halaf-Ubaid Transition, Wadi Rabah, ceramic technology, northern Mesopotamia, northern Levant, Lebanon

1. Introduction. A controversial diffusion

Despite almost a century of research from its discovery, the Ubaid largely remains a ‘strikingly contourless’¹ phenomenon. In particular, its beginning, defined as the Halaf-Ubaid transition (HUT), constitutes an extremely little-known phase.² Despite the rarity of well-stratified and chronologically reliable contexts, HUT is generally attributed to the third quarter of the sixth millennium (about 5500-5200 BC)³ and marks a crucial change in Northern Mesopotamian economy, identities and social organization.⁴ But if there is a wide consensus to consider this step as a fundamental moment in the process of emerging social complexity, there is no certainty about the means through which the Ubaid spread over an area of unprecedented dimensions,⁵ from southern Mesopotamia to the northern Levant. Even concerning terminology, the use of the term ‘Ubaid’ is far from consistent, because it deals with a pottery style, a period as well as a cultural assemblage. The ‘Ubaidness’ of this assemblage is traditionally defined by some material traits: black or brown on buff painted ceramics, baked clay nails or mullers, baked clay sickles, ophidian figurines with coffee-bean eyes, circumferential head shaping, tripartite houses, public architecture with niched and buttressed façades and extramural communal cemeteries. However, black-on buff very distinctive pottery has always been the most important indicator of the Ubaid⁶ and has been used to establish a widely accepted internal chronology with different phases.⁷ For this reason, any kind of reflection aimed at suggesting a better understanding of how the Ubaid assemblage emerged in the North has to focus especially on ceramic data and radiocarbon dates.

About the so-called Ubaid expansion, once abandoned the idea of a massive migration of southern people towards the North,⁸ two models currently remain:

- The Ubaid expansion would have been made by a process of acculturation starting from a contact zone, probably located in central Iraq or in the Diyala Valley, between the northern Halaf and the south-Mesopotamian Ubaid.⁹
- Or it should be attributed to the limited penetration in the North of small groups, which would have progressively become more and more important and able to influence the local material culture.¹⁰

The only certainty about this dynamic of expansion seems to be its chronology. In fact, both the hypotheses share the conviction that the Ubaid would have begun to spread in the North (fig. 1) especially by acculturation once reached a quite advanced phase in the South (during the Ubaid 3, around 5300 BC).

However, if this had been the case, a long process of acculturation would not have started before this stage and would have lasted a long time, whereas in the last quarter of the sixth millennium the whole northern Mesopotamia and the northern Levant already belong to the Ubaid horizon. Moreover, in the case of an acculturation starting from a single zone of physical and cultural contact between Halaf and Ubaid communities (as in Breniquet’s theory), the Ubaid expansion would not be immediate throughout the North but, on the contrary, it would have implied a gradual and relatively protracted process, with a progressive diffusion of Ubaid characters in areas increasingly far from the initial contact zone. Instead, calibrated radiocarbon dates for the emergence of the Ubaid do not present chronological gaps between central Iraq, northern Syrian and Iraqi regions and the northern Levant.¹¹

¹ NISSEN 1989, p. 245.

² DAVIDSON 1977.

³ CAMPBELL, FLETCHER 2010, p. 69.

⁴ MÜHL, NIEUWENHUYSE 2016, pp. 28-30.

⁵ CARTER, PHILIP (eds.) 2010a.

⁶ CARTER, PHILIP 2010b, p. 3.

⁷ OATES 1960a.

⁸ MALLOWAN, ROSE 1935.

⁹ BRENIQUET 1996.

¹⁰ STEIN 2010.

¹¹ CAMPBELL, FLETCHER 2010, p. 72.

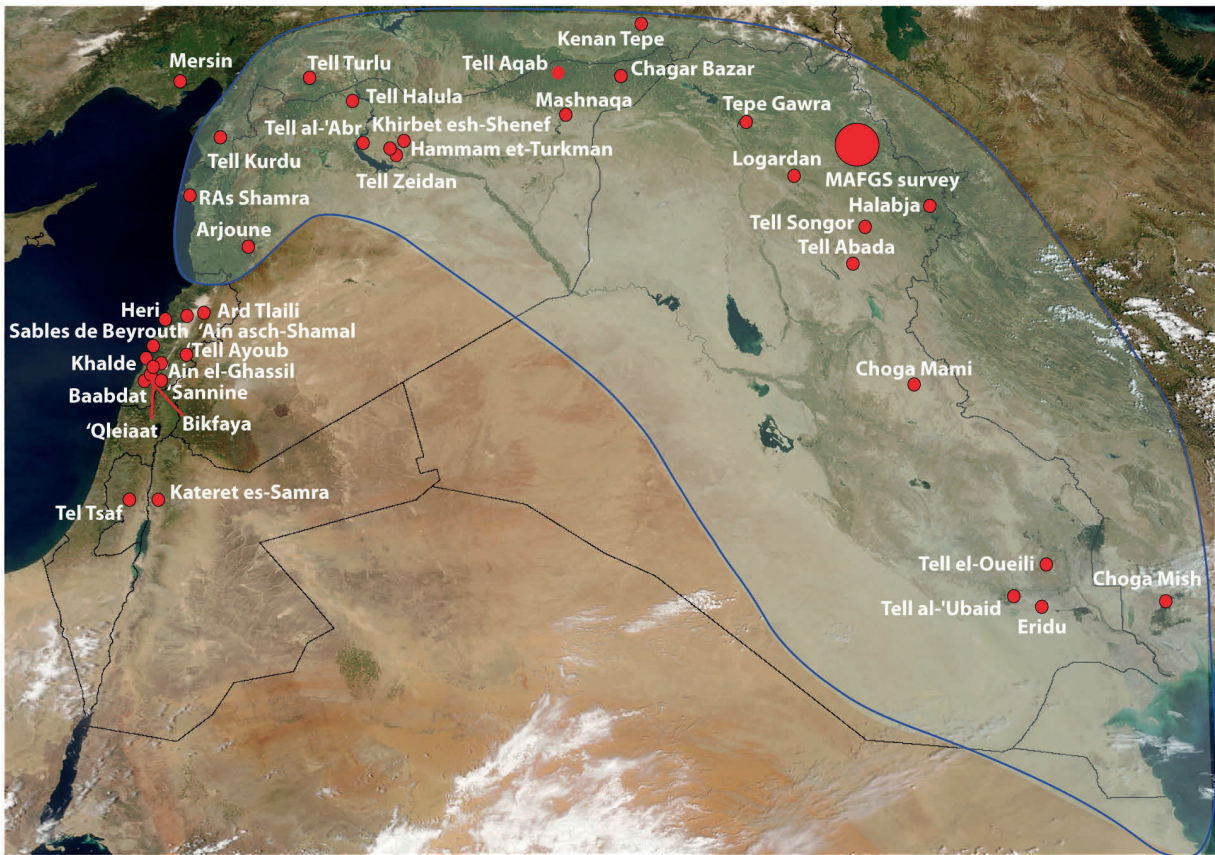


FIGURE 1
Sites mentioned in the text and approximate limits of the Ubaid cultural sphere

2. Making the picture even more controversial: between unfitting radiocarbon dates and anomalous ceramic parallels

In the last years, some scholars focused on new Mid-Holocene radiocarbon samples and on the reevaluation of ancient dates: to correct some possible distortions as the so-called ‘old wood effects’, only short-lived samples have been used. If we bring all together these new results (table 1), the outcome is a Mesopotamian and north-Levantine chronology where some data (like the ubiquitous nature of Ubaid in the north since the Ubaid 3 onwards) are pretty obvious, while other elements are quite unexpected. In particular, it seems that since its early phase during the first centuries of the sixth millennium BC, the Ubaid quickly established a network of contacts

stretching from southern Mesopotamia over north Mesopotamia and the northern Levant.

Ceramic typology provides a tool to test and validate this absolute chronology. In other words, if the Ubaid began to spread in the whole North since its early stages, then clear traces of ancient Ubaid must be documented by the ceramic typology in northern Mesopotamia and in the northern Levant. The synchronization of the Ubaid pottery confirms the existence of different large regions or ceramic macro-provinces: southern Mesopotamia, northern Mesopotamia and the northern Levant.¹² Several generic features are documented in all the macro-provinces and belong to a shared early Ubaid repertoire. It is the case of simple and quite fine trian-

¹² For the definition of the Ubaid ceramic provinces see BALDI 2016, 118-119, fig. 1.

TABLE 1

Summary framework of the Ubaid periodization based on relative chronology (OATES 1960a) and radiocarbon dates from Mesopotamia and the northern Levant

Dates BC	Oates Chronology	Northern Levant	Northern Mesopotamia	Southern Mesopotamia
5900-5300	Ubaid 1-2 (Halaf in Northern Mesopotamia and the Northern Levant)	Arjoun Trench VII-VI Tell Kurdu (Amuq C)	Tepe Gawra XIX Tell Zeidan (L. 33-27) Khirbet esh-Shenef Str. 3	Tell el-Oueili Ubaid 1 Eridu XIX
5300-4900	Ubaid 3		Tepe Gawra XVII-XV Tell Zeidan (L. 16/15) Mashnaqa Hamman-et-Turkman IV Tell al-'Abr 7-6	
4900-4500	Ubaid 4	Arjoun Trench V Mersin XVI	Kenan Tepe Tell al-'Abr 5-2 Tepe Gawra XIV - XII	Tell el-Oueili Ubaid 4-5

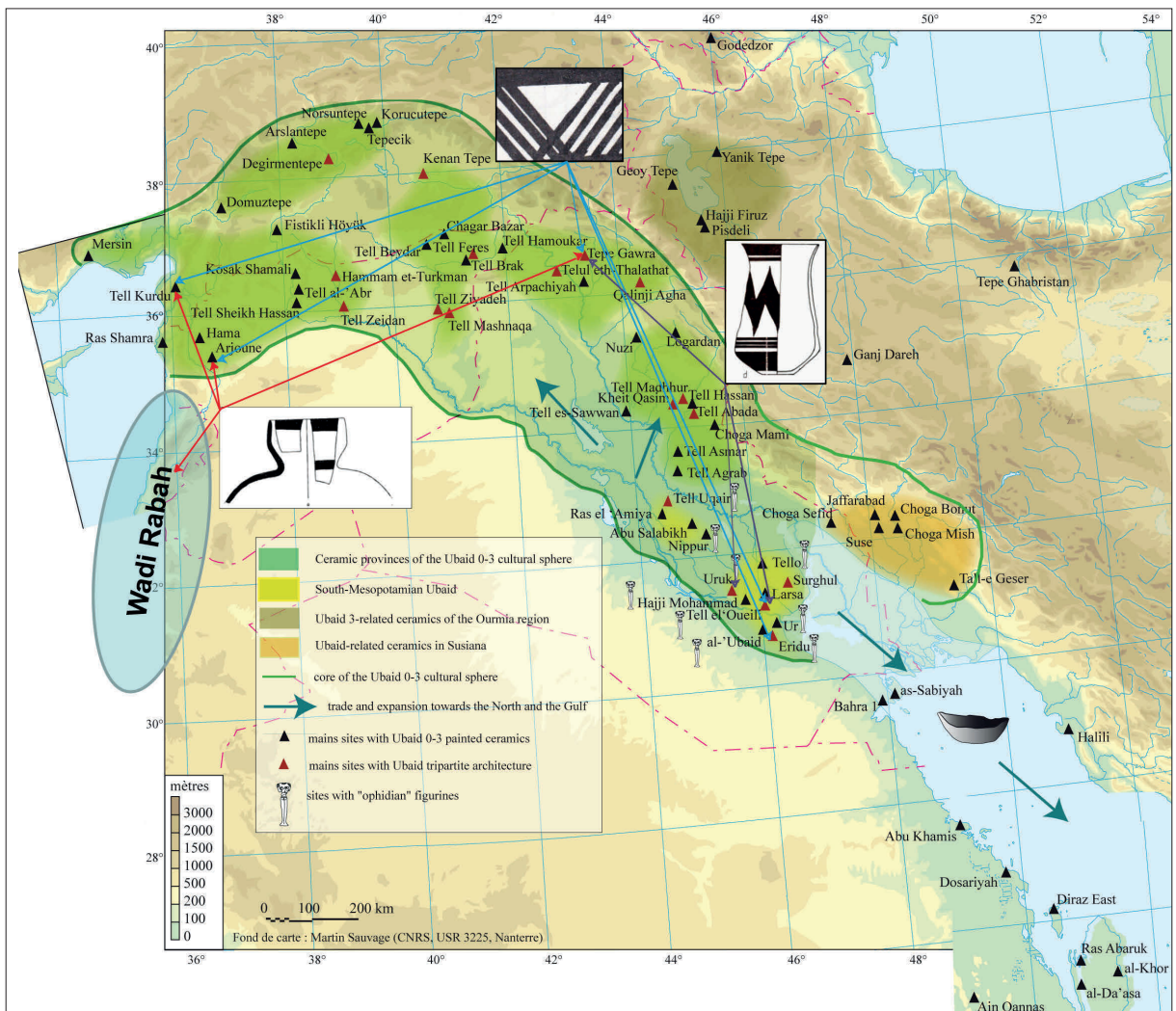
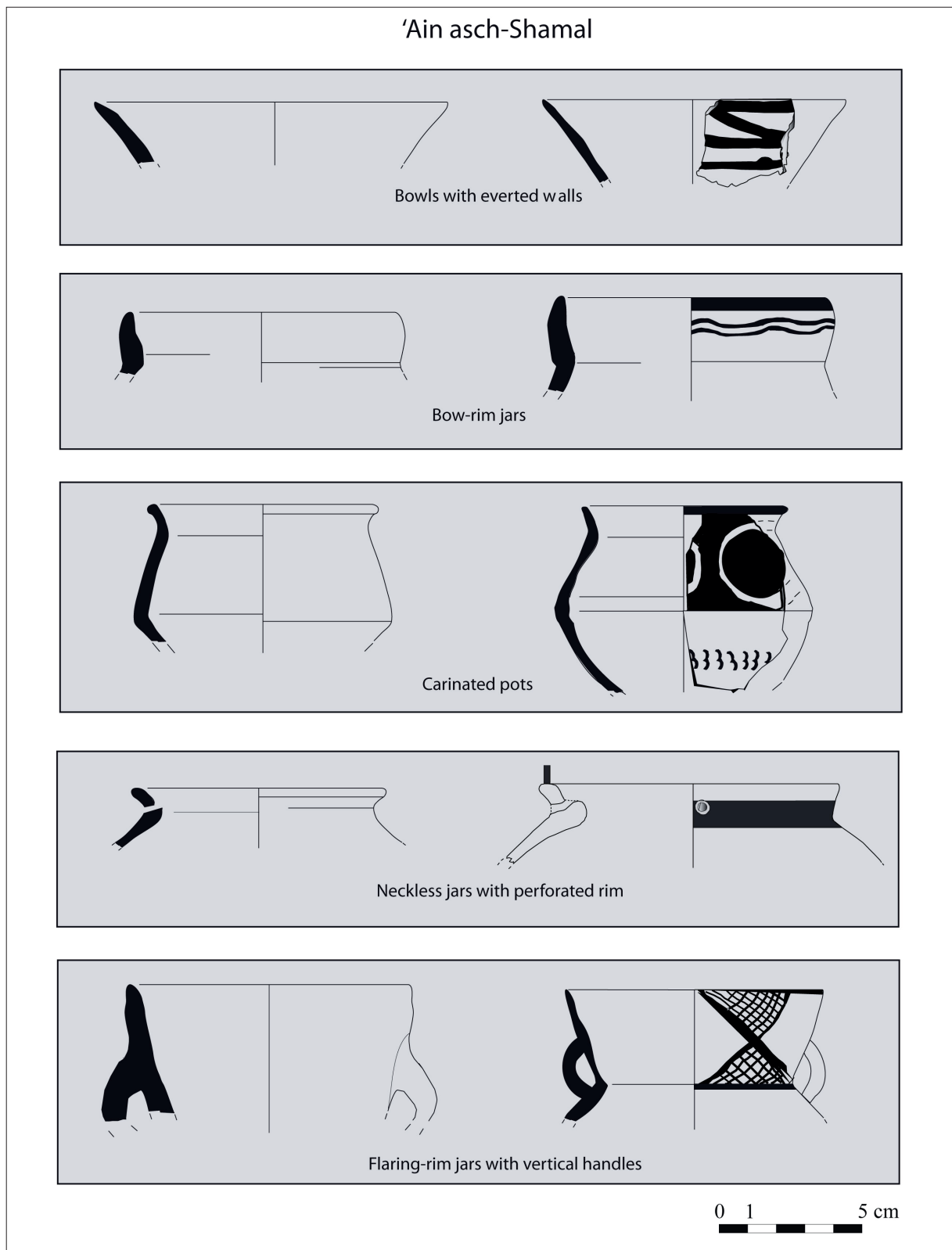


FIGURE 2 Sites of the Ubaid sphere and distribution of some morpho-stylistic traits of the early Ubaid (Ubaid 1-2)

TABLE 2

Comparative table of some Wadi Rabah (on the left) and Ubaid (on the right) ceramic shapes from 'Ain al-Shamal (selected samples from the collection of the Museum of Lebanese Prehistory, Beirut)



gular or oblique painted decorations (fig. 2),¹³ close carinated goblets,¹⁴ plates with elaborate chessboard decorations,¹⁵ as well as painted zig-zag bands joined by linear traits.¹⁶ On the contrary, some diagnostic shapes are very specific to certain areas. For instance, the only known samples of short-necked internally-angled jars are attested in central and northern Mesopotamia.¹⁷ Likewise, bow-rim jars are exclusively documented in the northern Levant¹⁸ and in northern Mesopotamia.¹⁹ Indeed, in the sixth millennium BC, bow-rim jars constitute a typical trait of the Wadi Rabah assemblages in the Levant,²⁰ as well as of the Halaf repertoire in northern Mesopotamia.²¹ Parallels between Wadi Rabah and Halaf traditions are not surprising in themselves since it is largely demonstrated that these two entities are

¹³ See at Oueili Ubaid 1-2 in the South (BRENIQUET 1996, Pl. X.5, 7-8; Pl. XVI.2, 4; Pl. XXV.1), at Tell Abada III in central Mesopotamia (JASIM 1985, fig. 107.g), or at Tepe Gawra XIX-XVIII in the North (TOBLER 1950, Pl. LXIX.b.5, 12; Pl. LXXI.a.9, LXXI.a.20).

¹⁴ See at Oueili Ubaid 1 (BRENIQUET 1996, Pl. VIII.3), at Abada III (JASIM 1985, fig. 100.c-d), or at Tepe Gawra XIX (TOBLER 1950, Pl. LXIX.b.1).

¹⁵ See at Eridu (SAFAR ET AL. 1981, p. 203, fig. 94:4), Oueili (BRENIQUET 1996, p. 177, Pl. VI.1), Tell Abada (JASIM 1985, fig. 102.b), Tepe Gawra (TOBLER 1950, Pl. LXIX.b.4).

¹⁶ See for instance in the Ubaid 1 levels at Oueili (BRENIQUET 1996, Pl. XV.4, 8), at Tell Abada III (JASIM 1985, fig. 100.a), or at Tepe Gawra XIX-XVIII (TOBLER 1950, Pl. LXIX.a.11, LXIX.b.2, LXX.b.2-3).

¹⁷ See at Tell Abada III (JASIM 1985, fig. 103. Sc.2/5) and at Tell Zeidan (STEIN 2010, fig. 17.2).

¹⁸ Bow rims make their first appearance in this period. Early samples are known from Ras Shamra IV A and IIIC (DE CONTENSON 1992, p. 208, fig. 199:4; 226, fig. 217:2) and then from Ras Shamra IVC and B (DE CONTENSON 1992, p. 188, fig. 179:8; 194, fig. 185:5, 6; 208, fig. 199:4-6), but also from Tell Kurdu D (YENER ET AL. 2000, p. 109, fig. 15:16-18).

¹⁹ Bow rim jars are a main characteristic of the early Ubaid phases in the North: they occur for instance at Khirbet es-Shenef (AKKERMANS 1993, p. 100, fig. 3.33: 39-41) and Tell Aqab (DAVIDSON, WATKINS 1981, p. 8, fig. 3:4). Later, some bow-rim jars are also documented in Ubaid 3 levels at Tell Turlu VII (BRENIQUET 1991, p. Pl. XVI:15,16), Hammam et Turkman (AKKERMANS 1988b, Pl. 75:102) and Tell el-Abr 7 (HAMMADE, YAMAZAKI 2006, Pl. 6.31:1,2,3,4,10).

²⁰ GARFINKLE 1999.

²¹ The close typological relations between Wadi Rabah and Halaf are known for a long time (KAPLAN 1958, 1960). Halaf influences and vessels with elaborate decoration in Halaf style are also clearly evident at the junction between northern Mesopotamia and the Levant at sites like Mersin phases XIX-XVII (GARGSTANG 1953, p. 115).

contemporary with each other.²² On the contrary, their similarities with the Ubaid repertoire could seem unexpected because of the general consensus about the fact that both the Wadi Rabah and the Halaf are more ancient than the first appearance of the Ubaid horizon. This provides an additional confirmation to a very ancient dating of the first Ubaid manifestations in the North.

3. Trench C at Logardan: A stratified evidence from the northern Zagros Piedmont

This early emergence of the Ubaid is documented at several sites, as Khirbet esh-Shenef,²³ Tell Turlu,²⁴ Domuztepe,²⁵ and also at Logardan, in the central Iraqi region of the western Qara Dag. After two surveys in 2014 and 2015, a French archaeological mission (directed by Régis Vallet) started in 2015 a micro-regional program of excavations at the sites of Gird-i Qalaa and Logardan, close to Chamchamal. Both the sites yielded extensive evidences of important (in some cases monumental) chalcolithic vestiges.²⁶ But since the sixth millennium, the Halaf-Ubaid transition is well documented in the basal levels of the Trench C at Logardan (fig. 3).

The deepest level (Level 9) is composed of two structures, a *tholos* and a rectangular unit, both destroyed by a fire and contemporary to each other since their walls overlapped and were embedded to one another. So, they were one architectural (probably domestic) unit. Levels 8 and 7 are composed of several kilns arranged on different layers. The whole area is characterized by strange Halaf and uncommon Ubaid sherds oddly associated in the same dwelling (fig. 3; Pl. 1).

Level 9, with the circular building and the rectangular burnt structure, shows the whole panoply of the Halaf 'culture': perforated potsherds, spindle whorls, circular ceramic discs, coarse flattened-

²² CAMPBELL 2007.

²³ AKKERMANS, WITTMAN 1993.

²⁴ BRENIQUET 1991.

²⁵ CAMPBELL, FLETCHER 2010.

²⁶ VALLET ET AL. 2017.

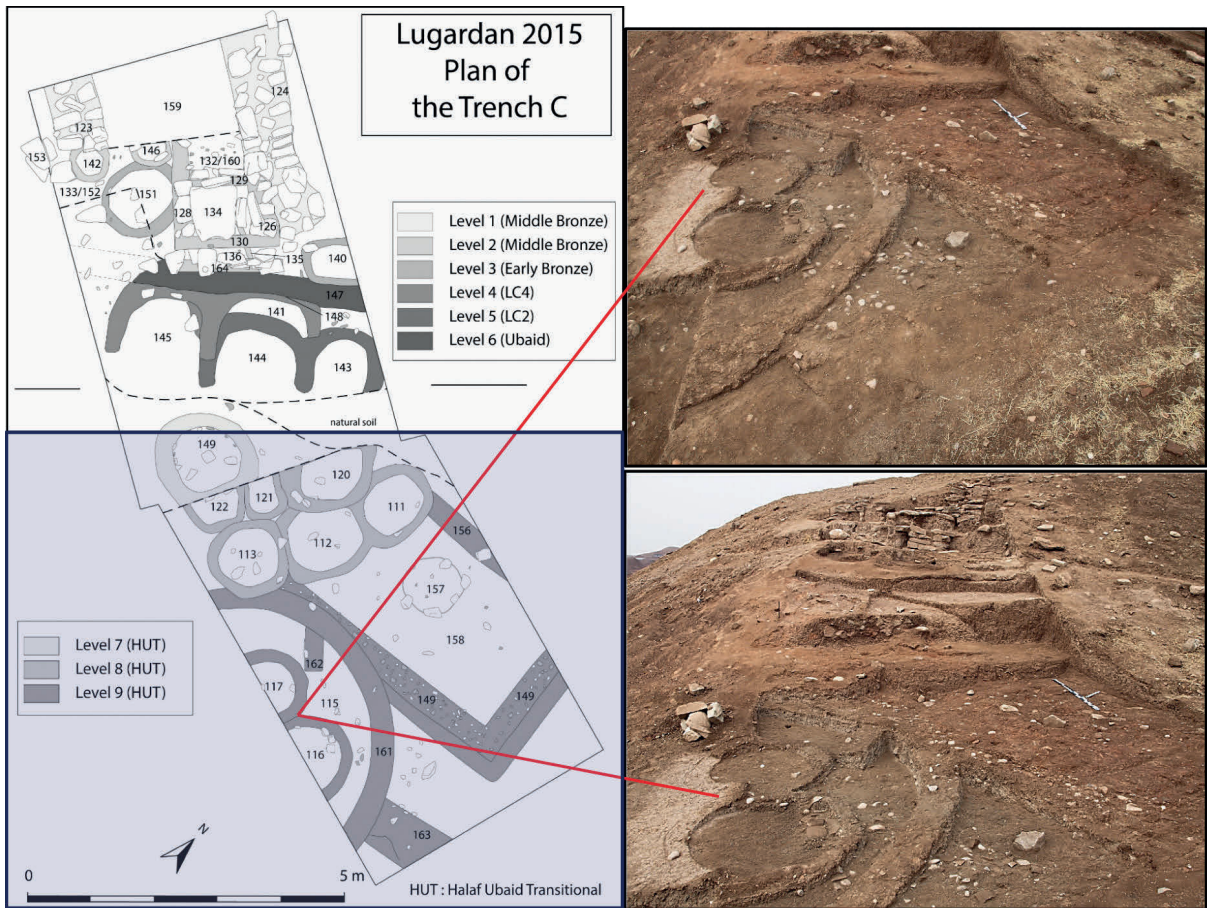


FIGURE 3
Trench C at Lugardan: plan and photos of Levels 9-7 (Halaf-Ubaid Transition)

base basins, miniature stone vessels, fine painted wares, orange (sometimes painted) common pottery, a roughly conical figurine and a rounded *tholos*. Therefore, there should be no doubt about the cultural affiliation of this phase. But since this level the ceramic assemblage is characterized by some anomalous features. In particular, 12% of the collected sherds show proper Ubaid attributes, as black-on-buff dense mineral fabrics, geometric designs and morphologies not consistent with the Halaf typology, as hemispherical bowls with in-turned rims and shallow bowls with beaded rims (Pl. 1). Moreover, Ubaid-looking and Halaf-looking ceramics share some motifs, such as the ‘Maltese cross’ which is documented both on Halaf red painted sherds and Ubaid black painted ceramics (Pl.1 – Log 15.34.12).

Even proper Halaf sherds do not belong to a standard repertoire. They are both red-on-orange, black-on-orange and polychrome-painted (black, orange, white and purple), with a predominance of red decorations. Their morphological typology includes tall necked everted rim jars, bow rim jars, wide mouth globular pots with everted rims, S-shaped bowls with flared rims and simple hemispherical or everted rim bowls. Even if clearly fitting with a generic Halaf horizon, it does not coincide with the repertoire traditionally considered as ‘final’ Halaf, which could justify the presence of Ubaid pottery and a transition to the proper Ubaid.

More in general, in the large debate about Halaf chronology and evolution, in the absence of a consensus on the Halaf ceramic typology, sometimes Halaf assemblages are considered ‘late’ just because

Logardan

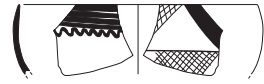
Plate 1



Log 15.21.5



Log 15.24.18



Log 15.34.6



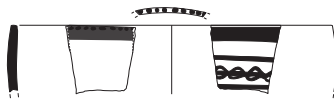
Log 15.34.16



Log 15.38.2



Log 15.24.17



Log 15.27.1



Log 15.21.17



Log 15.19.3



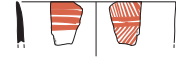
Log 15.34.4



Log 15.24.15



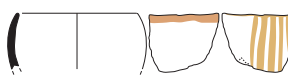
Log 15.19.5



Log 15.34.10



Log 15.21.22



Log 15.24.5



Log 15.24.2



Log 15.20.2



Log 15.24.9



Log 15.19.2



Log 15.34.15



Log 15.34.9



Log 15.34.11



Log 15.34.12



Log 15.34.13



Log 15.34.17



Log 15.38.1



PLATE 1
Halaf-Ubaid Transitional sherds from Logardan Trench C Levels 9-7

of the presence of some Ubaid sherds. Because of a largely accepted ‘culturalist’ perspective dealing with the Halaf and the Ubaid as two ‘cultures’ (namely two homogeneous packages appearing and developing one after the other), a transitional pattern of the ceramic assemblage is sometimes considered as an evidence sufficient to define a Halaf repertoire ‘late’ or ‘final’ just because of the presence of some Ubaid sherds.²⁷ It happens even when the transitional Halaf is very different from the well dated (on the basis of radiocarbon dates) late Halaf.²⁸

Indeed, in Trench C Level 9 at Logardan, the presence of some rare polychrome decorations, some fragments of ‘rusticated’ (or finger nails impressed) ware and bow rim jars seem to suggest a quite late Halaf phase. But, at the same time, final Halaf typology is characterized by miniature zoomorphic and anthropomorphic vessels, or footed vessels, which are absent, and the carinated so-called ‘cream-bowls’ – another hallmark of the late Halaf – are very rare (just one sample). Moreover, a non-negligible quantity of sherds shows very simple linear geometric motifs (Pl.1 – Log.15.19.5; Log.15.34.10; Log.15.34.13; Log.15.34.15; Log.15.38.1), considered as typical of the proto-Halaf and early Halaf phases Tell Halula or Chagar Bazar, in northern Syria.²⁹

It is evident that both Halaf-related and Ubaid-related sherds fit with a very early phase, characterized by linear decorations similar to the so-called Choga Mami Transitional pattern in central and southern Mesopotamia,³⁰ especially in the Hamrin Valley, at Tell Songor and Tell Abada.³¹ All these features are consistent with an early Halaf phase,³² with the Ubaid 1-2 tradition (the beginning of the Ubaid in the South)³³ and even with Early / Early Middle Susiana Phases at Choga Mish.³⁴

This kind of intertwining is also documented

²⁷ GÓMEZ-BACH 2017, pp. 38, 40.

²⁸ CRUELLS 2017.

²⁹ CRUELLS 2017, fig. 2.6.

³⁰ OATES 1969, 1960b.

³¹ JASIM 1985, fig. 98.b-c, 107.d, 108, 109.

³² CRUELLS 2017.

³³ JASIM 1985; OATES 1960a.

³⁴ ALIZADEH 2008.

in the Zagros Piedmont, in the region around the Dukan Lake (districts of Rania, Bngrd and Peshdar) surveyed since 2012 by the French archaeological mission at the Governorate of Sulaymaniyah (MAFGS – directed by J. Giraud). Some technical hybridizations – with the same paste for different decorative styles – are evident and affect both the pastes and the stylistic decorations and imply contacts between Samarra, Halaf and early Ubaid entities.³⁵ Decorative styles and technical hybridizations recalling the ‘Choga-Mami Transitional’ entity in central Iraq have also been recently recorded close to al-Habja, in north-eastern Iraqi Kurdistan.³⁶ This kind of combination between early Ubaid and other early sixth millennium entities would not be particularly surprising in central Mesopotamia, but the Dukan Lake or the al-Habja area are located hundreds of kilometers further north.

Anyway, in Trench C at Logardan the Halaf-Ubaid Transition goes on in Levels 8 and 7, with an increasing percentage of black-on-buff Ubaid ceramics. Since Level 8, the Halaf-related red painted decorations become extremely rare. Some material-cultural elements, like the presence of little stone vessels and pierced potsherds, are still attested in the Level 7. But orange common ware dramatically decreases in number and, even if some motifs are long-lasting (above all the ‘Maltese cross’), the ceramic typology and the set of painted decorations are more and more consistent with a ‘mature’ Ubaid horizon, closely similar to Tell Abada Phase II.³⁷ This is the same process of acculturation already stressed both for ceramics and other material cultural elements at Tepe Gawra XIX-XVII.³⁸

At Logardan, this dynamic of acculturation is also evident from the point of view of the ceramic techniques (fig. 4). In Level 9, Ubaid-like and Halaf-like ceramics did not share any technical feature. Their pastes were different and Halaf pottery was manufactured by slab construction or by hol-

³⁵ BALDI 2018.

³⁶ ALTAWHEEL ET AL. 2012, p. 24, fig. 10.6-9.

³⁷ JASIM 1985, fig. 176, 179, 180, 190.e.

³⁸ STEIN 2010, fig. 2.6. Recent large-scale typologies have similarly shown a progressive transformation of the morpho-stylistic Halaf repertoire towards shapes and decorations typical of the Ubaid period (ROBERT 2010).

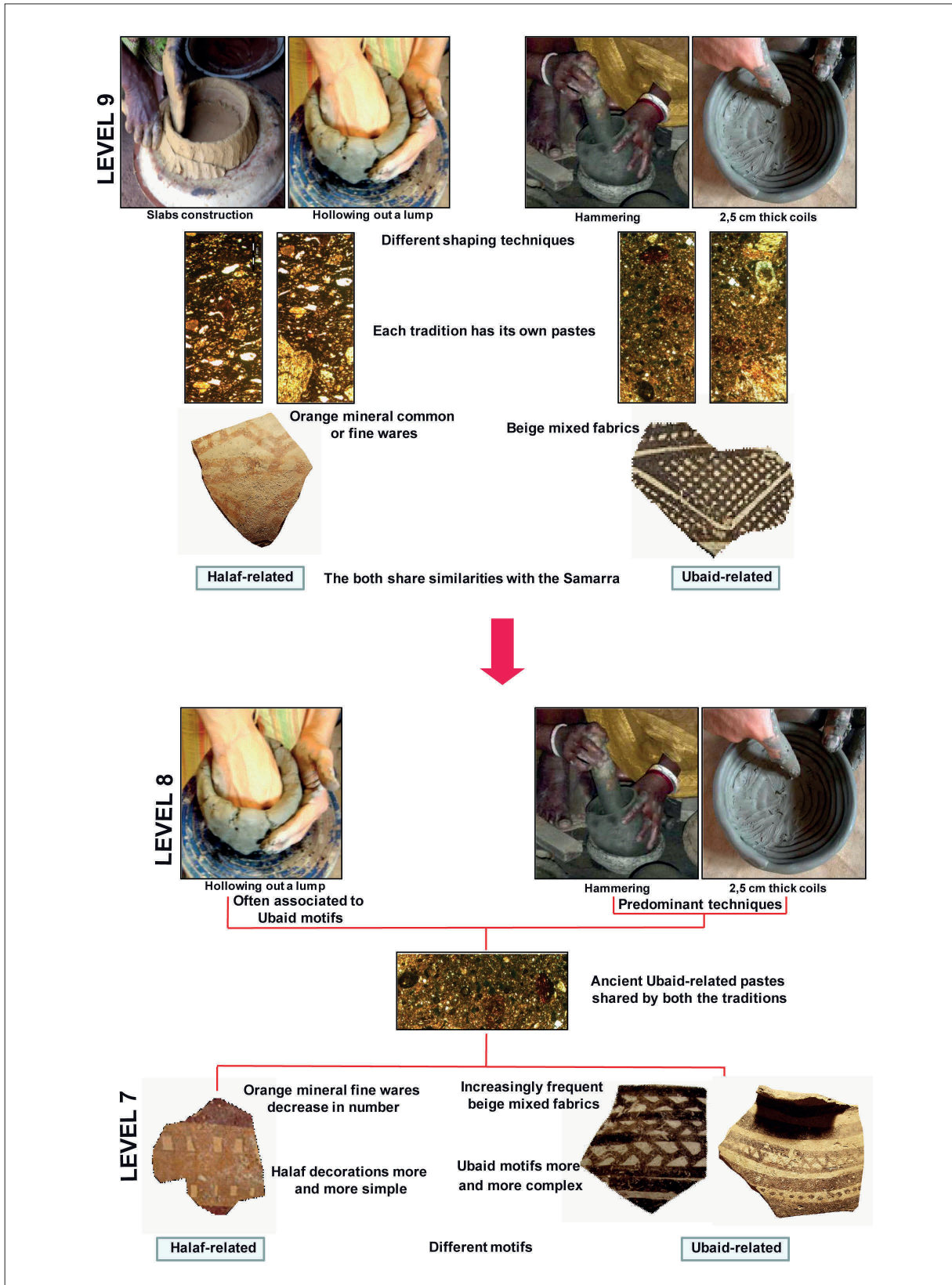


FIGURE 4
Process of techno-petrographic acculturation of the ceramics at Logardan Trench C Levels 9-7

lowing-out a lump of clay, while Ubaid ceramics were made by hammering on a convex support or by overlapping 2,5 cm thick coils. Later, in Level 8, Ubaid pastes start to be shared, and eventually, in Level 7, the Ubaid shaping methods become predominant, and more and more ceramics produced by hollowing-out a lump (that is a Halaf-related shaping method) start using typical black-on-buff Ubaid-related painted motifs (fig. 4).³⁹

4. A far-from-home Ubaid

A quite similar scenario is documented in the Lebanese region, very far from the area traditionally considered as the Ubaid cultural sphere. A research program the Ifpo-Beirut is carrying-out since 2015 with the Museum of Lebanese Prehistory (Université Saint Joseph in Beirut), implies a technical analysis of ceramic assemblages originating from ancient surface collections and excavations. Several assemblages show, since a very early phase, some traces of the evolutionary patterns observed in Mesopotamia, within the Ubaid cultural area. Some smaller sites show just some early Ubaid black-on-buff painted ceramics, while main villages in the coastal area,⁴⁰ in the Beqaa valley⁴¹ and on the central mountains⁴² are characterized not only by a presence of Mesopotamian traditions, but also by the same kind of evolution observed at Logardan, with an intertwining between local ceramic productions and Ubaid-related pottery (Pl. 2).⁴³

³⁹ The technical analysis of the Halaf-Ubaid transitional ceramics of Logardan is still ongoing and takes into account not only pottery from Trench C, but also from surface collections from Logardan (especially the northern edge of the hill) and Gird-i Qalaa. For a first assessment of the technical traits of the ceramics as far as pastes and shaping methods see BALDI 2015.

⁴⁰ As Khalde I-II, el-Heri and the agglomeration of sites known as the *Sables de Beirut*.

⁴¹ As 'Ain el-Ghassil, 'Ain asch-Shamal or Tell Ayoub.

⁴² As the Mount Sannine, Bikfaya or Baabdat.

⁴³ A clear example of these dynamics is represented by the site of Qleiaat, in the Mount Lebanon, investigated between 2015 and 2017 by a joint project led by the Ifpo and the Museum of Lebanese Prehistory. Final results of the excavations will be published in the next months according to the agreement of the Lebanese General Directorate of the Antiquities. The main tell of Qleiaat is occupied by massive architec-

Although the Ubaid pottery in the Levant has always been considered as limited to northern sites as Tell Kurdu⁴⁴ and Ras Shamra⁴⁵, black-on-buff painted ceramics in the Lebanese area are characterized by the same distinctive traits observed in the whole Ubaid sphere: a quite restricted set of geometric or stylized motifs arranged in horizontal bands, dense mineral fabrics, medium dimensions and decorations usually visible on the upper part of the vessels. This kind of wares have been noticed for the first time in the northern Beqaa Valley at the site of Tell Ard Tlaili,⁴⁶ where Mesopotamian-related painted traditions are documented since the Dark-Faced-Burnished Ware phase, at the beginning of the sixth millennium BC. These foreign wares represent a minority of the assemblage, where local productions obviously occupy a quantitative predominant position. Nevertheless, Mesopotamian-related ceramics are not mere occasional imports. On the contrary, they are a long-lasting presence deeply involved in local cultural dynamics. Indeed, the collections conserved at the Museum of Lebanese Prehistory, suggest a series of technostylistic borrowings between different traditions

tures dating back to the Early Bronze II-III phases, while the sixth millennium sequence is known from deep soundings. During a first phase, some rare black-on buff Ubaid-like painted sherds appear associated to an early chalcolithic Wadi Rabah-related local assemblage, as well as to some Halaf sherds. Initially, each of these three components of the assemblage show specific pastes and Ubaid specimens seem to have very ancient decorations. Moreover, local ceramics and Halaf sherds share their manufacturing techniques, which are well attested in the whole area since the Pottery Neolithic: they are built by hollowing-out a lump of clay or by superposing 4,5 cm thick coils with an alternating orientation of the junctions. On the other hand, all the Ubaid samples are built by superposing 2,5 cm thick coils with inward oriented junctions: a very simple technique never documented before in the region. Later, in a second phase, Halaf sherds tend to disappear, the Ubaid ones become more frequent and decorated according to some typical Ubaid 3 patterns. Besides, despite their beige colour due to an oxidizing firing, in this phase Ubaid ceramics are locally manufactured and share the same pastes of the rest of the assemblage. Likewise, Ubaid pottery also shares some local shapes, in particular bow-rim jars. The 2,5 cm thick coils technique continues to be used to shape Ubaid containers, but this method is no longer exclusive to the Ubaid ceramics, but it is also used to build about 16% of the local chalcolithic assemblage.

⁴⁴ ÖZBAL ET AL. 2004.

⁴⁵ DE CONTENSON 1992.

⁴⁶ KIRKBRIDE 1969.

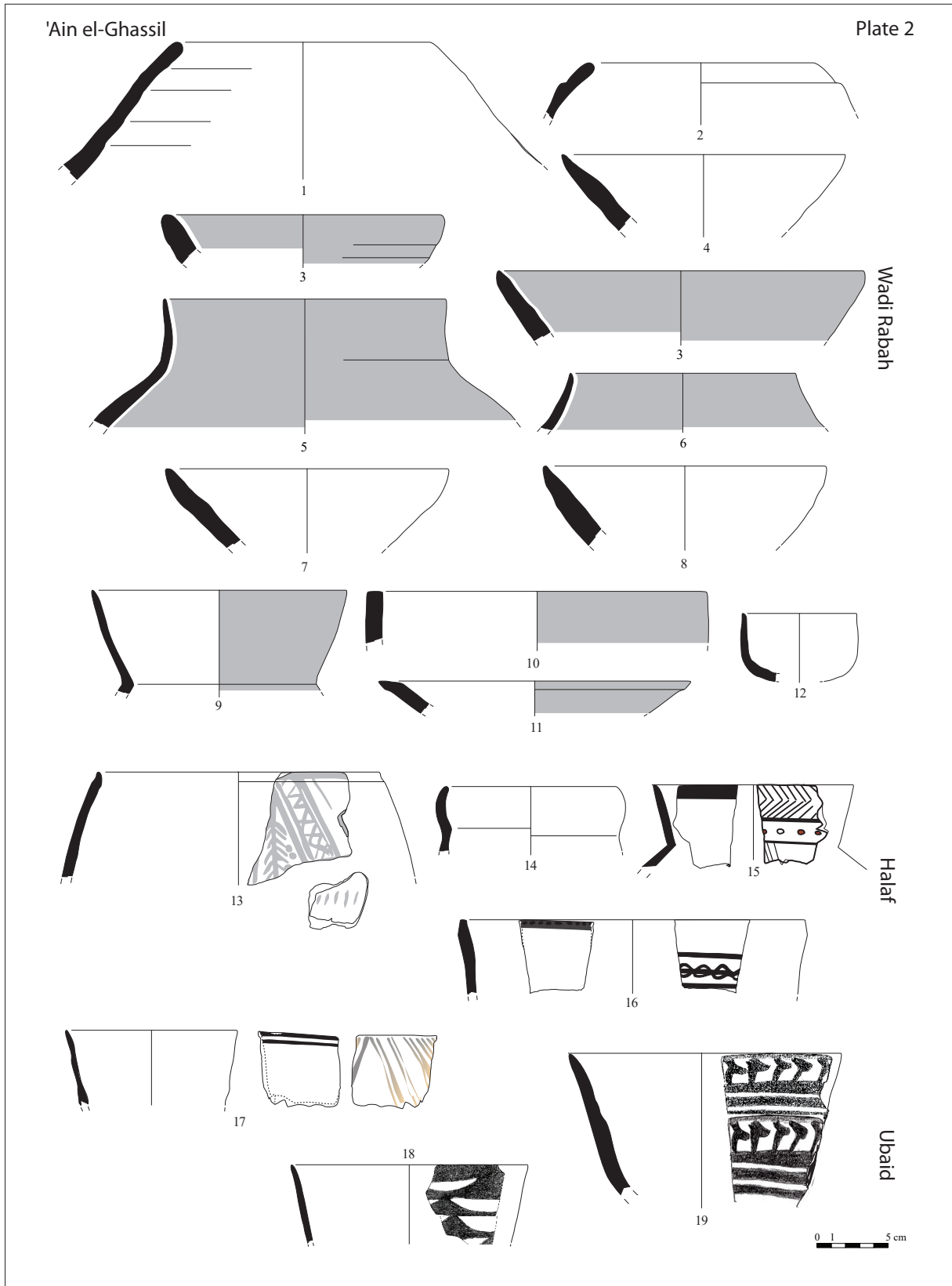


PLATE 2
'Ain el-Ghassil Early Chalcolithic assemblage: 1-12 Wadi Rabah sherds; 13-16 Halaf sherds; 17-19 Early Ubaid sherds

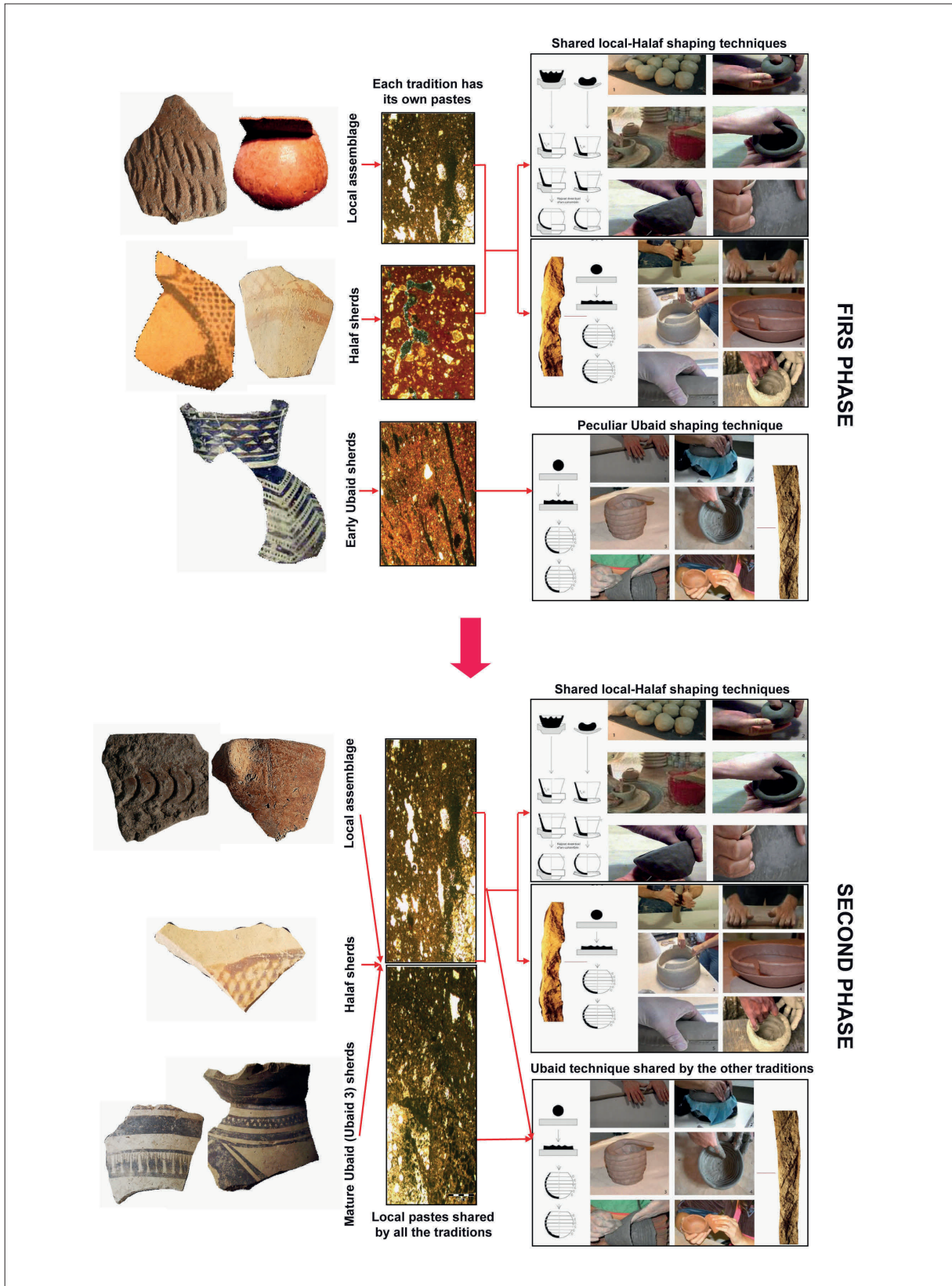


FIGURE 5
Acculturation pattern of ceramic techniques at Lebanese sites with Ubaid presence

over a period of some centuries. Using stratified sequences (as Qleiaat or Tell Ard Tlaili) to verify this kind of evolution observed on assemblages from ancient surveys, it appears that since a very early phase Halaf and Ubaid painted shards are recorded within Levantine late Dark-Faced-Burnished or Wadi Rabah-related assemblages (fig. 5). First, local and foreign traditions do not present any kind of similarities. But over time several intertwinements emerge: fabrics become more and more homogeneous, some shapes are progressively shared, and some decorative styles blend together. As far as shapes, fine bowls with little-beaded rims first occur exclusively in black-on buff early Ubaid-like wares, while later they are also adopted amongst local red-slipped productions.⁴⁷ Bow-rim jars, which are initially typical of Wadi Rabah or Halaf repertoires and then also spread amongst Ubaid ceramics, constitute an even more evident example in this sense. On the other hand, bichrome painted decorations (red and black on buff fabrics) seem to emerge as the product of a stylistic borrowing between distinctive Halaf red designs and Ubaid black motifs, as already documented in the Amuq Valley.⁴⁸ The earliest bichrome specimens closely recall the Halaf fine tradition, while later they become increasingly common and associated to new and less elaborate motifs as the typically Ubaid wavy lines.

It is remarkable that this late bichrome version (that summarizes Ubaid and Halaf traits, and could be the result of a long coexistence of these two traditions along with purely local productions) is the one attested in some southern-Levantine sites, as Kataret as-Samra⁴⁹ or Tel Tsaf.⁵⁰ It is totally coherent, therefore, that some reliable south-Levantine radiocarbon dates attribute bichrome painted Ubaid-like materials to the last quarter of the sixth millennium BC.⁵¹

⁴⁷ See for instance at Tell Ard Tlaili since a period contemporary to the Amuq Phase D (BADRESHANY 2013, fig. 3.22.4).

⁴⁸ See for instance at Tell Kurdu (BRAIDWOOD R. J., BRAIDWOOD L. 1960).

⁴⁹ LEONARD 1989, pp. 4-6.

⁵⁰ GOPHNA, SADEH 1988, p. 10.

⁵¹ GARFINKEL ET AL. 2007.

5. Conclusions

Even if available data are still meagre in the Levant, it seems that Ubaid pottery appears very early in the Lebanese area and actively participated in local cultural dynamics.⁵² It is not surprising that, given the distance from Mesopotamia, this tradition represents a minority of the assemblage in Lebanon. But both in northern Mesopotamia and in the northern Levant Ubaid pottery is involved in a series of technical borrowings with other components of the ceramic horizon and, above all, with local productions. These long and deep processes are not limited to superficial characters and determine intertwining and reciprocal transformations between distinct traditions. The natural consequence of these exchanges is that, as Stein has already pointed out,⁵³ the apparent large-scale homogeneity of the Ubaid repertoire is, in fact, the result of the emergence of several local Ubaid assemblages strongly characterized by local elements depending on the various regions.

It seems to me that the archaeological record from the Zagros Piedmont, Logardan and the Lebanese area is not a mere clue of a culture-contact phenomenon, but rather an evidence that calls into question the very definition of Halaf, Ubaid or Wadi Rabah 'cultures' and their reciprocal relations. The degree of intertwining between these entities is certainly higher than previously imagined, also because in all probability their cultural and territorial relationships begin much earlier than hitherto believed. Despite obvious regional differences at Logardan, in Lebanon, but also at Tell Kudu in the Amuq, or at Tepe Gawra in the Mosul region, local versions of the Ubaid seem to emerge from a very early intertwining between cultural entities one cannot consider as monolithic 'cultures'. In this sense, it is interesting that ceramic techniques underline what has already been observed on the ba-

⁵² A very significant example in this sense is represented by Tell Kurdu (ÖZBAL 2010). Despite the genetic continuity of the inhabitants, the transition from Phase C to Phase E implies a sharp discontinuity in terms of architecture, funeral practices, coroplastics and production systems, and clearly shows the cultural impact that small Ubaid groups can have exercised on an entire community in the long run.

⁵³ STEIN, ÖZBAL 2007; STEIN 2010, p. 24.

sis of other cultural traits,⁵⁴ namely the need to no longer approach the Ubaid or the Halaf as collective entities, but rather to deconstruct and investigate their local elements and internal mechanisms.⁵⁵

Moreover, the reassessment of radiocarbon dates, of the regional pottery typologies, as well as new data raise a question: it is possible that the Ubaid expansion towards the North and the Levant had begun during the Ubaid 1-2 (at the beginning of the sixth millennium) rather than during the Ubaid 3? It is a fact that Ubaid 3 and 4 phases have been a period of continuous expansion of the Ubaid sphere, with the foundation of many settlements and villages both in the Gulf and in the North. But a scenario implying the beginning of this process since the Ubaid 1-2 could offer a solution for the problems aroused by the models currently in use for

the Ubaid expansion. On the one hand, A Halaf-Ubaid Transition (or a contact between Wadi Rabad and Ubaid) conceived as local processes, without any 'contact zone', but rather due to regional interactions between Halaf people and small Ubaid groups could explain the absence of chronological gaps between the supposed main 'contact area' and the rest of the North. It could also explain the subsequent emergence of the Ubaid as a regionalized entity, with strong local specificities. On the other hand, if this interaction had begun during Ubaid 1, this could explain why the Ubaid horizon was already spread throughout the North around 5300 BC.

Further studies and fieldworks will be able to answer these questions only in a comparative supra-regional perspective between Mesopotamia and the Levant.

Acknowledgments

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⁵⁴ STEIN, ÖZBAL 2007; STEIN 2010; ÖZBAL 2010, p. 299, 304; CARTER, PHILIP 2010b.

⁵⁵ In a similar way, with respect to the strongly local and yet typically Ubaid characteristics of Kenan Tepe, (PARKER 2010, p. 357), after having discussed separately small finds, ceramics and architecture, concludes that the specific local version of the Ubaid was the product of variably interconnected and overlapping Anatolian and Mesopotamian social networks.

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The social landscape of Upper Mesopotamia: a preliminary overview of the Late Chalcolithic evidence from the Eastern Upper Tigris region

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ABSTRACT

The present contribution discusses a small sample of Late Chalcolithic sites that have been identified during the survey carried out by the Land of Nineveh Archaeological Project (LoNAP) in the area of the River Tigris. Via a preliminary analysis of the settlements, of their positions as well as of their ceramic material cultures, an interpretation is proposed of the settlement strategies and the socio-economic relationships that might have characterised the existence of these sites. At the same time these considerations are used in a broader way to explore the regional dynamics that shaped the Chalcolithic societies of Upper Mesopotamia across the late fifth–fourth millennium BC.

KEYWORDS

Society, Late Chalcolithic, Uruk, Upper Mesopotamia, settlement pattern

1. Introduction

It is beyond any doubt that the Neolithic and Chalcolithic of Upper Mesopotamia are the prehistoric periods that witnessed some of the most important phases in the development of prehistoric human communities. From the seventh millennium onwards, human societies started to change at increasing speed and with an unprecedented rate of growth – the way they lived in this region, the way they adapted to, and, at the same time, exploited, it. To summarize in one sentence, they radically transformed their social and economic interaction with other communities and with the surrounding environment. In particular, at the turn of the sixth/fifth millennium BC, that is at the transition between the Neolithic and Chalcolithic, human communities experienced significant changes in their social structure and subsistence strategies that led to transformation touching both the inner organization of societies and the execution of economic activities. Generally defined (and perhaps oversimplified)¹ as “socio-economic complexity”, this process has involved significant changes, with repercussions that created the bases for the big centralised societies of the following epochs.

The path that led to these changes touched several aspects that have been explored by archaeologists especially in excavations². Three of these may be considered of major relevance by archaeologists. The first is the emergence of social hierarchy, i.e. the emergence of social inequalities that resulted in a stratification of society into different groups characterised by different levels of access to power³. Such differentiation had substantial repercussions on – and indeed concrete consequences for – a number of aspects of everyday life, from different access to

food surpluses to control/possession of prestigious materials/items. Ultimately, all of these elements have been considered as indicators of different levels of “authority”, i.e. the emergence of leadership and the subsequent capacity of individuals to influence and/or address a number of socio-economic activities of the society.

The second element is labour specialization⁴. Craftsmanship and methods of production in a number of different fields changed significantly and improved throughout the Late Neolithic and early Chalcolithic⁵. This concerned several types of craft, among which copper working has indeed attracted the attention of archaeologists, though one may say that pottery production is the craft activity that showed the most significant changes⁶, thanks to the introduction of new kilns, new form types and new fabrics, such as Chaff Faced Ware during the Early (=Northern Ubaid)⁷ and especially the Late Chalcolithic⁸.

A third factor was the spread of urbanization, i.e. the emergence of usually large sites that exploited a wider region around them and that hosted a significant concentration of people, organised in accordance with the above-mentioned social differentiation. This phenomenon, initially observed in South Mesopotamia, has also been investigated in depth in Upper Mesopotamia thanks to a number of survey projects carried out especially in the Syro-Iraqi Jezirah. These have focussed both on single sites e.g.

⁴ STEIN 2012, p. 128.

⁵ D’ANNA, GUARINO 2012, p. 59; AL-QUNTAR 2016; ARROYO-BARRANTES 2016, pp. 139-142.

⁶ D’ANNA, GUARINO 2012, pp. 73-74.

⁷ The correlation Northern Ubaid – Early Chalcolithic is largely based on the association between emerging socio-economic complexity and spread of the Ubaid material culture in Upper Mesopotamia, which has gained a general consensus among archaeologists (FORREST 1996, pp. 53-55; FRANGIPANE 2007; AKKERMANS, SCHWARTZ 2003, p. 154). However, it must be stressed that a reassessment of the chronology of the early and middle phases of the Chalcolithic seems increasingly necessary (the definition of the Middle Chalcolithic remains in particular an open question). The new datasets produced by the ongoing projects in Iraqi Kurdistan might change the current picture and perhaps lead to reconsideration of the Halaf Ubaid Transition as the true formative phase for the beginning of the Chalcolithic epoch (CAMPBELL, FLETCHER 2010; KARSGAARD 2010).

⁸ HELWING 2004, 2012.

¹ For example, Chapman (2003, pp. 76-79) has demonstrated that different kinds of inequalities exist and that these occurred both in “simple” (e.g. hunter-gatherer groups) and “complex” (e.g. states) societies.

² This is again a simplification that attempts only to highlight some outcomes of this transformation that are more relevant for the purposes of this paper; it does not imply the existence of a linear evolutionary trend which might simply lead to misunderstanding of the multidimensional character of the complexity concept (VERHOEVEN 2010)

³ STEIN 2012; FRANGIPANE 2016.

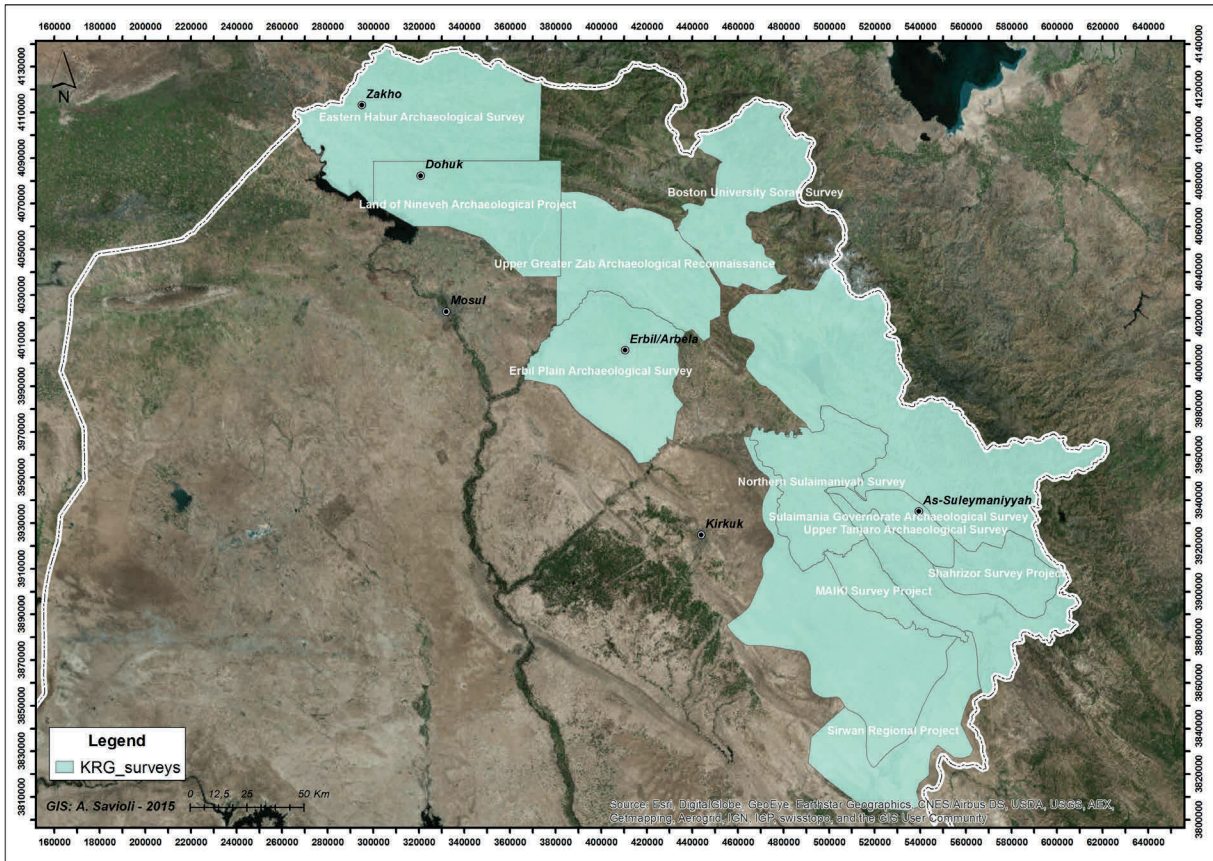


FIGURE 1
Map of the archaeological survey projects currently ongoing in Iraqi Kurdistan (Iraq)

the Beydar Survey⁹, the Tell Brak and the Hamoukar surveys¹⁰ – as well as on wider regions – to mention just the most significant with regard to extent and results obtained, the Northern Jazira Survey/NJS¹¹, the Western Khabor Survey¹² and the Tigris Euphrates Reconnaissance Project/TERP¹³.

However, this picture is destined to be changed or enriched by ongoing archaeological survey projects (The Eastern Habur Archaeological Survey – EHAS directed by P. Pfälzner, the Land of Nineveh Archaeological Project – LoNAP directed by D. Morandi Bonacossi in Iraqi Kurdistan, the Upper

Greater Zab Reconnaissance – UGZAR directed by R. Kolinski, the Erbil Plain Archaeological Survey – EPAS directed by J. Ur and recently the Boston University Soran Survey – BUSS directed by M. Danti) that are currently making available an unparalleled body of data which is literally transforming our knowledge of the settlement dynamics shaping Upper Mesopotamia. Altogether these projects cover an area of more than 13,500 sq km that roughly corresponds to half of all Upper Mesopotamia (fig. 1). Among these projects, after 5 years of investigation LoNAP stands out for having gathered a substantial amount of particularly significant data regarding the Neolithic and Chalcolithic regional settlement. This has been possible especially because of the adoption in the last two survey seasons of more intensive survey strategies for the identification of prehistoric sites, which had been un-

⁹ UR, WILKINSON 2008.

¹⁰ WRIGHT ET AL. 2006/2007; UR, KARSGAARD, OATES 2011; UR 2010.

¹¹ WILKINSON, TUCKER 1995.

¹² LYONNET (ed.) 2000.

¹³ ALGAZE, HAMMER, PARKER 2012.

noticed due to their elusive evidence: the number of surveyed sites dating to the seventh–fourth mill. BC has thus grown considerably and this permits the exploration of specific trends characterising pre-historic occupation in the LoNAP area.

Though much of the data analysis is still ongoing and in particular the study of the finds has only begun to enter a more detailed phase, the evidence to hand permits some observations to be made concerning especially the nature of the LC settlements in the region. The aim of this paper is to present a specific study that may help our understanding of the LC settlement dynamics that characterise Upper Mesopotamia. In more detail we discuss here a few selected case-studies from the LoNAP area, for which – since the finds collected there are in a more advanced phase of study – a more precise reconstruction of the local settlement dynamics is possible. The final target is to provide a “social perspective” of the surveyed evidence, i.e. we aim to explore the level of social cohesion, that is the “social force” that stimulates discrete groups of people to cooperate and share knowledge and/or information, as this manifests itself at a regional level in the survey evidence (settlements and pottery).

Though this kind of topic is usually investigated at intra-site level, we propose here – experimentally – a method based on the analysis of the occurrence of settlement patterns characterised by significant site clustering and the presence of a significant level of ceramic types in common. A similar approach has already been successfully adopted on a broader scale¹⁴: here we propose a more limited analysis based on a selection of seven sites analysed with regard to the two above-mentioned indicators (settlement pattern and pottery).

1. The body of data and regional traits

LoNAP is a survey project investigating an area of 3000 sq km, mostly concentrated in the province of Dohuk (fig. 2).

It has thus far identified 196 settlements dating to the Chalcolithic period, more or less evenly dis-

tributed in the LoNAP area. The following analysis focuses on the western sector of the LoNAP area where a group of sites (7 in total, see fig. 3) has been surveyed along two wadis that flow directly in the River Tigris (now in the Eski Mosul Dam): this discrete cluster of sites shows an interesting pattern that, albeit local in size, may offer insights also for the wider regional patterns found in the Tigris Valley.

According to a preliminary classification of the LoNAP area under investigation¹⁵, the group of sites analysed here falls in the river basin sector, distinguished by the presence of permanent water courses (the River Dohuk) and, more frequently, seasonal ones crossing the plain and eroding the surrounding terrain. As a result, the landscape is now frequently characterised by deep, narrow gullies that divide the region into separate terraces. Both permanent and seasonal drainage features have thus shaped the landscape creating a terraced region, especially in proximity to the Tigris. Further away from the Tigris Valley the erosive activity has been less strong: the surface is more regular, with an undulating profile due to gently sloping hills near the water courses. Here fluvial deposits (mostly clay and silty layers) have significantly raised the level of the surrounding surface, influencing the visibility of ancient sites – and thus also the local settlement dynamics. This depositional and erosive river activity that shaped the ancient landscape also to some extent determined (or at least influenced) the settlement pattern that, as we will see, depends upon local conditions.

The seven sites surveyed (sites nos. 1046-1050, 1052 and 1053) are small mounds that are mostly located along two main wadis. With one exception (site 1049 that covers more than 6 hectares), the settlements are very small in size, ranging from 0.5 to 4 h. They might therefore have been rural in character, although it should be remembered that in the region under investigation very large sites – comparable to big LC urban settlements of the Syro Iraqi Jezirah (e.g. Tell Brak and Tell al Hawa, both covering areas of 50-70 hectares)¹⁶ have not so far been found.

¹⁵ IAMONI 2016, p. 70; 2018.

¹⁶ BALL, TUCKER, WILKINSON 1989; WILKINSON, TUCKER, 1995; OATES ET AL. 2007.

¹⁴ PEEPLES 2018.

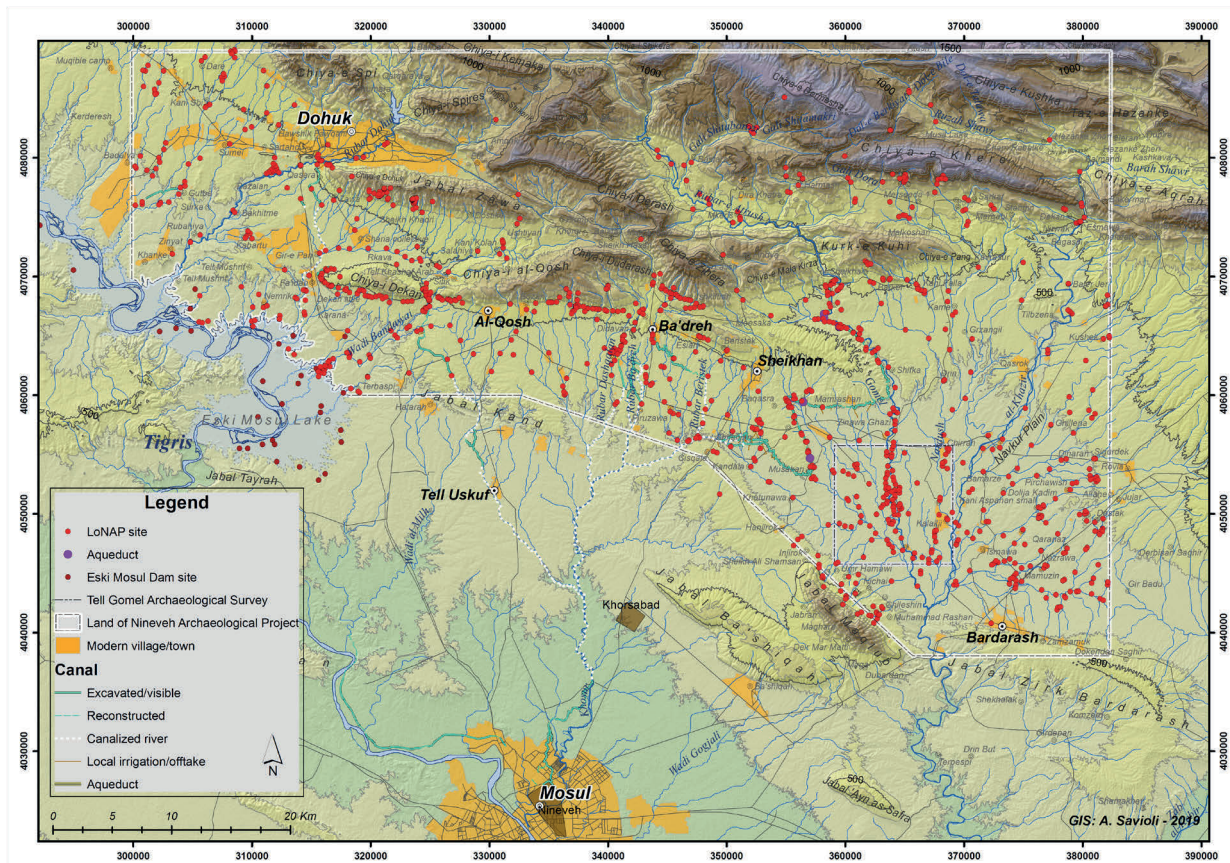


FIGURE 2
LoNAP area with all the archaeological sites surveyed

TABLE 1
Site dimensions (the areas refer to the general size of the mounds, which sometimes comprise different occupation periods)

	Site n	Settled areas in hectares
1	1046	0.5
2	1047	0.4
3	1052	1.7
4	1053	1.7
5	1048	2.0
6	1050	4.0
7	1049	6.13

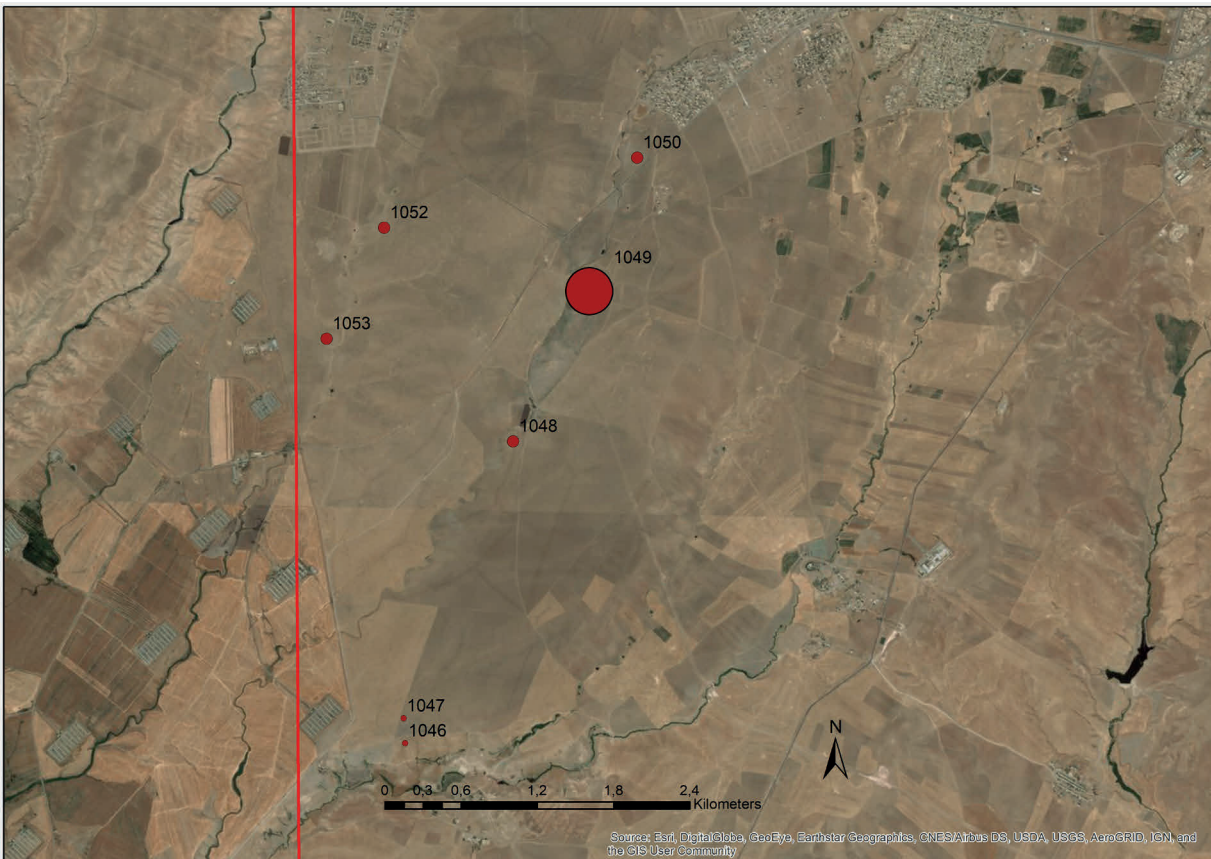


FIGURE 3

LC sites surveyed and analysed in the text; symbols have been graduated according to the size of each site (see table 1 for exact dimensions); in the centre right side of the picture note the third wadi, in which two Early Chalcolithic/Northern Ubaid sites were surveyed (not discussed in this analysis)

This aspect may suggest the occurrence of local trajectories towards complexity (and ultimately urbanization?) that may differ substantially from what is currently known¹⁷: the formula urban settlements=large sites, small settlements=rural sites might not work well in the region of the eastern Upper Tigris

An interesting aspect is that most sites show a settlement chronology that does not seem to start earlier than the Late Chalcolithic period. Though this might have been affected by the river activity mentioned above, which might have hidden the Neolithic levels, it may somehow really reflect a settlement pattern that started locally only in the fifth

millennium. Two other sites (not included in this analysis) are located along a wadi further east and date to the Early Chalcolithic (Northern Ubaid) but did not show any evidence of LC occupation. This situation may be a consequence of the radical settlement increase that characterised the region during the LC¹⁸ and that may depend on a significant demographic growth that occurred in the region across the late fifth and the fourth millennium BC. This picture, albeit partially corrected by recent survey results, is still valid and represents one of the most striking aspects of the prehistoric occupation in the LoNAP survey area.

¹⁷ IAMONI 2016.

¹⁸ MORANDI BONACOSSO, IAMONI 2015.

At the same time, as discussed below, this might suggest the occurrence of settlement patterns during the Late Chalcolithic period that may be a consequence of new economic and subsistence strategies – corroborating preliminary hypotheses proposed previously¹⁹. From this perspective, the body of data presented here may thus help us to understand better the dynamics that shaped Late Chalcolithic regional settlement, especially in an area that until a few years ago had been only marginally touched by systematic archaeological investigations.

3. Analysis of the data: the LC 1-2

The following analysis attempts to identify the occurrence of possible settlement patterns by breaking the Late Chalcolithic into two major periods LC 1-2 and LC 3-5, in agreement with a subdivision commonly adopted in analyses of survey evidence in the Near East²⁰.

The LC 1-2 sites (fig. 4) show a linear distribution along the wadis which confirms one of the general trends observed especially in prehistoric periods, that is the position of settlements in proximity to water courses²¹. This may point to a more specific need for the constant and reliable presence of water in the neighbourhood settlements, if not for the whole year at least for a significant part of it. However, the distribution of the sites, though based on a small sample, manifests another noteworthy feature: most settlements are located at a regular distance from one another (table 2). Aside from sites 1047 and 1046, whose nature has still to be fully understood, as they might either represent a case of cyclical settlement in the same area²² – possibly similarly to what has been recently observed in the near site of Muqable²³ – or part of a unique LC settlement whose limits have yet to be fully recognised, the other sites are located at an average distance of

1521.8 m, with an SD of 493.6 m (both decrease if one removes sites 1047/6: average 1358.2 with an SD of 322.05). This short distance does not seem to occur by chance: a similar pattern has been observed elsewhere – though located in a different area of the LoNAP survey area, the plain south of Ba'dreh²⁴.

LC 1-2 is considered to be a period during which the dynamics of socio-economic complexity accelerated. Compelling evidence of this has been found in crucial LC sites such as Tell Brak and Tepe Gawra. In the first, recent excavations in Operation TW, Levels 21-18 (more precisely 21-19 are dated to the LC 2, whereas LC 18 to the early LC 3), showed evidence of workshop areas specialised in the production of artefacts in hard stones (obsidian flints and cornaline) under the supervision of the local elite/bureaucracy²⁵. The latter might have dwelt in an adjacent public building, characterised by a large entrance and massive, thick walls²⁶. In the second, older (though still crucial) excavations carried out by the Pennsylvania Museum of Archaeology demonstrated the occurrence of increasing social hierarchy through the discovery of buildings with uncommon features, such as the so-called White Room of Level XII, and a number of tombs containing grave goods characterised by the presence of luxury items such as copper and electrum artefacts from tombs 109, 110 and 114 of Level X²⁷. The absence of these precious raw materials in Upper Mesopotamia suggests that a solid long distance network was established during the mid-late fifth millennium and that this was vital for the development of the early LC societies of Tepe Gawra.

The limited body of data analysed here cannot add definitive supporting evidence – which only a wider view based on the results of the LoNAP survey can give. Yet, the regularity of the site distribution might mirror the emergence of new settlement strategies derived from new exigencies, among which the necessity to strengthen contacts between all communities would seem to be a plausible contender. A second question concerns their occur-

¹⁹ IAMONI 2018.

²⁰ UR 2010.

²¹ WILKINSON, TUCKER 1995, p. 40; IAMONI 2018.

²² BERNBECK 2013, pp. 57-58; AKKERMANS 2013A, pp. 69-70; 2013B, p. 29.

²³ PFÄLZNER ET AL. 2017.

²⁴ MORANDI BONACOSI, IAMONI 2015.

²⁵ OATES 2012, pp. 172-175. OATES ET AL. 2007; McMAHON 2013; AL-QUNTAR 2016, pp. 167-172.

²⁶ OATES 2012, pp. 171-176.

²⁷ TOBLER 1950, pp. 25-30; 89-92.

TABLE 2
Distance among sites expressed in metres

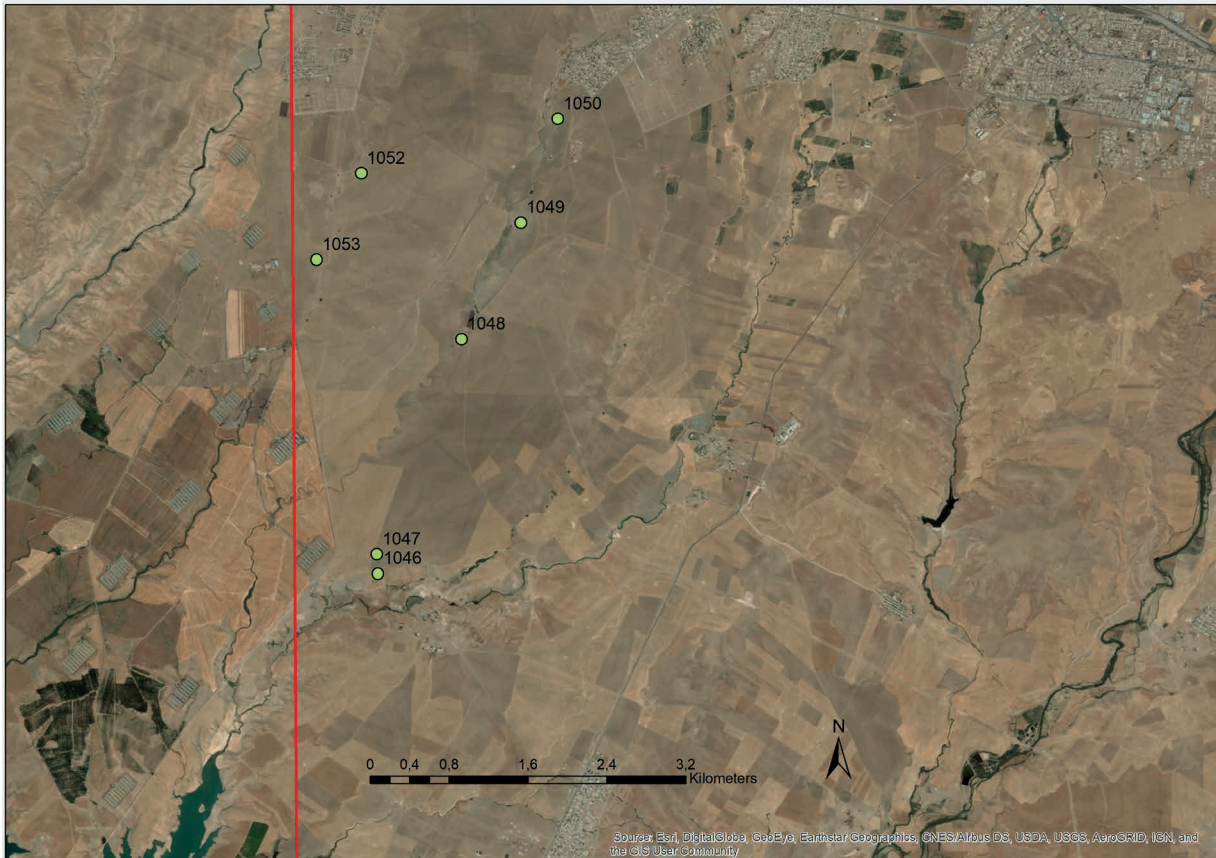
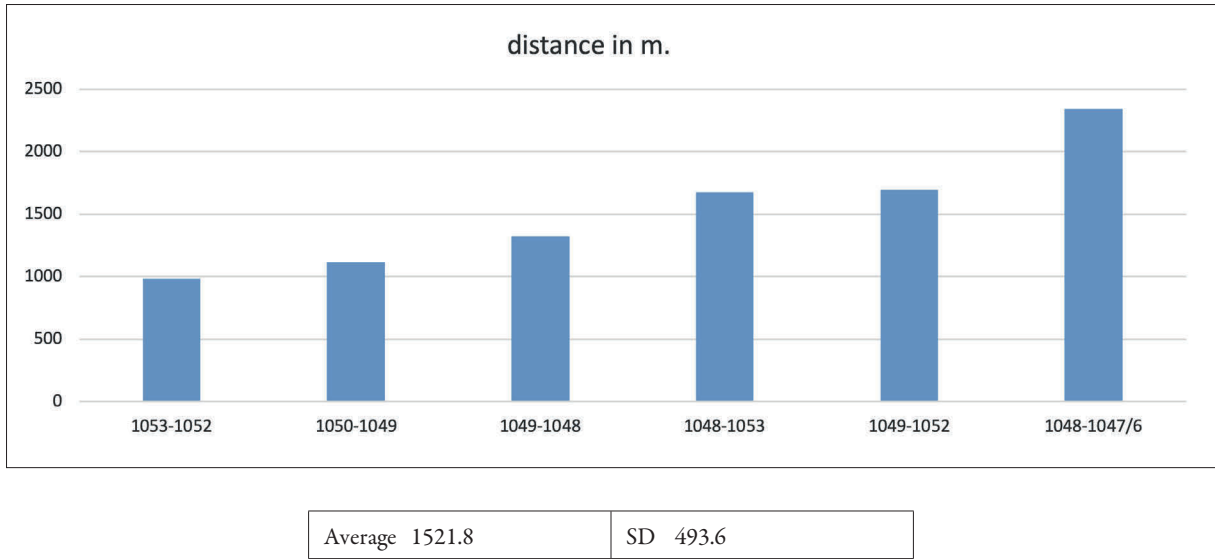


FIGURE 4
Distribution of LC 1-2 sites

rence along wadis: this might imply also the need to explore the region in search of direct access to sources of raw materials or the intention to create a network aimed at facilitating the wider circulation of raw materials. The cases of Brak and Gawra are indeed in many respects exceptional for the abundance and quality of the finds: the sites here analysed might reflect at a lower level this greater attention to the exploitation of local sources. Not far from here, in the valley south of Dohuk lie a number of flint mines whose exploitation probably started in a systematic and intensive way during the LC²⁸: the cases analysed here might be part of this growing demand for specific raw materials.

4. The LC 3-5 settlement

The later phase of the Late Chalcolithic spans approximately 700 years according to the recent periodization in use for Northern Mesopotamia²⁹. Although covering such a significant timespan, the evidence to hand in the region under analysis is apparently controversial (fig. 5). The number of sites decreases substantially, with only five sites that now look to be settled. These too are located near the watercourses, thus suggesting that the importance of local natural resources, in particular water, was still important during the LC 3-5. The diminished number of sites is, on the contrary, a somewhat unexpected trend. Given the preliminary character of this paper, only a provisional and hypothetical explanation is suggested for these trends. The abandonment of two sites along the water courses – which were among the smallest in the sample analysed – might depend on the emergence of new dynamics leading towards settlement centralization. Although, as mentioned above, the region surveyed by LoNAP does not seem to show the occurrence of large LC 3-5 centres covering about 50 hectares or more – typical of neighbouring regions³⁰, such as Tell Brak³¹ and Tell el

Hawa³² in the Syro-Iraqi Jezirah – it is noteworthy that the sites still settled during the LC 3-5, in particular sites 1050 and 1049, are the largest in the area under analysis. The position of nos. 1049 and 1050, which are significantly farther north than the other group of sites located on the same wadi (1048 and 1047), might suggest some kind of “centralization” or perhaps nucleation of the settlement emerging in the area. This information, when combined with the presence of Southern Uruk pottery on site 1049, may indicate the occurrence of new settlement strategies based on a model of increasing economic complexity – influenced or perhaps triggered (?) by long distance contacts, especially with south Mesopotamian societies³³. The latter may well have wanted to achieve access to raw materials sources or to establish direct contacts with local settlements that were in a position to facilitate such access. Investigation of the mines of the Jebel Zawa³⁴ and relative circulation of flint artefacts derived from those mines is still in progress and thus the evidence reviewed here still needs a more robust examination; however, it seems likely that the Jebel Zawa flint source might have played a role in these dynamics.

On this point it must be stressed that evidence of Uruk sites in the LoNAP region has been thus far quite elusive. Survey pottery material of Uruk inspiration or tradition had previously been sporadically identified and the number of settlements – especially when compared with other regions of Iraqi Kurdistan located further east such as in the area of Erbil³⁵ and Sulaymaniya³⁶ where significant phenomena of interaction have been identified – was significantly lower. This substantial discrepancy represents one of the most intriguing distinctive traits characterising the region under analysis³⁷.

³² BALL, TUCKER, WILKINSON 1989; BALL 1990.

³³ ALGAZE 1993; ROTHMAN 2001a.

³⁴ CONATI BARBARO ET AL. 2016.

³⁵ J. UR pers. comm.

³⁶ VALLET ET AL. 2017; SKULDBØL, COLANTONI 2016, pp. 15-16.

³⁷ This consideration refers mainly to evidence from the 2012-2016 survey seasons; more recent investigations, whose results are not discussed in the present paper, have been carried out during the 2017 and 2018 seasons and have slightly changed the picture under analysis, although it must be said that the general scarcity of Uruk sites is still valid.

²⁸ CONATI BARBARO ET AL. 2016.

²⁹ ROTHMAN 2001a; STEIN 2012.

³⁰ IAMONI 2016.

³¹ UR, KARSGAARD, OATES 2011; MCMAHON 2013.



FIGURE 5
Distribution of LC 3-5 sites

5. The pottery evidence

The study of the ceramic data is still ongoing and as a consequence a detailed report of the diagnostic traits of the pottery cannot be given in this work. However, a preliminary classification of the LC pottery was performed using the Ceramic Working Typology (hereafter WT) originally devised by Wilkinson and Tucker for their North Jazira Survey³⁸ and later expanded by J. Ur for his Tell Hamoukar Survey³⁹. Currently the WT has been adopted by LoNAP itself as well as by three projects carrying out surveys in neighbouring areas (EHAS, UGZAR and EPAS) with the goal of coordinating the results

³⁸ WILKINSON, TUCKER 1995, p. 89.

³⁹ UR 2010.

achieved and obtaining a homogeneous view of the archaeological landscape of a large portion of Upper Mesopotamia. The use of WT in the Eastern Upper Tigris region will also serve to increase the number of diagnostic types available – and consequently its chronological accuracy, as well as its regional applicability over an area much wider than that for which it was originally devised (and on which its diagnostic types are based).

The classification of the ceramics retrieved during survey (tab. 3) shows a discreet agreement with types already known from previous investigations located in the Syro-Iraqi Jezirah. The traits characterising the ceramic assemblages are three. As far as the early period of LC is concerned (fig. 6: 1-9), this is dominated by two well-known types, jars with flaring necks/rims (T4/5) and bowls with in-

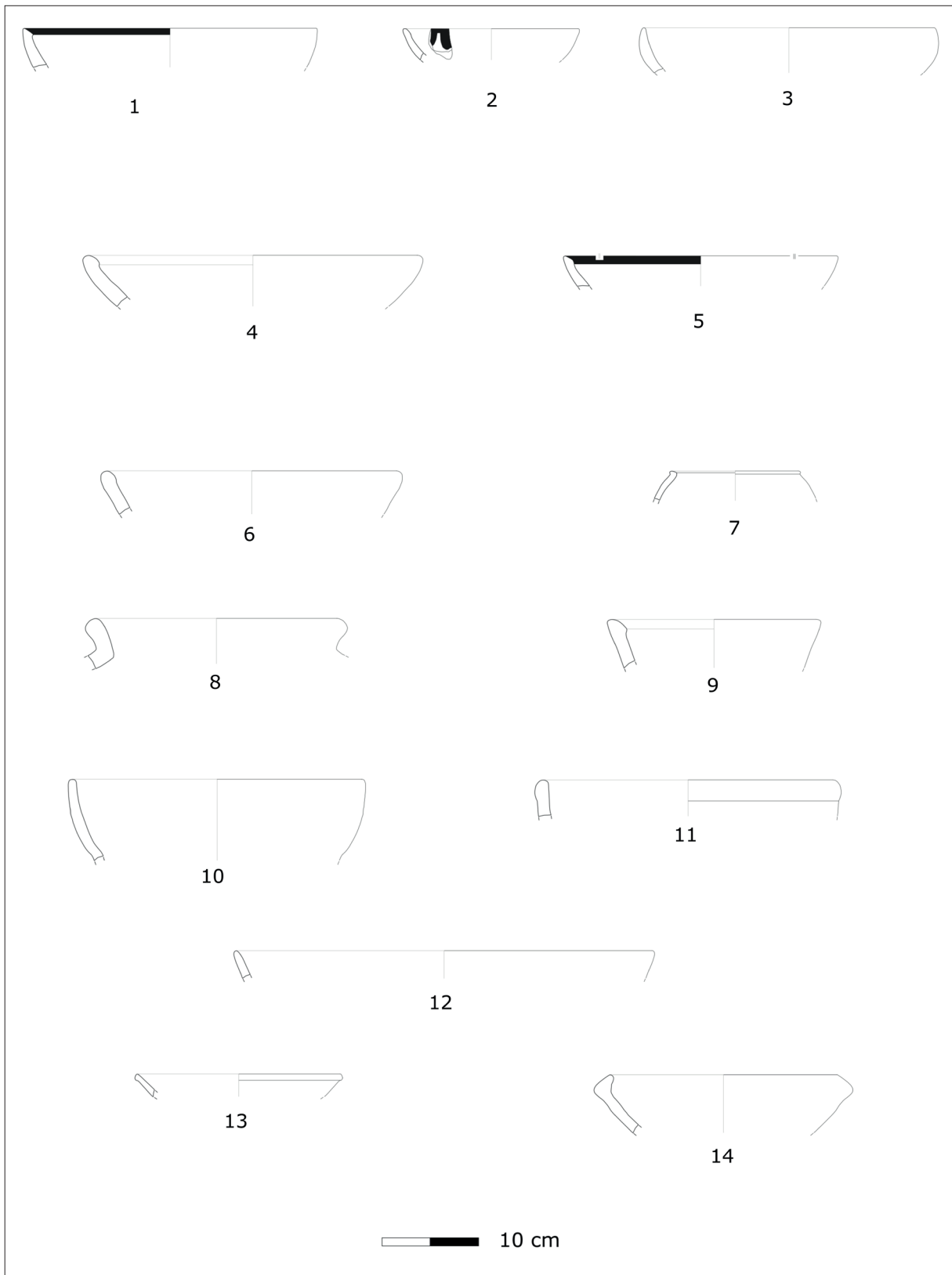
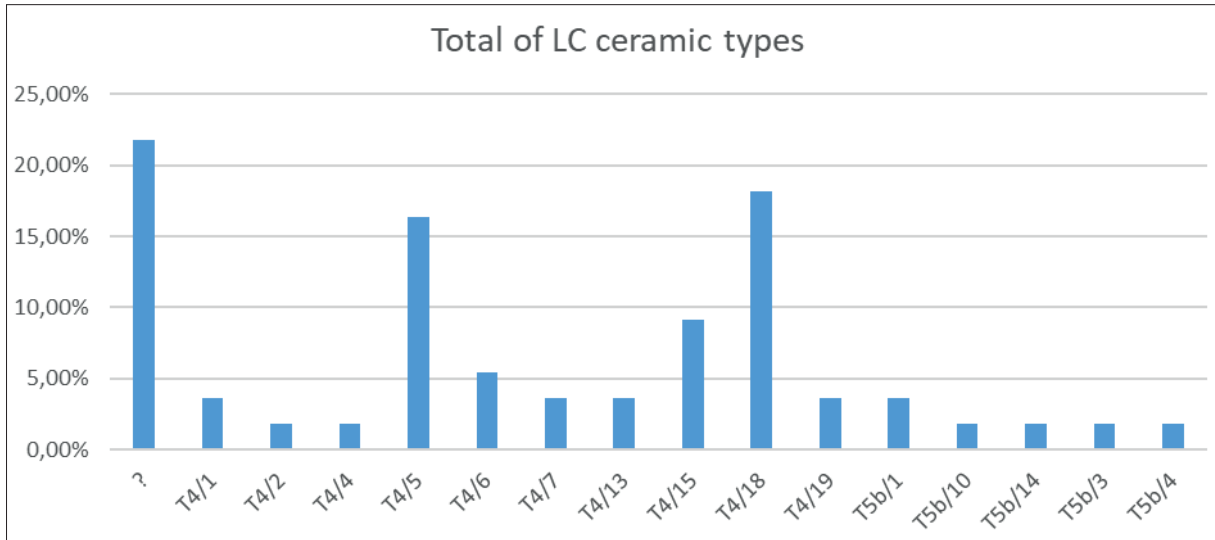


FIGURE 6
Selection of LC sherds surveyed in the sites analysed; n.1-9 early LC (LC1-2) n. 10-14 late LC (LC 3-5)

TABLE 3

Classification of surveyed Late Chalcolithic pottery: types T4 represent the LC1-2, whereas types T5b represent the LC 3-5



ternally thickened rim (T4/18)⁴⁰, which suggests the occurrence of a rather standardised ceramic production, characterised by the predominance of a few specific form types. This aspect may reflect (and indeed also be the consequence of) the distribution of settlements, the regular and close spacing of which may have strengthened social interaction and sharing of similar material culture, such as the use of standardised set of vessel types. Somehow unexpected is the apparent absence of the so-called “Sprig Ware”, a painted decoration that appears on open as well as closed forms and that is typical of the early LC (and perhaps also late Northern Ubaid) period⁴¹. The retrieval of a significant number of Sprig Ware fragments in the site of Shelgiyya, on the western side of the River Tigris, suggests that this area was the centre of production of this pottery type⁴²: its absence in the sites discussed here is thus a point which requires further inves-

tigation. Similarly, the low presence of another hallmark of the early LC, the so-called Coba bowls (T4/1)⁴³, is an aspect that stresses the likely occurrence of a ceramic tradition slightly different from neighbouring regions. At the same time, the rare occurrence of the second type – the Coba bowls, which have been connected to the organization of communal meals and ultimately to the existence of local elites⁴⁴, may also suggest a functional differentiation of the surveyed sites. Some settlements may lack the Coba Bowls simply because they were rural in character and thus devoid of any ceramic types related to social hierarchy⁴⁵.

⁴⁰ TOBLER 1950, fig. 142: 349, 351; MATTHEWS 2003, fig. 3.13:2; PFÄLZNER ET AL. 2017, pl. 2: 41-48; GAVAGNIN, IAMONI, PALERMO 2016, pp. 128-129.

⁴¹ TOBLER 1950, p. 149; ROTHMAN 2002, p. 57.

⁴² BALL 1997.

⁴³ BALDI 2012, 2016a; BALOSSI RESTELLI, HELWING 2012.

⁴⁴ BALDI 2012, pp. 401-405.

⁴⁵ I am deeply indebted to one of the two anonymous reviewers for this consideration, which will require a thorough examination of the area surveyed by LoNAP for a full confirmation of this intriguing interpretation, since the survey evidence (i.e. the ceramic types scattered on the surfaces of sites) might differ from excavation data (i.e. pottery assemblages from excavated contexts). The “visibility” of the first might be completely different from the second.

The later period of the LC (represented by types T5b in Tab. 3) is on the other hand constituted by a smaller number of ceramic types (fig. 6: 10-14). Among these, the internally hollowed rim jars (T5b/1) are the most frequently occurring types and represent a good chronological indicator for the later period of the Late Chalcolithic⁴⁶. Other types are, however, present in similar percentages; noteworthy among these is the presence of Grey Ware (T5b/3), a distinctive pottery of the mid-late LC period⁴⁷ that frequently occurs with bowls characterised by externally swollen rims. The latter are well known in the region as their presence in the late fourth millennium levels of the “Deep Sounding” of Nineveh attests⁴⁸. In general, the later period of the LC seems to be characterised, at least in the sites under examination, by a paucity of pottery. This is mirrored by the more restricted number of recognised types, especially when compared with the preceding early LC. Such an apparent anomaly may suggest the occurrence of a more variegated horizon of – thus far – unrecognised ceramic types that differ somehow significantly from the Syro-Iraqi Jezirah tradition, upon which much of the WT is based. In more detail, the rare presence of two major diagnostic types (casseroles and hammer-head bowls) – if not their apparent absence, as seems to be the case for the casseroles – from the assemblages of the sites discussed here seems to confirm the hypothesis proposed in preliminary work of a ceramic horizon characterised by local traits⁴⁹.

6. Conclusions

The data sample discussed above show the occurrence of micro-dynamics that have shaped the settlement pattern in the Upper Tigris Valley. Albeit local in extension, this analysis seems somehow to reflect the occurrence of patterns that are evident on a larger scale.

The following traits look to be of specific relevance:

1. Settlements seem always to be located on water courses
2. Settlements seem to be spaced at regular distances
3. A possible reduction in site numbers in favour of larger (?) centres
4. A rather distinct standardization (= prevalence of only a few ceramic form types within the surveyed pottery assemblages) – especially during the LC 1-2- in the ceramic culture

The limited body of data does not allow to conclusive considerations to be put forward, yet the trends highlighted show some points of convergence that may offer hints for future explorations of the LC body of data in Upper Mesopotamia. In more detail, the four marking traits may offer evidence in support of a changing level of interaction, a concept that has been used more and more widely by archaeologists to explain the different types of contacts emerging between North and South Mesopotamia during the Chalcolithic/Ubaid-Uruk periods⁵⁰. Traditionally, this topic has been investigated at site level – that is, via analysis of settlement sequences whose material culture may help to provide insights into the nature of the Chalcolithic in the north as well as on its dynamics, with thus a particular regard to long distance contacts. Little attention has been given to its possible repercussions on the regional settlement pattern.

It is indeed clear and widely accepted that major changes characterised human communities across the Chalcolithic, with some of the most visible socio-economic transformations occurring more clearly – or at least more visibly in the archaeological record – during the latter part of the period. New organizational models shaped societies, with specialization, hierarchy, and new economic strategies, whose repercussions might have also have affected the regional settlement pattern. Full analysis of the LoNAP data – given its coverage of 3000 sq km – will provide more significant and definitive re-

⁴⁶ SCHWARTZ 1988, fig. 60: 5.

⁴⁷ ROVA 1999/2000; BRUSTOLON, ROVA 2007, pp. 15-16; GAVAGNIN, IAMONI, PALERMO 2016, p. 130.

⁴⁸ GUT 1995, fig. 55: 800-805.

⁴⁹ GAVAGNIN, IAMONI, PALERMO 2016, p. 132.

⁵⁰ STEIN 1999, 2010; CARTER, PHILIP 2010.

sults: the LoNAP evidence analysed here, being local in size, may offer some hints of the macro-trends that will probably be clearer and more visible at the end of the full analysis.

The regular distribution of sites in combination with the occurrence of a standardised ceramic tradition seems to reflect a higher degree of interaction among communities. This interaction may have been still local in its reach, especially during the late fifth and early fourth millennium BC: the analysis of the ceramic corpus has not highlighted any “foreign” imported types, i.e. any pottery forms that may belong to neighbouring (but different) ceramic regions. However, the early LC communities interacted in different ways in comparison to previous periods: their linear and regular distribution seems the continuation of a trend identified in a previous analysis carried out on the late ceramic Neolithic (Halaf) and early Chalcolithic (Northern Ubaid) settlement based on the data provided by the Northern Jazira Survey⁵¹. In that analysis, a settlement pattern changing from a rather clustered to a more linear distribution was observed in area north of the Jebel Sinjar: the evidence here observed suggests a continuation of this trend. The position of sites along watercourses was indeed determined by the necessity of water; at the same time, the linear pattern may indicate a strategy aimed at a major involvement and/or exploitation of these communities in the regional circuits of exchange and/or contacts. Ultimately they might have not only aimed at being more strictly part of a supra-regional net, but might also have been (consciously or unconsciously) engines for a widening of this network.

The decrease in number of settlements and the apparently less standardised ceramic horizon that occurred during the latter part of the LC, on the other hand, seems to be a consequence of the expansion of networks of contacts that ultimately must have caused (or been derived from?) such an interaction. The concentration of settlements in specific and more distant areas and the possible emergence of – at least – one of these as a larger settlement (though not comparable in size to the large urban centres located farther west) suggests a higher degree of centraliza-

tion that may have resulted in a different and probably more coordinated level of interaction. It would be tempting to interpret this as the result of the so-called “Uruk intrusion”⁵² and the consequent impact of “more developed” societies from South Mesopotamia on Northern Mesopotamian groups. Such vision assumes that local polities, albeit characterised by traits at the basis of the “Urban Revolution”, had not triggered the full mechanisms of economic complexity that emerged only via the contact with south Mesopotamian urbanised sites⁵³. However, recent investigations have revealed the occurrence of similar processes in Upper Mesopotamia – with evidence of labour specialization, centralised control of crafts by local elites that demonstrated the independent path followed by Northern Mesopotamian societies in the emergence of socio-economic complexity⁵⁴ and, ultimately, of urbanization⁵⁵. Recent research has consequently focussed on the identification of which elements are more relevant to the formation and constant stimulus for growing levels of complexity, identifying “trade/contact” and “control/management of food surplus” as key factors in this path⁵⁶. The evidence analysed here would seem to support the contact model as a major element in changes characterising local (and possibly regional) interaction⁵⁷: thus far this result concerns the settlement pattern, although we suspect that it may also somehow mirror internal social changes that characterised the single settlements. To explore this relationship and to find fuller support for the hypotheses proposed above a wider data set of is necessary. The final results of the ongoing survey projects in Iraqi Kurdistan⁵⁸ and the contemporaneous archaeological investigation of Chalcolithic sites in Iraqi Kurdistan may offer decisive evidence in this respect.

⁵² NISSEN 2001; ROTHMAN 2001b, pp. 370-386; AKKERMANS, SCHWARTZ 2003, pp. 209-210.

⁵³ ALGAZE 1993.

⁵⁴ FRANGIPANE, 2012.

⁵⁵ STEIN 1999; OATES 2002; MCMAHON 2013; FRANGIPANE 2016.

⁵⁶ ALGAZE 2008; FRANGIPANE 2011, 2018.

⁵⁷ ROTHMAN 2001b, p. 399

⁵⁸ For the purpose of this article, see in particular the latest results achieved in the Rania Plain (BALDI 2016b).

⁵¹ IAMONI, in press; WILKINSON, TUCKER 1995.

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Managing survey data from Helawa, Erbil Plain (Kurdistan Region of Iraq)

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ABSTRACT

The project of the Italian Archaeological Expedition in the Kurdistan Region of Iraq (MAIPE) of the University of Milan focuses on a small part of the Erbil plain, namely the area of Helawa/Aliawa, 27 km south-west of Erbil. In 2013 and 2015, a topographic survey with differential GPS was carried out at Helawa. The ensuing GIS-based spatial analysis of diagnostic materials made it possible to reconstruct the site's main occupational phases and estimating its extension at different times in its history. In this paper, we will focus on additional aspects that emerged from our spatial analysis. The distribution of selected categories of finds (e.g., furnace wasters, lithic artefacts) throughout the site points to possible functional distinctions. Furthermore, our analysis of morphological data bears witness to processes of multilayer deposition and erosion, which contributed to shaping the site's mound morphology through time.

KEYWORDS

GIS, spatial analysis, predictive analysis, slope analysis, Late Chalcolithic, Helawa, Iraqi Kurdistan

1. Introduction¹

In 2013 and 2015, the Italian Archaeological Expedition in the Kurdistan Region of Iraq (MAIPE, University of Milan) carried out systematic surveys at the sites of Helawa and Aliawa, in the south-western Erbil Plain (ca. 27 km S-W of the modern city of Erbil).² The main goals of these surveys were to obtain chronological data and estimate these sites' extension from one period to the next. Another objective was to preliminarily identify possible functional distinctions across the sites based on quantitative and qualitative analyses of survey data in a GIS environment. This analysis, in its turn, was to provide the basis for a predictive strategy to be defined prior to the start of excavation (§ 2.1).

¹ The Italian Archaeological Expedition in the Erbil Plain (MAIPE) of the University of Milan, directed by L. Peyronel, and by A. Vacca as deputy director, carried out archaeological surveys at Helawa for two brief seasons (2013 and 2015), followed by targeted excavations since 2016. This study is the result of a joint work of the authors on the GIS processing and spatial analysis. A. Vacca wrote §§ 2, 3, 4.1, 4.2; D. Moscone § 4.1, 4.3; P. Rosati §§ 3, 4.1; the introduction and conclusions were written jointly. This study was carried out by the Research Unit of the University of Milan (coordinated by L. Peyronel) in the framework of the financed national project PRIN 2015 "Paesaggi Archeologici dell'Antico Iraq fra preistoria ed epoca islamica (PAAdAI): formazione, trasformazione, tutela e valorizzazione" (P.I. Morandi Bonacossi, Udine University). Work at the site was supported by the Ministry of Foreign Affairs, Regione Lombardia, the University of Milan and the Italian Ministry of Education, Universities and Research (MIUR), and was possible thanks to the permission, help and encouragement of the General Directorate of Antiquities of the KRG (director Mr. K. Ali Mustafa and former director Mr. Othman Zaineddin Abubakir), the Erbil Directorate of Antiquities (director Mr. Nader Babakr) and the State Board of Antiquities and Heritage in Baghdad. We would like to thank L. Peyronel for his thorough comments on this article, and the two anonymous peer reviewers for providing very helpful suggestions, which substantially improved the manuscript. Needless to say, any mistakes are the authors' responsibility.

² Helawa and Aliawa are located in the "Shamamak area" investigated by the EPAS Survey of the Harvard University in 2012 and in 2016-2017 (EPAS sites n. 272 and n. 246; UR ET AL. 2013). The sites are located along a secondary E-W road branching off the main Makhmur road at Du Sara Fatah (35°59'57.75"N; 43°47'19.17"E), ca. 27 km south-west of Erbil. The modern village of Helawa extends at the foot of and above the south/south-eastern portion of the ancient settlement. The peripheral lower eastern part of the site is partly damaged by agricultural activities.

In this article, we discuss several aspects of the site of Helawa relative to its morphology and the distribution of specific categories of finds compared with evidence gathered from the excavation.

Helawa is a prehistoric site, occupied continuously at least since the Hassuna to the Late Chalcolithic 3 period (seventh to mid-fourth millennium BCE), with a later reoccupation during the Late Bronze Age I (mid-second millennium BCE) (§ 2.2).³ The site has a peculiar morphology, with a high conical main mound and two lower secondary mounds to the north. Excavations, carried out since 2016, have documented a packed sequence of monumental buildings and the generalised use of high, and in some cases relatively narrow, terraces during the Late Chalcolithic 1-3 (hereafter LC). This probably contributed, together with erosion processes and, possibly, landslides, to shaping the highly stepped profile of the southern side of the main mound. Based on the distribution of surface materials, it appears that occupation of the main mound was substantial in the LC 1-2, while during the LC 2/3 occupation seems to have mainly been concentrated on the small mound to the north-east and on the top of the main mound. The hypothesis of a substantial change in occupation strategies during the LC 1-3 period is discussed here, on the basis of cross-correlation of the evidence from the excavations and the results of the survey in a GIS environment (§ 3).

Moreover, the investigation of the surface materials produced high-resolution spatial data, which allow for a preliminary identification of possible functional distinctions throughout the site. For instance, the distribution of furnace wastes supports the identification of possible LC 1-2 workshop areas, and that of lithic artefacts allows us to formulate hypotheses about the possible localisation of knapping activities during the Ubaid and LC 1-3 periods (§ 4).

The combined discussion of excavation and survey data analysed within a GIS environment has allowed us to refine our overall interpretation of the site and speculate on the natural processes and human activities that contributed to shaping the morphology of the mounds through time (§ 5).

³ PEYRONEL, VACCA 2015.

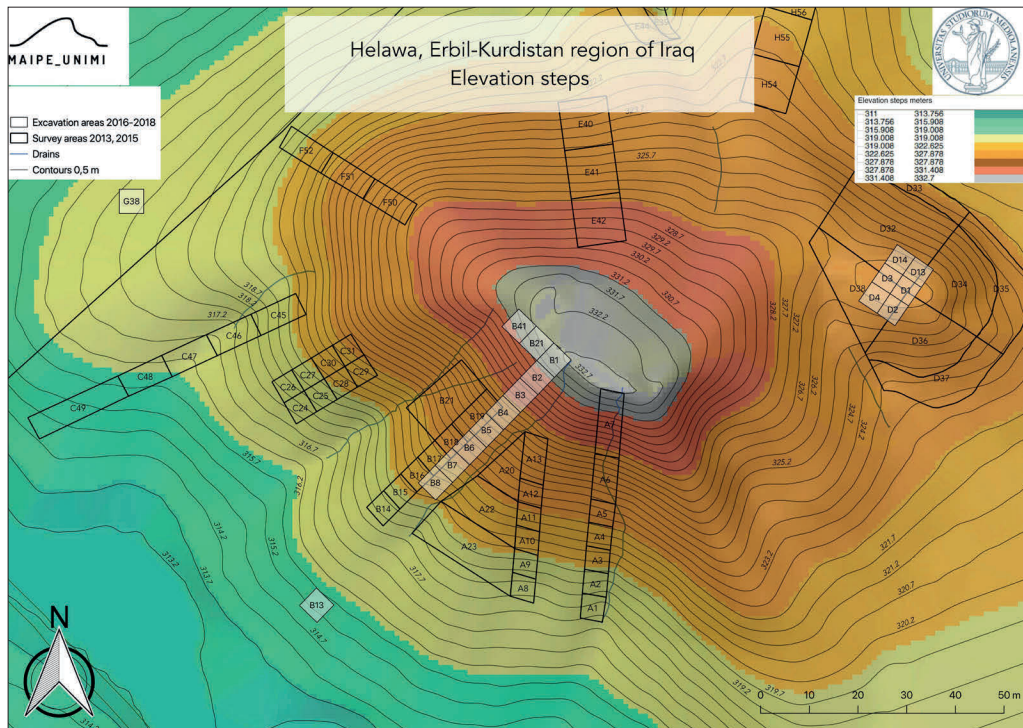


FIGURE 1
Digital Elevation Model (DEM) with the survey Collection Areas, Collection Units and excavation areas. The colours represent elevations (©MAIPE)

2. Survey Description, Excavation Data and Site Chronology

2.1. Survey Method

Helawa is located in a fertile hydrographic basin, with a rolling terrain crossed by several irregular ancient watercourses, including the two major water systems of the rivers Chai Kurdara and Chai Siwasor, both flowing into the Upper Zab.⁴ One of the ancient tributaries of the Chai Kurdara, flowing from the south-western anticlinal hills of Awe-na Dagh, ran along the western and south-western edges of the Helawa mound (fig. 1).

Helawa is a multi-period site, covering a minimum surface of ca. 7 ha, with a maximum elevation of ca. 22 m above the surrounding plain.⁵ The site

includes a high mound to the south (top at 332.7 m AMSL), characterized by a steep slope, and two low and gently sloping extensions to the north and north-east (figs. 1-2). The north-eastern extension is a sort of small secondary mound, flattened at the top (326.7 m AMSL) (figs. 2-3).

The MAIPE team carried out a topographic survey with differential GPS, registering a high number of Ground Control Points, which were used to calibrate the satellite image (WorldView2, acquired on 12 March 2011) and produce a DEM.⁶

The site was surveyed using two different approaches (fig. 1). The mounded area (ca. 1.2 ha) was subjected to an intensive survey, in which a large selection of materials was collected and their location registered in a geo-referenced grid system. The lower area, instead, part of which had been affected by mod-

4 UR ET AL. 2013, p. 93, fig. 2.
5 CORONA satellite imagery suggests a larger extension of the site, up to 10 ha, with the south-western and western limits of the site lying below the houses and farms of the modern village: PEYRONEL, VACCA, ZENONI 2016, p. 309.

6 PEYRONEL, BURSICH, DI GIACOMO 2016.

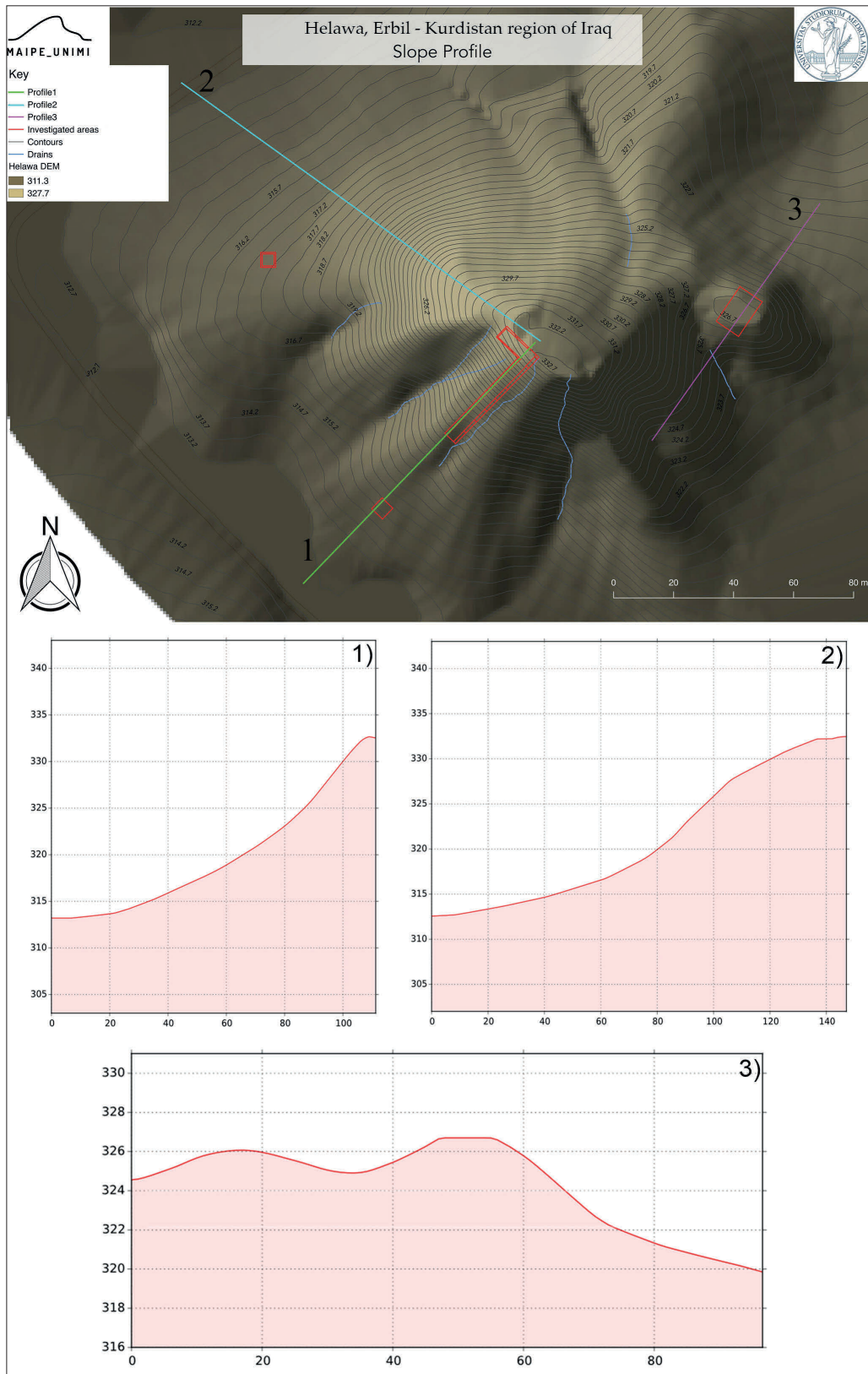


FIGURE 2
Digital Elevation Model with slope profiles and excavation areas: southern slope of the main mound (in green); western slope of the main mound (in light blue); north-south section profile of the lower north-eastern mound (pink) (©MAIPE)

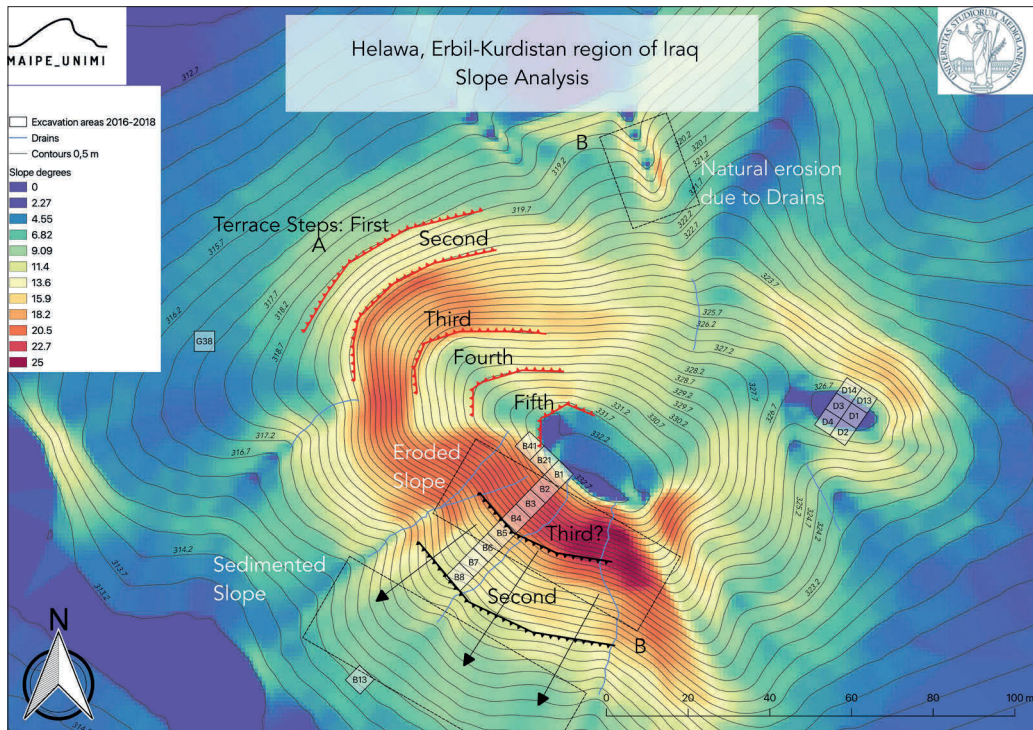


FIGURE 3
 Slope Analysis with the indication of excavation areas. The colour shades indicate steepness in degrees. A) Localisation of hypothetical terraces. B) Localisation of hypothetical eroded and sedimented slope, and natural erosion due to runoff (©MAIPE)

ern ploughing, was investigated by means of extensive surveys collecting only diagnostic finds and accurately positioning them on the basis of differential GPS.

The mounded area (fig. 1) was divided into eight large Collection Areas (CA), distinguished by their topographic features, labelled from A to H. The gullies on the southern slope of the main mound were used as natural boundaries to delimit CAs (CA A-C). Each CA was subdivided, in its turn, into smaller CUs (with the exception of CA G) of different sizes based on morphological features and elevation steps. The CUs generally measure 5x5 m, but irregular and larger areas were defined as well, such as CUs E43-44, which follow the profile of the northern gullies (fig. 1).⁷ Descriptive metadata for each CA and CU (such as presence of vegetation, quantity and distribution

⁷ In order to map archaeological finds within each CU, we generated a GIS layer of “random coordinate points”, assigning one point to each record (1:1).

of surface materials, vestiges of illicit digging, *etc.*) are stored in an SQLite database and integrated in the GIS platform. A selection of diagnostic materials was collected for each CU, whereas a complete sampling of surface findings (including small finds, pottery diagnostics and walls) was carried out only in CUs A1-7 and D43, in order to obtain a comprehensive reference sample for statistical analyses on post-depositional events.

A total amount of 3165 sherds was collected, including 1784 rim fragments and 1381 body sherds (some of which have a painted, incised or impressed decoration). The diagnostics from the field-scattered survey of the lower area (700 units) were counted and registered, but not collected. A total amount of 600 small finds (including different categories of objects, namely lithics, stone objects, clay objects, shells, bone and metals) was also collected and filed in the GIS/Database framework. This allowed a chronological modelling of our survey data,

resulting in the definition of a general periodization for the site and an estimation of the settlement extension by phase.⁸

2.2. Site Chronology

The results of the spatial analyses of diagnostic materials show that Helawa was a substantial prehistoric settlement with an uninterrupted occupation spanning from the Hassuna to the LC 3. The site was then abandoned — since no diagnostic sherds dating to LC 4-5 or to the third millennium BCE were identified⁹ — and reoccupied for a short time around the middle of the second millennium BCE, only to be abandoned again before the Middle Assyrian period. Sporadic occupation during the first millennium BCE and the Islamic period is attested by low percentages of diagnostics scattered on the mound's surface. Based on the distribution of surface materials, we hypothesised that the site reached its maximum extension (c. 7 ha) during LC 1-2 and in the Late Bronze Age.¹⁰

The chronological distribution of the survey data was cross-checked with the data from the ongoing excavations at Helawa, so far confirming the initial hypothesis of a gradual expansion of the settlement, a subsequent contraction and an abandonment in the course of LC 1-3, and also confirming that it was then reoccupied around the mid-second millennium BCE.¹¹

In Square B1 of Step Trench B, in Operations B1 and D, substantial LC layers were documented

(fig. 1). In Square B1 of Step Trench B and in Operation B1, located on the top of the main mound, a LC 2/3 tripartite building destroyed by a fire was discovered, with *in situ* cretulae with stamp-seal impressions, pottery vessels and objects. In Operation D, on the lower mounded area to the north-east (fig. 1), only domestic structures dating to early LC 3 have been excavated thus far (see also § 4).¹² In both excavation areas, second millennium BCE levels directly overlie early LC 3 layers, confirming the hypothesis of a prolonged abandonment of the site in-between those periods.

The ongoing excavation of a 45 x 3 m Step Trench B (Step Trench B, fig. 1) along the southern slope of the high conical mound is documenting a continuous Halaf to Late Chalcolithic sequence of well-preserved structures with primary contexts, identified immediately underneath the surface.¹³ Immediately beneath the most recent phase (Phase 1), dating to the modern age, and the monumental LC 2/3 building (Phase 2, Square B1), the excavation revealed a packed sequence of LC 1-2 levels consisting of at least 3 main architectural phases, each articulated in further sub-levels (Phases 3-5, Squares B2-5). Phase 3 (Square B2) can be dated to the (late) LC 2 and is divided into 4 sub-phases of use of a storage area equipped with circular silos lined with mud-bricks and processing facilities. Phase 4 (Squares B2-3) corresponds to the construction of a substantial building, dated to the (initial) LC 2, erected on sloping terraces, with 1 m thick walls and stone door-sockets. This large building, only partially detected, is built directly over a thick stratification of very sloping alternate red-loamy and grey sand-clay layers (Phase 5, Squares B3-4), a dump or filling of sorts, probably related to the presence of a pottery kilns area, as the recovery of several furnace wasters and overfired vessels would seem to suggest. During Phase 5, assigned to the LC 1, extensive cutting and leveling activities are evidenced by a 5 meter long pit that cuts deeply into the Ubaid stratigraphy (Squares B 4-5). The pit was probably

⁸ The results of the 2013 survey are published in PEYRONEL, VACCA 2015 and PEYRONEL, VACCA, ZENONI 2016. In 2015, new collection areas were investigated (CA 45-49, CAs F, G and H). In CAs F to H, surface finds mainly date to the Late Chalcolithic (especially LC 2-3) and late Middle/Late Bronze Age. On the survey method employed, see also PEYRONEL, VACCA 2015, pp. 104-106; PEYRONEL, BURSICH, DI GIACOMO 2016.

⁹ It is nevertheless interesting that when Helawa was abandoned during the third millennium BCE, the nearby site of Aliawa, located 2.5 km away to the north-east, was a quite large settlement of ca. 10 ha. The two sites show, indeed, alternated period of occupation (PEYRONEL, VACCA in press).

¹⁰ PEYRONEL, VACCA 2015.

¹¹ PEYRONEL, VACCA 2015; PEYRONEL, VACCA, ZENONI 2016; 2017.

¹² PEYRONEL, VACCA in press; VACCA, PEYRONEL in press.

¹³ This is a summary of the stratigraphic sequence uncovered in Step Trench B, which will be presented in detail in VACCA, PEYRONEL in press.

dug to level the imposing underlying destruction and obliteration levels of the Ubaid period. Beneath this multilayer LC 1-2 sequence, two architectural phases dating to the Ubaid period have been documented thus far (Phases 6-7, Squares B5-6). They consist of kilns (Phase 6) and mud-brick buildings, probably domestic (Phase 7).

The excavated sequence allowed us to fine-tune the chronology of the area (partly thanks to the re-dating of some sherds and small finds from the survey based on typological comparisons with stratified material) and observe the spatial relationship between the archaeological layers and the scattering of surface diagnostics due to post-depositional and erosive processes.¹⁴

3. Modelling the Settlement Morphology through Time

One of the lines of enquiry to be explored through the use of the GIS concerns the nature of the current site morphology, which encompasses a high conical mound and two lower secondary mounded areas to the north. The steep profile of the southern side of the high mound raises questions about how this stratigraphy was formed (terracing operations? intense short-period building activities? post-settlement transformations, such as destruction?) and to what extent the evolution of the surface morphology (especially due to erosion or landslides) has affected this side of the mound, giving it its current sloping profile (figs. 2-3). A GIS-based analysis is currently underway in order to investigate the post-depositional changes undergone by the mound by producing an erosion/sedimentation model based on survey and excavation data combined with geomorphological evidence (from slope analysis to erosion potential). However, the preliminary results from the slope analysis already allow a few working hypotheses to be tested.

We began by investigating the morphology of the site. Based on excavation data, we have evidence of massive excavating and terracing activities carried out along the southern slope of the main mound.

Overall, LC structures identified in Step Trench B were built one on top of the other by raising previous structures, reinforcing the cuts with mud-brick walls and filling the area with a compact layer of clay leaning against the terrace walls. Extensive cutting and filling activities are documented especially during the LC 1 (Phase 5 in Squares B4-5); they were probably carried out to level the imposing underlying destruction and obliteration levels of a large kiln dating to the Ubaid period. The LC 1 stratigraphy is a sequence of superimposed layers, about 2.5 m thick in total. In the subsequent period, LC 2 (Phases 3-4), intensive building further contributed in the rapid growth of the tell. In Phase 4, for instance, a monumental LC 2 building was erected on terraces sloping from north to south. The floors of its southern and northern rooms had a 70 cm difference in elevation. The rooms were separated by 1 m thick walls, and were probably connected by a staircase or a ramp lying to the north-east. During Phase 3 (LC 2), the area was converted and equipped with stockpiling structures rebuilt several times (at least four sub-phases have been recognized), probably in rapid sequence. Interestingly, the LC period (and especially the LC 2) appears to be a period of intensive building activities, resulting in a rapid vertical growth of the stratigraphy and consequently of the mound. Thus, the height of the mound profile might be due to substantial building efforts concentrated in this area of the site, including high terraces and monumental public buildings. The steepness of the profile of the mound may be due to a combination of construction activities (including levelling, filling and terracing) and soil erosion.

In order to understand to what extent the building activities and the erosion affected the southern side of the mound, resulting in its steep profile, we carried out a Slope Profile Analysis with the “QProf” plug-in for the generation of topographic and geological profiles (figs. 2-3).¹⁵ Comparing the profiles of the southern and western slopes of the main mound, it appears that the southern one is much steeper, with a maximum slope of 12% (fig. 2: 1-2). Looking at the southern

¹⁴ PEYRONEL, VACCA in press.

¹⁵ In QGIS, the contours were interpolated to obtain a DEM with cells of about 0.5 sq. m (fig. 3).

profile of the mound, for the first 60 m — from the wadi surrounding the site to the south up to mid-slope along the mound — the slope is gentle, with a difference in height of ca. 6 m (fig. 2: 1, from 0 to 60 m). In the next 50 m, instead, from mid-slope to the top of the mound, the profile becomes steeper, with a difference in height of about 12.7 m (fig. 2: 1, from 60 to 110 m). By overlapping Step Trench B and the profile of the mound, it appears that the steeper part corresponds to the very packed stratigraphy of LC structures described above and exposed in Squares B1-5 (fig. 2).

A relief analysis of the mound profile based on a DEM model (visualized as a stepped colour map) shows the existence of at least 5 different “steps”, corresponding to considerable changes in elevation (fig. 3). The most significant of these steps is the third one, which abruptly cuts the profile of the hill. Along the southern slope of the mound, the fourth terrace is missing, while the fifth lies very close to the flattened top of the high conical mound. On this side of the mound (fig. 3) we recognized a large cut (shown in red to deep red), followed by a higher zone (in yellow, green and blue) which has been interpreted as the result of tons of material accumulated after a landslide. Thus, the relief analysis suggests that erosion was higher at the third step, and that the steeper slope of the southern side might be due to heavy erosion (possibly including landslides) that had probably already begun in antiquity. Evidence of erosion is also documented in the excavation; most of the *loci* dated to the Late Chalcolithic period brought to light along the southern mound, in Step Trench B, were largely missing, with the walls and floors of the room cut nearly clear through. A large quantity of Late Chalcolithic sherds and several complete vessels, mostly dating to LC 1-2, were found during the survey in Collection Area B (fig. 4: A). They derive from the partial destruction of rooms with *in situ* materials and the accumulation of these materials along the southern slope. Our profile analysis supports the hypothesis that erosion processes destroyed later occupation, eventually reaching down to the LC 2 levels. Moreover, on that part of the mound it seems that there was no other occupation after LC 2, as the rarity of LC 3 sherds seems to suggest.

We then turned to another aspect, which is connected to the morphology of the site, namely, the extension of the settlement, which we estimated on the basis of the distribution of surface materials and evidence from excavations. The distribution of LC 1-2 materials over a wide area (fig. 4: A) indicates that it was a period of substantial growth of the site. Occupation in this period is documented on top of the mound, on its southern and western slopes (CAs A-C), on its lower reaches to the north (CA E), and in the lower area surrounding the site (CAs G, H59-60 and isolated findspots). A significant difference can be observed during the LC 3. Only few LC 3 materials from this period, as opposed to the large amount of LC 1-2 sherds, have been collected around the main mound, while a large number of diagnostic sherds is concentrated on the small mound to the north-east (fig. 4: B). The evidence that the area around the main mound was mainly occupied during the LC 2 and that around the small north-eastern mound mainly in the LC 3 fits with data from the excavation. The lower mounded area seems to be the result of a later stratification, formed starting at least from the LC period, based on excavation evidence (fig. 2).¹⁶ The earliest levels brought to light thus far in Area D (fig. 1), dating to the early LC 3, are located at the 326 m AMSL contour line and consist of a sequence of badly preserved houses which were refurbished several times. The sequence uncovered in Area D overlaps with that identified in Area B, where a monumental building was erected on the top of the main mound (Operation B1 and Square B1 of Step Trench B), lying ca. 4 m higher than the domestic structures in Area D, at the ca. 330 m AMSL contour line. Moreover, excavation along the southern slope of the main mound (in Step Trench B) did not reveal any other LC 3 levels.

The survey and excavation data seem to suggest that during the LC 3 the southern slope of the high

¹⁶ Excavations in Operation D, carried out by V. Oselini, revealed a sequence of LC 3 houses covered by thick abandonment levels, sealed in their turn by a Late Bronze Age multi-layer occupation (PEYRONEL, VACCA in press; VACCA, PEYRONEL in press; OSELINI in press). Future investigations at this spot are envisaged, which will shed light on the occupational sequence of the small mounded area and the possible presence of earlier levels.

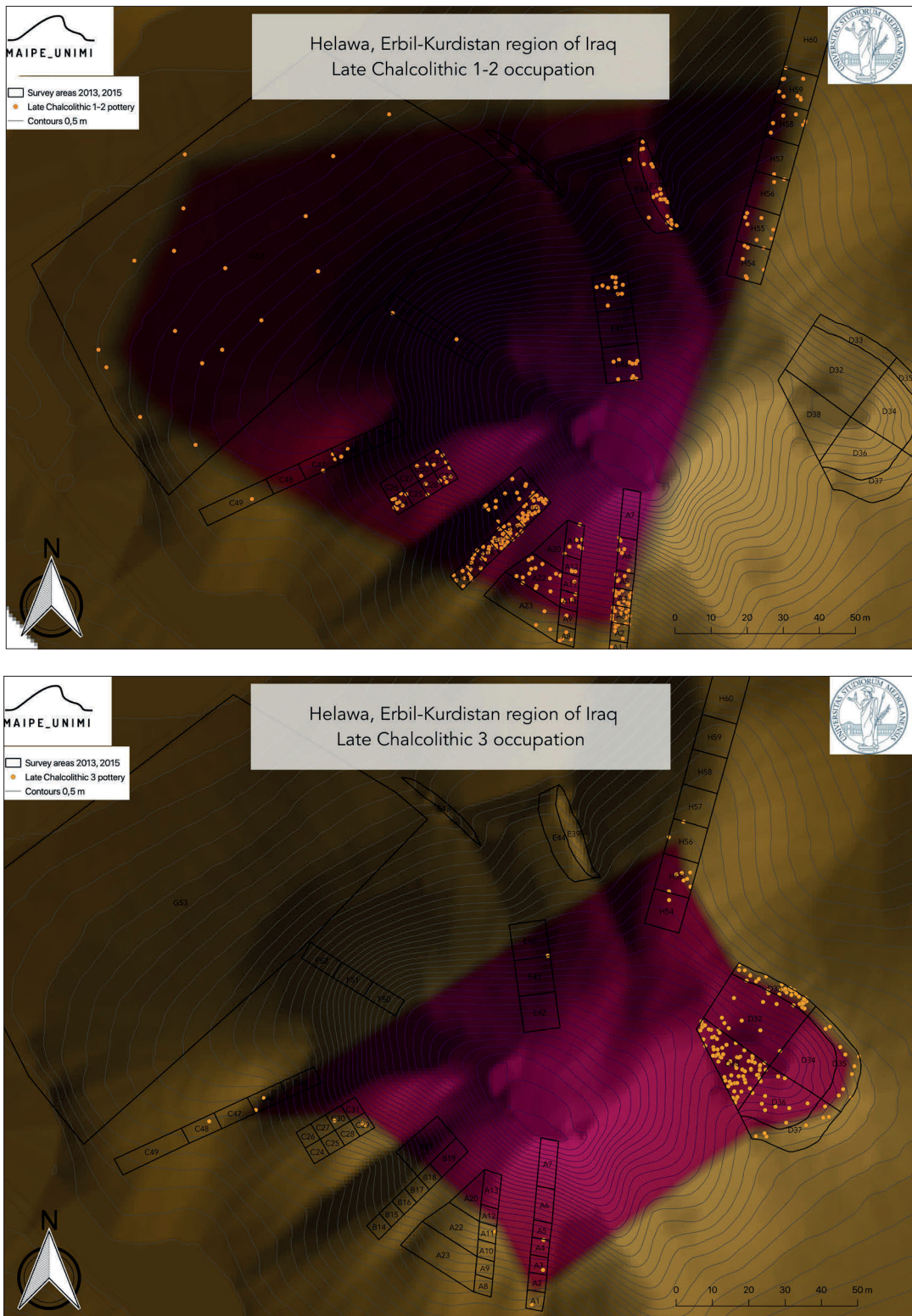


FIGURE 4
 Modelled distribution of A) LC 1-2 sherds and B) LC 3 sherds. The dots do not represent the actual position of the sherds; they are randomly generated on the basis of the density of sherds per Collection Unit. This mode of visualisation was chosen in order to make the map easier to read. The colour polygon represents the estimated extension of the site in LC 1-2 (4:A) and LC 3 (4:B), based on the distribution of diagnostic sherds (©MAIPE)

mound was no longer occupied, while LC 3 occupation is mainly documented around the small mounded area to the north-east (fig. 4: B).

This evidence, compared with the results of the slope profile analysis, allows us to go further and put forward some hypotheses concerning settlement dynamics at Helawa.

The substantial building activities and the quick growth of the stratigraphy during the LC 1-2 probably made the southern side of the mound unstable, compromising additional terracing and building activities, probably also as a result of landslides. This determined a reduction of the settlement area around the main mound and a concomitant extension of occupation around the small north-eastern mound during the next phase. By the LC 2/3, the settlement had shrunk to the top of the mound, where a monumental building with an administrative function (the “Burnt-Building”) now stood, while the lower mounded area to the north-east was settled with a domestic neighbourhood. The difference in elevation between the LC structures excavated on both mounds (ca. 4 m) suggests that the high conical mound was converted into a sort of “acropolis” in the course of the LC 2/3. The absence of LC 3 sherds along the southern slope of the mound also suggests a contraction of the settlement; it is probably because erosion had already started in antiquity that the inhabitants moved, abandoning this side of the mound. Future investigations, coupled with geo-morphological analyses, will contribute to test these hypotheses through a chronological modelling of long-term settlement patterns.

4. Identification of Workshop Areas through an Analysis of Correlating Features

4.1. Methodology

A spatial analysis of selected categories of findings revealed significant patterns related to the structure of the site. The formation of specific archaeological deposits as a result of continuous occupation and use of the same space over a prolonged period

of time generates meaningful patterns of surface artefact distribution (§ 4.1). In particular, by plotting the distribution of some categories of small finds relative to pottery production (i.e., furnace wasters and ring scrapers) we were able to hypothesize the existence of several potential pottery kilns or workshops, as well as their spatial extent and location, and also to propose a date for them based on chronological information associated with recorded items (§ 4.1). However, besides patterns of human activity at the site (such as excavations, levelling and dumping), other factors shall be considered as well, such as natural post-depositional processes (§ 4.2).

Our density-analysis of different categories of finds per Collection Unit (no. of finds/ sqm, figs. 5-8) allows us to address a number of questions regarding the potential function of specific areas within the site, such as the predictive identification of pottery workshops and kilns (based on the distribution of furnace waste), food-production areas (based on grindstones and Cooking Ware vessels), and lithic production contexts (based on the distribution of chert, obsidian and other raw materials artefacts).

The majority of what is defined here as “pottery-production correlates” comes from the southern slope of the high conical mound, from CUs that yielded Ubaid and Late Chalcolithic 1-2 sherds (CAs A-C; § 4.1). Similarly, lithic artefacts, although distributed all over the site, are much more frequent on the southern slope of the mound (CAs A-C), where the prehistoric layers are heavily eroded (§ 4.2).

4.2. Spatial Distribution of Pottery-Production Correlates

The confident identification of pottery workshops is, in most cases, strictly dependent on the interpretation of the associated materials found during their excavation. A pottery workshop is difficult and problematic to recognize, since several phases of the manufacture process are archaeologically elusive, and virtually impossible to identify based on survey data alone.¹⁷ The presence of pottery kilns lying un-

¹⁷ On classes of archaeological indicators of manufacturing contexts and kilns, see TOSI 1984, p. 25; VIDALE 1992, pp. 114-116; HUOT-DELCROIX 1972. On the analysis of ma-

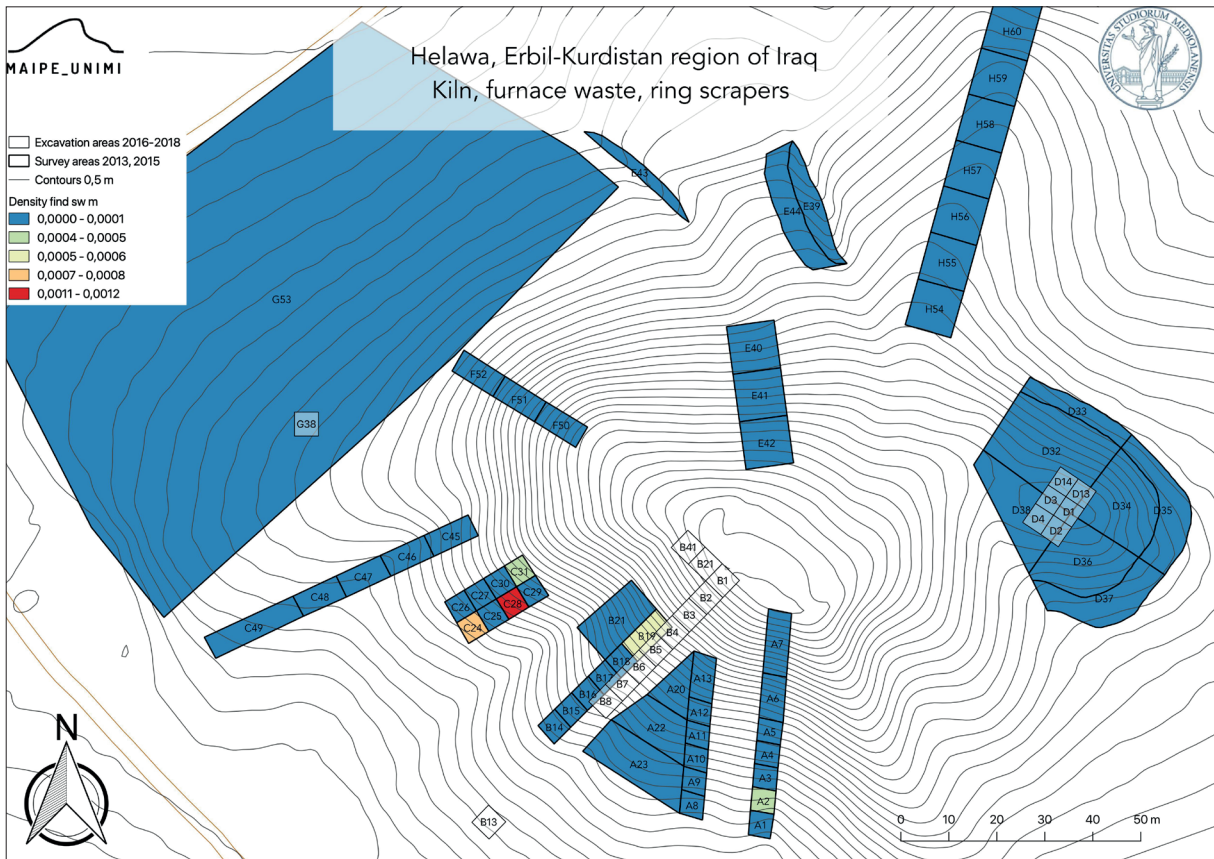


FIGURE 5
Spatial distribution and density analysis of pottery-production correlates: kiln and surface waste, pottery slags and ring scrapers (no. of finds/ sqm) (©MAIPE)

der the topsoil is more easily recognizable when specific markers occur among surface materials, such as misfired, vitrified or misshapen pottery sherds and furnace wastes. Beside these, another category of objects, the so-called “ring-shaped clay scrapers”, can be considered as significant indicators of pottery production, especially during the Late Chalcolithic period. They are well-depurated ceramic open rings with a truncated-conical shape — with smoothly polished working edges — most likely used for trimming the surfaces of vessels at the leather-hard stage.¹⁸ Ring-shaped clay scrapers are widely attested in Susiana and Southern Mesopotamian Uruk con-

manufacturing processes and techniques see ROUX-COURTY 1998; RICE 2005; LANERI 2009.

¹⁸ ALDEN 1988.

texts where pottery was manufactured.¹⁹ They are also frequently found at Northern Mesopotamia and Jezirah sites dating to the Late Chalcolithic, such as at Tell Nader,²⁰ Kosak Shamali,²¹ Brak HS1 and especially Tell T2.²²

We performed a spatial analysis of furnace wastes and ring scrapers (fig. 5). Significant clusters are recognizable in CAs A (A13, A23, A2, A4), B (B16, B18/19, B21) and C (C24-25, C28, C31), whereas CA D (D36/37, D38) and G53 only yielded scattered items. The majority of ring scrapers (4 items

¹⁹ ALDEN 1988.

²⁰ KOPANIAS, BEUGER, FOX 2014, p. 144.

²¹ SUDO 2003, pp. 220-221, type 2b, fig. 15: 6, pl. 15.4: 1, 6-9.

²² MCMAHON 2013, fig. 3.

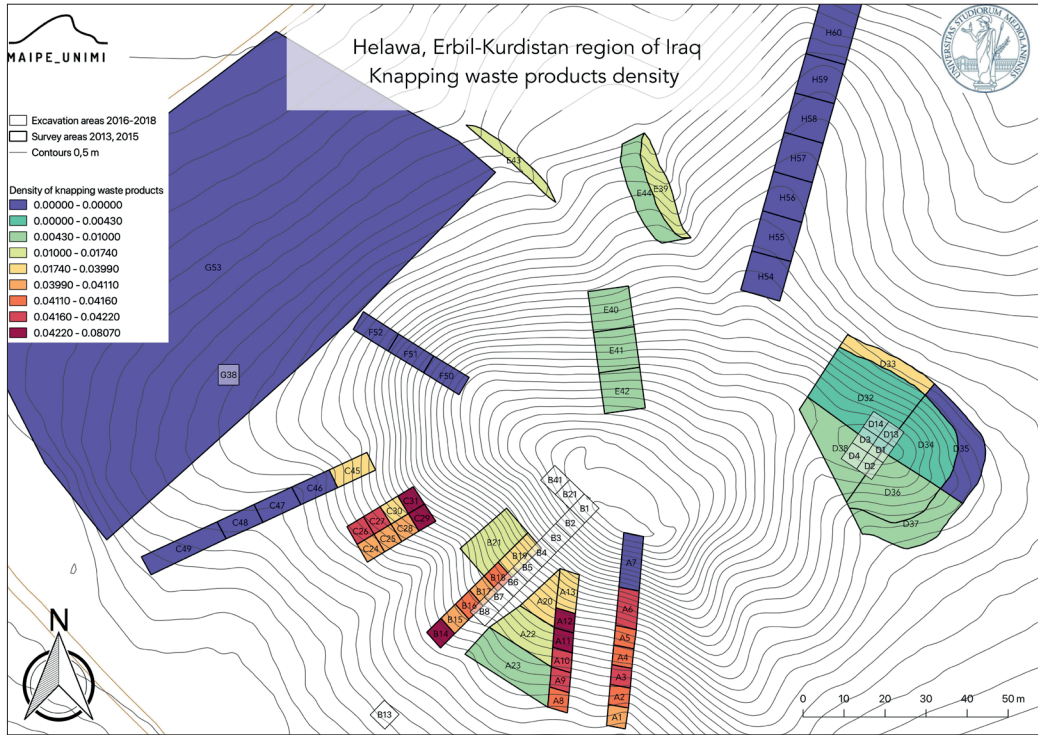


FIGURE 6
Spatial distribution and density analysis of lithic waste products (no. of finds/ sqm) (©MAIPE)

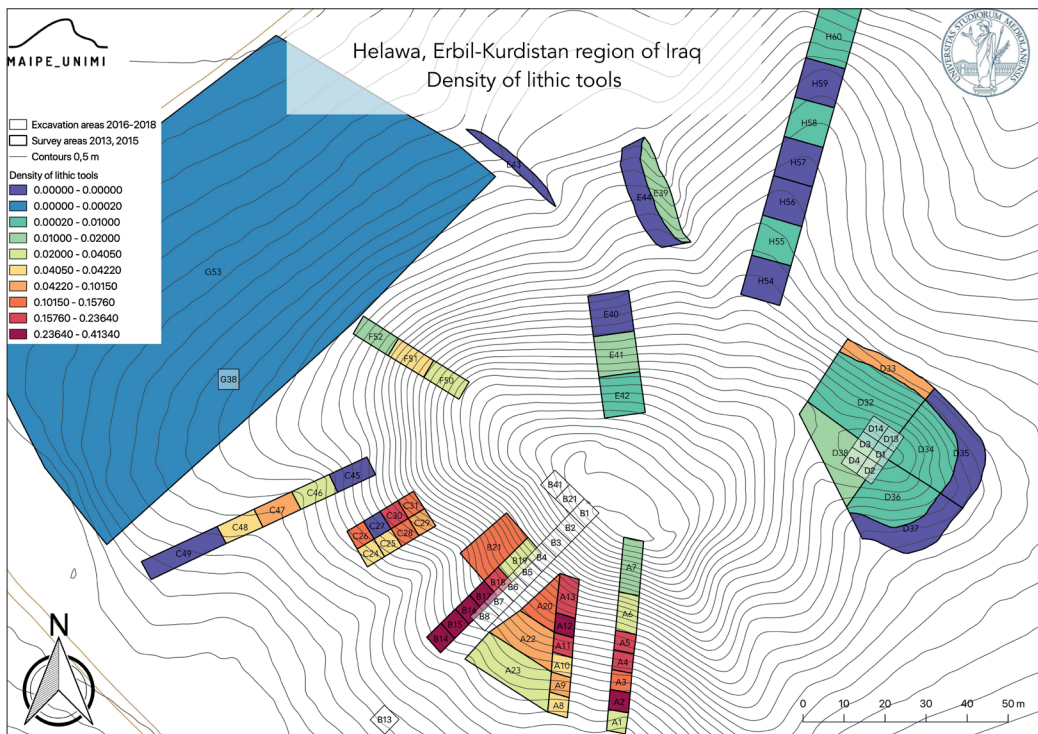


FIGURE 7
Spatial distribution and density analysis of finished lithic tools (no. of finds/ sqm) (©MAIPE)

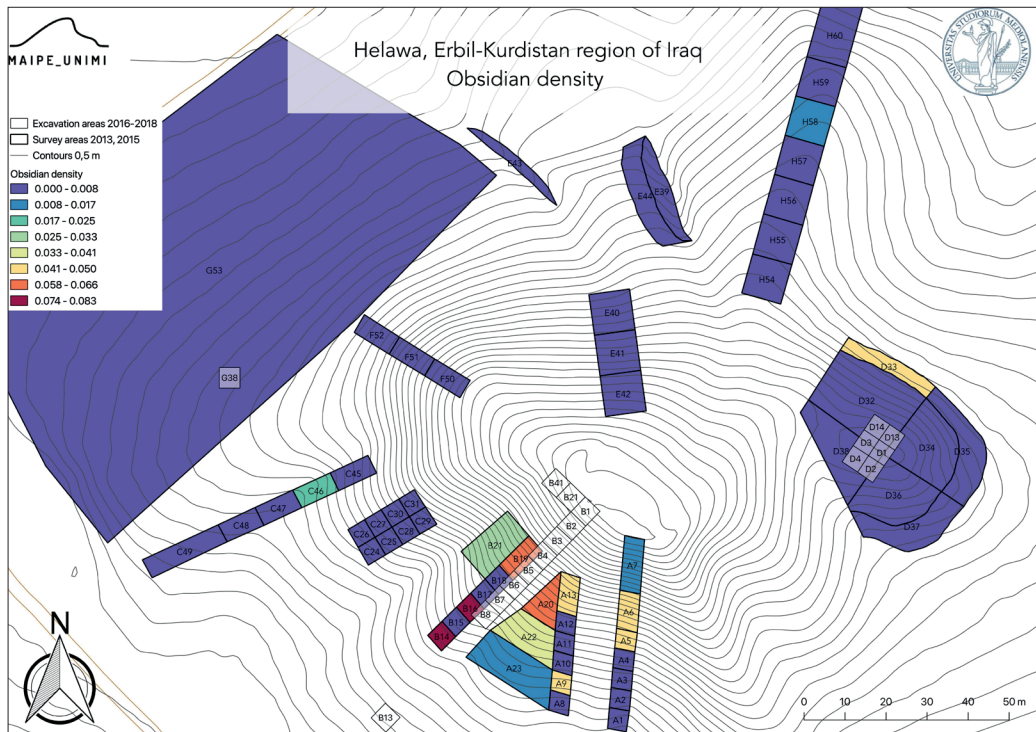


FIGURE 8
Spatial distribution and density analysis of obsidian artefacts (no. of finds/ sqm) (©MAIPE)

out of a total recorded amount of 7) come from CUs C24-31, providing, together with pottery slags, evidence of kiln-fired ceramic production around or near this spot (also considering erosion and sliding of artefacts) during the Late Chalcolithic.

In CA B, no scrapers were found; however, the presence of several vitrified and overfired sherds in CUs B18/19 and B21, pertaining to a type of bowl characteristic of the LC 1-2 assemblage of Qalinji Agha and Nineveh,²³ suggests the presence of contemporary kilns, which were indeed found in Step Trench B (in Square B4, fig. 1), dug immediately east of Collection Area B in 2016. Further furnace wasters were retrieved in Square B16, eroded and washed away from primary archaeological contexts (fig. 5). The excavation of the Step Trench also documented the presence of an earlier Ubaid kiln (in Squares B5/B6), immediately underneath, and partially cut

by LC 1 layers. These data suggest a prolonged use of the area for pottery production (from the Ubaid to the LC 1), which generated meaningful patterns of surface artefacts distribution. The choice of this spot for locating pottery kilns is probably due to its peripheral position in the southern part of the mound, at the margin of the settlement, where it took advantage of the prevalent north-eastern winds to minimize malodorous and unhealthy smoke emissions. The location of these kilns and the evidence for a prolonged use of this area of the mound over several generations might be indirect signs of an intensification of pottery production from the Ubaid to the Late Chalcolithic periods.

The hypothesis of an intensification of pottery production at Helawa will be explored through future excavations and supported by archaeometric analyses of vessels to reconstruct their circuits of production, distribution and consumption; it is nevertheless remarkable that the Helawa evidence is not isolated,

²³ PEYRONEL, VACCA 2015, fig. 12: 17.

being comparable with data from many other sites in the Bakun area²⁴ or in the Trans-Tigris region, where recent excavations are documenting firing complexes and workshops for the mass production of ceramics (Girdi Qala Trench C,²⁵ Bab Level 2²⁶).

4.3. Spatial Distribution of Lithic Artefacts

Since we are dealing with a multi-period settlement, it is important to consider two main human factors which can affect the intra-site occurrence of knapped finished tools and/or by-products:

- a) the extreme variability of technical behaviours inside the different living spaces,²⁷ dependent on site-inhabitant organisation of knapping strategies – circumstances which may cause segmentation of the sequences – and finished products/knapping waste management²⁸ (use-related spaces, caches, waste pits, discarded areas, *etc.*);
- b) dynamics of site-formation, such as living floor maintenance, superimposition and building up of new architectural phases, which frequently result in “artificial” assemblages of lithic objects belonging to different chronological phases.²⁹

Thus, the identification of distinct areas by means of surface collections could be difficult and may require a critical assessment of the collected data. In the case of Helawa, the database of surface lithic collections has been organised into two levels of description, namely raw materials (including descriptions of lithotypes, origin, shape) and technology (knapping techniques, methods, morphology, blank retouch, *etc.*). A technological study of the lithic assemblages from the stratigraphic sequence excavated in Step Trench B highlighted the heterogeneity of the lithic raw materials pro-

cessed (consisting of small pebbles and cobbles of fluvial origin) and the significance of these productions. There is scarce evidence of bladelet production on the site. Some chert types only occur as large blades, for which there is no evidence of in situ production. A more detailed technological analysis of the lithic assemblages from Step Trench B is currently underway.

Looking at the spatial distribution of knapping waste products³⁰ – exhausted cores, flakes, and debris – (fig. 6), we observe their relative ubiquity in most of the CAs located along the southern slope of the mound and, interestingly, their absence in lower CAs along its western and northern slopes. Specific clusters occur in CAs A (A11-A12), B (B14), and C (C29, C31), which also yielded sixth-fourth millennium BCE diagnostic pottery. The distribution of finished tools (chert and obsidian tools on blade/flake) (fig. 7) confirms this trend, showing a higher density along the southern slope, with significant clusters in CUs B (B14-17) and A (A12), and a low frequency in CA D (D33, D38) in the lower mounded area of the site located to the north-east.

Our spatial distribution and density analysis of knapping waste (fig. 6) indicates a major concentration in CAs located along the southern slope of the main mound (A-C), in contrast to the low density of waste and by-products in CAs E-F, located at the same elevation, but on the western and northern side of the tell. This could suggest that knapping activities were localized in CAs A-B-C, as also indicated by data coming from Step Trench B (see § 3). The erosive processes that resulted in the destruction and washing out of the layers and buildings lying on the upper part of the mound, which date to LC 1-3, contributed to the exposure of the stratigraphy and the accumulation of mixed deposits of artefacts originally from primary contexts at less steep contour lines. Thus, the lack of knapping waste in CAs E-F and the high density in CAs A-C could be also explained as a consequence of different post-depositional pro-

²⁴ MAJIDZADEH 1975-1977; ALIZADEH 1988; POLLOCK 2015.

²⁵ BALDI, NACCARO 2015; VALLET ET AL. 2017, pp. 69-74.

²⁶ SKULDBØL, COLANTONI 2016, p. 8.

²⁷ ROSEN 2010.

²⁸ ASTRUC ET AL. 2003.

²⁹ ROSEN 1997.

³⁰ This category includes all the siliceous rocks (chert, limestone, jasper, quartz, quartzite) exploited within the site. Obsidian knapping waste occurs less frequently, with the exception of the major concentration observed in CUs B14 and B16.

cesses. The evidence provided by CU B14 (figs. 6-7) (waste product density range 0.074-0.083; finished tool density range 0.258-0.455) possibly reflects the erosion of the LC 1 waste pits and room fillings documented during the excavation of Square B4 (fig. 1), which yielded a large quantity of knapping waste and discarded lithic artefacts.

The case of CA D, on the north-eastern part of the mound, is particularly significant. The high number of glossy blades made out of non-local cherts collected on the surface may date from the LC 3 occupation. The excavation uncovered domestic structures and associated deposits immediately beneath a thick Late Bronze Age (LBA) multi-layer sequence excavated at the top of the lower mounded area.³¹ Thus, lithic artefacts – especially those found in CUs D33 and D38 – could be interpreted as an assortment of materials washed away by the erosion of the lower mound (which exposed earlier LC levels) and materials connected with levelling and building activities that occurred during the LBA.³²

While the distribution of lithic artefacts (figs. 6-7) showed several significant clusters – to be studied more in-depth in the future – the distribution of obsidian artefacts (fig. 8) showed a single major density area of waste and finished products in CA B (and especially in CUs B14 and B16). This evidence is comparable with stratified data from the excavation of Step Trench B. Evidence of obsidian knapping activities at the site is clearly documented during the LC 1 period. In Square B4 (fig. 1), the excavation documented the presence of a compact layer of reddish clay (stratigraphic unit TH.17.B.60) which we have interpreted as a surface where obsidian was knapped to produce bladelets.³³ The concentration of waste products (core fragments, flakes, debris) and finished bladelets in CUs B14 and B16 suggests the accumulation of homogeneous materials eroded and washed down from the upper and mid-slopes of the mound or the existence of further evidence of

obsidian knapping activities immediately beneath the surface, where Northern Ubaid and Late Halaf levels have been identified (Squares B7-8, fig. 1). Moreover, the evidence of obsidian knapping activities at Helawa suggests that the site may have played a major role in the area during some periods in the sixth to fourth millennium BCE.

5. Conclusion

The GIS of Helawa (Erbil Plain, Iraqi Kurdistan) allowed us to analyse the mound's morphology and the surface distribution of specific categories of findings collected during the survey.

We have suggested a preliminary reconstruction of the localisation of terraces, erosion processes and possible landslides that occurred in antiquity. Nevertheless, targeted geo-morphological investigations are needed in order to add further datasets allowing a thorough interpretation of erosive and post-depositional processes. Relief and Slope Analyses, combined with the estimation of the site's extension (obtained through the modelled distribution of LC 1-2 and LC3 diagnostic materials) and cross-checked with data obtained from excavations have allowed us to propose an interpretative model to explain the formation of the main mound. We suggest that, especially during the LC 1-2, substantial levelling, terracing and building activities were concentrated along the southern slope of the main mound, resulting in a rapid vertical growth of the stratigraphy. This situation, coupled with heavy erosion (possibly including landslides) of the southern slope of the mound, which could have already started in antiquity, probably resulted in the abandonment of this area and the conversion of the high conical mound into a sort of "acropolis" occupied by at least one public building in the course of the LC 2/3. While occupation of the top of the main mound appears to have contracted, as excavation and survey data suggest, it apparently expanded toward the northern side of the mound; this evidence appears to indicate that there was a shift of the settlement area.

Our analysis of the distribution density of different categories of finds has given interesting results regarding the potential function of specific areas

³¹ PEYRONEL, VACCA in press; OSELINI in press.

³² Glossed blades made of non-local cherts have been also recorded in secondary deposition in LBA contexts in Area D.

³³ PEYRONEL, VACCA in press.

within the site. Our study of furnace wastes indicates the possible existence of a Late Chalcolithic pottery workshop. The distribution of lithic artefacts allows the formulation of hypotheses about the possible localisation of knapping and use-related areas during the Northern Ubaid and Late Chalcolithic periods. Our predictive identification of

pottery kilns and knapping locations based on GIS analysis of survey data has helped us to refine our overall interpretation of the site and select potential areas for targeted excavations. In this paper we have sought to demonstrate the usefulness of this method and how it can contribute to the planning of future excavation strategies.

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Cognitive Archaeology and the ‘Ancient Mind’: Mesopotamian motifs in the formation of Egyptian elites in the fourth millennium

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ABSTRACT

The study of the “ancient mind”, with its implications to the material culture and the actions of humans in the past, is currently ongoing. However, only a few segments of the archaeological research are advancing applications of cognitive studies in the field and producing insights inferred from their application. Transformations and variations in the archaeological data, as are figurative representations on objects, could benefit from a non-representational investigation and shed light on areas of the research still under debate. This paper, drawing upon the theory of material engagement, notions of extended and embodied cognition, material symbols, and material agency stemmed from anthropology, aims to introduce a brief outline of how iconographic motifs and styles have the capacity of guiding and influencing human becomingness. From this perspective, novel ways of examining the past may help to trace processes of becoming and to shed light on the interaction between Near East and Egypt at the end of the fourth millennium. Notably, the contribution focuses on how the presence of Mesopotamian motifs on specific Egyptian objects actively shaped and produced the basis for the creation of an elite in Egypt. Mostly due to lack in sources of data, the logic behind the processes of simplification and the birth of the Egyptian elites is still partially obscure. However, those periods of change are able to illuminate the importance between people and their cognitive environments and to give us more insights into the processes behind change and stability in the material and social worlds. Through an analysis of objects as partaking to a certain style, it is here advocated that a cognitive approach to figurative motifs has the potential to produce novel insights about social and cultural transformations among people, materials, and their environments.

KEYWORDS

Style, material engagement, human becoming, material symbols, cognitive archaeology, anthropology

Every human action brings something new into the world, influencing the ecology of our environments in ways that are always different and not predetermined because of our inherited bodies.¹ As incomplete and unstable organisms we are also the result of a distal phylogeny, a continuous process of making (writing, potting, drawing) that precedes us and unfolds in time through recursive coupling transactions with objects in the world.² This means that relations and interactions are configured as two-sided exchanges between individuals, objects, plants, animals, and landscapes.³ Through such interactions, individuals and objects become one. As we shall see with the appearance of motifs stylistically related with Near Eastern ones, transformations in the way objects are also results in changes in the social, bodily, and cultural domains.⁴ Under this light, Egyptian representations showing south Mesopotamian features, let us understand how the interaction between persons and objects shaped symbolic behaviours that sustained the emerging of Egyptian elites in the late IV millennium.

Southern Mesopotamian iconographic motifs and styles, as reflected in material culture and architecture, have fostered the study of interactions and connections, not only for what concern the Mesopotamia and its surroundings. Transmission and change of stylistic similarities with recurrent motifs spread outside the confines of Mesopotamia, Syria, Anatolia, and Iran to reach Egypt at the verge of the IV millennium. The connection of the latter with the other countries has yet to be understood.

The pieces of information gathered in the years, most of which devoided of an archaeological context and based upon what are now passive paradigms,⁵ hinder our comprehension of technological and stylistic similarities between the Near Eastern regions and Egypt. The crux is to grasp stylistic changes and

interactions, their capacity of acting in the world, and especially of coupling with the environment, as a unique phenomenon able to guide or constrain human action. Constructing a pathway to complexity that would align the Egyptian prehistoric societies with the schemes of western structuralism is not the purpose of this paper. *A priori* teleological assumptions are tossed away to explore how certain stylistic motifs come to be and transform themselves crisscrossing multiple temporalities. It also becomes possible to see the extent to which they can spread across wide geographical spaces bringing forth novel ways of interacting. This is why we shall explore how stylistic similarities between Mesopotamian motifs in Egypt have the capacity of guiding and influencing human becomingness, as part of symmetric and recursive interactions with similar objects.

I do not intend to advance our understanding of the historical period. The aim here is to demonstrate how during periods of change the relations between objects in a certain style and persons become more evident. The result of which allows archaeologists to explore transformations in both material and social worlds through the co-constitution of bodily, mental, and social domains within cognitive environments. Style in itself has the potency of linking together distant regions and diverse times to give sense to our necessity of cataloguing and making sense of the world. But it also has the powerful capacity of channelling transformations in the environments with whom it interacts with. It is a context in itself, and as such it will be treated throughout the next pages.

1. Egypt and the Near East in the fourth millennium

The archaeological data from the Near East and Egypt characterise the last centuries of the IV millennium as a period of rapid developments in both social and economic spheres. Many scholars describe this phase as of coalescence of social groups, ideas, and cultures fostered by the spread of Uruk material culture and related practices.⁶

¹ BERGSON 1911 (1998²).

² Cf. MALAFOURIS 2013; KELSO 2016, p. 497; GOSDEN 2005.

³ For the Theory of Material Engagement see MALAFOURIS 2013.

⁴ They are inseparable part of the same, there is no difference nor limits between the one or the other as advocated by a relational ontology like the one inspired by MALAFOURIS 2013, pp. 8-9.

⁵ EMBERLING, MINC 2016, pp. 820, 832.

⁶ For the Egyptian context see: WENGROW 2006; ANDEJKOVIC 2014; STEVENSON 2016. For the Near East-

In the Near East, right after 4000 BC, long-distance contacts in southern Mesopotamia and the neighbouring regions increased supporting exchanges of ideas and objects.⁷ Findings and architectural features from excavations testify the continuous processes of change in people and objects. Transformations in materials and practices related to the production of artefacts from Lower Mesopotamia spread in Khuzestan, northern Iraq, Syria-Palestine, arriving up to the shores of the Euphrates in Anatolia. Distinctive wheel-made plates, bowls, and jars with peculiar surface treatments accompanied what are usually considered administrative tools such as seals, clay tokens or tablets, and architectural features found in Uruk.⁸ Objects bearing certain iconographic themes radiated like an epidemic, perhaps through merchants or itinerant potters, supporting and guiding novel possibilities for thinking and making.⁹ Scholars have seen this circulation of ideas in the shape of new styles and motifs, technologies, and related practices as part of the so-called "Uruk Expansion".¹⁰ But recent excavations in Syria, Levant, Anatolia, and Iran carried out after the political deterioration in the region have been questioning this theory. Settlement data, combined with archaeometric analyses, are sketching a diverse picture of the late Chalcolithic and opening to study dynamics of contacts between civilisations. On the one hand, archaeometry points out that long-distance transport of Uruk ceramic vessels occurred only rarely,¹¹ and by itself did not account for

ern area: ALGAZE 1993 (2005²); FRANGIPANE 2001; YOFFEE 2005 (2006²), POTTS 1999 (2016²).

⁷ BOROFFKA 2009; HELWING 2013, pp. 93-106.

⁸ NIESSEN 2002, pp. 7-12.

⁹ BOROFFKA 2009.

¹⁰ This theory was first introduced by G. Algaze to describe the generally uniform material evidence surfacing in archaeological strata first recognised at Uruk in southern Mesopotamia. Artefacts and architectural features manifesting stylistic similarities with examples excavated at Uruk have been interpreted as a complex system of exchanges and interactions, see ALGAZE 1989, 1993 (2005²), 2008. Spanning an area of approximately 5500 km², the so called "Uruk Expansion" is still considered by various scholars as the world's first colonial trading network, with outposts and enclaves disseminated across Mesopotamia, Iran, and southern Anatolia. See also STEIN 1999. For other ideas on the "Uruk Expansion": WATTENMAKER 1990; KOHL 1989.

¹¹ SCHWARTZ, HOLLANDER 2016, pp. 894-5.

the great similarities in technology and style found within and outside the mentioned regions. On the other, archaeological excavations have put under discussion the once widespread theory that the "Uruk Expansion" started from one centre.¹² The majority of scholars now acknowledge that changes in practices and material culture originated from various scattered south Mesopotamian settlements and enclaves. According to some theories, these foreign quarters embedded within pre-existent centres were found across the Jazira, the shores of the Euphrates, the Zagros Mountains, and in western and central Iran.¹³ These local communities were not underdeveloped entities flourished during the "Uruk Expansion".¹⁴ Features that would be later found in the Uruk period had already established before southern models influenced the region,¹⁵ like in the case of Tell Brak.¹⁶ These assumptions resonate with the documented presence of local production of Uruk style pottery and,¹⁷ although they do not explain the lack of trade goods in the archaeological strata,¹⁸ could partially enlighten why Uruk style in northern Mesopotamia,¹⁹ Anatolia,²⁰

¹² Uruk in southern Mesopotamia has long been identified as one of the first urban centres, not only for its large size (ca. 250 ha) and monumental architecture but because of the effects its emergence had on regional settlement patterns. ADAMS, NISSEN 1972; NISSEN 2015.

¹³ ALGAZE 1989; STEIN 2002. Indigenous settlements in Anatolia and northern Mesopotamia are attested in various forms, as mention ALGAZE ET AL. 1990; PALMIERI, FRANGIPANE 1986; GIBSON, MAKTASH, 2000; STEIN 2012; ALGAZE 1993 (2005²), pp. 53-56; cf. BADLER 2002; ROTHMAN 2013 presents different views regarding the Uruk expansion in the Zagros region. Contacts with Khuzestan and Susiana.

¹⁴ ALGAZE 2008, p. 11; ROTHMAN 2004, pp. 80-88; WATTENMAKER 1990. On nomadic tribes: PORTER 2002, pp. 24-25; and for trade routes: FRANGIPANE 2004.

¹⁵ STEIN 2012.

¹⁶ MCMAHON 2013; OATES ET AL. 2007; UR, KARSGAARD, OATES 2007.

¹⁷ SCHWARTZ, HOLLANDER 2016.

¹⁸ Although wine (MCGOVERN 2003, pp. 148-166) and textiles, in the specific wool (PORTER 2012), were among the imported goods.

¹⁹ EMBERLING 2002; ALGAZE 2008. For SCHWARTZ 1989 and WATTENMAKER 1990 Uruk artefacts were only the result of stylistic appropriations of locals used to convey the Uruk elite ideology or coming from a local enclave.

²⁰ A striking case is Hacinebi Tepe (ca. 3700-3300 BC) where Uruk materials, having a strong stylistic similarity with southern ones, are linked with and kiln-wasters indexical of lo-

Syria,²¹ Khuzestan and Susa transformed local cultural traditions,²² triggering other changes in people and culture. Trajectories of interaction between humans, nonhumans, and their environments paved the way to a system of exchanges between cultures more complicated than what was once thought of. It should not surprise that research on this period has been focussing on contacts between cultures, sometimes as far as Egypt.

Archaeological assemblages in the late Predynastic,²³ betwixt Naqada IID (ca. 3450-3325 cal. BC) and Naqada IIIB-D (ca. 3085-2867 cal. BC), manifest a broad series of transformations. Alas, lack of published data and scarcity of surveys fostered past and present studies to focalise mainly on «establishing working models, definitions, and evolutionary trajectories».²⁴

These accounts, grounded on materials from burial contexts, describe the second part of the IV millennium as a period of generalised simplification and subtractions of forms and practices,²⁵ forced by centripetal processes generating «structural effects of state».²⁶ The population was deprived of pictures and symbols, while an emerging elite was rising through the control of diverse forms of power and resources.²⁷ In this light, alterations in objects and associated practices are presented as the reflection of a social power directed toward the creation of a hierarchical struc-

cal production (STEIN 1999, 2002).

²¹ Common example is Habuba Kabira (BOESE 1995; SCHWARTZ 2001).

²² The presence of a contact with southern Mesopotamia isn't under debate, Lapui-type pottery support the contact between Susa and Mesopotamia although not of the entire Khuzestan (ASKARI CHAVERDI, PETRIE, TAYLOR 2008; PETRIE 2013; PETRIE ET AL. 2013; SARDARI 2013), but ceramic data seems not support the idea of a permanent occupation and instead suggests that Uruk pottery was manufactured by locals at the site (ROTHMAN 2013).

²³ The absolute chronology of the Predynastic period adopted is based on DEE ET AL. 2013.

²⁴ WYNNE-JONES, KOHRING 2007, p. 3.

²⁵ For a general overview of what has been termed parallel processes of state formation see WENGROW 2006; SMITH 2003, pp. 277-278.

²⁶ MITCHELL 1991.

²⁷ ANDERSON 2006.

ture.²⁸ These elements, along with the expansion of prestige-good systems, give an apparent image of ever-increasing social stratification and of rising complexity in the late prehistoric societies.²⁹ Apart from a few studies that sought to see Egypt from a diverse perspective,³⁰ neo-evolutionistic theories of social complexity are rooted into the later conception of the pharaonic state.³¹ D. Wengrow follows as main thread of enquiry the role of figurative representations acknowledging previous research on the theme of art.³² However, though he recognises that the late prehistoric imagery of Egypt manifests a certain degree of representational fluidity, he follows the path traced by J. Baines,³³ marginalising the role objects have in influencing and guiding human action. Other investigations focussed mostly on figurative representations notably on hunting scenes,³⁴ elite iconography,³⁵ pottery decorations.³⁶ Only a few placed emphasis on the stylistic similarities between rock-art and other forms of decorations.³⁷ The retrospective approach and the incorporation of later pharaonic developments within the world of late prehistory require, however, too many caveats.³⁸ Explaining the increasing standardisation as surfacing from control over trade routes, limited access to materials, appropriation of figurative themes, and adopting later historical developments follows a predetermined path that could lead to pitfalls. Concentrating on the relation between material words

²⁸ See for i.e. ANDELKOVIC 2014; CAMPAGNO 2011; KÖHLER 2010.

²⁹ WENGROW 2006, pp. 141-156.

³⁰ See STEVENSON 2016; HENDRICKX 2014, pp. 259-267.

³¹ ANDELKOVIC 2014; CAMPAGNO 2011; KÖHLER 2010.

³² WENGROW 2006, pp. 7-8.

³³ BAINES 2007, pp. 7-10.

³⁴ HENDRICKX, FÖRSTER 2010; HENDRICKX, EYCKERMAN 2010; HENDRICKX 2010, 2011.

³⁵ HENDRICKX, EYCKERMAN 2012; HENDRICKX, FRIEDMAN, EYCKERMAN 2011; WILLIAMS, LOGAN 1987.

³⁶ GRAFF 2009; HARTUNG 2008.

³⁷ DARNELL 2009; HARDTKE 2017; HENDRICKX, DARNELL, GATTO 2012; HENDRICKX, DROUX, EYCKERMAN 2018; HENDRICKX 2006.

³⁸ ČERVIČEK 1998; GRAFF 2009; HARDTKE 2016; HUYGE 2002; WILKINSON 2003.

and human action through a non-representational approach to material worlds is necessary to understand the coupling between matter and meaning. Of interest is the fact that in the midst of the incipient standardisation it is possible to recognise a few artefacts and architectural features displaying striking similarities with Uruk motifs.³⁹ It is on the style of these motifs we shall direct our attention.

2. A Matter of Style

Sometimes striking, those stylistic resemblances point to actions in the past, events in which materials and meanings come to the world through recursive exchanges between humans and nonhumans.⁴⁰ Style, as it is intended here,⁴¹ should be seen as thinking in action and thinking through a set of relationships that unfolds in different temporalities and across space. It is through style that person and persona create a dialogue with objects, generating perceptions of time and of being that relate one with the other through the idea of style. Their relationship is more tightly connected than other scholars have so far demonstrated, something that the contact between Egypt and the Near East demonstrates.⁴² From this perspective, changes in the material world might result from less traceable introductions in the interaction between different objects, individuals, and their worlds rather than pre-rendered ideas about the constitution of the society. In line with C. Gosden and L. Malafouris, I maintain that «[w]hat we need is to bring together information on the movement of people and the movement and transformations of materials into some broader holistic understanding of movements through time and over space and

their effects».⁴³ From this perspective, style has the potency of informing us about the continual transformation between energy and matter, their unfolding in time, the role of objects and their capacity of mediate action with and through human action, as well as the process of human becoming. Figurative representations on artefacts should be evaluated not as standing for themselves but as participating in an ensemble of processes within a cognitive environment.⁴⁴ The fact that we recognise in certain objects from Egyptian contexts stylistic similarities with Near Eastern ones underlines the «psychological saliency» that a group of objects, seen as a whole, has in creating a corpus to which we make reference. Such psychological or cognitive saliency is what strikes us and allows us to make comparisons between past human interactions.⁴⁵ The result is a non-representational approach that sees in the material itself and in its relations with other elements comprising the world a way to understand processes of change in the past continuing in the present. As discussed previously, analyses insofar have stressed the role of Near Eastern representations in a period of generalised changes and transformations in the attempt to advance our vision on the constitutions of social, economic, and political powers in line with western thought. Periods of changes are «important in bringing out the relationships between people and their object worlds, looking at that strands of continuities in the requirements objects have of people, as well as the changes»⁴⁶ to understand «the things of which the universe is composed and the relationships between them»⁴⁷ and what consequences transformations through time have on the human becoming.

³⁹ WENGROW 2006; TASSIE 2014.

⁴⁰ Action in the context of Material Engagement Theory, and of the set of postulates presented here, is inseparable from thought and objects. On «creative thinging» see MALAFOURIS 2014.

⁴¹ For other perspectives on style see HEGMON 1992; GOSDEN 2005.

⁴² BAINES, YOFFE 1998; FRANKFORT 1941; JOFFE 2000; KANTOR 1992; MOOREY 1987; PITTMANN 1996; TEISSIER 1987.

⁴³ GOSDEN, MALAFOURIS 2015, pp. 711.

⁴⁴ Like in «a model of actively selective emulation», MOOREY 1987, p. 43.

⁴⁵ GELL 1998, p. 157-163.

⁴⁶ GOSDEN 2005, p. 193.

⁴⁷ GARROW, GOSDEN 2012, p. 22.

3. Back to the Mind

Casting the boundaries of the mind is not easy, given the fact that we live in a world where the mind is associated with the brain. Such vision not only limits our perception of the past but is also restrictive for what concerns the symbolic cognition.⁴⁸ The mind must be seen in a co-dependency with matter through bodily actions and that ideas and attitudes are 'in' rather than 'behind' it.⁴⁹ Material worlds, in this case, represent a genuine cognitive extension that locates its boundaries outside the skin, also when it is a material symbol.⁵⁰

A symbol, in accord with M. Cappuccio and M. Wheeler,⁵¹ is defined as the capacity to refer to objects using an interpretative code. This code is not embedded in the relationship between the «representamen» and the object, and the connection between the symbolic and its meaning is arbitrary. To be arbitrary the relationship between object and «representamen» is decoupled, which means that a symbol can be exported in contexts diverse from that of origin. Hence the symbol becomes context-independent. As a consequence, the symbolic meaning is detached from direct bodily situations and from the sensorimotor dispositions opening for the use of symbols in multiple cognitive contexts.⁵² Material structures decoupled from the original context become meaningful in themselves and open for action. These same actions have the potential for change, renew or discard meaning through direct or indirect engagement.⁵³ In this discourse, style embodies the capacity for action and change. As a distributed process of thinking, it permits action and interaction across space weaving together socio-ma-

⁴⁸ An insightful introduction to the theories of 'internal' representations can be found in MALAFOURIS 2013, pp. 26-31.

⁴⁹ See for instance KNAPPETT 2005, p. 169; MALAFOURIS 2013, p. 34.

⁵⁰ CLARK 2008, pp. 44-60. However, the position of cognitive archaeology in this matter should look beyond the «language as scaffolding», as recognised by ROEPSTORFF 2008.

⁵¹ TOMASELLO 2008, p. 58.

⁵² This doesn't mean that there is room for intracranial symbolical structures or to associate symbolic internal representations with external elements (CAPPUCCIO, WHEELER 2001, but the approach is far more radical HUTTO, MYIN 2013).

⁵³ For a similar model see: DI PAOLO 2005.

terial worlds across space unfolding in many overlapping temporalities. Objects having certain styles part of our environments can, through a continuous relationship, guide us to create changes in the world and shape our brains, since we «are the only species with plastic minds enfolded within a plastic culture, and this metaplasticity opens for a rich field of creative and imaginative engagement with our surroundings».⁵⁴

The three case studies we will encounter come from specific contexts where the result of actions produced reflections in humans and objects. As images they bring with them a broad spectre of values that strike us almost immediately. To escape from the mistake of associating figures with later cultural developments, and to understand the processes behind the symbolic behaviour and its action on the mind, the case studies must be approached ontologically as being co-constituted and co-constituent of social, bodily, and cultural domains.⁵⁵ We will not explore the complexity behind the motifs in Uruk style. Each will be treated as a material articulation to make them testable, quantifiable, and participative in the process of making sense of the world.

4. Cognitive Environments

In the proposed view motifs assume the role of external neural processes able to complete our basic minds along with sensory stimuli, the organisms' past histories, and embodied habits.⁵⁶ These cognitive processes develop and operate in precise settings: the aforementioned cognitive environments. In those loci, material representations act and relate to other objects, brains, and bodies becoming part of relational networks of recursive interconnections. A cognitive environment, where material symbols couple with the human embodied minds, became a contextual locus where «cognition, per-

⁵⁴ MALAFOURIS 2010, pp. 267-270; More on metaplasticity can be also found in GOSDEN 2009, p. 109.

⁵⁵ DEMARRAIS, ROBB 2013, pp. 3.

⁵⁶ For an explanation of the 'parity principle': CLARK, CHALMERS 1998, p. 8; CLARK 2008, p. 77-78; HUTTO, MYIN 2013.

ception and action arise together, dialectically forming each other». ⁵⁷ This means that all the elements that are part of the minds, as are figurative motifs partaking to a certain style, are all comprised of the environment and are connected together within a cognitive environment (fig. 1).

It is in the composition between all the elements of a cognitive environment that is possible to recognise how symbols activate and stimulate people and their engagement. Objects in the world influence and guide human action. Through styles they relate together and impose their presence upon humans, mediating and creating possibilities for action and thinking. As a result, changes are produced through an ongoing process of transformation mediated by objects, as are motifs, having a certain style. This process brings forth novel way humans can use to relate with the world. As a consequence, the minds can be influenced and guided by objects reflecting a common attitude that promote the formation of groups.

Nonetheless, the interactions between all these constituents generate something that is more than a web of processes framed within an enclosed context. Every subject in a cognitive environment is a composition of different materials and practices resulting from past interactions. Artefacts, their shapes, decorations, and materials all come from diverse social and geographical spaces; each of them has its own temporalities that conflate in determined times and places into objects. ⁵⁸ Such approach allows to extend and expand our analysis outside the boundaries of the single situated place and the surface of a pot, marble seal or piece of knapped stone.

The fluid nature of objects not only leave traces but goes outside the confines traced by culture and can be followed towards other cognitive environments to trace connections and changes along time and across space. ⁵⁹ The relationships generated are, consequently, in an endless state of change, as are the social interactions that establish them. It is in the interconnections, which generate the networks,

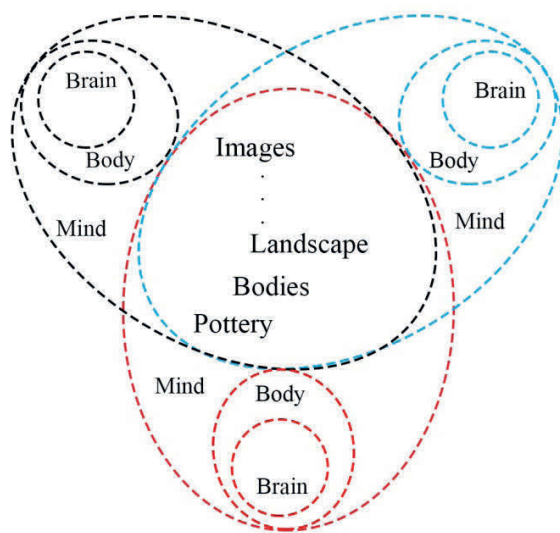


FIGURE 1
Scheme of a cognitive environment where minds interacts with the same material articulations through direct interaction (Picture by author)

that became possible to disentangle the processes that conflate in cognitive environments and to find out how minds arise, the world perceived, and the social shaped. Moreover, it helps to trace connections and to understand how interactions happen, fostering behaviours able to alter the world and the way it is experienced through material engagement. ⁶⁰

5. Mesopotamian Motifs and Egyptian Élites

Mesopotamian motifs found in Egypt are not new to the study of the contact between Egypt and Mesopotamia and have been subject of many studies. ⁶¹ Nonetheless, the origins of these interactions are still unclear, though a definitely high quantity

⁵⁷ MALAFOURIS 2009, p. 293.

⁵⁸ LATOUR 2005, pp. 169-172.

⁵⁹ We can define this as a subjective quality and self-evident of ideas that spread over the boundaries of political intention (BOYER 1994, pp. 3-4).

⁶⁰ Notions of creative power, for instance, resonate with the consideration of this contribution and can help to trace a diverse trajectory for the Late Prehistoric societies of Egypt. WYNNE-JONES, KOHRING 2007.

⁶¹ FRANKFORT 1941; JOFFE 2000; KANTOR 1992; MOOREY 1987; PITTMANN 1996; TEISSIER 1987.

of raw materials from burials point to exchanges along trade routes, supposedly mediated by the Levant.⁶²

Most material representations derived from Near Eastern contexts come from cylinder seals. In Mesopotamia these depictions were seen as a common symbolic system part of the cultural environments that recalled the society they came from; they admitted ideas to be exported beyond the place where they were produced.⁶³ As we are going to see, in Egypt a bulk of materials bearing foreign stylistic motifs triggered changes in making and thinking about local objects and traditions. The theme of (1) the interweaving serpents, (2) the rows of ordered animals, and (3) fantastic beasts, such as gryphons or serpopards, are found on a limited but considerable array of artefacts in archaeological contexts in Egypt. These themes have been chosen for their stylistic catchiness and counterintuitive features, able to put into practice the theoretical assumption delineated above.

The following analysis relies on the independence of style in being the context of analysis by itself and upon its capacity of generating «relations of relations».⁶⁴ The real meaningful way to look at objects with physical or decorative similarities is to look at other objects in the same style. Context is hence mediated through objects and through the relations that an object, partaking to a certain style, has in association with the broader category of which it is part. In other words, the context of a motif representing a gryphon is the style to whom that motif is part of. Although this sounds unusual,⁶⁵ given that we are looking at the social composition in relation to the engagement of motifs in a certain style, it is a way to understand actions and their results. The presence or not of a known archaeological context does not prevent to consider objects as a conflation of other temporalities, materials, and en-

ergies channelled from interactions. Each element of a cognitive environment will be compared with others because only in the composition with other constituents a material became able to shape minds, attitudes, behaviours, and be recursively shaped over time.

5.1. Interweaving Serpents

The Gebel el-Tarif knife (fig. 2), now in the Egyptian Museum, has no context although its name designates Abydos as the place of origin. A dating is consequently unknown, although according to M.R. Bohemer and W. Davis,⁶⁶ parallel motifs in the Susiana, and comparison with other knives from the region, a dating approximately close to Naqada IIIA or IIIB (cal. 3325-3085 BC) can be assumed. On one side of the ivory handle, originally covered with sheets of gold, are two serpents coiling around three rosettes. The overall composition is also almost identical to the Berlin Staatliche Museum knife (inv. 151137), and the handle in the UCL Petrie Museum (UC. 16294).

A strikingly similar motif with two snakes is stamped, for instance, on an unfired clay bulla dated to the Protoliterate Period (3300 – 2700 BC) from Susa.⁶⁷ The snake in Iran has a long tradition, it is found earlier on bullae and seals, alone (fig. 3), or even intertwined (fig. 4); outside the administrative sphere emblematic is a beaker from the Susa I period (fig. 5).

The same animal was already part of the late prehistoric Egyptian imagery. Although not intertwined, it was cast on a wide variety of objects, mostly pots earlier than the knife-handles. Worth of mentioning are two vessels dated Naqada IID2 (ca. 3325 cal. BC) from Hu in Lower Egypt, which represents two couples of snakes around a tree or a branch,⁶⁸ and a pot from Abadiya (fig. 6) with three

⁶² The Delta played a focal role in filtering and trading with Upper Egypt, as it is underlined in the findings from Tell el-Farkha (MAĆZYŃSKA 2014).

⁶³ WENGROW 2014, pp. 67-74.

⁶⁴ GELL 1998, pp. 165-168.

⁶⁵ There are other frameworks and approaches that look at other contexts, for instance I. Hodder's contextual archaeology focusses on how society and their divisions use things (HODDER 1982).

⁶⁶ BOHEMER 1991, p. 55; DAVIS 1992 (p. 48), according to the formal organisation of the figures dates the object to the late Naqada IIC-D or early IIIA.

⁶⁷ AMIET 1980, pl. 14bis.

⁶⁸ Ashmolean Museum AN 1896-1908.E.2874. This representation has been compared with a palm tree; cf. GRAFF 2009, p. 169.



FIGURE 2
The Gebel el-Tarif knife handle *recto* and *verso*
(after DE MORGAN 1896, p. 115)



FIGURE 5
Beaker with snake from Susa, ca. 4000 BC
(Courtesy of the Louvre Museum, Sb 3168)



FIGURE 3
Stamp seal with snake (Kelsey Museum 91.3.99,
after COOL ROOT 2002, fig. 5.1a)



FIGURE 4
Stamp of intertwined stake (Kelsey Museum 91.3.95,
after COOL ROOT 2002, fig. 5.1a)



FIGURE 6
Pot from Abadiya with three serpents drawn around
crocodiles (Photo by author, copyright by Ashmolean
Museum, E.2882)

serpents drawn around crocodiles. Snakes with plants were already part of the late prehistoric iconography and represented a symbol: a feature detached from the original context and reproduced in a new setting.

What the «high-culture» supposedly received from the Near Eastern cognitive environments was not the meaning or the Uruk ideology but a representative mode: the intertwined style. The mode of representation arises as a novel introduction shaped on a pre-existing stylistic feature of the prehistoric Egyptian populations. What we see here is a transformation in objects that goes beyond questions such who has created the image or diffused it. The interaction between objects, more than the interplay between persons, guided stylistic change. It was not a sudden change and was not mediated through the same administrative idea, as the surface on which those depictions were carved point out. Moreover, we can observe diverse temporalities nested in each iteration of the intertwined style. Firstly, it is possible to recognise the time of the original object, or objects. Secondly, the date of the Egyptian counterpart. Both of them are historically situated and bounded within the chronological time and the time in which they participated in the action. Also, style seen as a whole unique corpus of linearly arranged actions, is outside time and links together every of its instances. The result is indexical of a constant state of change that develops in various ways; in the homeland as a system of «commodity branding»,⁶⁹ in Egypt as a catchy motif able to capture the eye of the observer and to entangle it with something new: the human body and its relations with the social sphere.

Why this style was linked with a knife? Some would reply that the materiality of the knife itself is a display of might and power. As a ceremonial object, the knife demonstrates the wielder's capacity of defending the group or of harming his or her foes. However, this is not so easy. Knives do not appear in the Egyptian prehistoric imagery before this period but are almost ubiquitous in the funer-

ary assemblages well before the late prehistory.⁷⁰ In Greater Mesopotamia, instead, what lacks are decorated knife-handles. The manufacturing technique manifests high skilled professionals and differs from Iranian, Syrian or generally Mesopotamian exemplars. This, apart from strengthening that the making of the handles has a local Egyptian origin, also indicates that the knife was not a symbol of power because it was a weapon. Lineages of stone knives, as mentioned, are known and hence related to a system where interaction with them was already part of a custom set of actions and resulted in specific interactions. Something that the objects themselves mediated. Knives detained greater significance not for being weapons in the sense we usually give them but for its physical, or better aesthetic, qualities.⁷¹ The chosen material, the specific colours, and the technique adopted are in line with other examples attested throughout the late prehistoric period.⁷² For instance, we know of knives engaging in interactions with humans during the closure of tombs.⁷³ In those events, the deceased buried with memorable objects and the people linked by kinship relations associated to their possessions demonstrated their capacity of trapping others minds and of composing together social, ideological, and perhaps religious aspects acquiring thus a special status. The Gebel el-Tarif knife (fig. 2) results as the gathering of actions, materials, from distant social and geographical spaces able to shape minds through interaction. Through visual association material representations are not only part of cognitive environments but generate them connecting socio-material worlds by placing together foreign and local conceptions. The role objects retained in changing human actions and behaviours is even more visible in relation to another theme: the rows of animals.

⁷⁰ Most researchers recognise in depictions scenes of warfare, but there are also alternative views: GARFINKEL 2001; PREZIOSO 2017.

⁷¹ Cf. GOSDEN 2005; GELL 1998.

⁷² Knives are found in almost every burial context in Upper and Lower Egypt, for more data: LUND 2009.

⁷³ A study on Predynastic burial rites from the viewpoint of Adaïma: STEVENSON 2009.

⁶⁹ WENGROW 2010, pp. 16-19.

5.2. Rows of Animals

Returning to the Gebel el-Tarif knife, it is possible to notice on the reverse of the handle (fig. 2) an interesting motif: rows of animals marching in ordered rows. Ibexes, a leopard, lions, a gryphon, and dogs all move forward in the three registers. Similar examples are the Pitt-Rivers knife (fig. 7), the Carnarvon Knife (fig. 8), the Abu Zeidan knife (fig. 9), the so-called Davis Comb (fig. 10), and the aforementioned UCL Petrie Museum and the Berlin knives.

Like in the case of snakes, rows of animals are found in Egyptian contexts before Mesopotamic-themed manifestations make their appearance in the local assemblages. Again, depictions on pottery pre-date the outbreak of this theme by centuries, as pointed by the case in fig. 11 dated Naqada IIC-D (ca. 3450-3325 cal. BC).

Conversely, in the Susiana, the environment appears for the first time on seals whereas rows of animals in the Susa III period (3100-2900 BC) break with the Late Uruk phase. Other similarities be-

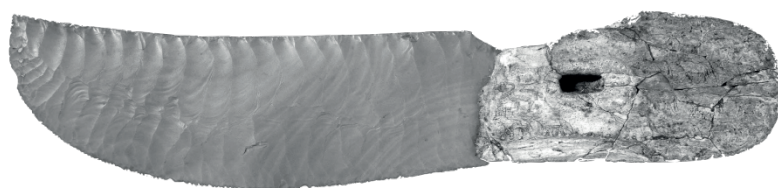


FIGURE 7
The Pitt-Rivers knife at the British Museum, ca. 3325 cal. BC (Courtesy of the British Museum, AN 35331001)



FIGURE 8
The Carnarvon knife, ca. 3200 cal. BC (Courtesy of the New York Metropolitan Museum of Art, AN 26.7.1281)



FIGURE 9
The Abu Zeidan knife, ca. 3300-3100 BC (Courtesy of the Brooklyn Museum, AN 09.889.118)



FIGURE 10
The Davis Comb with rows of diverse animals, ca. 3300-3100 BC (Courtesy of the New York Metropolitan Museum of Art, AN 30.8.224)



FIGURE 11
Vessel with ibexes and natural features dated Naqada IIC-D, ca. 3450-3325 BC (Courtesy of the Metropolitan Museum of Art, AN 12.182.41)

tween the two cultures are manifested by the same disposition on registers, whilst otherwise the presence of specific arrangements between animals is less evident.⁷⁴ Combinations of animal species on ivory artefacts of the period seemingly mirror a precise intention, which manifests changes in the symbolic minds of earliest Egyptians and innovation within the composition of themes.

However, the criteria chosen by the artist appear to be less evident than in the Near East counterparts. This difference is easily understandable by recognising that is in the interaction with objects in the respective cognitive environments that Egypt and Greater Mesopotamia diverge.

In the latter, material representations are linked with the administrative sphere; seals, with their miniaturised depictions, remained closely linked with the bureaucratic context. Therefore, the reduced space and the immediacy needed by their setting of use generated a multiplication of standardised forms. These were subjected to multiple compositions of diverse ideas, fields of knowledge,

⁷⁴ The limited amount of material doesn't allow to recognise a general framework; a glimpse of a pre-conceived structure in representation could be pointed by similarities in pottery. See GRAFF 2009.

and past traditions that coalesced into highly readable and immediate pictorial symbols.⁷⁵ On the contrary, in Egypt the multiplicity of media and the presence of certain themes from external contexts are part of a fluid structure in which figures were adopted, modified, and presented in many shapes; they were constantly manipulated, revised, and altered. The rows of animals do not just testify the will of depicting the creation as an idealised cosmology. They were a means to construct the world by presenting features of the perceived physical environment: a composition that does not simply mirror the reality but «self-mirrored» it.⁷⁶ The world is not represented as pre-conceived in an inner mind, it is created in the same moment in which it is experienced and externalised.

The context, even more than in the previous example, acquires a pivotal role. Stylistic motifs and their materiality alone have no meaning. However, they generated relationalities when directly accessed by the human counterparts. Then the mind arises in the interaction with these figures, as illustrated in fig. 1. This means, on the other hand, that minds

⁷⁵ WENGROW 2014, pp. 76-73.

⁷⁶ GOODMAN 1978.

are formed, if not on equal, at least similar premises. Brains and bodies are invited to relate and interact with analogous contents through repeated interaction. Engaging with the external stimuli of a cognitive environment can give rise to similar minds, common dispositions, and shape bodily, social, and mental domains.

Previously it has been stated that interactions with objects having certain styles guide human thinking and, to a certain extent symbolic cognition, fostering changes in persons as reflected by changes in objects. With the rows of animals, novel stylistic features related with foreign contexts produced novel interactions with past objects fostering a sense of community. New Uruk style motifs on objects, albeit stemmed and interlaced with past traditions, related humans and nonhumans. In this sense, those motifs supported the creation of an elite and the development of a system of interactions between the deceased, the living, and the broader socio-material worlds. The symbolic mind wasn't in the brain. It was enacted in a cognitive environment and distributed with objects displaying specific stylistic features.

5.3. Fantastic Beasts

The increasing standardisation of the systems of production at the end of the IV millennium in Mesopotamia is strictly related with the developments of a complex administrative system coexistent and enabled by the use of seals. The administrative needs and the extensive use of seals shaped the minds of its users resulting in the ongoing mediation between figures and persons. Through engagement stylistic motifs acquired the potency of expressing meaning with just a glance. Susa and Uruk manifest the highest achievement of this practice, epitomising the idea of detaching motifs from one context to adopt into another. The same cannot be said for Egypt.

In the prehistory of the region, composites do not appear on sealings but on ceremonial palettes. The Two-Dog Palette housed at the Ashmolean Museum of Oxford (fig. 12) presents a chaotic fight between humans and animals. Among them, there are two curious figures: a human-jackal flute player



FIGURE 12
The Two Dog Palette (Photo by author, copyright by Ashmolean Museum of Oxford, AN1896-1908.E.3924)

and a gryphon. The latter is a new introduction in the Egyptian repertoire of material representations, and it is limited to the late Naqada III (ca. 3100-2900 cal. BC).⁷⁷ Such material representation is taken and adopted without modifications introducing an entirely new symbol for the first Egyptians; the reason for its failure. Even though there are experiments, as visible on the Abu Zeidan knife (fig. 8), such type of material articulations failed and were not accepted, a fate to which are also destined the palettes themselves.

Recalling the considerations on the intertwined snakes and the rows of animals, the setback of animal composites can be explained with the fact that the other Mesopotamian stylistic themes introduced in Egypt adopted symbols which already had elements participative of the daily interactions between bodies, brains, environments, and objects. Conversely,

⁷⁷ Excluding scattered examples from later periods, for instance the Birth Tusk, see QUIRKE 2016.



FIGURE 13
Female figure from el-Ma'mariya, 3400-3500 BC
(Courtesy of the Brooklyn Museum, Accession Number
07.447.505)

fantastic beasts were probably perceived as foreign and disjointed from previous traditions. Connecting these elements with outer cognitive networks is rather difficult too. On the contrary, human-animal hybrid figures, like the human-jackal flute player, have antecedents, as exemplified by the bird-women statuettes from el-Ma'mariya (fig. 13). The increasing importance on the body that appears at the end of prehistory is testified by the first examples of preservative treatments on the deceased and reaches its peak with the ritual arenas of sacrifice of the First Dynasty.⁷⁸ Such ontological shift reflects another creative introduction, mediated through material articulations – as were bodies – and built through interactions, which changed the way the world was perceived: from a dimension dominated by animal forces to a cosmology of humans.⁷⁹

⁷⁸ WENGROW 2006, pp. 220-226.

⁷⁹ PREZIOSO 2017.

6. Conclusions

What is the symbolic mind? Where is it? These questions arise from the investigation of objects and studies we have followed, albeit briefly, in the pages above. As I hoped I have demonstrated, both questions are futile and in a certain sense misleading. The first one vanishes in a variegated plethora of stylistic motifs and their transformations, whereas the latter overlaps and fades within the boundaries of art and artefact. What we are left with is then the action and the consequences they bring in the bodily, mental, and social domains. The mind is with object and, at the same time, is the object itself. With this ontological perspective we should ask how it emerges, and then choose how to pursue the research to obtain answers – or pose new questions. In our case, the interaction created by objects with other objects in different styles transformed the material world and generated new ways of thinking about the world. This is what the objects mentioned above suggest.

Be them transferred by groups of objects along trade routes, as a consequence of movements of people outside the economic sphere, or the result of the will of a group of individuals, Mesopotamian stylistic motifs on carefully chosen objects played a central role in transforming other objects and human action. The making of specific decorations on ivory handles, of white lines on a pot, or of carvings on the dark surfaces of palettes, produced new possibilities for making sense of the world as reflected in the social domain.

«An object with a new or subversive sensory quality will send social relations off a new path, not through any interaction from the part of the object, but through its effects on the sets of social relations to various forms of sensory activity».⁸⁰ Motifs on objects were hence able to gather over wider geographical spaces people and objects, creating associations between a restricted group of persons and the new material articulations. The elites became the objects they displayed, bodies interlaced with them and their social relationships through the capacity decorations had of capturing and transforming. This explains why Mesopotamian motifs fostered

⁸⁰ GOSDEN 2001, p. 165.

the creation of an elite: it was not to transmit the original meanings and values of the cognitive contexts where they were originally introduced. It was a creative innovation that, at least in two cases, mixed local contexts and past dispositions. The fluid webs of interactions among bodies, brains, objects, and landscapes generated minds based on shared ways of categorising the world constructing as reflection groups. In such a scenario, creativity in all its forms created a political legitimisation enabling diverse overlapping and centrifugal pathways to power.

The same processes are at work when it comes to maintaining order in the social, and not the imposition of undefined stability through structures and

levels. Stylistic transformations shape and are shaped through interaction and activity. They are constant and irreversible, although manifest themselves slowly or through the «principle of least difference»;⁸¹ a mechanism which could explain why sometimes these symbols appear to be more or less innovative as in the case of the three motifs examined. From this perspective stability in the social domain are only apparent because there is not stability but only change. In this flux of interaction, the capacity for action that objects give us interweaves the «lines of becoming» defining the creative evolution of the human species, as happened with the birth of the Egyptian state and before in Mesopotamia.⁸²

⁸¹ GELL 1998, p. 219.

⁸² DELEUZE, GUATTARI 2004, pp. 224-225.

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Herding and farming symbiosis: a dialogic exercise on the manifestation of a universal *topos* in Sumerian and Roman primary cultures*

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ABSTRACT

At a microeconomic level, the ancient inhabitants of southern Mesopotamia and regions of the Italic peninsula gained their sustenance from a combination of rain-fed cereal cultivation and herding. These already highly connected activities would inevitably, for many practical and cultural reasons, have profound repercussions on the construction of abstract thinking and on the conception of abstract vocabulary in a transversal cultural matrix. Such cultural compositions would come about by similar linguistic mechanisms, independently of the cultural context and time span, for the practical experience together with natural phenomena and rural life would be the source for these primary constructions.

In that sense, in this paper I speculate on the relationship between the signs of these two complementary activities and their imaged representation as a source for abstract meaning in the collective mind. By approaching a kind of archaeology of traditional thought, I intend to establish a dialogic analysis between the data from two unrelated sociolinguistic cultures, in order to identify a transversal mode of constructing meaning upon similar compounded images of daily life.

KEYWORDS

Semiotics, signs of meaning, Sumerian literature, Roman instructions, agriculture

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Approaching the daily life of Sumerian and Roman farmers and the way they thought about it is a highly theoretical exercise. Alster (1978) published samples of Sumerian proverbs, which seem to be inspired by daily life.¹ However, some scepticism is necessary as texts such as those are just a small sample of ancient textual corpus, so they should not be blindly considered sources for ancient wisdom or in some way being empirical references for the representation of life in southern Mesopotamia. Archaeological remains, administrative texts and certain literary texts², such as the FI³ or the ‘Latin instructions on farming’ can shed some light onto the practicalities of the farmer’s life, although those texts do not provide sufficient evidence to gain an exact idea of the farmer’s perspectives on his world and therefore, his behaviour. In this sense, seeking a prosopography on a farmer’s life is a somewhat creative, speculative exercise. According to the mechanisms of semiotics, however,⁴ abstract language may give some impressions on the way ancient peasants could describe their lives by showing the landscape of meaning that surrounded them.

At a microeconomic level, the ancient inhabitants of Mesopotamia, as well as the ancient inhabitants of *Latium*, gained their sustenance from a combination of cultivation of cereals (rain-fed and irrigated), sheep and goat herding, and the cultivation of small orchards and vegetable gardens. In that context, farming and herding are highly connected, being the craft of ploughing a kind of a fusion between these activities; the man working the land with oxen⁵ is a kind of a

herder.⁶ Symbolically speaking, as a shepherd, he is the ruler, the protector and the source of sustenance for the animals, which he leads in order to produce crops, as a farmer.

1. Herding and Farming and a shared frame in the Mesopotamian landscape

Regarding the agricultural landscape, farming and herding usually come together. For example, in DI D₁⁷ (ll. 42-52, vide infra) there is an interaction between the two activities, as if the value of each was expressed through the other. And one could take the Dumuzi – Enkimdu *disputatio* (SF²)⁸ as a paradigm of that, for the qualities of both actors are described and compared, them representing farming and herding.⁹

The first 8 lines of the text are quite fragmented, but one can assume that there is an attempt at convincing Inana to marry Dumuzi, the shepherd god, and an answer that seems to show her unwillingness to marry him (ll. 7-9).¹⁰ Two values are being considered, that of the farmer and that of the shepherd. Apparently the god Utu tries to convince Inana to marry Dumuzi by presenting her with the attributes of the shepherd. Dumuzi can produce butter (*i₃*) and milk (*ga*), which are more than simple nourishment, these products are also an optimal base for various dishes and foodstuffs. So, as well as ‘being the provider’, the shepherd can also bring luxury. My interpretation is that Dumuzi is identified as the provider of a variety of exquisite foods, for those products can be fermented and salted, in order to be stored as surplus products that can be exchanged for other

¹ Cf. Proverb collection VII, ll.11-13, ll. 51-53, ll. 96-100 (ALSTER 1978). On the subject vide VELDHUIS 2000.

² We will not approach aspects as the scribal tradition or the chronology of the texts here cited, despite its great value for understanding Sumerian literary, for the main objective of the paper is the semantics transmitted on the texts that are based on the signs of meaning, which are independent of literary context. On the historical background of Sumerian literature and scribal tradition vide VAN DE MIEROOP 2016 and RADNER, ROBSON (eds.) 2011.

³ CIVIL 1994.

⁴ On semiotics theory and on the approach of language construction based on signs of meaning vide COBLEY (ed.) 2010; concerning material culture, vide also PREUCEL 2006, pp. 21-92. On the general theory ECO 2002 is being followed.

⁵ For a pre-historical symbolism of the bull of the farm-

ing world vide WATANABE 2002, pp. 99-102.

⁶ Regarding lexicon on farming used in economic and administrative texts vide MAEKAWA 1990.

⁷ Dumuzi-Inanna Song D₁; comp.t. ETCSL c.4.08.30; SEFATI 1998, pp. 301-12.

⁸ SF² – Dumuzid and Enkimdu (the Shepherd and the Farmer). Comp.t. ETCSL c.4.08.33; SEFATI 1998, pp. 324-43.

⁹ On Sumerian literary *disputatio* vide VANSTIPHOUT 2003. For a study in DI corpus vide SEFATI 1998.

¹⁰ For a reconstruction of the lines 1-6 vide SEFATI 1998, p. 336.

commodities. There is, then, an image constructed upon a kind of potential abundance. This value of a certain luxury and richness may be materialized by the šuba stones Dumuzi is said to bring.

(l. 17) In other words, it is possible to find a relationship between the gifts promised to Inana and the goods from grazing and farming, for Dumuzi brings richness.

10. šeš-a-ni ur-saĝ šul^dutu
11. kug^dinana-^lra^l gu³ mu-un-na-de₂-e
12. nin₉-ĝu₁₀ ħe₂-tuku-tuku su₈-ba-de₃
13. ki-sikil^dinana za-e a-na-aš nu-ub-še-ge-en
14. i₃-ni dug₃-ga-am₃ ga-ni dug₃-ga-am₃
15. lu₂su₈-ba niĝ₂ šu dug₄-ga-ni dadag-ga-am₃
16. ^dinana ħe₂-tuku-tuku ^ddu₅-mu-zid-[de₃]
17. ^lunu₂^l la₂ šuba la₂ za-e a-na-[aš] nu-ub-še-ge-en
- 17A. [i₃]-ni dug₃-ga-am₃ ga-^lni^l [dug₃-ga-am₃]
- 17B. ^{lu2}su₈-ba niĝ₂ šu dug₄-ga-ni dadag-[ga-am₃]
18. i₃-ni dug₃-ga mu-un-da-gu₇-e
19. an-dul₃-e lugal-la za-e a-na-aš nu-ub-še-ge-en¹¹

10. Her brother, the vigorous warrior, Utu,
11. Directs his words to holy Inana:
12. “My sister, may the shepherd marry you!
13. Maiden Inana, why are you unwilling?
14. His butter is good, his milk is good,
15. The product of the shepherd’s hands is bright.
16. Inana, let Dumuzi marry you.
17. You, who wear jewellery, who wear šuba stones, [why] are you unwilling?
- 17a. His [butter] is good, [his] milk [is good],
- 17b. The product of the shepherd’s hands [is] bright.
18. He will eat his good butter with you.
19. you, patron of the king, why are you unwilling?”

Dumuzi (ll. 35-64) answers Inana’s refusal¹² comparing himself to the farmer and generating a dispute about the qualities of both gods. Dumuzi lists the qualities of the farmer, albeit stating that for the goods Enkimdu presents, the shepherd can offer better and more – at least that is what Dumuzi claims by boasting about what he can provide. Despite this, the text clearly suggests that both are good candidates as they are both providers.

The semantic value of the signs of meaning that compound the image of the shepherd are crys-

talized in traditional thought as are the products provided by him and which give him a symbolic meaning once the particularities of his activity are considered. The same is true to the signs of meaning that constitute the symbolic construction of the farmer.¹³ In the previous example, the signs of meaning are a representation of each product that can be provided. Once conjugated those signs compound a symbol: abundance.

¹¹ Comp.T. Ni 2431 (SRT 3) + CBS 8320 (SEM 92).

¹² SEFATI 1998, p. 335.

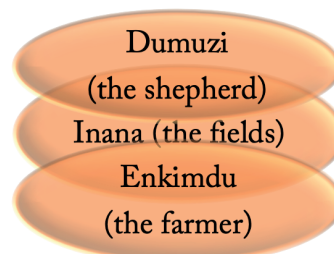
¹³ Vide ECO’s 2002, pp.29-43, and AGUIAR E SILVA 2002, pp.76-79, for a general definition of signs of meaning vide also LORUSSO 2015, pp.117-158.

40. [engar-e] ġa₂-a-ra engar-e ġa₂-a-ra engar-e a-na mu-un-dirig-ga-am₃
 41. ^den-ki-im-du lu₂ eg₂ pa₅-ra-ke₄
 42. ġa₂-a-ra engar-e a-na mu-un-dirig-ga-am₃
 43. tug₂ gig₂-ga-ni ħa-ma-ab-šum₂-mu
 44. engar-ra u₈ gig₂-ġu₁₀ ġe₂₆-e ga-mu-na-ši-ib-šum₂
 45. tug₂ babbar₂-ra-ni ħa-ma-ab-šum₂-mu
 46. engar-ra u₈ babbar₂-ra-ġu₁₀ ga-mu-na-ši-ib-šum₂
 47. e-ne kaš saġ-ġa₂-ni ħa-ma-an-de₂-e
 48. engar-ra ga sig₇-a-ġu₁₀ ga-mu-na-ši-in-de₂
 49. e-ne kaš sig₅-ni ħa-ma-an-de₂-e
 50. engar-ra ga-ki-si-im-[ma[?]]-[...] ga-mu-na-ši-in-[de₂](...)
40. “The farmer to me, the farmer to me, in what is the [farmer] superior to me?
 41. Enkimdu, the man of the dykes and canals –
 42. In what is that farmer superior to me?
 43. Let him give me his black garment,
 44. I will give the farmer my black ewe for it.
 45. Let him give me his white garment,
 46. I will give the farmer my white ewe for it.
 47. Let him pour me his finest beer,
 48. I, the farmer, will pour yellow milk for it.
 49. Let him pour me his fine beer,
 50. I will pour him, the farmer [my] kisim-milk for it. (...)

Dumuzi’s ability to generate value is identifiable on these lines, where he apparently manifests his willingness to exchange goods with Enkimdu.¹⁴ With such ‘commercial ability’, one can interpret that Dumuzi would be able to provide Inana with his products and with Enkimdu’s. The assumption I make is, of course, an extrapolation. It might also

¹⁴ SF² ll. 55-64: ħa-ħa-la sig₅-ni ħa-ma-ab-šum₂-mu / engar-ra ġe₂₆-e ga i₃-ti-ir-da-ġu₁₀ ga-mu-na-ši-ib-šum₂ / ninda sig₅-ni ħa-ma-ab-šum₂-mu / engar-ra ga [nunuz-te]-a-ġu₁₀ ga-mu-na-ši-ib-šum₂ / gu₂ di₄-di₄-la₂-ni ħa-ma-ab-šum₂-mu / engar-ra ga-ar₃ tur-tur-ġu₁₀ ga-mu-na-ši-ib-šum / u₃-mu-ni-gu₂ u₃-mu-ni-naġ-ġa₂-ta (i-zu-ba) / i₃ niġ₂ dirig-ga ga-mu-na-ra-ab-šub ([wa-at]-ri-im) / ga niġ₂ dirig-ga ga-mu-na-ra-ab-šub / ġa₂-a-ra engar-e a-na mu-un-dirig-[ga]-[am₃]. “Let him give me his fine ‘barley flour’, / I will give the farmer my *itirda*-milk for it. / Let him give me his good bread, / I will give the farmer my [nunuz-te]-milk for it. / Let him give me his small beans, / I will give the farmer my small cheeses for them. (...) / After letting him eat and letting him drink, (cf. SEFATI 1998, p. 341) / I will leave surplus butter for him, (cf. SEFATI 1998, p. 341) / I will leave surplus milk for him. / In what is the farmer superior to me?” Sefati translates ħa-ħa-la as something like pressed beer (l.55). Nonetheless, I prefer to let it open to ambiguity (cf. SEFATI 1998, p. 340; CAD H, p. 41).

be assumed that Dumuzi is only saying that for any product Enkimdu can offer, he can offer something better. There may in some way be an allegory that intentionally relates and, in some aspects, fuses the two activities. In fact, farming and herding are complimentary. And ll. 65-87, describing the meeting between the three gods and the resolution of the *disputatio*, may manifest the correlation of the two activities together with earth, the point of intersection, represented by Inana.¹⁵



¹⁵ On the interpretation of lines 65-87 vide SEFATI 1998.

Literature describes what is common sense in regard to a riverine landscape, that is, herding and farming are part of the same symbolic plan for

they belong to the same natural framework. In the following lines the symbolic symbiosis is clearly suggested:

73. su₈-ba^d dumu-zid-de₃ edin-a-na du₁₄ mu-un-di-ni-ib-mu₂-mu₂
 74. ĝa₂-a za-a-da su₈-ba ĝa₂-a za-a-da su₈-ba ĝa₂-a za-a-da
 75. a-na-aš mu-da-ab-sa₂-e-en
 76. udu-zu u₂ peš₁₀ ħe₂-em-mi-gu₇
 77. išin-ĝa₂ udu-zu ħe₂-em-mi-gu₇
 78. a-šag₄ šuba unug^{ki}-ga še ħa-ba-ni-gu₇
 79. maš₂ sila₄-zu^{id2} surungal-ĝa₂ a ħa-ba-ni-in-naĝ
 80. ^{lu2}sipad-me-en nam-nitalam-ĝu₁₀-še₃
 81. engar gu₃-li-ĝa₂ na-ba-ni-in-kur₉-ra
 82. engar^d en-ki-im-du gu₃-li-ĝa₂ engar gu₃-li-ĝa₂
 83. na-ba-ni-in-kur₉-ra-am₃
 84. gig ga-mu-ra-de₆ gu₂ ga-mu-ra-de₆
 85. gu₂-nida bir-un₄-na ga-mu-ra-de₆
 86. ^{lu2}ki-sikil niĝ₂ za-a-ra sig₉-ga
 87. ki-sikil^d inana še giĝ₄ gu₂ MUNUS ga-mu-ra-de₆ (...)

73. The shepherd, Dumuzi, from his plain provoked a quarrel with him.
 74. “I’m with you, shepherd, I’m with you, shepherd, I’m with you
 75. Why should I compete (with you)?
 76. Let your sheep eat the grass of the riverbank,
 77. Let your sheep graze on my stalks.
 78. Let them eat grain in the šuba (stones) fields of Unug,
 79. Let your goatlings and lambs drink water from my Surungal canal.”
 80. “I am a shepherd, at my wedding,
 81. Farmer, you are going to be my companion.
 82. Farmer, Enkimdu, as my friend, farmer, as my friend
 83. You are going to become indeed.”
 84. “I will carry wheat to you, and I will bring you beans;
 85. I will bring you two-row barley from the threshing-floor.
 86. Maiden, I will bring you everything you please,
 87. Maiden Inana, ... barley or ... beans, I will carry to you”

This frame apparently fuses two planes. The two activities generate complementary gifts and manifest how essential they are to human life. The scene, despite being constructed upon stylistic literary resources, mythology and perhaps religious or ritual beliefs, evokes an image that someone in touch with rural life could imagine. In that sense, the semantic value of this scene would be easy to under-

stand thanks to the previously acquired knowledge preserved by tradition and recreated over and over again by collective experience. In short, the two activities are complementary, and their traditional value can only be fully understood when they are related in a common frame.

Considering the *disputatio* SF², victory is not dependent on the superiority of the goods each god

can provide. From an economic perspective, both gods could exchange their surplus and provide different commodities and this is the way Dumuzi aims to convince Inana that he should win the contest. In that sense, no activity is seen as being more worthy than another.

The symbol of provider can be constructed with signs of meaning from the traditional landscape where the shepherd is framed and also with those signs associated with the farmer (cf. DI D₁, ll. 42-59). In this sense, the *disputatio* between the gods Dumuzi and Enkimdu shows the natural space of the shepherd and the farmer, expressing a source for abstract agricultural images. The site is composed by the plain (*edin*) and by the riverbank.¹⁶ In fact, this could be considered to be the same framed landscape presented through the landscapes of

DumDr (ll. 1-13),¹⁷ where the shepherd god is the main character.

Naturally this is the shepherd's domain, for there is water and green grass for the herd. The terrain next to an irrigation canal is not good for farming, for seasonal changes in water level make it impossible to grow crops without the risk of losing them to floods. That makes the marshes of the river perfect for grazing, for there would always exist smaller green plants owing to the characteristics of damp, fertile soil.

Even when the symbol of the shepherd is being considered alone, it seems that, regarding the collective mind, the traditional shepherd is not always a symbol isolated from the agricultural cosmos. It tends to result from a symbiosis of herding with farming, as expressed allegorically in text DI D₁:

46. ki-en-gi ki-uri-a ešgiri₂ šibir šum₂-mu-na-ab (source: ta)
 47. saĝ gig₂ dur₂-ru-na-bi nam-sipad-bi ħe₂-ak-e
 48. e-ne engar-gin₇ gana₂ ħe₂-ġa₂-ġa₂
 49. sipad zid-gin₇ amaš ħe₂-em-mi-lu-lu

46. (Over all) Sumer and Akkad, grant him the staff and the sceptre!
 47. May he practice the shepherdship craft with the black-headed inhabitants.¹⁹
 48. May he, like a farmer, establish agricultural fields.
 49. May he like a loyal shepherd make many sheepfolds, (...)

¹⁶ SF² ll. 65-72: ul am₃-te ul am₃-te gaba peš₁₀-a ul am₃-te / peš₁₀-am₃ sipad-de₃ peš₁₀-am₃ / sipad-de₃ peš₁₀-am₃ udu na-an-ga-am₃-[mi¹-[ni-in-lu-lu] / sipad peš₁₀-a udu lu-a-ra / lu²sipad-ra engar mu-na-ni-[in-te] / engar d^{en}-ki-im-du [mu¹-[na-ni-in-te] / d^{umu}-zid lugal eg₂ pa₅-re [...] / edin-a-na sipad-de₃ [edin]-a-na du₁₄ mu¹-un¹-[di-ni-ib-mu₂-mu₂]. "He was in joy, he was in joy, at the edge of the riverbank, he was in joy. / Is on the riverbank, the shepherd is on the riverbank, / Indeed the shepherd [was] pasturing too the sheep on the riverbank. / The shepherd pasturing the sheep on the bank; / The farmer [approached] the shepherd there, / The farmer Enkimdu [approached him]. / Dumuzi the king of dyke and canal [...]. / From his plain, the shepherd from his plain [provoked a quarrel with him]; (cf. ll. 73).

Of course, the signs that compound the symbols of the farmer and the shepherd are presented independently; however, they appear in the same plane, they interact within the same natural space and both work for the complementary sustenance of the community. By forming part of the same frame, their gifts are in some way mixed and interdepend-

¹⁷ DumDr – Dumuzi's Dream: ALSTER 1972; ETCSL 1.4.7.

¹⁸ Cf. COHEN 1988, p. 168, ll. a+110-a+111.

ent. Of course, this is an assumption based on common sense and on the practicalities of both activities in a riverine farming context. We should not forget that farming and herding were the main subsistence activities in antiquity. The literary representation may have a specific function and may alter the symbols, but the traditional signs of shepherd and farmer based on empirical practices are cristalized, so they do not change.

Considering the above, Westenholz (2004) says, “The farmer image was even more popular than the shepherd in the earliest personal names, as might be expected in an agrarian society. In fact, it is the pastoral image that seems out of place”. I defend that the shepherd image is not out of place, for herding was a very important economic factor in Sumerian society and not as dependent on season as farming, thus people would be in day-to-day contact with this activity, in the same way they would be with farming. That is, they would be in touch with the signs that potentiate the symbol and that gave place to ‘talking names’. In fact, farming and herding share some signs of meaning besides a common landscape.

- 60. engar maḥ-bi sipad zid kalam-ma
- 61. ud dug₃-ga zid-de₃-eš tu-ud-da-am₃
- 62. engar gana₂ daḡal-la ḫe₂-du₇-am₃
- 63. ši-im-da-ḡen nidba gal-gal-la-da

- 60. Its great farmer is the right shepherd of the Land,
- 61. Who was born loyal on a good day.
- 62. The farmer, suited for the wide fields,
- 63. Comes with great gifts;

In fact, this is not a reference to the symbiosis or complementarity of the two symbols. However, it is possible to find a kind of a crossover, as if they were two symbolic entities practiced individually, but manifested on the same plane in order to characterize the god as a leader and provider. The farmer is the great provider (the basis of society) and the shepherd the ruler of society, symbolically speaking.

DI D₁ apparently deals with the sacred marriage ceremony of an anonymous king, which seems to

Westenholz’s apparent differentiation of the two activities seems to ignore the potential relationship between activities and their practice. The two activities were certainly complementary economically and technically. Despite finding no exact proof within literature regarding the connection of the two activities in a physical and empirical plane, common sense leads me to believe with some certainty that both activities were undertaken in a complementary order. One activity benefitted the other, as for example, the use of a fallow system, or cattle to clean the fields of weeds. It may, therefore, be inaccurate to say that one of the activities was secondary to the other; one thing is economic value, another is social value.

In fact, Westenholz (2004) gives some weight to that by saying “In a later Sumerian literary composition, the Hymn to Enlil, the farmer is equated with the shepherd: engar-ma-bi sipa-zi kalam-ma ‘its august farmer is the country’s reliable shepherd’ (Hymn to Enlil [Enlil suraše], Line 60).” Although Westenholz is not arguing on the complementarity of both activities in practical and symbolic terms, they are associated semantically as it is also shown in Enlil A:¹⁹

personify the union between Dumuzi and the goddess Inana.²⁰ After the announcement of the arrangements for the marriage ceremony (ll. 1-32), there is what could be considered a prayer for happiness and prosperity. Dumuzi being the shepherd god as well as the future spouse of the fertility goddess, the blessings would reflect the two planes of action of both

¹⁹ Enlil A – Enlil in the E-kur (Enlil A), ETCSL c.4.05.1.

²⁰ SEFATI 1998, pp. 306-307.

gods and at the same time the material result of their symbolic union. The gifts of the shepherd come with Dumuzi, who is also presented as farmer and plough-

man, as the field is to be ploughed for Inana (DI P ll. 22-31); and the richness of the land will be improved, as Inana desires in the following lines:

42. ^dutu e₃-ta ^dutu šu₂-še₃
 43. ^{tum}ulu₃-ta^{tu-mu-ul-lu-ta tum} mir-ra-a-še₃^{tu-mu-dmi-ra} (vide cuneiform)
 44. a-ab-ba igi-nim-ta a-ab-ba sig-še₃
 45. ^{šis}ha-lu-ub₂'-ta ^{šis}erin-na-še₃ (source: ta)
 46. ki-en-gi ki-uri-a ešgiri₂ šibir šum₂-mu-na-ab (source: ta)
 47. saĝ gig₂ dur₂-ru-na-bi nam-sipad-bi ħe₂-ak-e
 48. e-ne engar-gin₇ gana₂ ħe₂-ĝa₂-ĝa₂
 49. sipad zid-gin₇ amaš ħe₂-em-mi-lu-lu
 50. gu ħe₂-en-da-ĝal₂ še ħe₂-en-da-ĝal₂
 51. id₂-da a-eštub ħe₂-en-da-ĝal₂
 52. a-šag₄-ga še gu-nu ħe₂-en-da-ĝal₂
 53. ambar-ra ku₆ mušen gu₃ ħu-mu-da-ra-ra
 54. (^{šis}gi) mu-gi-e gi sumun gi ħenbur ħe₂-en-da-an-mu₂
 55. an-edin-na ^{mu}MAŠ-GURUM ħe₂-en-da-an-mu₂
 56. tir-tir-ra šeg₉ šeg₉-bar ħe₂-en-da-lu
 57. pu₂ ^{šis}kiri₆ lal₃ ĝeštin ħe₂-en-da-il₂
 58. mu₂-sar-ra ħi-iz^{sar} za₃-ħi-li^{sar} ħe₂-en-da-mu₂
 59. e₂-gal-la zi-su₃-ud-ĝal₂ ħe₂-en-da-an-ĝal₂

42. From the sunrise to the sunset
 43. From the south to the north,
 44. From the upper sea to the lower sea
 45. From where the *ħalub* tree is, to where there is the cedar tree,
 46. (Over all) Sumer and Akkad, grant him the staff and the sceptre!
 47. May he practice the shepherdship craft with the black-headed inhabitants,²¹
 48. May he, like a farmer, establish agricultural fields,
 49. May he like a loyal shepherd make many sheepfolds,
 50. May he be flax provider, may he be barley provider,
 51. May he be carp floods provider in the rivers,
 52. May he be the barley and flax provider in the fields,
 53. May fish and the birds 'make noise' in the marshes,
 54. May the old reeds and the young reeds sprout under him in the reed thicket,
 55. May the *mašgurum*²² plant sprout under him on the high plains,
 56. May the wild sheep³ (wild boar³) and wild rams be abundant under him in the forests,
 57. May the fruit gardens and orchards produce under him syrup and wine,²³
 58. May vegetables and plants (cress³) grow in the garden plots under him,
 59. May a long life in the palace be given by him.

²¹ Cf. ll.8-10, COHEN 1988, p. 176. For the shepherd as a leader of the black-headed (saĝ gig₂) vide also COHEN 1988, pp. 152-174, ll.93-94; COHEN 1988, pp.222-243, ll. a+57; COHEN 1988, pp. 222-243, ll. a+80.

²² Vide SEFATI 1998, p. 311.

²³ For examples of administration roles of gardens in Ur III (Ĝirsu) vide GRECO 2015.

All the qualities of a provider based on the agricultural landscape are brought together in the bridegroom that is: a shepherd and a farmer. The qualities presented cannot be related directly to the ploughman for the text does not do so, but it is perfectly clear that prosperity depends on the farmer and herder's skills, for Inana is the land to be ploughed. Concerning the scene expressed in this text, it is important to note that we are avoiding a religious and mythological approach, for we are looking for the semantics of the literary expression and not so much analysing the cultural context.

Following the narration of how Niniubur, steward of Eanna (ll. 33), takes Dumuzi, or the king, by his hand and brings him to Inana's lap (Ur₂), Inana manifests her expectations for prosperity, in terms of what Dumuzi can bring to the palace and the country. The fertile fields and the barns replete with products result from the symbiosis of the attributes of the two gods. The fields feed the herds and the animals fertilize the fields. Together, they both bring prosperity to the land, and the last lines of the text (65 ff.) materialize and personify their union by showing a scene of sexual intercourse. Their union states the symbolic prosperity of the land, because everything is in perfect harmony when Dumuzi is at Inana's side: 'fields' are established, even though he is the shepherd god, not the farmer god – such a god would be Enkimdu. In that sense, I hold this is not a merely mythological narrative, but the text expresses a construction of a semantic image that intends to show prosperity. And a real, factual prosperity could only be conceived through a perfect symbiosis of all the elements that constitute the rural landscape.

2. The plough and the animal

The image generated by the person leading the ox on the plough is a remarkable example of the symbiosis of herding and farming at a symbolic and empirical level. Considering the image of the bull in 'Latin instructions', Columella gives an example that suggests both the ploughman and the shepherd shared the capacity for leadership, expressed by the sign of meaning for 'leading'.

Si uero non pigeat iugum fabricare, quo tres iungantur, per hanc machinationem consequemur, ut etiam contumaces boues grauissima opera non recusent.
(Col. 6.2.10)

"If one really has no objection to constructing a yoke to which three animals can be fastened, we shall by this artifice achieve that even obstinate oxen do not refuse the heaviest tasks." (...)²⁴

The ploughman must be able to put the animals to work, even when it is hard. In that sense, Columella explains how to control or spur a bull by using the idea of a group to handle the herd. Two signs of the ploughman coincide with those of the herder (vide infra): the capacity of submitting the powerful animal and the quality of leading the animal into productive work. He may have to convert:

- 1) the strong, wild bull into a worker;
- 2) the lazy oxen into productive animals.²⁵

The instruction on the management of oxen suggests the potential of such image being a powerful analogy with the leader commanding the state. (cf. Col. 1.pr.13-14) Although this quotation is more technical advice than a literary expression of a symbol,²⁶ through it qualities of leadership are touched on, as well as seeing the actual image of the ox in an agricultural context. Thus signs of meaning based on visual landscape are being given: a sign representing the idea of 'leading', a sign representing 'work', a sign representing 'strength'.

Columella expands on the subject of herding with a metaphor: a military plan gives meaning to the discipline imposed on the cattle by a herder that intends to do farming work, that is, ploughing.

Hic enim recognosci grex poterit numerusque constare, si uelut ex militari disciplina intra stabularii castra manserint. Sed non eadem in tauros exercentur imperia, qui freti uiribus per nemora uagantur liberosque

²⁴ Columella notes some labouring characteristics and potentialities of bulls from different regions as Umbria, Etruria, Latium and Apennines. (Col. 6.1-2)

²⁵ cf. Col. 6.2.10.

²⁶ Vide THOMMEN 2012, p. 83.

egressus et reditus habent nec reuocantur nisi ad coetus feminarum. (Col. 6.23.3)

“Here it will be possible to inspect the herd and verify its numbers, and just like that if, through under military discipline, they occupy their quarters in the stalls. However, similar rules are not imposed upon the bulls, which, relying on their strength, wander about in the woods and are free to go out and return and are only recalled when they are required to cover the females.”

The factual control of the herder and the power of the bull are mentioned but the ploughman is not; however, the signs of his great tool, the bull’s power, are evident. Although the text does not use complex literary construction, i. e. there is no abstract language, the factual image can be identified through the scene presented; and its description is in fact a reference to an original natural image in which the traditional symbol is rooted.

The farmer can change the nature of things, and in order to reap benefits from the fields and he proceeds in a symbiosis with the animal, exercising control over the beast, literally or metaphorically:

Armentum enim id quod in agro natum non creat, sed tollit dentibus. Contra bos domitus causa fit ut commoedius nascatur frumentum in segete et pabulum in novali. (Var. R. 2. Pr. 4.7)

“Certainly, the herd do not produce what grows on the field, but tears it off with the teeth; as oppo-

sition, the domestic ox becomes the cause for the grain to grow easily in the ploughed land, and the fodder in the fallow land.” (Cf. Col. 5.4.2.5-6; Lucr. 5.206-5.217)

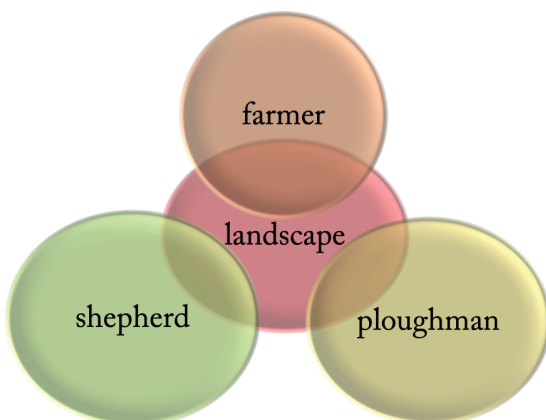
The farmer converts the herds (which normally eat and destroy crops) into productive cattle. He is like a shepherd, but at same time he is something more, for he interacts with nature in a way that modifies it and makes it productive. This farmer is a shepherd, and this shepherd is a ploughman, and the ploughman is a farmer.

The farmer must deal with different aspects of production and each of those aspects involves specific abilities and qualities, which can favour the construction of archetypes for moral values. When dealing with animals of remarkable brute force, such as oxen, the symbol for which contains the signs for strength and fertility, the ploughman must himself be remarkable. He has to read the animals and use that knowledge to put them to the particular work he wants them to do. And, in order to achieve that, the herder needs ‘natural intelligence’. Such intelligence is not so much that of pure knowledge and reason; the ploughman needs a sensorial comprehension of natural things. He must know how to drive power and must create a symbiosis between plough and beast, using the qualities of a herder.

Bubulco quamuis necessaria non tamen satis est indoles mentis, nisi eum uastitas uocis et habitus metuendum pecudibus efficit. (Col. 1.9.2)²⁷

“For the ploughman, however necessary, quality of mind is still not enough, unless powerful voice and condition makes him frightening to the cattle.”

The ploughman’s skill in exercising power is important for bringing earth and animal under control and making them productive; the ploughman then is somewhat similar to the shepherd. But like a farmer, he reaps his harvests thanks to his hard work and suffering.



²⁷ Cf. COHEN 1988, p. 176; ‘The song of the ploughing oxen: an ululumama to Ninurta’ ll. 1-3; Comp.t. CIVIL 1976, pp. 83-95; ETCSL c.5.5.5.

*Nec tamen, haec cum sint hominumque boumque
labores
uersando terram experti, nihil improbus anser
Strymoniaeque grues et amaris intiba fibris
officiunt aut umbra nocet. (...)
(Verg. G. 1.118-121)²⁸*

Albeit man and beast passed for efforts
– trying to goffer the earth, – the insistent geese and
the Strymon cranes and the bitter roots of chicory,
and the hurtful shadow cause damages.

Acting in accordance with the life cycle, and responding to difficulties by constant labouring, the farmer reaps his rewards through the plough that is pulled by cattle, so animal and man take part in the process of creation. The man is in the lead and shares the symbol with the cattle. In other words, the concept of cattle is in fact a compound element of the image of the ploughman:

*Agricola incuruo terram dimouit aratro:
hic anni labor, hinc patriam paruosque nepotes
sustinet, hinc armenta boum meritosque iuuenos.
Nec requies, quin aut pomis exuberet annus
aut fetu pecorum aut Cerealis mergite culmi,
prouentuque oneret sulcos atque horrea uincat.
(Ver. G. 2.513-518)*

The farmer has opened the soil with his curved plough:
The year's work (depends) of it; with this, supports
his fatherland and his little grandchildren;
And also the herds of cows and worthy steers,
Without rest, indeed the season abounds in fruits,
And new calves and lambs, or sheaves of Ceres' grain,
Packing the furrows with spring and filling the
granaries.

Together farmer and animals generate a landscape of life and abundance. The symbol of the ploughman would definitely be generated by an imaged symbiosis between man and cattle. Furthermore, the ploughman is hardened by his work, and his strength resides in the ability to use suggestion and power, rather than brute force:

²⁸ Cf. *Saepe ferus duos iaculatur Iuppiter imbres, / Grandine dilapidans hominumque boumque labores (...)* (Col. 10.1-329-330). "Often the fierce Jupiter throws powerful rains, / man and ox are consumed by the heaviness of the work (...)".

Sed temperet uires clementia, quoniam terribilior debet esse quam saeuior, ut et obsequantur eius imperiis et diutius perennent boues. (Col. 1.9.2)²⁹

"Yet he should temper his strength with gentleness, since he should be more terrifying than cruel, so that the oxen may obey his commands and at same time last longer (...)"

As a herder, only by submitting – but not by crushing – can the ploughman prevail over the will of the beast. In this way, the shepherd-farmer avoids the animal rebelling, as a great king would do with his subjects. This latter statement is of course an extrapolation. I use a description of Columella's to evoke the symbol of the good king. I am now doing, what the ancients did, using a traditional image to create a symbolic classification (cf. Col. 1.pr.18.4-6). Such a symbol seems to be universal, as it is constructed upon invariable signs of meaning dependent on agricultural life experience. Columella's picture is the description of what would be a 'common sense' symbol paralleled the world of politics.

However, as mentioned above, cattle can also be harmful to agriculture, disturbing the harmonious agricultural landscape.³⁰ Nonetheless, through work³¹ and practical wisdom the farmer, together with cattle, overcomes barrenness and at same time protects his crops from the cattle (cf. Ver. G. 2.371-375). That man is the same farmer of the plough. In fact, due to the ox being so closely related to farming, and agriculture being so crucial for social life, there are references to oxen in foundational traditions and legends.³² In short, the Latin ox has a place in traditional rustic thought generated through its relationship with farming and the interaction with the landscape. Once the empirical practices of rustic life in antiquity are considered, the symbio-

²⁹ Cf. with the herder who makes the cattle bound (COHEN 1988, p. 181, ll. 11-12).

³⁰ *Apricis etiam et macris aut aridis locis prata iam purganda et a pecore sunt defendenda, ut faeni sit copia* (Col. 11.2.7-8) "and furthermore, in places exposed to the sun, poor and arid, the meadows must now be cleaned up and protected against cattle, so that production may be abundance of hay".

³¹ Cf. Lucr. 2.206-212.

³² Vide Col. 6.pr.7 and also the lines that follow this passage for the Greek myth relating Demeter (Ceres) with ox and the cultural consequences of it in Attica.

sis of herding and farming is clear, especially when draught animals were used.

During what Columella considers ‘remarkable times’, the leading man would come from the fields, probably because of the skills he had obtained there.

Enim temporibus, ut ante iam diximus, procures ciuitatis in agris morabantur et, cum consilium publicum desiderabatur, a uillis arcessiebantur in senatum. (Col. 1. pr.18.4-6)³³

“During those times, as we previously said, the persons leading of the state used to pass their time in the fields and when advice on public matters was wanted, they were summoned from their farms to the senate”.

One cannot ignore the idealization with and, at same time, the disconnection from the reality of the farmer’s economic activity; that is, what his work actually consisted of. For a great number of those working on farms were slaves and servants, dealing with their strife making profits for others. Nonetheless, the idealized image is there because it is constructed upon the elements that constitute the performance of the activity³⁴: ‘leading’, ‘work’, ‘growing’, ‘crops’, ‘strength’ and ‘soil’. Those elements give rise to the analogy with the abstract image and its resulting signs of meaning that may be sources for abstract language resources such as metaphors. And the descriptive relation between the visual sign of meaning based on an empirical reality and the constitution of the symbol can be resumed in the following way:

Sign ‘leading’:

good commander (symbol/metaphor)

Sign ‘strength’ (control over a bigger animal):

the power over subjects (symbol/metaphor)

Sign ‘labour’:

the strength and resilience of man (symbol/metaphor)

Sign ‘producing’ (The crops generated by a farmer’s work together with the animal):

the leader that leads to prosperity (symbol/metaphor)

3. Conclusion

As pointed out, the literary symbols of the shepherd and the farmer tend to be a selection of some of the signs that compound the traditional image; the symbolic character is composed after the selection of signs according to the objectives of the text or with the myth to which the symbol belongs. However, that symbol is not exactly the traditional one, it is only a selected part of the original signs of meaning that makes up the abstract image.

The literary characters of shepherds or farmers are often used as a metaphor that evokes a symbol that is at the same time transversal and almost universal, but when used by literature its complete semantic value is highly dependent on context. All the images presented in this study are a constructed selection made from the multiplicity of semantic signs that issue from reality. So, they may function as complex symbols in literary speech, but they will always maintain their profound, spontaneous and unchangeable value because they are a recall on a visual reality. If those activities are practised in the same way in a visual landscape, the potential signs of meaning generated by them will be seen and identified in the same way. It is the mechanism of linguistic expression that alters and creates different complex symbolic outcomes. Despite linguistic creativity, the signs of meaning are never ambiguous or variable in their value for they correspond to unique and crystalized images.

In agricultural cultures shepherding is highly connected with farming as there is an interaction between the two activities, despite the technicalities of these activities being different, as Varro stated:

alia, inquam, ratio ac scientia coloni, alia pastoris: coloni ea quae agri cultura factum ut nascerentur e terra, contra pastoris ea quae nata ex pecore. (Var. R. 2. Pre. 4.7)

“I say, the skill and knowledge of the farmer are one thing, (and those) of the herdsman (are) another: in

³³ Cf. with the returning of Quinctius Cincinnatus to the fields, after exercising his social role and ignoring power (Col. 1.pr.13-14).

³⁴ Cf. Col. 11.1.8.

the space of the husbandman are those things which are made to spring from earth by farming, contrary to those that born from the herd”.

They do, however, belong to the same natural frame. It is their workings that make both activities distinct, but they share a landscape and both are fundamental to subsistence. Recalling the example of the *disputatio* between Dumuzi and Enkimdu, Inana is the soil (DI P ll. 22-31), therefore the point of intersection of the images constructed upon a factual and empirical reality that generates traditional and transversal signs. Those signs are shared and unified by two activities that are crucial for the existence of complex societies. And images of earth, farmer and shepherd are compounded by the same basic signs independently of the culture of their expression.

In conclusion, I would like to bring to mind the image of the Virgil's Corycian gardener (Verg.

G. 4.127-33),³⁵ a character that perfectly fits an idealized image, regardless of the chronology of a given cultural context. The receiver of such a description would always recognize this farmer as a good man (cf. UrN G ll. 17-19, Šu-Suen C ll.18-22; Cato *Agr. pr.* 2-3). However, is that a compelling literary description or is it a symbolic frame that transcends the literary *topoi* and influences our cultural thinking? In other words, is it because of Virgil's compelling description that we see this man as great, or because of our preconceptions of the attitude toward life and morality? The answer is not so much a result of a philosophical inquiry, but a matter of intuition and, in this sense, it may be a question our own cultural background has already answered for us. In sum, the signs of meaning based on agriculture are universal and can give some clues as to the thought of the silent voices from the past.

³⁵ *Corycium vidisse senem, cui pauca relict/ iugera ruris erant, nec fertilis illa iuvenis/ nec pecori opportuna seges nec comoda Baccho./ bic rarum tamen in dumis olus albaque circum/ lilia verbenasque premens vescumque papaver/ regum aequabat opes animis, seraque revertens/ nocte domum dapibus mensas onerabat inemptis.* “I saw old a Corycian that just counted on a few/ acres of rural land, not fruitful for bullocks,/ no good for the herd, nor suitable for wine./ Still, here between brambles, he had in rows/ white lilies in a ring, vervain and a few poppies./ He equalled the wealth of kings in essence, when later at night,/ having returned home, he covered his tables with un-bought feasts”.

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**The Levant in the Bronze and Iron Age:
crossroad or frontier between different cultures?**

A 'Repertoire of Otherness'? Identities in early Iron Age Philistia

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ABSTRACT

Recent study of the Philistine culture of the Iron Age Southern Levant has enabled to suggest a much more complex and multi-faceted understanding of the origins, composition and development of this fascinating culture, first appearing in the transition between the Late Bronze and Iron Ages. In this paper, I discuss the entangled identities that can be identified in Iron Age Philistia, and caution from previous, and in some cases, contemporary, simplistic definitions and understanding of the identity matrix of the Philistines and their relations with neighboring groups and cultures.

KEYWORDS

Philistines, Iron Age, Southern Levant, Identity, Entanglement

Recent studies of the Late Bronze/Iron Age transition in the eastern Mediterranean stress the complex and multi-scalar processes that occurred during this period.¹ Philistia, or the southern Coastal Plain of the Southern Levant (modern day Israel and Palestine) is a focal point in the study of this transitional period, due to the interesting cultural developments occurring in this region, and in particular, the appearance of the Philistine culture.²

While the study of the material manifestations of the Philistine culture has been dealt with extensively for more than a century, when issues of identity were discussed,³ the suggested frameworks were quite simplistic and linear – more or less that you are or you are not a Philistine! It is only quite recently that a complex, multi-faceted, subtle – and I believe more sophisticated approach to the relevant identities has been brought to the forefront. Along these lines, I have suggested that one should look at the complex “identity matrix”⁴ in early Iron Age Philistia.⁵ While “identity” is hardly an easily observable and/or definable aspect from an archaeological perspective, I believe discussing and debating identity-related issues pertaining to the Philistines – and other early Iron Age groups – is of crucial importance to understand the processes relating to the unfolding of the complex and multifaceted circumstances of the Late Bronze/Iron Age transition.

Elsewhere,⁶ I have suggested relating to the various groups in the early Iron Age Southern Levant as “frogs out of pond”, paraphrasing the famous quote of Plato (*Phaedro*, section 109b), himself quoting Socrates, describing the human settlement in the Mediterranean region: «[...]like ants and frogs around a pond, we have settled down upon the shores of this sea.»⁷

¹ CLINE 2014; FISCHER, BÜRGE (eds.) 2017.

² YASUR-LANDAU 2010; MAEIR, HITCHCOCK 2017a, 2017b.

³ DOTHAN 1982; BIERLING 1992; OREN (ed.) 2000; FAUST 2015a; MASTER, AJA 2017.

⁴ For the term, see BRUNSMAN, DELGADO, ROCKQUEMORE 2012.

⁵ MAEIR, HITCHCOCK 2017a, 2017 b.

⁶ MAEIR in press.

⁷ Translation following: *Plato in Twelve Volumes, Vol. 1* translated by Harold North Fowler. Cambridge, MA, Harvard University Press, 1966.

There, I suggested that these various groups (=frogs), who derived from various foreign origins and/or of indigenous backgrounds, and of very different socio-political and economic settings, all contributed to the matrices of identities at the time, and to the complexity of the processes that occurred during the LB/Iron Age transition. More specifically, in this particular time frame, many of these *frogs*, of diverse origins, can be seen in a defined geographic region, that of the southern Coastal Plain (or Philistia) and the Judean Foothills (or the Shephelah) in the region of current day Israel.

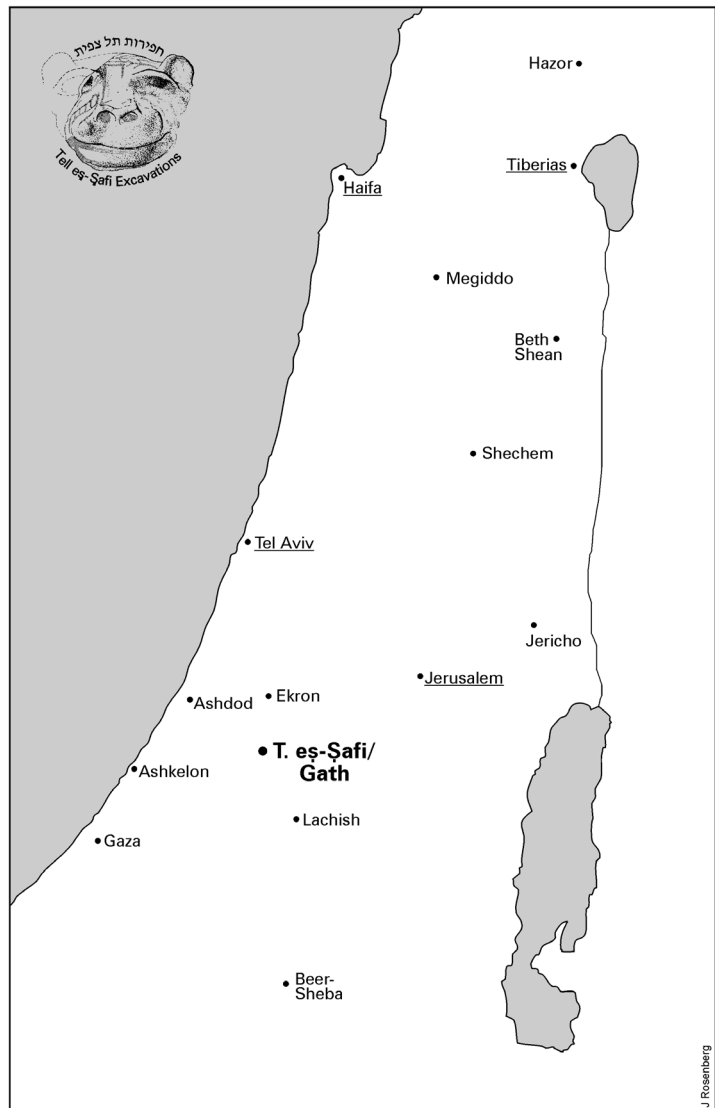
In light of this complex set of overlapping cultures and identities in this region during the Late Bronze Age/Iron Age transition, I believe a close study of the archaeological evidence, and an attempt to study this complex “identity matrix” (as noted above) in this limited region can shed important light on cardinal issues, of both specific and broader significance, in the study of the LB/Iron Age transition.

Recent research on the LB/Iron Age transition in Philistia has shown that the previous paradigms for understanding the origins and development of the Philistine culture are in need of reassessment and revision. Earlier understandings⁸ were that the Philistines (and other “Sea Peoples”) were by-and-large of Aegean origin, and were responsible for a more or less unified conquest of Philistia by invading forces during the LB/Iron Age transition. In addition, it was thought that there was a straightforward process in which the culture in Philistia during the Iron Age was first heavily influenced by Aegean culture, and later, slowly was influenced by local Levantine facts, eventually assimilating completely into a Levantine culture. And finally, much of the understanding of the history and politics of Philistia during the Iron I and Iron IIA was largely dependent on the biblical narrative – at times more or less accepting it at face value.

This paradigm has been questioned, particularly in the last decade or so. Questions have been raised regarding the assumptions on the underlying mechanisms and processes of the appearance,

⁸ DOTHAN 1982; SANDARS 1985; OREN (ed.) 2000; STERN 2013; many of the papers in KILLEBREW, LEHMANN (eds.) 2013.

FIGURE 1
Map of the Southern Levant
with the location of Tell es-Safi/Gath
and other sites



development and makeup of the “Sea Peoples” in general and the Philistines more specifically. Examples of this can be seen in the work of A. Gilboa,⁹ Yasur-Landau,¹⁰ Cline,¹¹ and Emanuel¹² as well as the work of my colleagues and myself, based on our excavations, research and interpretations at Tell es-Safi/Gath for the last two decades or so¹³ (figs. 1-3).

⁹ GILBOA 2006-2007.

¹⁰ YASUR-LANDAU 2010.

¹¹ CLINE 2014.

¹² EMANUEL 2017.

¹³ MAEIR, HITCHCOCK 2011, 2016, 2017a, 2017b; MAEIR, HITCHCOCK, HORWITZ 2013; MAEIR ET AL. 2015; MAEIR, DAVIS, HITCHCOCK 2016; MAEIR in press; HITCHCOCK, MAEIR 2013, 2014, 2016a, 2016b, 2018; HITCHCOCK

Various problems with the earlier understanding have been noted. Little evidence can be found of widespread destruction at the Canaanite sites in Philistia with the arrival or appearance of the Philistines. Similarly, there is mounting evidence that the appearance of the Philistine culture was a drawn-out process. Recently, we have claimed that the initial hints to this may have already started in the 13th cent. BCE.¹⁴ However, even if this early date is not accepted,¹⁵ the processes involved in the appearance of earliest manifestations of the Philistine culture

ET AL. 2015; HITCHCOCK, MAEIR, DAGAN 2016.

¹⁴ ASSCHER ET AL. 2015; BOARETTO ET AL. 2019.

¹⁵ FINKELSTEIN 2016, 2018.

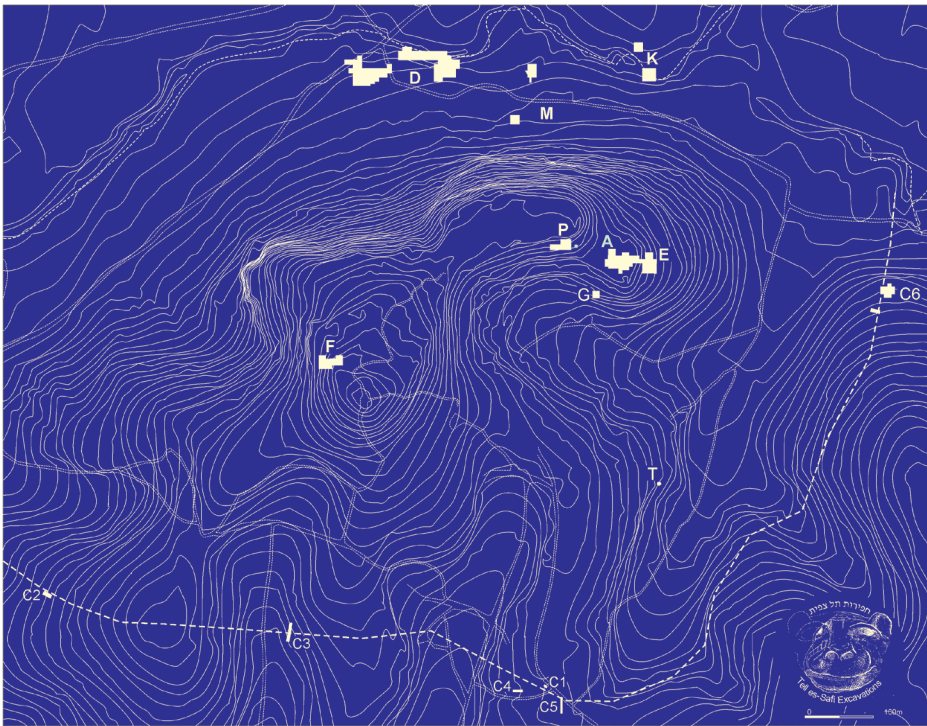


FIGURE 2
Plan of site of Tell es-Safi/Gath



FIGURE 3
Aerial view, looking west, of the upper (left) and lower (right) cities of Tell es-Safi/Gath



FIGURE 4
Examples of decorated Iron Age I Philistine pottery from Tell es-Safi/Gath

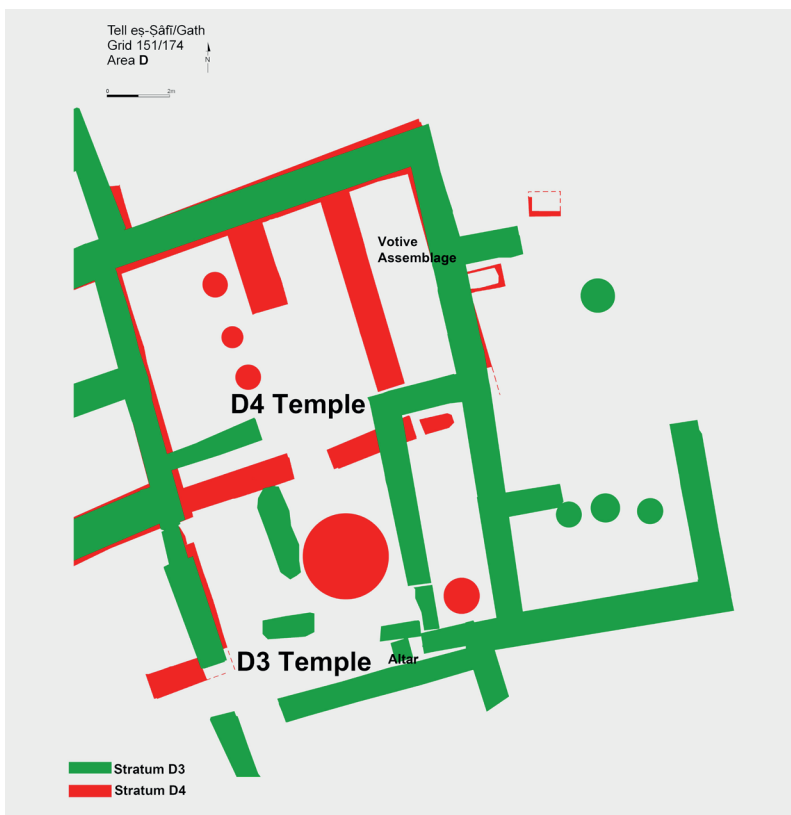


FIGURE 5
Plan of two phases of the temple in Area D West, in the lower city of Tell es-Safi/Gath Stratum D4 (late Iron I/early Iron IIA, ca. 10th/9th century BCE) and Stratum D3 (Iron IIA, late 9th century BCE)

were not a single, uniform and short-lived event, but an extended, drawn out, complex set of processes.

An additional crucial point is that in early Iron Age Philistia, one sees a mixture of various non-local influences – mainland Greece, Crete, western Anatolia, Balkans, Cyprus, and others.¹⁶ Some of these facets are new, and at times foreign, to the region. In fact, this somewhat reminds me of Francois Hartog's¹⁷ term – a “repertoire of otherness” – that we have used for the title of this study. That is, a complex set of cultural markers and identities, brought together.

At the same time, there is abundant evidence that Canaanite material facets continue in early Iron Age Philistia. This hints to the “entangled” character of early Philistine culture, as seen,¹⁸ e.g., in pottery (fig. 4), architecture, cult (fig. 5), diet, various technologies and agriculture. In other words, contrary to earlier understandings, the Philistines were not a group from a specific foreign origin who migrated to Philistia. Rather, they were comprised of mixed and varied origins, local and foreign.¹⁹

In addition to this, the multi-cultural character of the Philistines, and their appearance during the turbulent LB/Iron Age transition, suggests to us that some of the Philistines might have been comprised of pirate-like elements.²⁰

Very often, and even until today, the Philistines were viewed as a colonizing culture.²¹ However, what we know about the early Philistine culture – and their relationship with their surroundings from the archaeological remains – as opposed to their image in the biblical text – hardly permits seeing them as a colonizing culture. To suggest a colonial relationship, there must be clear patterns of domination – by one party (the Philistines in this case) on another (the various local Levantine

groups). There is no clear archaeological evidence for this.²²

Changes in the “Philistine paradigm” are seen also after the very early Iron Age. Previously,²³ the understanding of the processes of the transformation of the Philistine culture were quite linear. It was thought that while during the Iron I there were clear indications of foreign influences, these quickly disappeared in the early Iron Age IIA, and from that time onward, the Philistines lost their cultural identity. This was already challenged by Stone,²⁴ and further developed in recent years.²⁵ Thus, there is no major break in the 10th cent. BCE, when supposedly the Philistines shed most of their foreign originating facets, supposedly due to the influence and domination of the early Judahite Kingdom. This was very much the view in earlier literature, and in some cases, until today,²⁶ but this is untenable. In particular, the finds from the excavations at Tell es-Safi/Gath have demonstrated this. In particular, the dominant size and unhampered continuity in settlement at the site up until the late 9th cent. BCE, makes it difficult to suggest that the Judahite Kingdom dominated Philistine Gath, or for that matter other parts of Philistia, prior to ca. 830 BCE, following the destruction of Gath by Hazael.²⁷

It is apparent that the character and directionality of the interactions between Philistia and neighboring cultures is far from simple. Earlier research stressed the influences seen in the Philistine culture from the neighboring Levantine communities. More recently, it has been demonstrated that there are significant influences from Philistia on adjacent cultures: in pottery, cult, food preparation, and other facets.²⁸

In much of previous research²⁹ the prevailing view of Philistine language and writing was that: a) the early Philistines spoke a language similar to My-

¹⁶ MAEIR, HITCHCOCK 2017b; MAEIR ET AL. 2019.

¹⁷ HARTOG 2001, pp. 21-36.

¹⁸ HITCHCOCK, MAEIR 2014, 2016a, 2018; MAEIR, HITCHCOCK 2017a, 2017b; MAEIR 2019; MAEIR ET AL. 2019.

¹⁹ YASUR-LANDAU 2010; HITCHCOCK, MAEIR 2013, 2018; MAEIR, HITCHCOCK 2017a, 2017b; MAEIR ET AL. 2019.

²⁰ HITCHCOCK, MAEIR 2014, 2016b; EMANUEL 2017 *passim*.

²¹ Most recently FAUST 2015a, 2015b.

²² MAEIR, HITCHCOCK 2016, pp. 213-214.

²³ DOTHAN 1982; GITIN 1998.

²⁴ STONE 1995.

²⁵ MAEIR 2013.

²⁶ FAUST 2015a, 2015b.

²⁷ MAEIR 2017.

²⁸ COHEN-WEINBERGER, SZANTON, UZIEL 2017; MAEIR, HITCHCOCK 2017a, 2017b.

²⁹ SINGER 1994; CROSS, STAGER 2006; FAUST, LEV-TOV 2011, 2014.

cenaeon Greek; and b) they used a writing system deriving the Bronze Age Aegean.

The understanding of the Philistine's language was based on a limited number of words and names in the Bible and a few other texts, seemingly implying connections with non-Semitic, Indo-European languages, such as Mycenaean Greek. As to the supposed Philistine writing system(s), this understanding was founded on a very small repertoire of undeciphered inscriptions, seemingly equivalent to Aegean scripts.

After close to 150 years of intensive archaeological research in Philistia, it is apparent these views are not based on much.³⁰ The various words seem to relate to various languages (not only Mycenaean) – part of a multi-lingual situation. Due to the paucity of inscriptions, it is most likely that as in the Aegean, with the collapse of the Aegean palace system, the need for writing disappeared, so, the peoples amongst the Philistines, who may have originated from the Aegean region, and might have been familiar with the Aegean scripts, had no use for these writing systems in their new environment. Quite simply, these scripts were not needed in the socio-political contexts of early Iron Age Philistia.

The manner in which the Bible,³¹ and the Egyptian reliefs,³² portray the early Iron Age Philistines – is clearly as a militarily powerful and very martial culture. However, after 150 years of research, there is negligible evidence of this.³³ Excavations have revealed only a handful of Philistine weapons (including in the recently excavated cemeteries at Ashkelon and Tel Erani³⁴) and there is hardly evidence of trauma in skeletons. I would hardly suggest that the Philistines were pacifists. Nevertheless, this would indicate the need to reassess our understanding of the character of the Philistines, which was previously very much based on ancient ideological narratives and modern understanding.

Thus, it is quite clear that many basic questions relating to the Philistines are in need of fresh ap-

praisal. This includes: what do we know about who the Philistine were? Where did they come from? Of whom were they comprised? What was their socio-economic structure? How their culture developed and transformed? And, what was the nature of their relationships with neighboring cultures?

The very different understanding of the Philistines and their culture reflects as well on how we understand their identity (or identities) and those of communities in the surrounding regions on the other. It is clear that there is the need for a multifaceted interpretation of the definition of identity groups during the early Iron Age. Due to the limited contemporaneous textual materials at our disposal, and our almost complete dependence on the very partial archaeological evidence, I think a bit more caution is called for when attempting to define identities in Philistia and the Southern Levant during the Iron Age.³⁵

This is opposed to the often suggested clear-cut classifications of cultural markers and ethnic demarcation,³⁶ and the confidence in archaeological definition of supposed identity-related-practices, such as circumcision, menstruation, and egalitarianism.³⁷

Thus, archaeological research should continue its efforts to understand the complex socio-economic in early Iron Age Philistia and surrounding regions, utilizing the archaeological record, inter- and multi-disciplinary analyses, and sophisticated interpretative frameworks. Similarly, a more subtle and multi-faceted approach to identities should be employed, one in which the very complex, shifting and at times unclear borders and definitions of various types of identities, within and between the different groups are taken into account. However, the limitations of the archaeological data and its interpretation should be kept in mind. The identity matrices and cultural definitions in this region during this period are complex and multifaceted – and our ability to understand them may remain limited, despite our best, ongoing, efforts.

³⁰ DAVIS, MAEIR, HITCHCOCK 2015; MAEIR, DAVIS, HITCHCOCK 2016; DAVIS 2018.

³¹ MACHINIST 2000.

³² DOTHAN 1982.

³³ MAEIR 2018.

³⁴ MASTER, AJA 2017; MILEVSKI ET AL. in press.

³⁵ MAEIR, HITCHCOCK 2016.

³⁶ BUNIMOVITZ, LEDERMAN 2011; FAUST 2015a, 2015b, 2018; NA'AMAN 2017.

³⁷ FAUST 2015a, 2015b; FAUST, KATZ 2017.

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Cult and ritual in Early Bronze Age I Southern Levant: fragmented or connected landscape?

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ABSTRACT

The existence of marked regionalism in the material culture of the southern Levant in the Early Bronze Age I is a long-established fact; however, the nature of the relationships between the different sub-regions is still a matter of debate. The paper analyses the EBI regionalism in the southern Levant from the perspective of cult and ritual in order to investigate the nature of the connections – or the lack thereof – between the various sub-regions also in comparison to the main Late Chalcolithic sanctuaries to have an overall look at the fourth millennium cultic habits. Architectural aspects of the main southern Levantine sanctuaries from this period will be taken into account, as well as the material culture and ritual practices. New data from excavations at Jebel al-Mutawwaq, Jordan, will be included in the analysis. Through the examination of the archaeological data, the paper seeks to recognize differences due to isolation of the different sub-regions from one another and/or similarities which may suggest that there were contacts and connections between the different areas of the Southern Levant in the Early Bronze Age I.

KEYWORDS

Jebel al-Mutawwaq, Early Bronze Age I, Cult, Ritual, Southern Levant

1. Introduction

During the fourth millennium BC in the Southern Levant the Late Chalcolithic occurred (4000-3800 BC)¹ and, after its end, the Early Bronze Age began.² The Early Bronze Age I period (ca. 3700-3000 BC)³ is characterized by new archaeological features compared to the previous period and those characteristics are the expression of new cultural and economic impulses which spread in this period and which determined the development of sedentarism and of the urbanization process during the Early Bronze Age II.⁴ For this reason, this period is considered a proto-urban period and understanding its main aspects could allow to retrace the evolution of the Early Bronze Age communities. Early Bronze Age I (henceforth EBI) is divided into two archaeological phases, EBIA and EBIB. While the EBIB phase shows several evidences and archaeological features which preempt the EBII urbanization phase, it is still quite difficult to define the EBIA aspects throughout the Southern Levant because of the high degree of regionalism in this period in the region.⁵ Despite that, interactions between different microregions occurred and some similarities between the communities can be observed.

The present analysis, preliminary in nature, examines the cultic aspects of the fourth millennium BC communities to delineate differences and similarities between some of the main Late Chalcolithic and EBI sacred areas and between the EBI ones, to observe the degree of regionalism in this period, for a deeper comprehension of the nature of the re-

ligion and the role of the cult in the development of the proto-urban Early Bronze Age I societies. In particular, it aims to understand if the Early Bronze Age I ritual practices denote the regionalism of the period or if it is possible to identify some common aspects between the eastern and the western regions, at least in the cultic aspects.

In this regard, Jebel al-Mutawwaq, located in the Middle Valley of the Zarqa River, in Jordan, is one of the most important sites, because it is the only excavation of an Early Bronze Age I sanctuary in Transjordan; furthermore, during the last five years, the Italian-Spanish expedition at the site, directed by A. Polcaro of Perugia University and J. Muniz of Pontificia Facultad San Esteban of Salamanca, decided to study all the materials gathered from the sacred area of the settlement, which has been excavated from 2003 to 2005, to better understand the cultic activities in the site.

2. Late Chalcolithic period

In the Southern Levant region, several sanctuaries have been found, belonging to the Late Chalcolithic Period, and it is interesting to notice how many similarities characterized the religious aspects during the two periods in analysis. The best examples of Late Chalcolithic cultic habits are the sacred areas of En Gedi and Teleilat Ghassul.⁶

In the site of En Gedi the sacred area is placed on an isolated hill and is not linked to a settlement, as in the site of Teleilat Ghassul. Here the Area E sanctuary is placed on an isolated zone, but inside the settlement area. Despite that, the planimetries of the two sanctuaries are similar.

Both of these sanctuaries are characterized by a temenos enclosing a courtyard with several buildings (fig. 1). There was a main building, probably the main *sancta sanctorum*, and a smaller building, perhaps in the case of Ghassul used as a storage room or as a production place; furthermore, at the center of the courtyard there was in both cases a circular installation for ritual practices. In Tuleilat al-Ghassul, there

¹ For discussions about the Chalcolithic chronology see: BRAUN ET AL. 2013, BOURKE ET AL. 2001; ROWAN, GOLDEN 2009; ROWAN, ILAN 2012.

² A strong climate change occurred between Late Chalcolithic and Early Bronze Age I and the environmental change imposed societal changes different from region to region. Varied subsistence systems determined different settlement patterns and several patterns of mobility through the microregions (HOURANI 2010; CLARKE ET AL. 2015).

³ For a discussion about the Early Bronze Age chronology see; REGEV ET AL. 2012; REGEV ET AL. 2014.

⁴ For a detailed analysis about the reorganization of Southern Levantine settlements during the Early Bronze Age see: HARRISON, SAVAGE 2003; CHESSON 2003; PHILIP 2008.

⁵ For a definition of regionalism see: GREENBERG 2002, pp. 5-7.

⁶ For En-Gedi excavations see: STERN 2007. For the Area E sanctuary of Teleilat Ghassul see: SEATON 2008.

is a large open semicircular altar with a sort of processional road leading to it; differently, in En Gedi, there is a circular installation interpreted also as ceremonial water basin. The absence of a settlement linked to the En Gedi shrine indicates that the sanctuary was used by all the communities of the area as a regional sanctuary; instead, the presence of a settlement in Teleilat

Ghassul indicates that the sanctuary was used by the community who was living there. Despite this fact, the two sanctuaries present also strong similarities in the material culture, indicating a sort of religious *koinè* in this period, even if the Late Chalcolithic sedentary communities of Ghassul could have had proper distinctive characters.

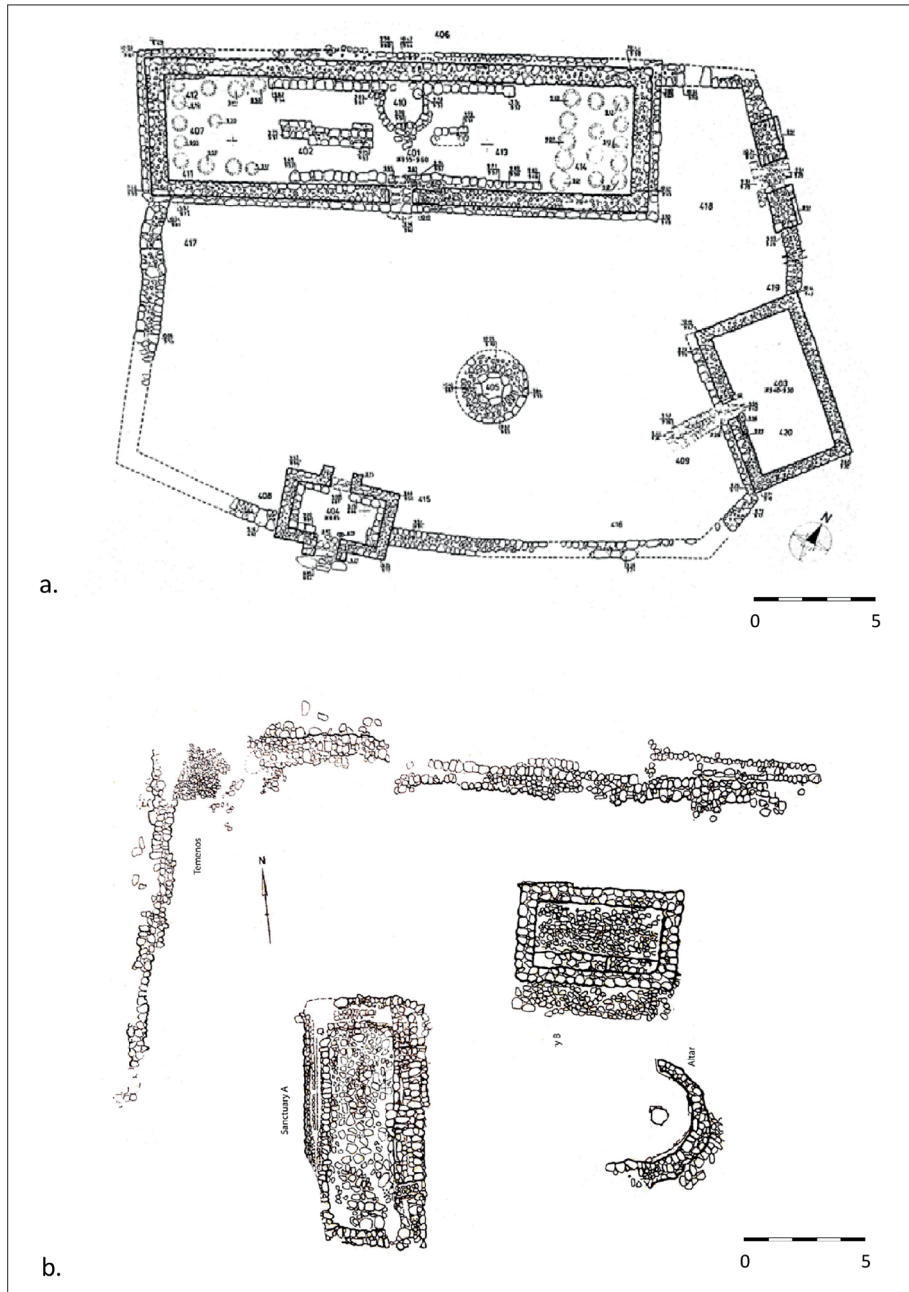


FIGURE 1
 a. Plan of the En-Gedi shrine (after STERN 2007, p. 31);
 b. Plan of the Area E Sanctuary at Teleilat al Ghassul (after SEATON 2008, Pl. 9)

3. Early Bronze Age I period

At the beginning of the Early Bronze Age, the regions of Southern Levant show different cultural features and social organizations; it is possible to recognize dissimilarities also in the location and function of sacred areas.

For example, the site of Hartuv does not show evidences of a proper settlement, but a sacred area on the top of the hill was identified, which could have been some kind of regional sanctuary as the Late Chalcolithic site of En Gedi. Hartuv, which is in the Palestine region of Shephelah, rises near the Sorek river.⁷

The settlement is a mono-phase site of the Early Bronze Age I with three sub-phases. The second sub-phase (Stratum II) revealed a public complex in the Area A (fig. 3: a).⁸ The complex is characterized by a central courtyard (L114) in the northern portion of the area, and by two large perpendicular rooms (L.234 and L152) and two narrow elongated rooms (L.163 and L.173). Inside the sanctuary L.152 there is a row of standing stones/massebot on the inner facade of the southern wall W.150. The standing stones could have had a structural function even if they are just on one of the walls. More probably, some stones used to build the walls of the complex could have been originally part of a row of standing stones; in fact, two broken pillar bases in the western portion of the room seem to be broken standing stones. Thus, probably, this could have been originally a cultic open area with a row of standing stones (Stratum III). An open sacred area was replaced by a built cultic complex.⁹ The plan of the temple is similar to Late Chalcolithic sacred buildings and to temples of the following period, for example Ai and Yarmouth.¹⁰ Examples of ritual standing stones are known already from the Late

Chalcolithic Gilat.¹¹ No materials on the floors of the complex were found; probably it was peacefully abandoned. In fact, in the same period, at the end of the Early Bronze Age I, many other sites in the Shephelah region were abandoned. During the Early Bronze Age II new fortified settlements, as Tell Yarmouth, were founded.

Most of the pottery sherds found in Hartuv are identified with local South Levantine pottery even if some Egyptian vessels (probably imported from Southern Canaan) are recorded.

As said before, also in the Early Bronze Age I period it is possible to recognize not only isolated sanctuaries, but also sacred areas inside the settlements, as showed by the sites of Megiddo, Jericho and Jebel al-Mutawwaq.

The site of Megiddo, around 20 km south of Haifa, has been investigated by several archaeological expeditions.¹² Concerning the fourth millennium sacred area on the tell, it was identified on the eastern terrace of the tell, in Area BB, facing Ain el-Kubbi spring (fig. 2). The first phase (Stratum XIX/J-2) was constituted by a cultic open area (locus 4008), the presence of several fragments of cornets dated this area to a Late Chalcolithic/EB IA phase.¹³ During the phase J-2 (corresponding to Stratum XIX), dated to EB IB, in the same area, a temenos and a broad-room structure were built.¹⁴ The broad-room building (15,5 × 5,5 m) was badly preserved but two rows of pillar bases on the main axis were identified. The ritual function of the structure is suggested by the presence of some graffiti on the stones of the forecourt floor.¹⁵ During the phase J-3 (corresponding to Stratum XIX), buildings 4050, 4047 and the installation 4034 were built inside the temenos. Building 4050, built on the top of the previous J-2 phase building, was a broad-room building (13,2 × 4,2 m) and the entrance was locat-

⁷ For the report of Hartuv excavations see: MAZAR, DE MIROSCHEDJI 1996.

⁸ The absolute chronology for the main phase (Stratum II), after radiocarbon analysis, is 3506-3409 BC (see MAZAR, DE MIROSCHEDJI 1996, p. 27).

⁹ MAZAR, DE MIROSCHEDJI 1996, p. 11.

¹⁰ For the plan of the building at Ai, see CALLAWAY 1972, p. 21; for the plan of the building at Yarmouth see DE MIROSCHEDJI 1988, p. 39.

¹¹ LEVY 2006, p. 99, 110, Pl. 5.12.

¹² The main archaeological expeditions at Megiddo were conducted by the *Deutsche Orient-Gesellschaft* (1903-1905), the Oriental Institute of Chicago and the Tel Aviv University.

¹³ KEMPINSKI 1989, p. 170; FINKELSTEIN, USSISHKIN 2000, pp. 38-42.

¹⁴ FINKELSTEIN, USSISHKIN 2000, pp.53-55.

¹⁵ LOUD 1948; FINKELSTEIN, USSISHKIN, CLINE (eds.) 2013.

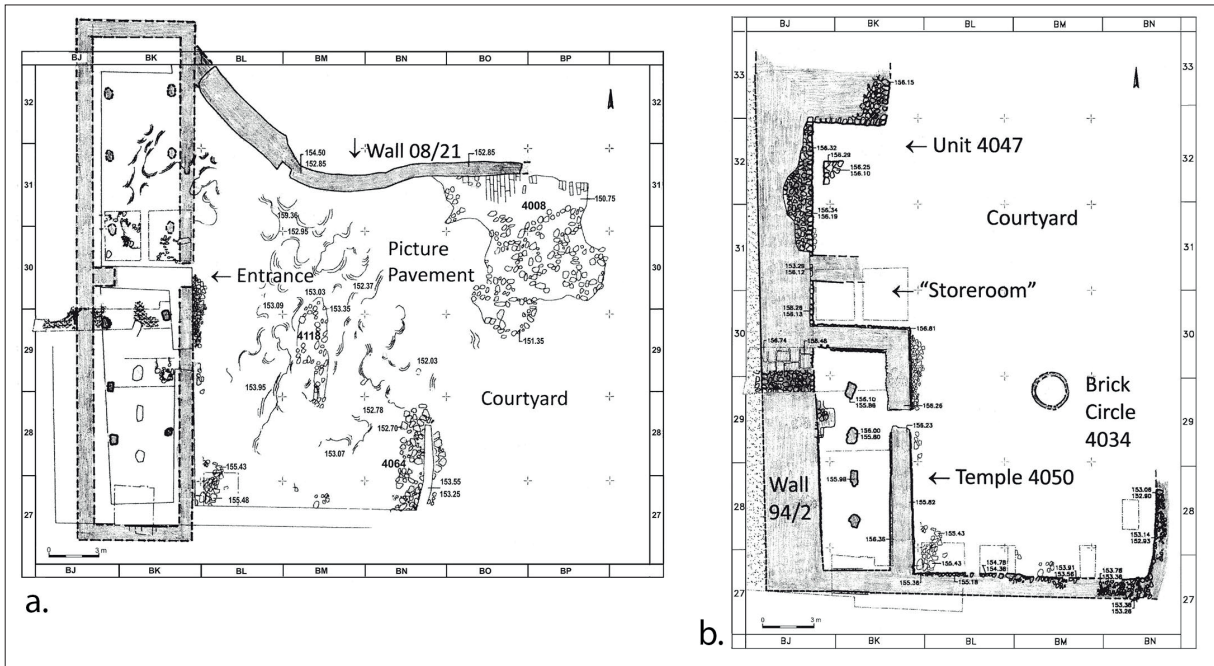


FIGURE 2
 a. Plan of the phase J-2 in the Area BB, Megiddo (USSISHKIN 2015, fig. 8); courtesy of the Megiddo Expedition
 b. Plan of the phase J-3 in the Area BB, Megiddo (USSISHKIN 2015, fig. 10); courtesy of the Megiddo Expedition

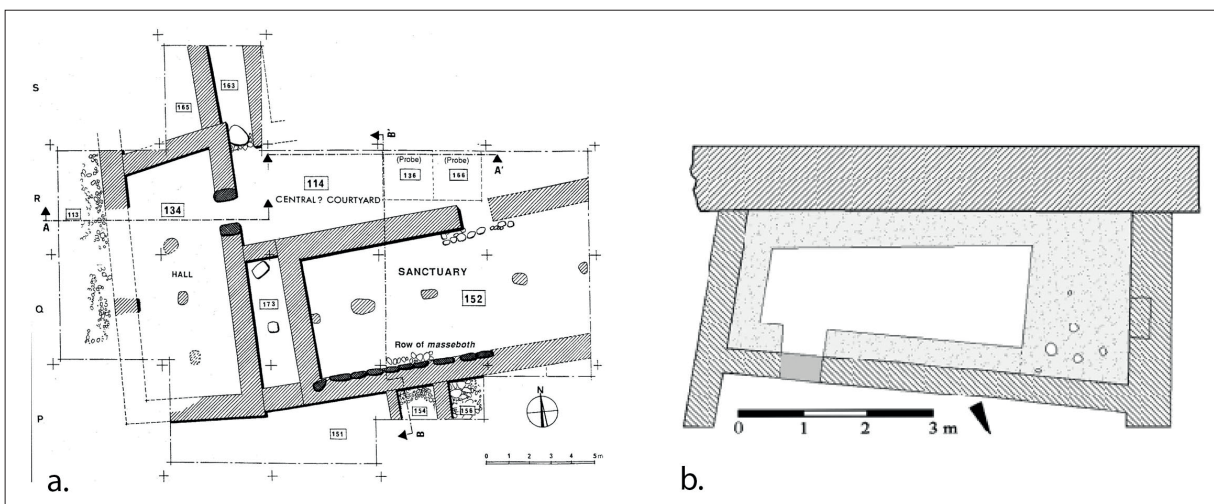


FIGURE 3
 a. Plan of the sacred area at Hartuv (after MAZAR, DE MIROSCHEJJI 1996, fig. 6);
 b. Plan of the shrine 420 at Jericho (after NIGRO 2005, fig. 3.41)

ed on the long side. Inside the building, four pillar bases on the main axis were located and, in front of the entrance, a stone quadrangular platform was located. In front of it a barely hemispherical clay installation with some hollows on the surface, maybe for some cultic activities. The building 4047 was a smaller building where probably some productive activities were performed, as suggested by the preservation ware found in the structure. In the forecourt of the sacred area, a circular platform with a hollow on its surface was placed, probably for some ritual activities linked to the temple.

The plan of the EB IB sacred area of Megiddo is similar to the plan of En Gedi shrine suggesting that EB IB Megiddo was influenced by the Late Chalcolithic model.

The site of Jericho is located inside an oasis along the southern Jordan valley, about 10 km north of the Dead Sea.

The site has been investigated by different expeditions, led by Garstang during the '30s and Kenyon during the '50s. The current one is directed by Lorenzo Nigro from Sapienza University of Rome.¹⁶

In 1936 Garstang identified the Early Bronze Age I temple, built on the northern terrace of the site, in an area separated from the domestic quarter by a demarcation wall. The temple was called "Babylonian shrine" by Garstang, because its entrance was on one of the longer sides in a non-central position (fig. 3: b). The temple was dated to final Early Bronze Age Ia, corresponding to the Sultan IIIa phase and was used also during the Early Bronze Age Ib (Sultan IIIb phase). The temple 420 was a roughly rectangular room with a latitudinal orientation.¹⁷ The building had thick walls and the entrance was on the northern side. On the inside, the temple had plastered platforms along each side and a 1,6 m wide platform linked to the NW short wall, right of the entrance, interpreted as a podium. On the platform there were some cupmarks, maybe for

offers. Inner walls of the buildings and platforms were plastered. Probably the temple had an external courtyard because its walls seem to continue further the building. The walls had stone foundations and a mudbricks wall. During the Early Bronze Age Ib the sacred area was enlarged through East and a second room was added (447 with platform 422) with an uncertain function.¹⁸ The area in front of the temple was not excavated and it is not possible to be sure that there were some open area installations. Inside the temple area some small pillars and standing stones were found. It is supposed that the temple 420 was a sacred place inside the settlement that may be interpreted as a domestic shrine similar to the shrine 671 from Tell el Farah North dated to the Early Bronze II.¹⁹ The pottery repertoire from the temple 420 is mainly made of simple ware, like cups, juglets and jars. It is noticeable the presence of line painted and band slip decorations which are typical decorations of the Early Bronze Age IB phase. It is important to notice the presence of some applied decoration with serpent shape.²⁰

The settlement of Jebel al-Mutawwag, in the Zarqa region of Jordan, around 30 km north of Amman and 7 km South-East of Jerash, was partially excavated by a Spanish archaeological expedition from the University of Oviedo under the direction of the professor Juan Tresguerres-Velasco from the '90s until 2010. After that, since 2012, the site has been investigated by an Italian-Spanish joint expedition.

The settlement rises on a mountain located at the confluence between the Zarqa River to the south and a seasonal river on the west side, the wadi Qmeid. This geographical feature, with the proximity to two water springs on the base of the mountain favored the occupation of the settlement around the second half of the fourth millennium BC, corresponding to the Early Bronze Age I.²¹

The site is known for the presence of 18 ha village, larger than other sites in this period (fig. 4). Furthermore, the settlement was enclosed by a demarcation wall, which is uncommon during the

¹⁶ John Garstang conducted the excavations for the University of Liverpool between 1930 and 1936 (GARSTANG 1936), Kathleen Kenyon directed the University College of London expeditions at the site between 1952 and 1958 (KENYON 1981). During 1997 Sapienza University of Rome with Lorenzo Nigro started new excavations at the site (NIGRO 2005, 2010).

¹⁷ NIGRO 2005, p. 44.

¹⁸ SALA 2008, p. 77.

¹⁹ NIGRO 2005, p. 47.

²⁰ NIGRO 2005, p. 79.

²¹ For a general description of the site see: MUÑIZ, POLCARO, ÁLVAREZ 2013; POLCARO, MUNIZ 2014.

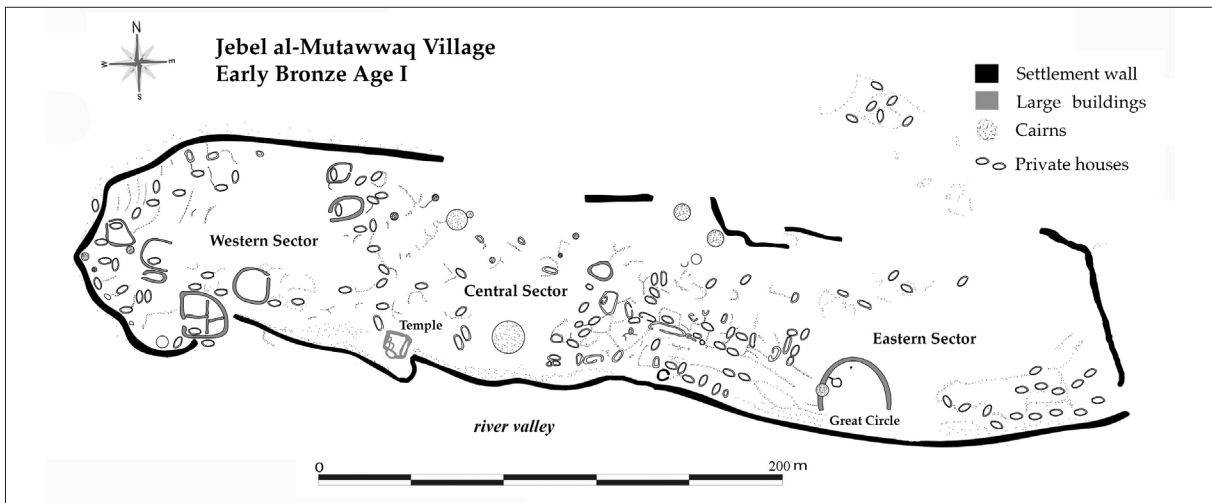


FIGURE 4

Plan of the Jebel al-Mutawwaq village (after POLCARO, MUÑIZ, MOGLIAZZA 2014, fig. 2)

Early Bronze Age IA,²² and had a wide megalithic necropolis out of the village enclosure on the rest of the hill.²³ Inside the village, a sacred area has been identified, named Temple of the Serpents, and investigated between 2003 and 2005.²⁴

The sanctuary is located in one of the most visible and high points of the southern slope of Jebel al-Mutawwaq (fig. 5).

It is composed of a main oval building (Building 76), with north-south orientation, five small independent rooms with an entrance corridor on

²² The wall which encircled the village of Jebel al-Mutawwaq was just a demarcation wall, not a defensive wall, and defined the area of the village from the necropolis. In 2013, a small portion of the wall was investigated and the material culture dated the wall to EB IA (see MUÑIZ, POLCARO, ÁLVAREZ 2017a). Some other examples of demarcation and defensive walls were attested during EB I but they have been mainly dated to EB IB (see PAZ 2002).

²³ The settlement had two main occupational phases, both pertaining to EB I. The first phase is dated to EB IA and the second phase is dated to EB IB. The EB IB phase has been detected in the Area C, precisely in dolmen 534 and 535 (see POLCARO, MUNIZ 2018). The chronological phases have been identified mainly through the pottery repertoire (see CASADEI 2018). C14 analysis were performed on olive seeds coming from the Temple of the Serpents and the results are 5290–5040 BP = 3340–3090 BCE (Beta Analytic 194526) and 5270–5170 BP = 3320–3220 BCE (Beta Analytic 194527), see FERNANDEZ-TRESGUERRES 2005, 2008.

²⁴ FERNANDEZ-TRESGUERRES 2005, 2008.

the west (Rooms 1-5) and another rectangular structure to the north, labeled Building 75. All the structures are encircled by a temenos, delimiting an open courtyard. Differently from the Chalcolithic sanctuaries, as En-Gedi and Teleilat Ghassul, in Jebel al-Mutawwaq the architectural feature in the courtyard, that indicates the use of the open area of the sanctuary as a ritual place, is not an altar, but a standing stone or menhir, located in the northern side. Building 76 has been built following the natural slope of the mountain, using the natural bedrock as floor. The entrance to the building is placed on one of the long sides. The northern part of the building was probably roofed, as seems to be indicated by a deep hole in the bedrock perhaps used to sustain a wooden pillar. In this covered area a stone slab was present, used as an altar, near which a pit was identified, probably linked to some ritual activities. Inside the pit a broken mace-head and some fragments of grounding stones were found.²⁵ The southern part of Building 76 was probably un-roofed, looking to the lower Wadi az-Zarqa Valley, wide visible from this point of the structure. It is not clear what kind of rituals were performed inside Building 76, but

²⁵ FERNANDEZ-TRESGUERRES 2005, p. 18. Other two broken mace-heads were found in the courtyard of the sacred area.

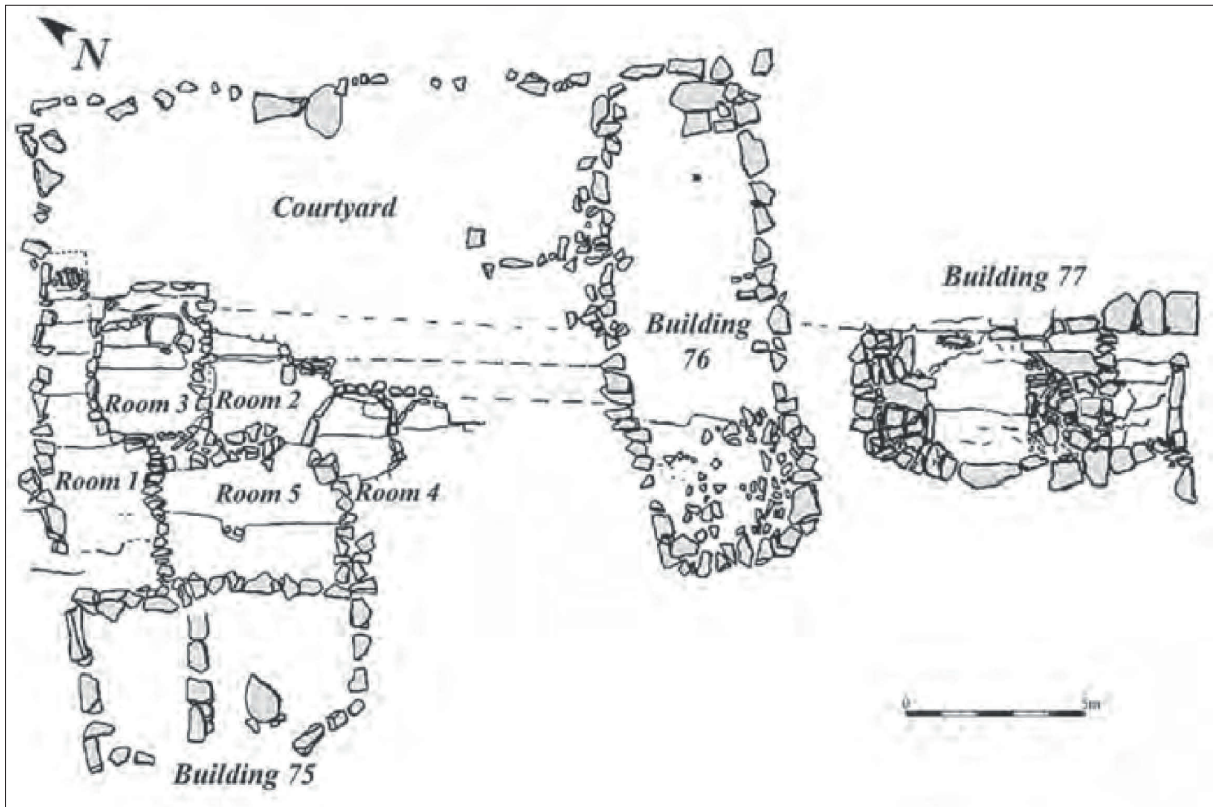


FIGURE 5
Plan of the Temple of the Serpents, Jebel al-Mutawwaq (after FERNANDEZ-TRESGUERRES 2008, fig. 1)

due to its monumental architecture it is clearly the main “sancta sanctorum” of the sanctuary.

The plan of the sacred area buildings is similar to the domestic buildings. The construction technique seems the same as in the rest of the settlement, using large stones without mud-brick or pebble inside the walls, but the delimitation slabs of Building 76 are much more monumental than the private buildings.

The material culture of the Temple of the Serpents is not totally known yet because the Italian-Spanish team is still studying the materials from the past excavations. Despite that, it is possible to notice that some rooms of the multicellular complex inside the temenos and House 75 show a prominent presence of necked and holemouth storage jars, and it is an important datum because in the

same rooms there were many grinding stones, tabulars and fan scrapers²⁶ (fig. 6).

These data suggest that some production activities were performed in the sacred area and it is possible to delineate a sort of differentiation in the functional designation of the different sectors of the area. In Teleilat al Ghassul, a production area near the Area E sanctuary was identified, probably linked to that. This kind of activities is typical of a sedentary society, in which the sacred area is also used for other community activities, such as food production.²⁷

Considering the cultic aspect, it is important to notice that many applied serpent figurines dec-

²⁶ For a preliminary analysis of the distribution of pottery sherds in the temple see: CASADEI 2018, pp. 289-290.

²⁷ SEATON 2008, p. 127.

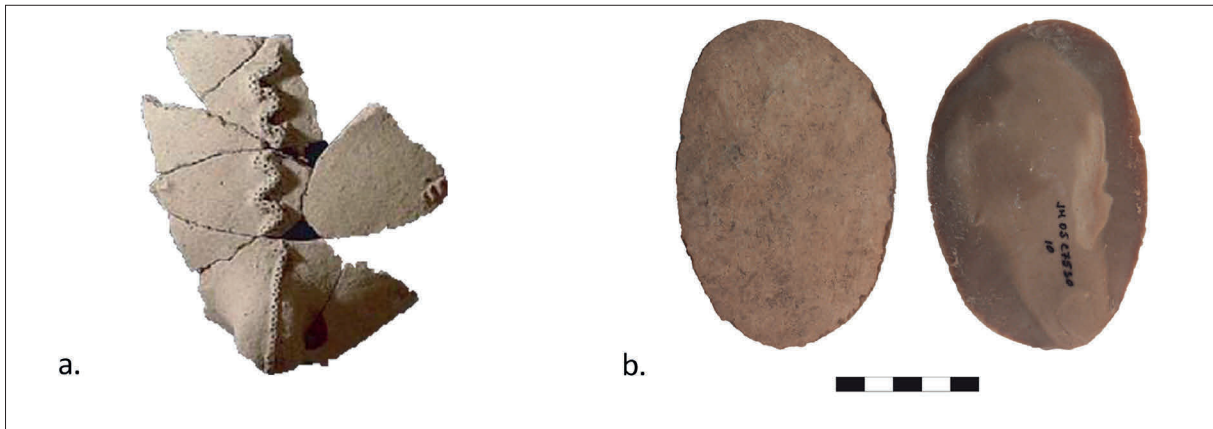


FIGURE 6

a. an example of snake decorations from the Temple of the serpents, Jebel al-Mutawwaq (after FERNANDEZ-TRESGUERRES 2008, fig. 13);

b. An example of fan scrapers found in House 75 (Spanish-Italian archaeological expedition at Jebel al-Mutawwaq)

oration were found in the temple, especially on the crushed storage jars discovered inside the main building, Building 76.²⁸ The serpent has always been a chthonic animal and symbolizes rebirth and cyclicity and it has an important role in a sedentary society which needs to propitiate the cycle of the nature to favor the agricultural production.²⁹

4 Conclusions

In conclusion, it is possible to notice some discontinuities and some continuities between the cultic contexts of Late Chalcolithic and Early Bronze Age I; furthermore, the similarities and dissimilarities between EB I contexts may have been the result of the different Chalcolithic traditions from which they emerged and developed the traditions.

Considering the architectural features, it is interesting to notice that Jebel al-Mutawwaq is the only sanctuary among the mentioned sites which has a curvilinear plan. Even though the curvilinear plan is one of the characteristic features of the Early Bronze

Age I buildings, the “Babylonian shrine” in Jericho and the Hartuv complex have a broad-room plan, as the Late Chalcolithic sanctuaries had. Furthermore, the Jericho shrine has the inner platform inside the main building, as the temple of En Gedi, but the spatial organization of the sacred area of the Temple of the Serpents at Jebel al-Mutawwaq is more similar to En Gedi and Ghassul sanctuaries than Hartuv and Jericho. In fact, there is an open courtyard enclosed by a temenos which contains the main building, i.e. the temple, and other functional buildings for ritual activities. A dissimilarity between the sanctuaries is the position of the sanctuary: En Gedi was on an isolated tell, as the sanctuary of Hartuv, during the Early Bronze Age I; on the contrary, the main sacred area of Ghassul was within the settlement and, in addition to this sanctuary, there was another sacred area inside the domestic quarter. Thus, there was a ritual activity linked to a sedentary community. Probably the sites of Jericho and of Jebel al-Mutawwaq had that kind of cultic activity linked to the settlement.

The Late Chalcolithic sacred areas, as En Gedi and Ghassul, were the model for EB I temples but the socio-economic aspects and the EB I regionalism determined the different development of the same traditions in different areas.

²⁸ FERNANDEZ-TRESGUERRES 2005, p. 19.

²⁹ POLCARO 2019.

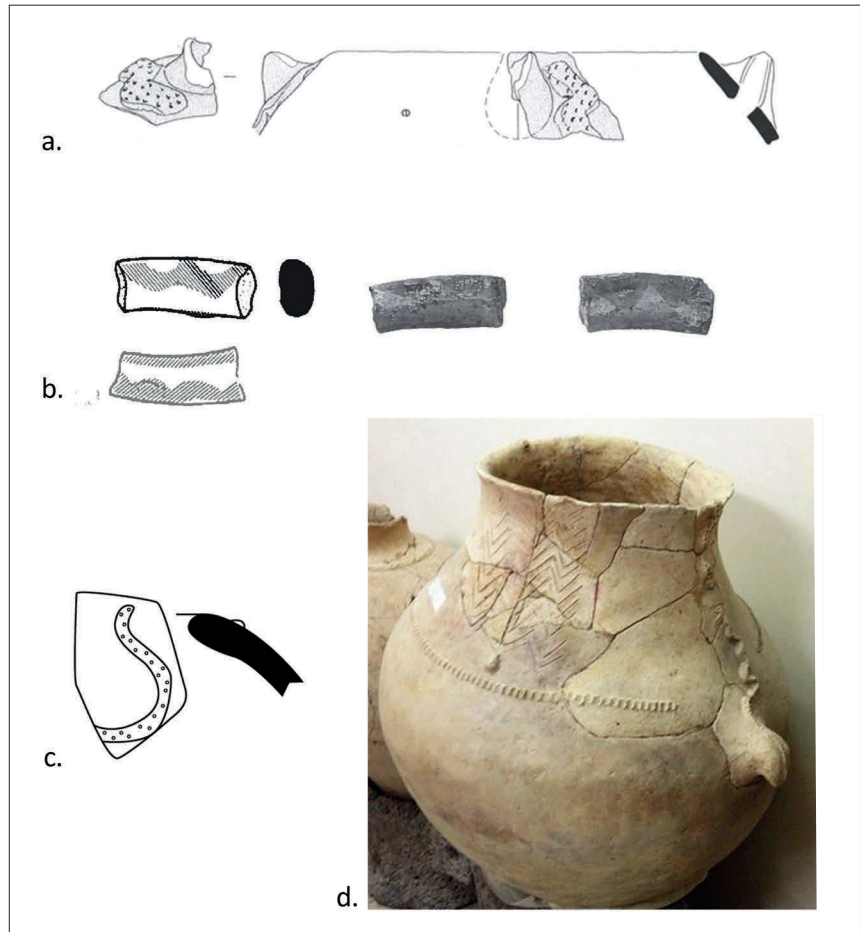
FIGURE 7
Some examples of snake
decorations

a. Teleilat Ghassul (after SEATON 2008, Pl. 83A);

b. En-Gedi (after STERN 2007, fig. 2.10.23);

c. Jericho (after NIGRO 2005, tav. 34.12);

d. Jebel al-Mutawwaq
(after POLCARO, MUÑIZ,
MOGLIAZZA 2014, fig. 7)



About the ritual traditions and religious behavior, it is interesting to notice the presence of the serpent feature in different contexts (fig. 7). The Late Chalcolithic sanctuaries have pottery decorations with serpent shape applications on the surfaces of the jars. At En Gedi, the snakes have a band painted body, while at Ghassul snakes have a pointed incisions decoration. At Jericho there are some examples of the serpent decoration on pottery sherds similar to the Ghassulian one. At Hartuv there are no examples of serpent decorations. At Jebel al-Mutawwaq, the snakes with pointed incised body are typical of the Temple of the Serpents, and they are generally placed on the jars with the mouth on the rim of the vessels as if they were to drink from the jar.

Considering just the plan of the sacred areas mentioned in this paper, Jebel al-Mutawwaq seems

to be a “compromise” between the Late Chalcolithic and the EB I traditions. In fact, the spatial distribution of the buildings in the Temple of the Serpents is similar to the plan of En Gedi shrine and Teleilat Ghassul sanctuary, but the buildings have a double-apsed plan according to EB I tradition.

Taking into account the chronological phases in Jericho, it can be noticed that the Shrine 420 was built after the domestic area³⁰ and probably the shrine can be dated to a late phase of EB I when a tendency to build rectangular buildings developed.³¹

At Hartuv, the main phase of the cultic complex

³⁰ The domestic area was characterized by curvilinear and rounded buildings (see NIGRO 2005, pp. 23-34).

³¹ At the beginning of Early Bronze Age I, the appearance of double-apsed and rounded domestic buildings is attested in the Southern Levant. During EB IB a tendency to build more regular structures can be noticed, and then during EB II rectangular domestic units are usually built (see CASELLI in prep).



FIGURE 8
A view from west of the Early Bronze Age II-III temple at Khirbet al-Batrawy (after NIGRO 2012b, fig. 5)

(stratum II) was EB IA but architectural features and material culture are quite different to the other analyzed contexts probably because of the Egyptian presence in some Southern Canaan sites.

Thus, the analysis of ritual aspects of the Early Bronze Age I testified the strong regionalism of the Southern Levant during this period. It is possible to recognize some similarities which could mean that the different Early Bronze Age I cultic activities come from common traditions of the Late Chalcolithic, which were the model for the rituals and the architectural aspects of the sacred areas both in the East and in the West sides of the Jordan River. On the other hand, despite the regionalism, it is not possible to exclude the possibility

that some kind of contacts was performed between different regions.

It is interesting to consider what happened in the Wadi az-Zarqa valley in EB II. In fact, Jebel al-Mutawwaq was abandoned at the end of EB I, and the city of Khirbet al-Batrawy arose.³² During the EB II occupational phase of this site, corresponding to excavators' Phase 4, a temple was built in area F. The building was a broad-room temple including cella L.500 (12.5 × 2.7 m), a courtyard L.504 and a circular platform S.510. The entrance to the temple was opened around at two third of the length of the southern façade wall. Inside the

³² NIGRO 2006, 2008, 2012a.

cella, four pillar bases had been recovered along the main axis and a niche was identified facing the entrance. A slab located in the niche was characterized by the presence of two cupmarks, probably used for the ritual activities performed in the building. A shallow circular cupmark was identified also on the circular platform located in the courtyard, the platform probably was an open air altar (fig. 8). After a collapse which damaged the sacred area, the temple was rebuilt in the following period, EB III (Phase 3).

The plan of the building and the organization of the sacred area in Batrawy, is similar to the other temples analyzed in this contribution. The plan of the building is elongated and the entrance is located on the long side, as Late Chalcolithic and EB I temples. Furthermore, the presence of a forecourt and of a cultic platform in the forecourt testify that Late Chalcolithic cultic traditions were the model for EB I Jebel al-Mutawwaq Temple of the Serpents and, also for the EB II Khirbet al-Batrawy broad-room temple.³³

³³ The broad-room cella represents the classic Early Bronze Age type of Palestinian sacred architecture (SALA 2008) and the Late Chalcolithic temples are its original model. A consistent parallel for EB II temple of Khirbet al Batrawy is the EB II-III temple in Bab edh-Dhra (RAST, SHAUB 2003, pp. 157-166, pp. 321-335).

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Imported artefacts from an Early Bronze Age I burial ground at Nesher-Ramla Quarry (el-Khirbe). Two cases of interregional goods' transitions

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ABSTRACT

Exotic objects between distant regions frequently constitute bases for interpreting them as evidence of direct interaction. This tendency is especially widespread in archaeological research of late prehistoric periods. Excavations of nine late Early Bronze I (EB I) burial caves at el-Khirbe in a modern quarry at Nesher-Ramla (NRQ = Nesher Ramla Quarry) has yielded various imported objects. Six are of Egyptian origin and a seventh is an extremely rare import from the Middle Euphrates Valley. The current paper presents these artifacts, proposes the manner in which they were likely imported and offers a broad interpretation of the phenomenon of including such objects as grave goods.

KEYWORDS

Southern Levant, Dynasty 0 in Egypt, Early Bronze Age, Imports, Burial caves, Interregional Contacts

The archaeological contexts

The site of el-Khirbe is located in the Lod Valley part of the Shephelah (piedmont) bordering the Judean foothills five km south-east of the modern cities of Lod and Ramla (fig. 1). The site extends over the slopes of two adjacent hillsides which together form a crescent-shaped area between 110–125 m asl. Archaeological exploration has been undertaken at the site between 2006 and the present (2018) on behalf of the Zinman Institute of Archaeology of the University of Haifa. Excavations were directed by S. Kol-Ya'akov, and since 2014, co-directed by the author.

Burials in this necropolis revealed within the perimeter of the archaeological site are characterized by multiple, primary interments in natural, karstic caves minimally modified to facilitate burial (fig. 2). Six caves were originally used for burial in the Late Chalcolithic period and then used in late EB I, while three were first used in the later period. The re-use of LC burial grounds during the late EB I for burial purposes is not uncommon, and is evidenced e.g., in not too distant LC/EB I burial caves in central Israel at Giv'atayim,¹ Benei Braq,² Palmahim Quarry,³ Ben-Shemen⁴ and Shoham (North).⁵

The individuals interred in the late EB I necropolis at NRQ were arranged on the floors of the caves, around the perimeters of the walls. Four adults were laid out on stone-built pavements in three different burial caves, perhaps indicating that they enjoyed high social status. They were accompanied by a variety of funerary gifts, including pottery, ground stone vessels, flint tools, metal weapons, and faunal offerings (fig. 3). The quantity and variety of the gifts varied markedly from cave to cave and from interment to interment.

Ceramic and lithic deposits deriving from the NRQ burial caves all date to various phases within the late EB I period until its very end. The multiple burials in the caves most probably indicate

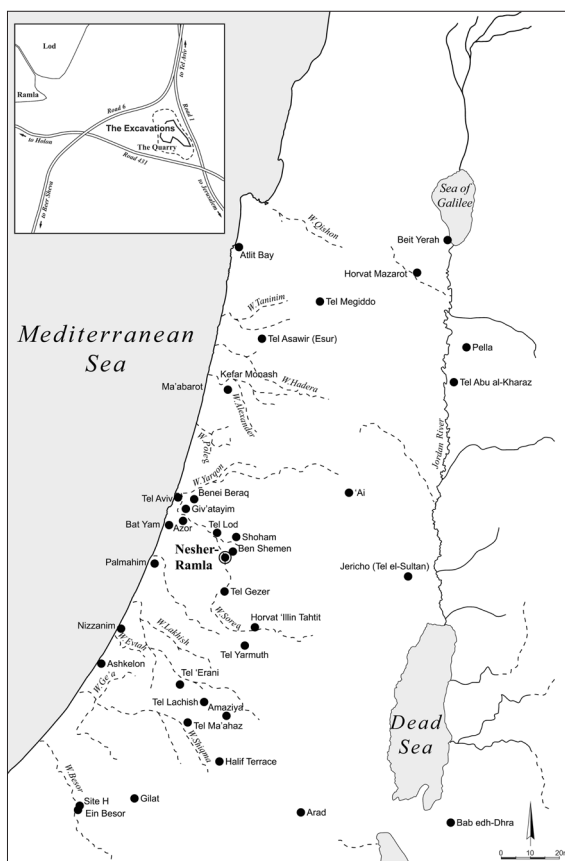


FIGURE 1
Map of the southern Levant
with sites mentioned in the text

they served the population interring its dead there for more than one generation. In terms of regionalism, the material culture of the NRQ burial caves belongs to a late EB I southern sub-culture but with some notable northern influences.⁶

In the absence of any late EB I settlement remains above-ground or in the caves, a possible candidate for the mortuary population of the NRQ necropolis is the large, contemporary settlement at Tel Lod, situated five km northwest.⁷ The presence of several Egyptian imports at the former site is consistent with the occurrence of Egyptian materials uncovered in the caves.⁸

¹ SUSSMAN, BEN-ARIEH 1966.

² KAPLAN 1963.

³ GOPHNA, LIFSHTIZ 1980.

⁴ PERROT, LADIRAY 1980.

⁵ VAN DEN BRINK, GOPHNA 2005.

⁶ AVRUTIS 2012, pp. 101–199, 213–220.

⁷ E.g., YANNAI, MARDER 2000; VAN DEN BRINK 2002.

⁸ Cf. VAN DEN BRINK, BRAUN 2002.

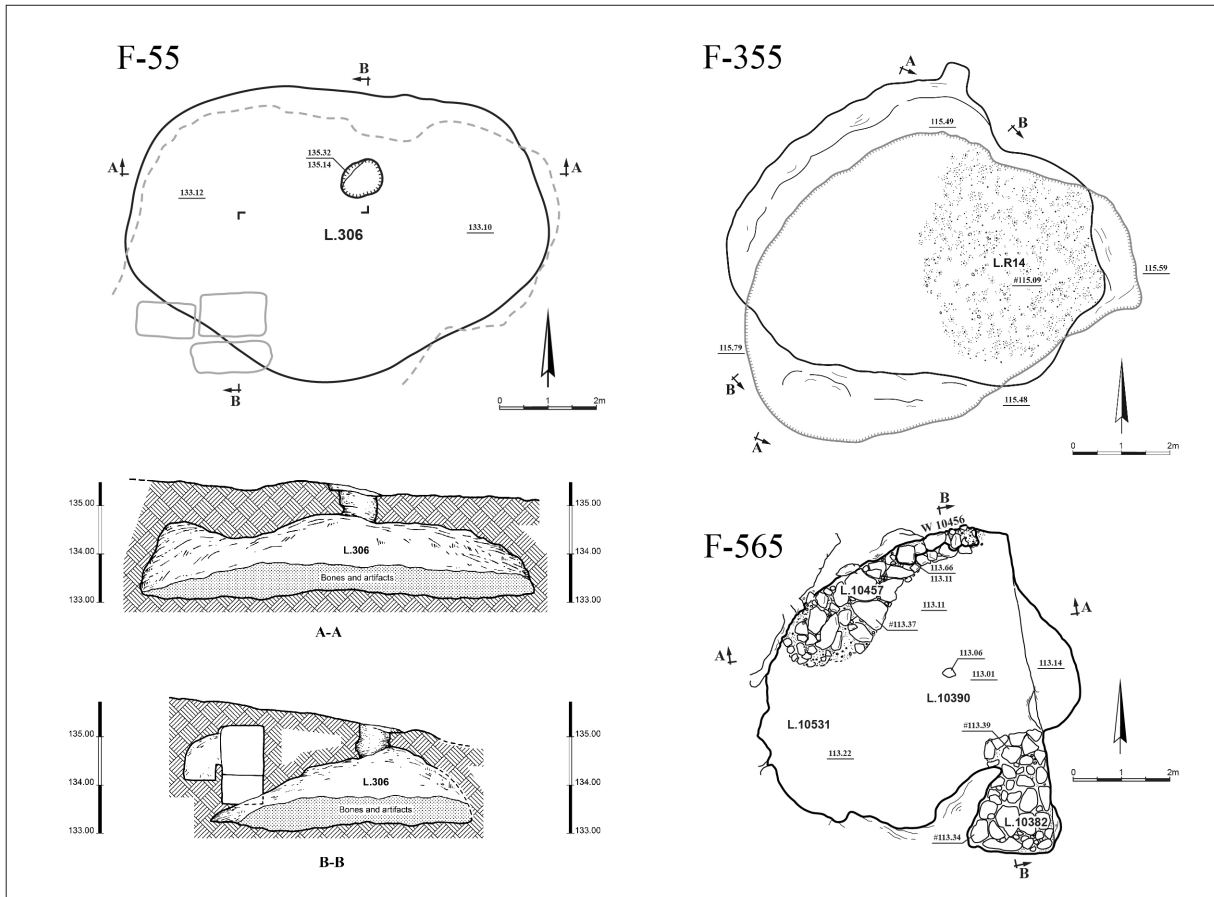


FIGURE 2
Burial Caves F-55, F-355 and F-565

Four imported Egyptian ceramic vessels are associated with the late EB I burials; three small teardrop shaped bottles and an intact relatively small storage jar. The bottles were found in three different burial caves (F-355, F-565 and F-868). One of them, from Cave F-355, has a slightly elongated, globular body and a high cylindrical neck with a thickened, everted rim (fig. 4: 1). Its exterior surface is red-slipped. A second bottle from Cave F-565, differs in morphology, having a short neck with a rounded, slightly everted rim (fig. 4: 2). The third bottle from Cave F-868 has a globular body and short neck (fig. 4: 3). Below its simple rounded rim are two antithetic pinholes, which probably served for fixing a lid in place.

Petrographic examination of the vessels from Caves F-355 and F-565, revealed the fabrics of both

bottles are of alluvial Nile clays.⁹ Their forms are very similar to Petrie's Sequence Type 87 a-d.¹⁰ In the Nile Delta comparable vessels appear in Naqada IIIA/B contexts, e.g., at Tell Ibrahim el-Awad¹¹ and Tell el-Fara'in/Buto (level III).¹² In the southern Levant similar bottles are found at sites extending from northern Sinai to 'Ein Assawir on Israel's coastal plain, all of them from late EB I contexts.¹³ Similar vessels imitating Egyptian forms and techniques were sometimes produced in the southern Levant from local clays, clearly imports copied lo-

⁹ GOLDING-MEIR, ISIRLIS 2012, samples 75 and 117.

¹⁰ PETRIE 1953, pl. XXV.

¹¹ VAN DEN BRINK 1992, fig. 7.2, pl. 18.2.

¹² KÖHLER 1992, fig. 7.

¹³ AMIRAN, VAN DEN BRINK 2001, fig. 3.10.

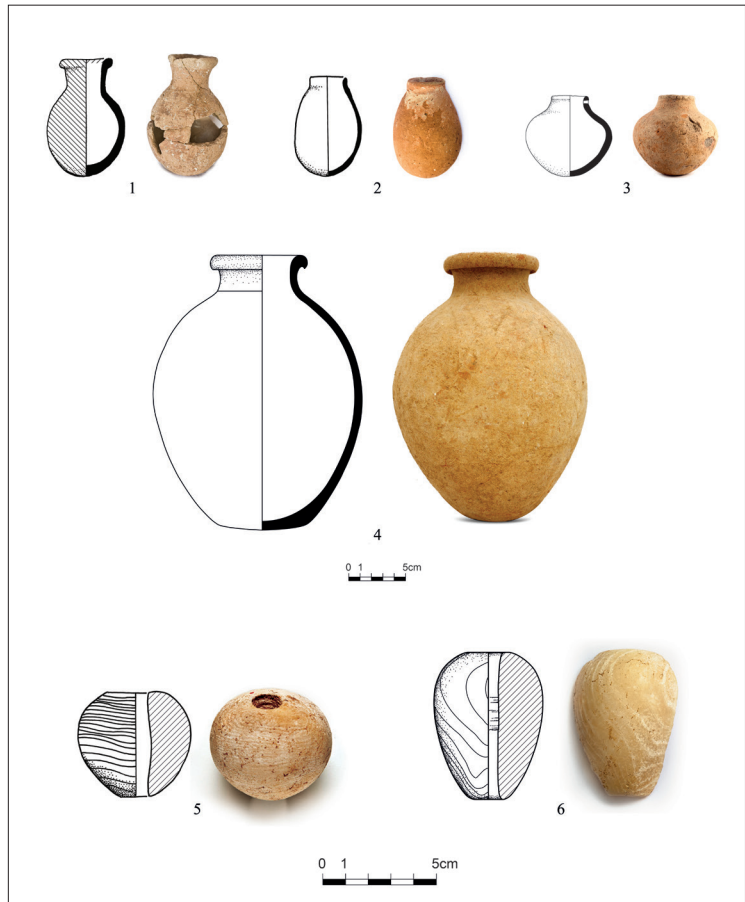


B



FIGURE 3
Selection of finds from burial Caves F-55 (A) and F-662 (B)

FIGURE 4
Imported Egyptian artifacts
from the NRQ burial caves



cally and sometime known as Egyptianized.¹⁴ Such vessels are restricted to southern sites, e.g., Site H Wady Ghazze (Nahal Besor) and 'En Besor.¹⁵

The morphology of the intact storage jar of this vessel is clearly Egyptian (fig. 4: 4), a fact corroborated by petrographic examination.¹⁶ It was made of Egyptian marl clay, fired to a high temperature, and its exterior was left plain. This type of jar belongs to Petrie's Predynastic Group L53, in particular L53 h-j¹⁷ and proto-dynastic Type 94, in particular 94d2 and 94k.¹⁸ There are over 50 occurrences of this type of jar in Egypt: they offer a chronological framework that does not predate Naqada III. The majority of examples fall within Naqada IIIA2, al-

though later examples occur in Naqada IIIB-C.¹⁹ Given its present context, attributing the NRQ jar to Naqada IIIB-C seems most likely.

Two pear-shaped alabaster mace-heads, found in the NRQ burial caves F-565 and F-868, show high levels of craftsmanship (fig. 4: 5-6). The alabaster appears to be of Egyptian origin but it is unknown where the objects were manufactured. Similar mace-heads are frequently recorded from the Naqada III period in Egypt but appear less frequently in the southern Levant during the Early Bronze Age. Examples are known from Jericho²⁰ and Horvat 'Il-lin Tahtit.²¹ Production of alabaster items was very characteristic of early Egypt²² and the export of such

¹⁴ BRAUN 2016.

¹⁵ GOPHNA 1992, figs. 4.7, 6.4.

¹⁶ TSATSKIN 2010, pp. 55-56, fig. 4.25.

¹⁷ PETRIE 1921, pl. L.

¹⁸ PETRIE 1953, pl. XXIX.

¹⁹ AVRUTIS 2012, 117-118, tab. 4.2.1 and references THEREIN.

²⁰ KENYON 1960, fig. 66.4.

²¹ BRAUN ET AL. 2002, fig. 4.7.

²² E.g. EL-KHOULI 1978; VAN DEN BRINK, BRAUN 2006.

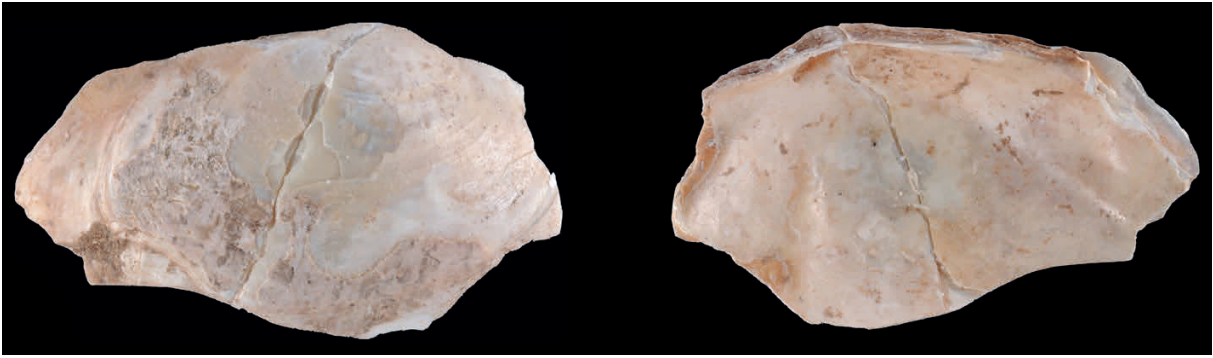


FIGURE 5
Chambardia rubens arcuata shell from burial Cave F-565

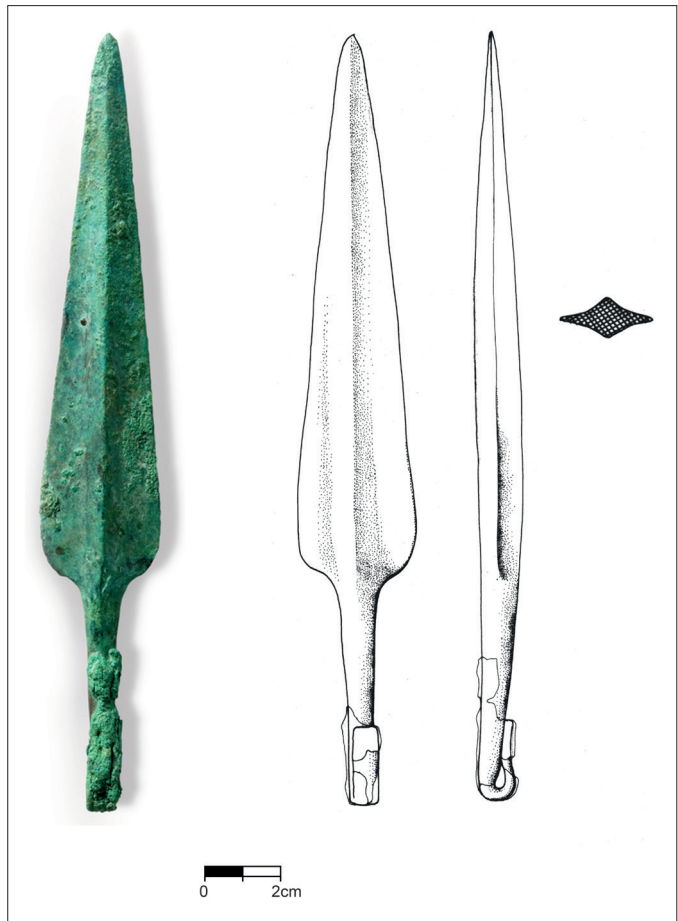


FIGURE 6
A copper spearhead from burial Cave F-55

products to the southern Levant has been recorded.²³ These artifacts were either manufactured in Egypt or the raw material was imported and fashioned in the southern Levant.

²³ E.g. AMIRAN 1970 (alabaster vessels found in EB III temple at 'Ai, which probably originated in earlier, EB I, period).

Shells of the fresh water bivalve species *Chambardia rubens arcuata*, obvious imports from the Nile, were found in EB I contexts in Caves F-355 and F-565 at NRQ (fig. 5).²⁴ These shells have also

²⁴ MIENIS 2012, pp. 252–254, fig. 12.1.10.

been collected from Late Chalcolithic (LC) contexts at the site (e.g., Cave F-477), as well as from numerous other sites in the southern Levant. The presence of these Nilotic freshwater bivalves with their mother of pearl shells in the LC and EB I contexts is not surprising because they are highly diagnostic for those periods, although they were exploited at least from the Natufian until the Arabic periods.²⁵ The *Chambardia* shells collected from NRQ caves do not exhibit any signs of man-made modifications, i.e., there is no indication that they were exploited in one way or another beyond being used as grave goods.

This observation applies to most of the shells found in excavations throughout the Levant. In Egypt such mussels were used for numerous purposes such as scoops and for production of containers, combs, scrapers, discs and pendants. Their inclusion in the burials of the Late Chalcolithic and EB I in the southern Levant suggests they may have had some symbolic value. The export of *Chambardia* shells from Egypt, probably as live specimens are corroborated by the discovery of a late Predynastic Egyptian jar, of Ma'adi type (LC/EB transition or very early EB I) off the coast of the North Atlit bay, which contained pairs of these bivalves,²⁶ which were probably valued for their gastronomic qualities.

Interaction between the distant regions can be manifested not only by the transfer of objects, but also by adoption of foreign customs, concepts and traditions. On particularly good noteworthy of such an occurrence in the Ramla necropolis in Cave F-257 is a burial of a young child in tandem with a canine. The five to nine year old human individual²⁷ had been intentionally interred with a young dog (*canis familiaris*) of six to seven months.²⁸ The burial was sealed with a circular stone slab of local limestone.²⁹

The earliest evidence of a canine burial in the Southern Levant is recorded for the Natufian period.³⁰ This unusual double burial is apparently the

earliest example of such in the southern Levant, as too date, there are no published examples of dogs that have been intentionally interred together with humans.

Intentional canine burials unrelated to human burials are known from the LC site of Gilat, where dogs have been deposited in shallow pits, dug into the ground. In few instances these were accompanied by pottery. Occasionally several dogs were buried in a single pit.³¹ One explanation for this phenomenon is that the dogs played a ceremonial or totemic role in that society.³² Dog burials have also been recorded for an early phase of the EB I settlement excavated at Ashqelon-Afridar,³³ and in an EB I–II pit at Tel Lachish.³⁴ This practice remains rare in the archaeological record of the country until the Iron Age II and Persian periods, which are beyond the scope of the present discussion. None of the above-mentioned examples were associated with human burials.

Unlike the situation in the southern Levant, numerous examples of human individuals buried together with canines are recorded for the Predynastic and later periods in Upper Egypt and Nubia.³⁵ There independent canine burials, with one or more dogs in single pit, were frequently found surrounded by concentrations of human burials. These dog burials were interpreted as being those of guardians.³⁶ One might perhaps hypothesize that the before-mentioned infant-canine burial in burial F-257 is perhaps a manifestation of a mortuary practice 'imported' from Egypt.

So far, this paper has presented artifacts and ideas imported from Egypt and their impact on the material culture of the southern Levant. Below it addresses several examples, of influences which flowed in the opposite direction, reflected by objects associated with the EB I NRQ burials.

²⁵ REESE, MIENIS, WOODWARD 1986.

²⁶ SHARVIT, GALILI 2002, p. 29*, figs. 43–44.

²⁷ DEUTSCH 2012, p. 234, tab. 10.2.

²⁸ HORWITZ 2012, pp. 242–243, fig. 11.4.

²⁹ AVRUTIS 2012, p. 25, fig. 2.28.

³⁰ TCHERNOV, VALLA 1997.

³¹ LEVY, ALON 1993, pp. 83–84, fig. 107.

³² GRIGSON 2006, p. 239.

³³ GOLANI 2004, p. 14; WHITCHER KANSA 2004, pp. 291–292.

³⁴ TUFNELL 1958, pp. 288–290, pl. 7, 2; BATE 1958, pp. 322–323.

³⁵ See E.g., CHAIX 1999; FLORES 2003; VAN NEER, LINSELE, FRIEDMAN 2004.

³⁶ FLORES 2003, p. 65.

A locally-made, double-handled jug found in NRQ burial cave F-55, may serve as an example of the southern Levantine influence on foreign pottery traditions. The jug has two handles: a large, high and single-stranded loop handle attached to the rim of the cylindrical neck and shoulder, and an opposite, smaller, and near vestigial loop handle placed on the shoulder.³⁷ Similar jugs, though slightly less elongated and more globular, are known from burial caves in Palmahim Quarry and Azor, dated to a post-Erani C phase of the EB I period.³⁸ A miniature version of a similar jug was recovered at 'Ai.³⁹ Notably similar jugs have been found in contemporary Naqada III funerary contexts in Hierakonpolis, Upper Egypt⁴⁰ and in Terminal A-group elite tombs in Qustul, Lower Nubia,⁴¹ where they were imitated in much finer fabrics. The appearance of these jugs in so distant regions suggests local imitations of the southern Levantine imports.

The late EB I burials found to date at NRQ were accompanied by fifteen daggers and a single spearhead, all of them of copper. The daggers are of the most common type, characterized by elongated blades, a rhombic or elliptical cross-section and rectangular butts with four or six circular perforations arranged in pairs which once had rivets. This dagger type, introduced during late phases of EB I, remained in use up to and including the EB IV period.

The spearhead deserves special mention (fig. 6). It is a 239 mm long and heavy (159.7 g) copper artefact of excellent workmanship. The blade is triangular with curved shoulders and is reinforced by a pronounced midrib that extends from tip to base. The massive tang is round in cross-section and ends in a hook. The blade is almost twice as long as the tang. Heavy hammering is evident on both its surfaces. Four similar spearheads have been found in the contemporaneous Kefar Monash Hoard⁴²

and a single in Bat Yam.⁴³ Daggers sharing similar characteristics have been uncovered at and Kefar Monash (n = 4),⁴⁴ Jericho,⁴⁵ Tel Aviv (Ha-Masger Street)⁴⁶ and Horvat Mazarot (Nahal Tavor) (n = 2).⁴⁷ They differ from the spearheads in having a riveted hilt hafting but display the same local metallurgical tradition.

In Egypt, four nearly contemporaneous daggers with triangular shaped blades and pronounced midribs have been recorded. Two were recovered at el-Amra, one is of silver and the other of copper. The third, also of silver, was purchased by the Cairo Museum, having apparently been looted from a grave at Homra Doum. The fourth dagger, of copper, was recovered at Naqada.⁴⁸ The earlier appearance and the greater number of such daggers in the southern Levant lead us to assume that the Egyptian specimens are either imports or local imitations made of imported copper from the southern Levant. The latter assumption is especially valid for the two silver daggers, as there are no silver deposits known in the southern Levant.

The artifacts from NRQ join to the corpus of evidence of the interrelations and mutual influences between the southern Levant and Egypt during late EB I/Naqada IIIB–C. The contacts and influences described above illustrate several levels of the interregional interaction: the import of artifacts, the import of raw material for local production, local imitation of foreign artifacts, adaptation of foreign ideas and traditions.

The Egyptian artifacts from NRQ, as well as the main corpus of Egyptian material recovered from sites in the southern Levant, are dated to the late EB I, parallel in time with Naqada IIIB–C, the period during which the last kings of Dynasty 0, (Horus) Ka and (Horus) Narmer reigned and early rulers of Dynasty 1, (Horus) Aha and possibly the early years of the reign of Djer.⁴⁹ Based on the quan-

³⁷ AVRUTIS 2012, pp. 109–110, fig. 4.17, pl. 4.22.3.

³⁸ GOPHNA, VAN DEN BRINK 2002.

³⁹ CALLAWAY 1964, pl. XIX.5091.

⁴⁰ ADAMS, FRIEDMAN 1992, p. 334, fig. 15.

⁴¹ WILLIAMS 1986, pp. 78–80, fig. 182, pl. 25.

⁴² HESTRIN, TADMOR 1963, pp. 279–282, figs. 10.3; 11.1–3; pl. 29.A–D.

⁴³ SHALEV 1992, p. 133, tabs. 3-A.3.A.8; 3-B.2.A.1.

⁴⁴ HESTRIN, TADMOR 1963, fig. 12.1–4, pl. 29. E–H.

⁴⁵ PHILIP 1989, p. 454, fig. 34.823 (right), pl. 2.A.

⁴⁶ BARKAN, ABU-SALAH 2017, fig. 6.

⁴⁷ Rotem personal communication.

⁴⁸ BAUMGARTEL 1960, pl. II.1–3, 5.

⁴⁹ BRAUN 2014, p. 40.

tity of imported material in the southern Levant and Egypt, it seems that contacts between the two regions peaked during that period.

In the EB I period there is ample evidence of interaction between the Southern Levant and Early Dynastic Egypt.⁵⁰ Towards the end of the late EB I period interaction becomes more and more intense.⁵¹ The earliest interpretations of the evidence for this intensified interaction were expressed in terms of a military conquest of the Southern Levant (and even farther north) by Egypt.⁵² With the accumulation of new excavation data, the nature of the interaction was reviewed, and trade, rather than military aggression, was emphasized.⁵³ The process was defined as colonization of the southern part of the Southern Levant.⁵⁴ Newer approaches offer more dynamic interpretations of the evidence.⁵⁵ Notably, this interaction abruptly ceased at the very end of EB I.

A “four-tiered” model, based on the analysis of large quantities of the Egyptian-associated material derived from various sites, was proposed to illustrate the degree of interaction during very late EB I.⁵⁶ According to Braun’s and Van den Brink’s model, Tier 1 is ascribed to sites with primarily Egyptian-associated material culture, probably reflecting immigration from the Nile Valley. These sites are located in a limited area in the southeastern Mediterranean Littoral and the northern extremity of the Negev and, in most cases, had previously been settled by indigenous populations. It seems that there was a kind of hierarchy in the Egyptian settlements consisting of a political center, administrative outposts, way-stations, and points of contacts with local populations.⁵⁷ To Tier 2 belong sites with significant quantities of Egyptian-associated material, perhaps <... suggest[ing] they may have, in addition to their

local inhabitants, harbored Nilotic populations as either frequent visitors or long-term residents».⁵⁸ Sites of Tiers 3 and 4 are characterized by exclusively indigenous populations, as is evidenced by only sporadic Egyptian-associated artifacts (Tier 3) or a total absence of them (Tier 4).

The small quantity of imported Egyptian artifacts from four of the eight burial caves excavated at NRQ are contrasted with many more objects south Levantine origin. The mode of burial (with the exception of the young child and canine), is typical of south Levantine mortuary practices and thus, the totality of the evidence points to this necropolis as serving a local population. The Egyptian imports, likely objects of prestige, are evidence of the relative wealth of the population and its willingness to devote significant resources for the benefit of its dead. They also suggest the possibility of contacts with Egyptians, both direct (e.g., the child-canine burial) and indirect (imported goods).

The centrally organized interregional interrelations must exhibit a material evidence of some kind of administration. Numerous *serekhs* of the last kings of Dynasty 0 and the first three kings of the First Dynasty have been found on the sites in the southern Levant.⁵⁹ The largest number belong to the period of the reign of (Horus) Narmer and mark the zenith of the interaction between the two regions. Most of the *serekhs* appear on jars of Egyptian origin and only two have been found on locally-made vessels, both of which exhibit Egyptian morphological characteristics. These containers, bearing royal insignia and names, suggest that the contacts had received royal sanction, even if they were not actually initiated directly by the Egyptian state. In addition, the internal administration of the period by Egyptians is evidenced by Egyptian-style bullae, found at En Besor and the Halif Terrace/Nahal Tillah site.⁶⁰

The primary reason for establishing these relations seems to have been economic. The contemporary archaeological data are supported by later evidence, e.g., the early Middle Kingdom frescoes

⁵⁰ E.g. VAN DEN BRINK, LEVY (eds.) 2002.

⁵¹ DE MIROSCHEJJI 2002, pp. 39–44, tab. 2.1; BRAUN 2011.

⁵² YADIN 1955; YEIVIN 1960, 1968; OREN 1973.

⁵³ AMIRAN 1974; BEN-TOR 1982; GOPHNA 1987, 1992.

⁵⁴ BRANDL 1992; GOPHNA 1992.

⁵⁵ LEVY, VAN DEN BRINK 2002; DE MIROSCHEJJI 2002; BRAUN, VAN DEN BRINK 2008; ANĐELKOVIĆ 2012; BRAUN 2014.

⁵⁶ BRAUN 2014, pp. 37–43, fig. 1.

⁵⁷ GREENBERG, PALUMBI 2014, p. 117.

⁵⁸ BRAUN 2014, p. 43.

⁵⁹ LEVY ET AL. 2001, esp. 430–437, figs. 22.13–22.15.

⁶⁰ Cf. SCHULMAN 1976, 1980; LEVY ET AL. 1997.

from Beni Hasan,⁶¹ which illustrate the various south Levantine commodities traditionally imported into the Nile Valley: wine, pulses, olive oil, resins, wood, cattle and caprines, copper, and human labor. In return, Egypt may have exported grain, Nilotic shells, gold, and semi-precious stones to the southern Levant.⁶²

The overland trade routes between the Nile Delta and southern Levant have been established through the survey in the northern Sinai Peninsula.⁶³ Using data from sites such as Nizzanim, Palmahim Quarry, Palmahim, Ashqelon (Afridar and Barnea), Ma'abarot and North Atlit bay,⁶⁴ a part of a network of coastal way-stations on the maritime route from Egypt to Lebanon can be reconstructed.⁶⁵ The Egyptian artefacts at contemporary Byblos provide further evidence for this maritime route.⁶⁶

The end in Egyptian/southern Levantine interactions occurs in very late (terminal) EB I or early EB II, during the reign of Den, the third king of the First Dynasty. At this time imported artefacts disappear from the southern Levant, as does other evidence of an Egyptian presence. The reasons for the waning of Egyptian influence during this period is not clear and a number of explanations have been suggested. The most widespread opinion is that the main factor for the change was the development of the sea route between the Egypt and the Lebanese coast. This route seems to have been much quicker, less expensive and safer and also gave a direct access to the source of the important and valuable commodity of timber.⁶⁷ In any case, the end of the massive Egyptian involvement was sudden and complete, which could be interpreted as an act of political will.⁶⁸

These radical changes also occurred in the urban southern Levant and are clearly evident at the NRQ burial grounds which, after having been in use for several generations, did not continue into the EB II.

In complete contrast to the interrelations between Egypt and the southern Levant during the EB I, are the state of the contacts with the northern regions, such as northern Syria and Anatolia. Until recently the only imported vessel from the Euphrates Valley was found at the 'Ein Assawir, Tomb 20.⁶⁹ A new jar of similar origin was uncovered in the NRQ burial grounds.

The spouted jar found in Cave F-662 characterized by a globular body, high neck and an everted, thickened rim (figs. 7: 8.1), morphological characteristics clearly foreign to late EB I south Levantine ceramics. The jar is finished with oblique burnishing on its upper the body and with horizontal burnishing below. The spout is set on the vessel's shoulder. The neck and spout were made as separate segments and attached to the body while the vessel was in a 'leather-hard' condition. Petrographic examination of the jar confirmed its origin in the Euphrates Valley.

Spouted and un-spouted globular jars are very characteristic of the Mesopotamian ceramic repertoire. Parallels for the Neshar-Ramla jar have been recorded at Tepe Gawra (fig. 8: 2, 8),⁷⁰ Mohammed 'Arab (fig. 8: 3),⁷¹ Tell Braq (fig. 8: 9)⁷² and Khafajah (fig. 8: 4).⁷³ In addition this vessel can be related typologically to Late Reserve Slip Ware, although it differs in its surface finish (e.g., fig. 8: 5–7).⁷⁴ This group is well known in the Euphrates and Amuq valleys.⁷⁵ The majority of these vessels are dated to ARCANÉ⁷⁶ Period Early Middle Euphrates 1–2, corresponding with south Levantine EB IA to early phases of EB II.

⁶¹ NEWBERRY 1896, pl. XXXI.

⁶² BEN-TOR 1982, p. 14.

⁶³ OREN 1973.

⁶⁴ As mentioned above, the North Atlit Bay jar dated very early in the EB I. Nevertheless, it still should be considered as additional evidence of the Maritime Route Way.

⁶⁵ GOPHNA, LIPHSCHITZ 1996.

⁶⁶ PRAG 1986.

⁶⁷ For a summary of the views on this topic, see SOWADA 2009, pp. 28–30.

⁶⁸ GREENBERG, PALUMBI 2014, p. 117.

⁶⁹ YANNAI, BRAUN 2001, fig. 3.6.

⁷⁰ SPEISER 1935, pp. 47–48, Pls. LXV.63; LXVI.80.

⁷¹ ROVA 2013, p. 7, pl. 2.1.

⁷² FELLI 2003, p. 67, figs. 4.16, 4.25.20.

⁷³ DELOUGAZ 1952, pl. 187.C.655.222.

⁷⁴ BRAIDWOOD, BRAIDWOOD 1960, fig. 219.1, 3; FRANGIPANE 2007, fig. 8.17.13.

⁷⁵ JAMIESON 2014.

⁷⁶ Associated Regional Chronologies for the Ancient Near East and the Eastern Mediterranean.

FIGURE 7
Middle Euphrates spouted jar
from burial Cave 662

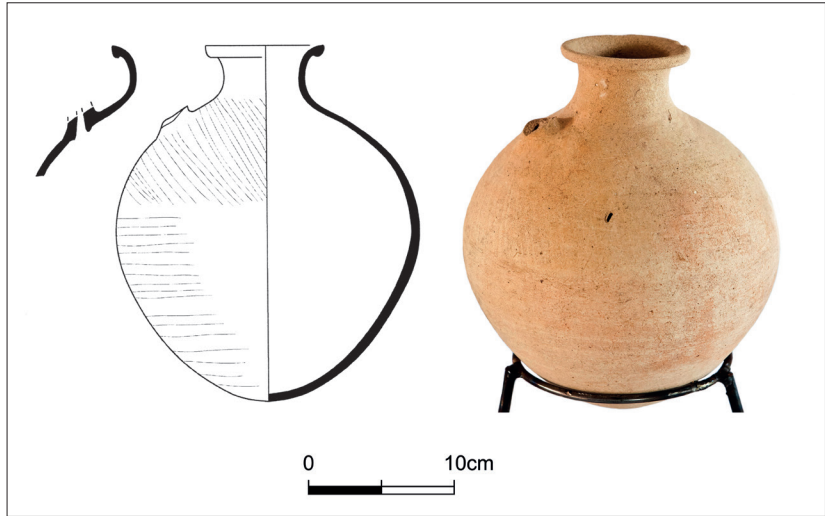
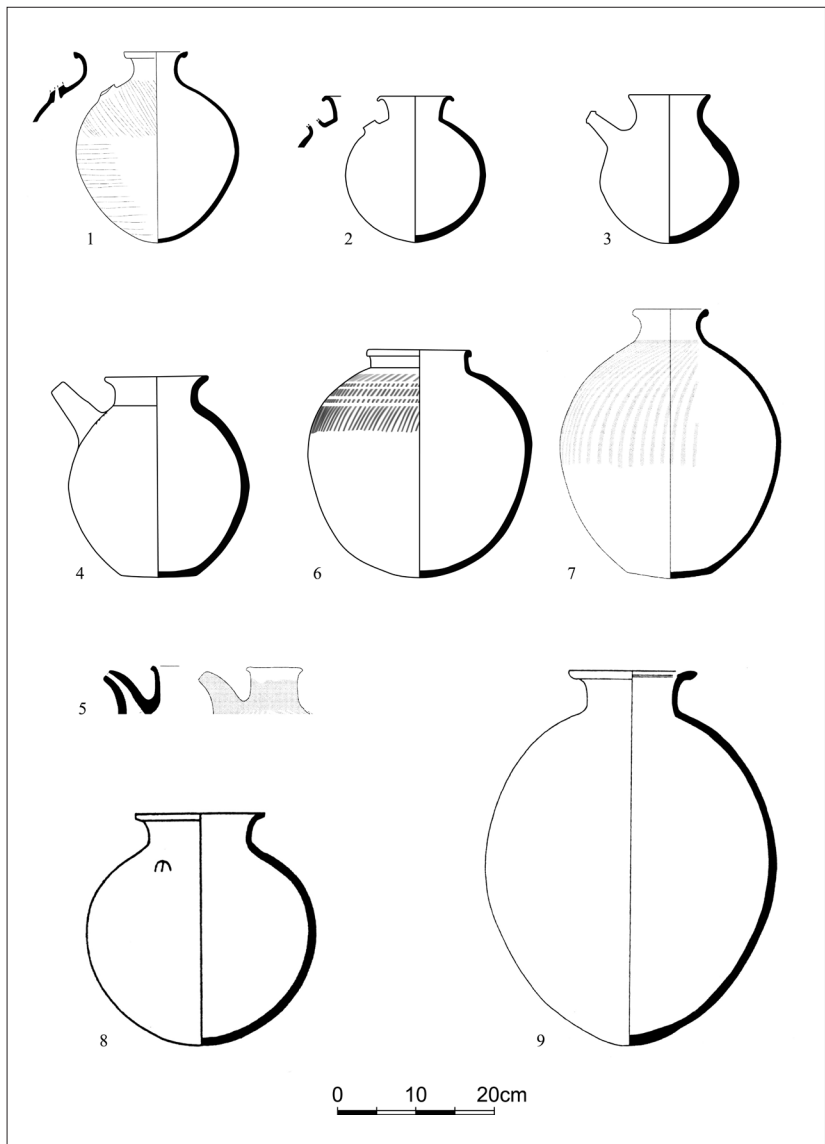


FIGURE 8
Selected parallels for the spouted
jar from NRQ



The presence of only two vessels imported from the north in the whole area of the southern Levant emphasizes the almost-complete absence of any direct connections with northern Syria and Anatolia during the course of the EB I period.

Trade between the southern Levant and neighboring regions discussed in this article may have been on an equal or unequal basis and may have

been either direct or indirect. However, it should be remembered that foreign artefacts could have reached the various sites discussed above through non-commercial relationships which might have included tribute, plunder, gifts, etc. Thus, the presence of the imports, *per se*, as is apparently the case for NRQ, does not necessarily indicate direct inter-regional contacts.

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Ebla and the South: reconsidering inter-regional connections during Early Bronze IV*

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ABSTRACT

Scholarly tradition has connected the second half of the third millennium BC with the question of contacts between the northern and southern Levant suggested by the spread in the south of given elements of material culture inspired by northern prototypes. Current explanations of connectivity across the Levant during Early Bronze IV, framed within the context of formation, crisis and regeneration of early urbanism, centre on the role of nascent states in Inland Western Syria – Ebla in particular – in structuring regional agro-pastoral strategies and triggering cultural transfer to the south. This article reviews the available chronological, archaeological and textual records in order to achieve a greater definition of the chronological resolution and geographic scale of possible patterns of interactions among the northern and southern Levant during the second half of the third millennium BC that have not been considered thus far. The article will discuss whether current explanations of connectivity between the northern and southern Levant during Early Bronze IV fit the data available and will explore possible alternative scenarios.

KEYWORDS

Ebla, northern Levant, southern Levant, Early Bronze IV, connectivity, mobility, chronology

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1. Introduction

Tell Mardikh, the ancient city of Ebla, is located on the northern limestone plateau of inland Western Syria, some 60 km south-west of Aleppo, in the Idlib governorate (figs. 1-2). From 1964 to 2010, the site was excavated by the Italian Archaeological Expedition to Ebla of Sapienza University of Rome directed by Paolo Matthiae. The excavations revealed continuous occupation from Early Bronze III (hereafter EB III) to the Persian Period and later frequentation in the Hellenistic, Roman, Byzantine, and Crusader Periods.¹ Although, from 2011, fieldwork activities at Ebla were interrupted by the outbreak of the Syrian crisis, the team of the Ebla Project continued research on the site's history and material culture with a three-fold approach. It includes: 1) the reappraisal of stratigraphy and the associated assemblages for the Bronze and Iron Ages, 2) the introduction of a multidisciplinary research programme, and 3) the adoption of a broad spatial perspective.² The ultimate aim of this methodological approach is to frame the study of the site and its region in the different periods within the regional and inter-regional contexts.

This article briefly concentrates on Early Bronze IV (hereafter EB IV). In the last years, scholarly consensus has grown that the EB IV period should be dated to ca. 2500-1950/1920 BC in the Levant as a whole.³ Phase Mardikh IIB1 at Ebla

corresponds to the EB IVA stratum (EB IVA1, ca. 2550-2450 BC; EB IVA2, ca. 2450-2300 BC) and Mardikh IIB2 to the EB IVB stratum (ca. 2300-2000 BC). The second half of the third millennium BC is connected with the formation, crisis and regeneration of early urbanism in the Levant⁴ and with contacts between the northern and southern Levant, suggested by the appearance in the south of given elements of material culture inspired by northern prototypes, a phenomenon which is generally defined as "Syrian connection".⁵

Current interpretations of interregional connectivity across the Levant during EB IV centre on the role of nascent states in Western Inland Syria – Ebla in particular – in structuring regional agro-pastoral strategies and their impact on connections between the northern and southern Levant. In partic-

253-261; FALCONER, FALL 2016. Consensus is growing that the transition from the Early to the Middle Bronze Ages might have taken place differentially at individual sites and areas within the twentieth century BC. For the northern Levant, see FIORENTINO ET AL. 2008; 2012; MORANDI BONACOSSO 2008a, in particular p. 135, fig. 1 and pp. 136, 147; 2014, p. 414 for Western Inland Syria. For the southern Levant, see COHEN 2002, pp. 11-19, 137-138; 2012, pp. 2-4; 2017; MARCUS 2003, 2013; MAEIR 2010, pp. 127-128; FALCONER, FALL 2017. There are no dates for the EB-MB transition and the early Middle Bronze Age phase in Lebanon. When not otherwise specified, the article follows the traditional Middle Chronology. Absolute dates for the northern Levantine EB IVA at ca. 2500-2300 BC and at ca. 2300-2000 BC are still conventional, due to the broad interval of radiocarbon determinations available for EB IVA and to the paucity of radiocarbon dates for EB IVB, early Middle Bronze I (MB I) and "transitional" phases in between, where attested (see fn. 4). While a bi-partite sub-phasing of the EB IV period of Western Inland Syria is generally adopted (see, e.g., SCHWARTZ 2007, pp. 49-52; COOPER 2014, pp. 283-289), DORNEMANN (2008, pp. 81-84, figs 15:18-32, 6, 7:1-11; 2012, pp. 221-230) proposed a tripartite scheme, EB IVA-C. A tripartite sub-phasing for the last phase of the Early Bronze Age in the northern Levant was proposed also within the ARCANE Project's periodization. In the latter scheme EB IVA corresponds to phase Early Northern Levant 4 (ENL 4) and EB IVB to phases Early Northern Levant 5 and 6 (ENL 5, ENL 6); see the revised periodization table on the ARCANE Project's website: http://www.arcane.uni-tuebingen.de/EA-EM-EL_phasing_v5-4-6.pdf. See remarks in D'ANDREA 2014-2015, pp. 151-152, 2018a, pp. 232-233, 2018b and SCHWARTZ 2017, fig. 5.1 on p. 88 and pp. 91, 93.

⁴ See, recently, the overviews by COOPER 2014 and SCHWARTZ 2017.

⁵ For first uses of this definition, see: DEVER 1980, p. 52; MAZZONI 1985, p. 15; PALUMBO 1990, p. 119. See recent reappraisals of the "Syrian connection" in D'ANDREA, VACCA 2015; D'ANDREA 2018c.

¹ For a general overview, see MATTHIAE 2010; 2013a.

² For new vistas on Ebla in the Bronze and Iron Ages see, e.g., the contributions in MATTHIAE ET AL. (eds.) 2014-2015 and MATTHIAE, PINNOCK, D'ANDREA (eds.) 2018. In particular, for the Early Bronze Age, from 2010 to 2014, an interdisciplinary study focused on early state formation at the site and its region during the mid-third millennium BC – the *Ebla Chora Project* – was implemented thanks to funding from the European Research Council (ERC Advanced Grant *Ebla Chora*, FP-7\ IDEAS grant agreement no. 249394). This project launched an integrated multidisciplinary methodological approach, combining archaeology, landscape studies, archaeometry and the study of written sources; the results of the project have been published in a preliminary report (MATTHIAE, MARCHETTI [eds.] 2013).

³ For the northern Levant, see SCHWARTZ 2017, pp. 97-114, with relative bibliography, for Inland Western Syria and HÖFLMAYER ET AL. 2014; GENZ 2010, p. 206, tab. 1 and THALMANN 2013, pp. 257-259, fig. 1 and 2016, pp. 31-32, fig. 34 for northern coastal Lebanon; for the southern Levant, see REGEV ET AL. 2012, pp. 558-561; 2014, pp. 241-242,

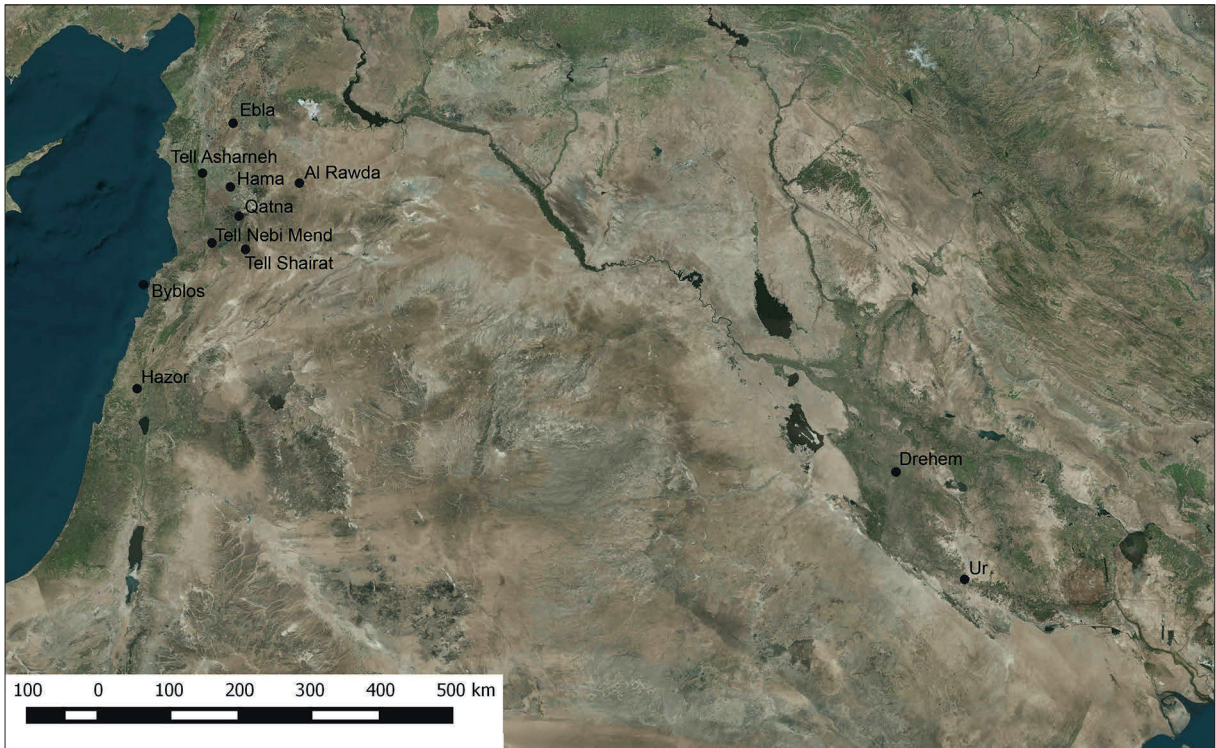


FIGURE 1
Map of sites mentioned in the text (map by Eloisa Casadei; map source: www.bing.com / ©Microsoft corporation Earthstar Geophysics SIO)

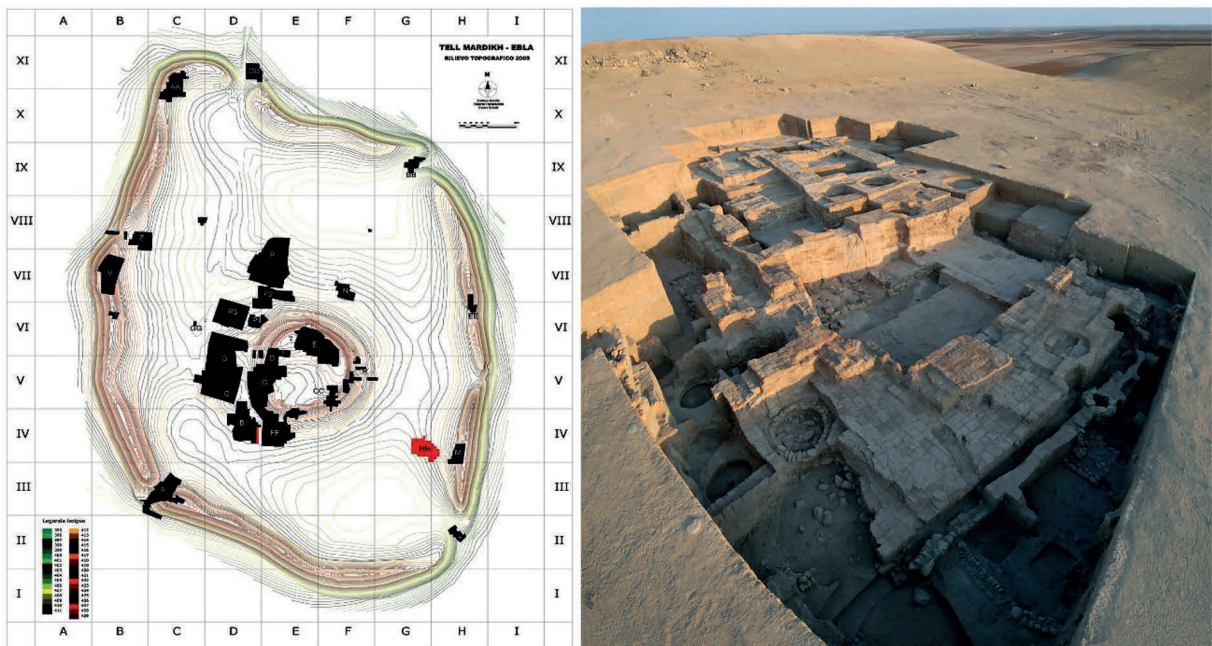


FIGURE 2
Topographical map of Tell Mardikh/Ebla, with Area HH highlighted in red (left) and general view of Area HH looking south-east (right), with the EB IVB temples in the background and houses in the foreground, respectively overrunning and abutting the no-longer used EB IVA temple (© Missione Archeologica Italiana in Siria)

ular, it is believed that cultural transfer from north to south might have been prompted by large-scale animal herding activities controlled by Ebla in this period and extending to the Syrian steppe and presumably involving the EB IV communities of the southern Levant.⁶ However, as recently pointed out by M. Bonechi, the definition of the “Ebla southern horizon” features among “thorny geo-political problems” to tackle.⁷

This paper moves from a short outline of Ebla’s developmental trajectory during EB IV, reconsidered thanks to the discoveries made in the 2004-2008 excavations that shed light on EB IVB at the site, which, until then, was less known and understood than EB IVA. Subsequently, the article summarizes and discusses current interpretations of connectivity between the northern and southern Levant in EB IV centred on Ebla’s leading role in the “Early Bronze Age agro-pastoral economy”. Textual and archaeological data are considered in order to re-examine north-south synchronisms during EB IV, also in the light of revised regional periodization schemes for the Levant. This way, on the one hand, it will be possible to identify blind spots in current scholarly knowledge from the points of view of archaeology and textual data. On the other hand, it will be possible to re-examine the suggested north-south interactions at higher chronological and geographical resolutions than considered before.

As is discussed below, three factors affect our understanding of regional developments and inter-regional interactions in the Levant by phase through the EB IV period. They are: 1) the lack of long stratigraphic sequences for some areas, in particular southern Lebanon and the northernmost areas of the southern Levant; 2) the low resolution of ceramic chronologies for some regions of Syria and the southern Levant; and 3) the lack of direct written sources from the Levant from ca. 2300 to ca. 1900 BC. With these caveats in the background, the author will attempt to reconsider the available evidence and propose alternative regional scenari-

os, changing through different EB IV phases. This way it will be possible to shed light on differences in the socio-political and socio-economic structures during various EB IV phases.

2. Ebla in the Early Bronze IV period

Since the discovery of the cuneiform texts dating to the twenty-fourth century BC in Ebla’s Palace G,⁸ EB IVA has been the focus of the research on the third millennium BC Ebla. As is well known from the texts from Ebla itself and other sites in Syria and Mesopotamia, in that period Ebla was a major regional entity.⁹ Differently, until a decade ago, the EB III and EB IVB periods, respectively preceding and following EB IVA, were less documented than the latter period in terms of stratigraphy, horizontal exposure, and written sources at both the site and the region levels.¹⁰ Direct textual sources dating from EB III and EB IVB from Western Inland Syria are lacking.¹¹ From the archaeological point of view, until a few years ago Hama was virtually the only site with long stratigraphic and ceramic sequences published.¹² Therefore, the reconstruction of these segments in the occupational life of Ebla was a major achievement of the Ebla team during the last ten years, throwing light also on regional developments during the Early Bronze III-IV sequence.¹³

It is now clear that the EB III stratum (ca. 2750-2550 BC), Phase Mardikh IIA, represents a forma-

⁸ For a general introduction, see, recently, MATTHIAE 2008.

⁹ ARCHI 2015a; SALLABERGER, SCHRAKAMP 2015.

¹⁰ For earlier studies on the EB III period at Ebla, see MAZZONI 1991; MATTHIAE 1993; 2010, pp. 40-47, figs. 17-18. For earlier synthesis on the EB IVB evidence at Ebla, see DOLCE 1999, 2002, 2007, 2009.

¹¹ ARCHI 2015b.

¹² See ASCALONE, D’ANDREA 2013, with bibliography and discussion.

¹³ For a general overview, see MATTHIAE 2006a, 452-481; 2007, pp. 489-512, 520-525; 2009a, pp. 752-791; 2013a; PINNOCK in press. For EB III and EB IVA1 see also, recently, VACCA 2014-2015, 2015; 2018; for EB IVA2, which was already quite well known before, see the recent contributions in MARCHETTI 2013; MATTHIAE 2013a, 2013b; MAZZONI 2013a; MARCHETTI, VACCA 2018. For EB IVB, see also, recently, MATTHIAE in press and D’ANDREA 2014-2015, 2015, 2016a, 2018a, 2018b.

⁶ WILKINSON ET AL. 2014, pp. 90-92; GREENBERG 2017, pp. 46-48; SCHLOEN 2017. For an earlier elaboration of this hypothesis, see BUNIMOVITZ, GREENBERG 2004, pp. 27-28; 2006, pp. 28-29.

⁷ BONECHI 2016.

tive stage of urbanization at Ebla, characterized by the appearance of non-residential structures with areas and features devoted to communal storage of crops.¹⁴ It seems likely that this phase saw the emergence of institutionalized elites, and represented a regional manifestation of the urbanizing trend that, roughly at the same time, was taking place in the neighbouring regional areas, from the southern Levant¹⁵ to the Middle Euphrates Valley to the Jazirah.¹⁶ According to the reconstruction recently proposed by A. Vacca, this trend continued during the initial EB IVA phase, EB IVA1 (ca. 2550-2450 BC), and, eventually, gave way to the formation of an early state controlled by Ebla during the following phase, EB IVA2 (ca. 2450-2300 BC). The latter phase only is documented also by the texts found in Palace G.¹⁷

The geographic scope of the kingdom of Ebla during EB IVA based on textual evidence has been investigated deeply and it has been suggested that the site controlled a territory extending from near Carchemish on the Euphrates in the northeast to the region south of Hama on the southwest.¹⁸ However, defining the exact borders of the area over which Ebla exerted its direct political control or hegemony is difficult,¹⁹ and, according to a “minimalist” point of view, the Ebla kingdom did not include Hama.²⁰ On the other hand, it is well known that political turmoil and imperialism from the mid-twenty-fourth century BC would bring Ebla’s flourishing state to an end, due to a fierce destruction, most probably occurring in the interval between 2367 and 2293 cal. BC according to radiometric determinations in the 2-sigma range.²¹

As said above, until a few years ago, EB IVB developments in inland Western Syria were generally

obscure. At Ebla, Phase Mardikh IIB2, the EB IVB stratum following the destruction of the city of the age of the Archives, was little known. From 2004 to 2007 the Italian Archaeological Expedition to Ebla excavated a long EB IVB stratigraphic sequence in Area HH (fig. 2), in the Lower Town south-east, as part of a longer sequence spanning from EB IVA to MB II.²² This operation allowed Ebla’s developmental trajectory during this period to be reconstructed. In a few words, summarizing from previous works,²³ the destruction of the EB IVA city opened a phase of decline (EB IVB1), when termination rituals were performed in the Temple of the Rock, which had been a major sanctuary within the EB IVA city. Retaining walls were constructed to prevent this no-longer-used building to collapse, and dwellings were built to the north and west of it. This phase was followed by a stage of progressive reorganization and reconstruction (EB IVB2), as suggested by levelling activities and constructional fills. The late EB IVB phase (EB IVB3) saw a new development, represented by the construction of temples on the Acropolis (Temple D3) and the Lower Town (Temples HH4 and HH5) and a palace in the Lower Town north (the Archaic Palace). Although it seems that, during EB IVB, Ebla might have not been a regional centre like in EB IVA, it is probable that the Syrian centre re-established inter-regional contacts during a late EB IVB phase (EB IVB3). In fact, as well known, cuneiform texts retrieved at Drehem, ancient Puzrish-Dagan, in Southern Mesopotamia, and dating from the reigns of three kings of the Third Dynasty of Ur (Ur III) – Shu Suen, Amar Suen, and Shulgi – register the presence of “men from Ebla” (lú-eb-la^{ki}) at the Ur III court.²⁴ It is likely that the contacts at an official level between Ur and Ebla documented by the Ur III texts took place during a late EB IVB phase,²⁵

¹⁴ VACCA 2014-2015, pp. 18-24, figs. 2-4; 2015, pp. 5-7, 15-16, figs 2-3; MORANDI BONACOSI 2008a, p. 67.

¹⁵ WILKINSON ET AL. 2014, pp. 85-86 and see, recently, VACCA, D’ANDREA in press.

¹⁶ VACCA 2015.

¹⁷ VACCA 2015, 2018.

¹⁸ ARCHI 2015a, fig. 1; BIGA 2013. See also COOPER 2010.

¹⁹ BIGA 2013, p. 266.

²⁰ BONECHI 2016, p. 59.

²¹ CALCAGNILE, QUARTA and D’ELIA 2013.

²² MATTHIAE 2006a, pp. 452-481; 2007, pp. 485-512.

²³ The proposed reconstruction follows MATTHIAE 2007; 2010; in press, reprised by D’ANDREA 2014-2015, pp. 132-150; 2016a, 201-203, fig. 2; 2018a, pp. 222-224, 229-234, figs 2-4, tab. 1; 2018b.

²⁴ OWEN 1992, pp. 117-122.

²⁵ MATTHIAE 2006b, p. 92; 2010, p. 204; PINNOCK 2004, p. 91; 2009, p. 71. D’ANDREA 2014-2015, p. 132; 2018a, p. 230. A different synchronism, centring on contemporaneity of the Ur III period with Middle Bronze Age I at

when Ebla showed clear signs of reorganization and growth as well as of the presence of an elite or ruling institution of some sort.²⁶ Matthiae proposed that the EB IVB settlement was destroyed at the end of this phase²⁷ and that the destruction was followed by a short phase (EB IVB4) characterized by a terminal EB IVB ceramic horizon uncovered in Area HH. This has been interpreted as a short-lived squatters' re-occupation of the site at the very end of EB IVB and before the reconstruction of the Middle Bronze Age city.²⁸

3. The "Early Bronze Age Agro-Pastoral Economy"

In a recent paper, T. Wilkinson and colleagues have reaffirmed the role of nascent states in Syria and Upper Mesopotamia in structuring the "Early Bronze Age agro-pastoral economy" in the Fertile Crescent, including the "zone of uncertainty", a broad geographical "belt" of "drier agropastoral zones" across northern and central Syria where crop cultivation

Ebla, has been proposed based on suggested ceramic parallels between late Early Bronze Age assemblages from sites in the Jazirah and Ebla's Middle Bronze Age assemblages (SCHMIDT 2012, 2013, 2014; PFÄLZNER 2017, in particular pp. 172-177, figs 7.8-7.11, tab. 7.2). The present author discussed in several previous works that the pottery evidence of late EB IVB assemblages from Ebla may contradict this proposal (D'ANDREA 2014-2015, pp. 153-154, fn. 8; 2016a, fn. 5; 2018b, pp. 229-233; 2018c; 2019a, pp. 273-276). The discussion of this topic is beyond the scope of this paper; the aim of this short digression is just to re-affirm that it is reasonable that the late EB IVB phase at Ebla might have been contemporary, completely or partially, with the Ur III period in Mesopotamia (see, in particular, D'ANDREA 2016b, 218-220; 2018a, pp. 232-233; 2019a, pp. 274-276).

²⁶ On this aspect, see the considerations by DOLCE 2007 and MAZZONI, FELLI 2007, pp. 209, 219.

²⁷ Matthiae initially based this hypothesis on the observation that the soil layers heaped in the Middle Bronze Age ramparts in some sectors were in large part constituted by ash layers containing EB IVB pottery (MATTHIAE 1989a, p. 132; 2010, p. 205; 2006b = 2013c, p. 249, fn. 14; 2009b, pp. 184-185, fn. 61 = 2013d, pp. 72-73, fn. 61). Subsequently, Matthiae reported that possible traces of a destruction were identified in Area HH (MATTHIAE 2006a, pp. 474-475; 2009b, pp. 184-188 = 2013d, pp. 72-76). Differently, Mazzoni maintains that Ebla was not destroyed at the end of EB IV (MAZZONI, FELLI 2007, p. 209; MAZZONI 2013b, pp. 47, 50).

²⁸ MATTHIAE 2010, p. 205; in press. See also D'ANDREA 2018b.

is risky because rainfall is not constant.²⁹ They have maintained that exploitation of such areas on a large-scale through the differentiation of subsistence strategies is possible only under given circumstances, such as the existence of political entities stable enough to absorb the risks of potential crop failures.³⁰ During the EB IVA period, Ebla was an aggrandizing state, and textile production was one of the pillars of its socio-economic organization, requiring large quantities of wool, as deduced from the EB IVA texts found in Palace G.³¹ Therefore, Wilkinson *et Al.* proposed that the exploitation of the Syrian steppe in EB IV might have been connected with large-scale sheep rearing controlled by Ebla. Referring to Milano's estimate of circa 670,000 sheep flocks directly controlled by the Palace based on the texts,³² Wilkinson and colleagues calculated a necessary grazing area of ca. 31,500 km², that would correspond to "a circle of radius 100 km" from Ebla, reaching as far as the steppe region around al-Rawda.³³

Moving from revised inter-regional synchronisms that shifted the start of EB IV in the southern Levant from 2300 BC to 2500 BC,³⁴ and aligned this non-urban period in the south to the apogee of early urbanism in the north, they suggested that the southern Levantine communities were attracted by the nascent market of large-scale herding activities controlled by Ebla.³⁵ They proposed that the EB IV non-urban southern Levantine communities might have been involved in those activities at least peripherally, for example supplying young animals, breeding stock, or human labour through new EB IV routes running from Palmyra through the Homs region up to Damascus, the Hawran and the southern Levant.³⁶ This phenomenon would have eventually prompted the transmission of cultural and technological information from the north to the south.³⁷

²⁹ WILKINSON ET AL. 2014, pp. 45, 53-54, fig. 3.

³⁰ WILKINSON ET AL. 2014, pp. 55-57.

³¹ See, for example, BIGA 2010.

³² MILANO 1995.

³³ WILKINSON ET AL. 2014, pp. 55.

³⁴ See REGEV ET AL. 2012, pp. 558-561; 2014, pp. 241-242, 253-261.

³⁵ WILKINSON ET AL. 2014, pp. 91-92.

³⁶ WILKINSON ET AL. 2014, pp. 91-92.

³⁷ WILKINSON ET AL. 2014, pp. 91-92.

The latter hypothesis is, basically, a recent version of Bunimovitz and Greenberg's proposal – published in the early 2000s and elaborated, at that time, in the framework of traditional chronologies for the southern Levantine EB IV³⁸ – now re-adapted to the recent higher EB IV absolute chronology and the ensuing inter-regional synchronisms (see above).

The interpretive construct proposed by Bunimovitz and Greenberg centres on the presence of “semi-nomadic pastoralists perhaps straddling the interface between Canaan and the urban centres of central Syria” as an explanation for the coexistence of elements derived from the local EB III tradition and features adopted from the EB IV Syrian sphere within the ceramic repertoire of the southern Levant.³⁹ This is, essentially, a core-periphery model to explain north-south interactions in the Levant during EB IV, recent versions of which, again elaborated within the framework of the new radiometric chronology for the southern Levantine EB IV and consequent synchronisms with the north, centre on agency. In fact, it has been recently proposed that, at the transition between EB III and EB IV, the southern Levantine communities deliberately chose to turn to pastoralism as an adaptive strategy to tackle progressive decline of urbanism turning themselves towards northern networks and, consequently, adopting new sets of symbols and practices.⁴⁰

The present author has examined extensively in previous and forthcoming works the reasons why, compared to traditional synchronisms, the new higher chronology for the southern Levantine Early Bronze III and IV may allow us to better understand the development of parallel and yet different trajectories in the northern and southern Levant during most of the third millennium BC.⁴¹ In a few words, the chronological realignment of EB III in the northern and southern Levant suggests that the two regions were part of a similar, contempo-

rary trend of incipient urbanization during the second quarter of the third millennium BC.⁴² Two regional developmental paths separated from ca. 2500 BC, with the formation of archaic states evolving from EB III urbanism in the northern Levant, and a multi-factorial crisis of the EB III urbanism in the southern Levant.⁴³ The reasons for this dissimilarity may lay in the different ecological basis of the two areas, in particular the absence in the southern Levant of a territory to expand agro-pastoral strategies in order to avoid inter-site conflicts for water resources and land and to face possible risks of failure of local economic strategies.⁴⁴ Such impossibility to develop back-up economic strategies, possibly paired with localized climatic changes, documented by proxy data,⁴⁵ might have made the first urban experiment in the southern Levant premature, unstable and, ultimately, fragile.

The crisis of Early Bronze Age urbanism in the southern Levant would inaugurate five or six centuries of non-urban life in this region, during Early Bronze IV. The research of the past three decades demonstrated that this phase was not a long, stagnant phase of generalized collapse, but a dynamic progression leading to reorganization and new growth and therefore a demonstration of the region's resilience to crisis and ability to develop adaptive strategies.⁴⁶ Actually, a longer duration of the EB IV period in the south, chronologically realigned to the northern Levantine EB IV during the second half of the third millennium BC (and possibly extending in the first decades of the second millennium BC) may fit well such long trajectory from crisis to reorganization to growth that we have just mentioned.

On the other hand, the new chronology has complicated the picture. In fact, at present, it is still difficult to bridge the proposed absolute dates spanning

³⁸ BUNIMOVITZ and GREENBERG 2004, 2006.

³⁹ BUNIMOVITZ and GREENBERG 2004, pp. 27-28; 2006, pp. 28-29; WILKINSON ET AL. 2014, p. 92.

⁴⁰ GREENBERG 2017, in particular pp. 40-48 and SCHLOEN 2017, in particular pp. 61-69, but see the remarks by HÖFLMAYER 2017, pp. 9, 12 and the discussion in D'ANDREA in press a.

⁴¹ D'ANDREA in press a, in press b; VACCA, D'ANDREA in press.

⁴² D'ANDREA in press a; VACCA, D'ANDREA in press.

⁴³ D'ANDREA in press a; VACCA, D'ANDREA in press.

⁴⁴ WILKINSON ET AL. 2014, p. 92; D'ANDREA in press a.

⁴⁵ FINKELSTEIN, LANGGUT 2014, p. 222, fig. 1; LANGGUT ET AL. 2015, p. 226; LANGGUT, ADAMS, FINKELSTEIN 2016, pp. 128-130.

⁴⁶ See, e.g., PALUMBO 2008; RICHARD, LONG 2010; D'ANDREA 2014a, Vol. 1, in particular pp. 223-235, 265-278, with references.

five or six centuries and the available stratified data from the southern Levant, and, as said in the Introduction, this is influenced negatively by the lack of long stratigraphic sequences and low-resolution ceramic chronologies for some areas. In other words, summarizing from the author's previous works,⁴⁷ it seems difficult, at present, to identify the entire EB IV sequence at many sites and regional areas or to ascribe phases and assemblages at certain sites to a given EB IV sub-phase (e.g., simplifying, "early", "central", and "late"). These apparent "gaps" in the sequences of given regional areas, if not due to documentary biases, might be explained in terms of changes in patterns of settlement. These factors influence also current understanding of connections between the northern and southern Levant during the EB IV period, and compel us to re-discuss current interpretive constructs for these phenomena. As is analysed below, interactions among different regional areas within the Levant seem to have been more nuanced than suggested previously and, above all, chronologically and geographically differentiated.

4. Textual and Archaeological Data

In the following analysis, we review the EB IV textual and archaeological data available from the Levant documenting inter-regional connectivity, and compare these records with current interpretations of contacts between the northern and southern Levant.

EB IVA, the time of the Archives, was the period when the geographic scope of Ebla's economic activities during the third millennium BC was at its peak, reaching as far as Anatolia, the Euphrates River Valley and Upper Mesopotamia to the north and at least Central and Southern Mesopotamia to the east.⁴⁸ As for the texts, the western and southern geographic horizons of Ebla are known to a significantly lesser extent than the northern and eastern ones.⁴⁹ As pointed out by Bonechi, since in all likeli-

hood Ebla had contacts with Egypt in EB IVA,⁵⁰ the Palace G elites should have been aware of geographical and socio-political entities located in-between Ebla and the very distant south.⁵¹ However, it is difficult to track evidence of such contacts between Ebla and these regions either in the texts or in the archaeological evidence.

Some scholars have proposed the identification of the geographic name Dulu with Byblos,⁵² but others consider this problematic, and, therefore, it is not-unanimously accepted.⁵³ Some places in the Orontes Valley are mentioned in the Ebla texts, like Hama and Tunip – the latter to be identified with either Tell Asharneh or a site nearby. It was suggested that the territory in the Syrian steppe to the east and south of Hama bordered by the "Very Long Wall" identified by Geyer⁵⁴ might be considered as the territory of Ib'al,⁵⁵ a confederation of tribes recurring in the texts that had alternated relationships with Ebla.⁵⁶ On the other hand, the regions of Qatna, Hazor and the Damascene are less known in the written documentation from the third millennium

⁵⁰ On the one hand, the identification of the geographical name Dugurasu with Egypt, proposed by BIGA and ROCCATI (2012 and see, recently, BIGA 2016, in particular pp. 695-711) has been contested (ARCHI 2016, pp. 40-43). On the other hand, contacts between Ebla and Egypt during the first half of the EB IV period are suggested by the material culture of Ebla, in particular the retrieval of inscribed pharaonic objects and bowls made of "Chefren's diorite" in the Palace G (SCANDONE MATTHIAE 1979, 1981, 1982, 1995, pp. 234-235; 1997). See, recently, D'ANDREA 2018d, pp. 205-206 and MATTHIAE 2018.

⁵¹ BONECHI 2016, p. 30.

⁵² BIGA 2016, pp. 697-698.

⁵³ BONECHI 2013, p. 250.

⁵⁴ GEYER ET AL. 2010. The true nature of "Very Long Wall" (*Très Long Mur*, TLM) is still enigmatic, but this feature is considered a boundary wall for the tribal socio-political entity called Ib'al (see discussion in the main text and references at fn. 56). LAFONT (2010) proposed that the construction of the TLM was prompted by Ebla in the twenty-fourth century BC in the context of rivalries with Mari, on the Euphrates, for the control of the steppe (see recently ARCHI 2018, p. 96), but the connection of the TLM with Ebla still has to be demonstrated.

⁵⁵ CASTEL, PELTENBURG 2007, pp. 613-614; MORANDI BONACOSI 2009, pp. 56-57; MAZZONI 2013b, p. 35; MOUAMAR 2016, 86-89, fig. 13; 2017a, 186-189, fig. 5; ARCHI 2018, p. 96.

⁵⁶ ARCHI PIACENTINI, POMPONIO 1993, pp. 297-299; BONECHI 1993, pp. 186-188; 2013, p. 250; CATAGNOTI 1997, p. 136; FRONZAROLI 2003, pp. 124-125; BIGA 2014; ARCHI 2018.

⁴⁷ D'ANDREA 2019a, in press b.

⁴⁸ ARCHI 2014, 2015b; BIGA 2013; 2016, pp. 693-695; BONECHI 2013, 2016.

⁴⁹ BONECHI 2013, p. 250; 2016, p. 30.

TABLE I – Proposed relative EB IV periodization of Southern Syria and the northern valleys of the southern Levant based on settlement sites, re-adapted from D’Andrea 2014a, Vol. 1, tab. 6

	Southern Syria			Southern Levant (Northern Regions)								
	Moumassakhin	Kh. al-Umbashi	Yabroud	Tell el-Waqqas (Hazor)	Kh. an-Na’ima (T. Na’ama)	Kh. Kerak (Beth Yerah)	Tell el-Hosn (Beth Shean)	Kh. Kishron (H. Qishron)	‘Afula	Nahal Rimmonim	‘Ain el-Hilu	Kh. el-Meiyiteh
“Early” EB IV	?	?				Period E ↓ ?						
“Central” EB IV	?	?		?	?		?	?	?	?	?	
“Late” EB IV	↑	↑		↑	↑		↑	↑	↑	↑	↑	+
	+	+	+	Str. XVIII	Ph. 7-5		Ph. R-6	+	Str. V	Str. II-III	+	↓
	↓	↓	↓	↓	↓		↓	↓	↓	↓	↓	↓
	↓	↓	↓	↓	↓		↓	↓	↓	↓	↓	↓
	↓	↓	↓	↓	↓		↓	↓	↓	↓	↓	↓
	↓	↓	↓	↓	↓		↓	↓	↓	↓	↓	↓

BC.⁵⁷ The geographic name of Qatna has not yet been identified in the Ebla texts,⁵⁸ although it has been proposed that it might have been an important centre at that time.⁵⁹ As for the southern Levant, re-prising Bonechi,⁶⁰ in the Ebla texts, no references to the region of Hazor, in the Hula Valley of Upper Galilee, have been identified thus far. This datum is worth noting, because Hazor was one of the main sites located at the interface between the northern and southern Levant and, in the Middle Bronze Age, it would become a major regional settlement with material culture and architecture fully comparable to the coeval tradition of Western Syria.⁶¹

The archaeological evidence is problematic as well. In fact, at present, in the dataset from Southern Syria and the northern valleys of the southern Levant (Tab. I), it is difficult to trace a phase corresponding, chronologically, to the time of the Ebla Archives. In fact, pottery types comparable either to EB IVA assemblages in Inland Western Syria or to the early EB IV phase of the southern Levant have not been identified at sites in Southern Syria.⁶² Likewise, an early EB IV phase is thus far invisible archaeologically also in the Beqa’ and, with few exceptions, in the northernmost regions of the southern Levant.⁶³ Even at Hazor larger exposure of the EB IV Stratum XVIII in recent excavations seems to support a date of this phase to the second half of the EB IV period⁶⁴, a detail that might

⁵⁷ BONECHI 2013, p. 250. On the Damascene, see earlier KLENGEL 1985.

⁵⁸ BONECHI 2013, p. 250; MORANDI BONACOSSI 2009, pp. 56-57.

⁵⁹ MORANDI BONACOSSI 2009, p. 57.

⁶⁰ BONECHI 2013, p. 250; 2016, p. 30.

⁶¹ See, e.g. ORNAN 2012, with bibliography.

⁶² D’ANDREA 2014a, Vol. 1, pp. 114-117, tab. 5.

⁶³ D’ANDREA 2014a, Vol. 1, pp. 117-123, tab. 6; 2019b, pp. 62-63 and Tab. 1; in press b.

⁶⁴ See chronological remarks in BECHAR 2015, p. 47.

TABLE II – Schematic representation of current gaps in relative inter-regional synchronization for the EB IV period in the Levant based on comparative stratigraphy and ceramic chronology. *Transitions are marked in order to make the scheme flexible enough to incorporate them, but with two caveats: 1) passages between periods and phases can be smooth or sharp at individual sites and area, and 2) transitional phases have not been identified at every sites and region

Inland Western Syria	Southern Syria	Northern Lebanon	Southern Lebanon	Southern Levant (northern areas)	Southern Levant (central and southern areas)
EB III ↓ ↓ ↓	EB III ↓ ↓ ↓	EB III ↓ ↓ ↓	EB III ↓ ↓ ↓?	EB III ↓ ↓ ↓	EB III ↓ ↓ ↓
-----/EB III-EB IV Transition*-----					
EB IVA ↓ ↓ ↓	? ? ? ?	EB IVA ↓ ↓ ↓	? ? ? ?	? ? ? ?	Early EB IV ↓ ↓ ↓
EB IVB ↓ ↓ ↓	EB IVB ↓ ↓ ↓?	EB IVB ↓ ↓ ↓	EB IV ↓ ↓ ↓	EB IV ↓ ↓ ↓	Central EB IV ↓ ↓ ↓
-----/EB-MB Transition*-----					

explain why the latter site seems not mentioned in the EB IVA Ebla texts. Conversely, the available archaeological evidence from Southern Syria and the northern areas of the southern Levant seems to document a phase of settlement during a later stage of the EB IV period (Tab. I), which might roughly correspond to the EB IVB period of Western Syria, based on pottery parallels;⁶⁵ in fact, during this phase, wares related to Syrian ceramics appear in the southern Levant. In this context, we do not refer simply to the spread of different regional variants of goblets and teapots across the latter region,⁶⁶ but to a different, well defined phenomenon recognized since long time: the appearance of hard-textured, grey-coloured wares often

decorated with white painted motifs in the area encompassing Central and Southern Syria, the Beqa' and the Hula Valley (see below).⁶⁷

The factors lying behind the current impossibility to isolate early EB IV phases and assemblages in Southern Syria, the Beqa' and the northern regions of the southern Levant still have to be understood. As the present author has proposed in earlier works,⁶⁸ this situation might be due to low archaeological visibility of landscape occupation in those areas concealing the existence of an earlier EB IV archaeological phase, such as either reversion to pastoralism or a more opportunistic way of landscape use with short-lived settlements shifting from one site to another. This may be the case of pastoralism in Southern Syria and intermittent occupation of

⁶⁵ D'ANDREA 2014a, Vol. 1, p. 116; 2014b, pp. 203-206, with relevant bibliography.

⁶⁶ For recent reappraisals of this phenomenon, see WELTON, COOPER 2014; D'ANDREA, VACCA 2015, with bibliography.

⁶⁷ D'ANDREA 2014b; 2017, pp. 177-181, with bibliography, and fig. 3.

⁶⁸ D'ANDREA 2014a, Vol. 1, pp. 223-232, 234, 270-272, tab. 11; in press d.

short-lived settlements shifting from one place to another in the northern regions of the southern Levant following a short dryer period around 2500 BC, documented by the proxy data available.⁶⁹ On the other hand, there is a problem of low-resolution ceramic chronologies for the Beqa', Southern Syria and Upper Galilee affecting our ability to recognize the early EB IV phase in these areas, because specific archaeological correlates of such phase have not been defined in these regions thus far. This is due mainly to a lack of long EB IV stratigraphic sequences in the areas listed above (Tabs I-II), which make it difficult to trace the development of local pottery traditions through EB IV.

5. Discussion. Reconsidering North-South Connectivity across the Levant in EB IV

The current difficulty to isolate an earlier EB IV phase in the Beqa', Southern Syria and the northern regions of the southern Levant does not per se rule out an involvement of the southern Levantine communities in large-scale herding activities in the "peripheral" areas of the northern Levant proposed by Wilkinson *et Al.*, reprising Bunimovitz and Greenberg (see above). However, in the suggested interpretations of EB IV connectivity between the northern and southern Levant other chronological issues that further complicate the picture have been not taken into account thus far and are discussed below.

The Ebla texts report on a limited time-span before the destruction of the EB IVA city that has been estimated by some scholars as circa forty years.⁷⁰ As said before, radiocarbon dates place the destruction of Ebla in the interval between 2367 and 2293 cal BC in the 2-sigma range.⁷¹ This means that the

texts refer *just* to a situation in place during forty years within the twenty-fourth century BC, but not later than the beginning of the twenty-third century BC (that is, not during EB IVB).

With regard to patterns of north-south Levantine connectivity during EB IV, it has to be considered that Ebla's hegemony in the regional scenario ceased after its destruction in the twenty-fourth century BC. This suggests that interactions between the northern and southern Levant should have been dissimilar in different EB IV phases and that it is unlikely that a single interpretive construct applies to the EB IV period as a whole. In particular, it is questionable that the socio-economic organization of the period of the Ebla Archives, before the destruction of the city, may apply to the situation after the destruction, because this event marked a major divide between and after ca. 2300 BC in the socio-political history of Western Syria.

There are no direct textual data from the Levant for the period between ca. 2300 and ca. 1900 BC and, therefore, the socio-political situation and economic organization of Western Syria during the second half of the EB IV period are less clear than the EB IVA conditions. It is generally acknowledged that the available data suggest that changes and transformations took place in Inland Syria during the last quarter of the third millennium BC and at the turn from the third to the second millennium BC. However, the lack of written sources makes it difficult to explain changes and transformations in socio-cultural and socio-political terms. However, it is reasonable that the socio-political situation and the socio-economic organization of inland Western Syria during the second half of the EB IV period were rather different from the configuration of the region during the first half of the period, when Ebla was a dominant regional centre.

⁶⁹ FINKELSTEIN, LANGGUT 2014, p. 222, fig. 1; LANGGUT ET AL. 2015, p. 226; LANGGUT, ADAMS, FINKELSTEIN 2016, pp. 128-130.

⁷⁰ ARCHI 1996 = 2015c, in particular pp. 118-120, 2015a, 7.

⁷¹ CALCAGNILE, QUARTA, D'ELIA 2013. Several proposals have been advanced on the causes of the destruction of EB IVA2 Ebla; Matthiae maintains that Sargon of Akkad de-

stroyed the city (MATTHIAE 1989b = 2013e; 2009b = 2013d), while ARCHI and BIGA (2003; see also ARCHI 2014; 2015c) proposed that EB IVA2 Ebla was destroyed by Mari, but see the analysis in SALLABERGER, SCHRACKAMP 2015 and FOSTER 2016. Finally, DURAND (2012) proposed that the responsible for the destruction of Ebla at the end of EB IV was Ididi, a *Shakkanakku* of Mari, on behalf of Sargon of Akkad. See recently, the discussion in MATTHIAE in press. On the chronology of the Ebla destruction, see also the considerations by SCHWARTZ 2017, pp. 97, 100.

As for the Ebla region, the archaeological evidence documents that, after the destruction at the end of EB IVA, Ebla experienced a phase of crisis and gradual recovery and reorganization. A new phase of growth, although on a less monumental scale than the EB IVA city, began with the construction of temples, a palace and, possibly, of the rampart, as the present author has proposed recently.⁷² It is plausible that transformations resulted from endogenous factors and were connected with the ability of local socio-cultural components (whether or not we may label them Amorite) to take a leading political role by controlling key economic activities that fuelled inter-regional contacts.⁷³

For EB IVB, the pottery evidence suggests that there were bi-directional contacts between Ebla and the Hama region to the south.⁷⁴ Future research on the pottery evidence will hopefully reveal whether the site had contacts with other centres in the Middle and Upper Orontes sectors (e.g., Tell Mishrifeh/Qaṭna and Tell Nebi Mend) and the Syrian steppe (e.g., Tell Shayrat). The available ceramic evidence shows that Ebla had contacts with the Middle Euphrates on the east.⁷⁵ Likewise, the texts from Drehem document contacts with Southern Mesopotamia on the south-east (see above).

The archaeological evidence suggests that changes and transformations took place in other areas within the northern Levant too during the last quarter of the third millennium BC; this is the case of Central and Southern Syria. In fact, during EB IVB, sites in the Orontes Valley and the Syrian steppe apparently gained importance, such as Tell Nebi Mend that was fortified, and Tell Shayrat that reached 100 ha in size.⁷⁶ Southern Syria witnessed the re-establishment of permanent settlements during EB IVB, as suggested, for examples, by the discoveries at Yabroud, Moumassakhin and Khirbet al-Umbashi.⁷⁷ Likewise, this was the phase

when the southern Levant recovered from crisis following the end of local urbanization and was drawn again into networks of inter-regional connectivity.⁷⁸ Like Southern Syria, the northern regions of the southern Levant witnessed the re-establishment of settlements too, with several permanent villages attested in this phase (Tab. I).⁷⁹ In particular, in the Hula Valley, Hazor was re-occupied by a substantial village during the second half of the EB IV period.⁸⁰

It is possible that these data from different regional areas are interconnected with one another and reflect new socio-political and/or socio-economic balances emerged from ca. 2300 BC. Such changes in the second half of EB IV might have been triggered by the collapse of the polity of Ebla that, during EB IVA, exerted its direct political and economic control over northern inner Syria and “indirect” control on several other areas within the Levant, possibly corresponding to as many socio-political entities.⁸¹ The vanishing of the Ebla polity might have allowed some of those entities to gain a leading regional role in EB IVB, for example by controlling key territories, resources, or certain economic activities. This might be the case of the tribal confederation of Ib'al that, as we said, had alternated relationships with Ebla during EB IVA, until it swore an oath and was subjugated by Ebla itself.⁸² Therefore, if we accept the proposal that the region to the east and south of Qaṭna, bounded by the Very Long Wall, might have corresponded to the territory of Ib'al, our interpretation might find support in the archaeological evidence. In fact, sites laying within this area, like Tell Shayrat and

an EB IV extensive occupation (NICOLLE, ÉCHALLIER 2004) and the EB IV pottery retrieved at the site (ÉCHALLIER, BRAEMER 2004, fig. 584) point to a phase comparable to EB IVB in Inland Western Syria, a consideration that may apply also to the assemblages from Moumassakhin (AL-MAQDISSI 1989) and Yabroud (ABOU ASSAF 1967). This proposal has been elaborated in D'ANDREA 2014a, Vol. 1, pp. 114-117, tab. 5, Vol. 2, pp. 3-9; 2014b, in particular pp. 200-206).

⁷⁸ D'ANDREA 2014a, Vol. 1, pp. 253-264, 277-278; 2018c, in particular pp. 86-88.

⁷⁹ D'ANDREA in press b.

⁸⁰ BECHAR 2013; 2015, pp. 30-34, figs. 2-4; 2017.

⁸¹ In this regard, see the analysis in COOPER 2010.

⁸² CATAGNOTI 1997, p. 136.

⁷² D'ANDREA in press c.

⁷³ For a more detailed analysis of these phenomena and of their archaeological correlates, see D'ANDREA in press c.

⁷⁴ VACCA ET AL. 2018, pp. 25-28, fig. 4:1-2.

⁷⁵ D'ANDREA 2018c.

⁷⁶ KENNEDY 2015, p. 64; 2016, p. 3; MOUAMAR 2016, pp. 74-77, figs. 3, 6, 12.

⁷⁷ For example, the site of Khirbet al-Umbashi clearly had

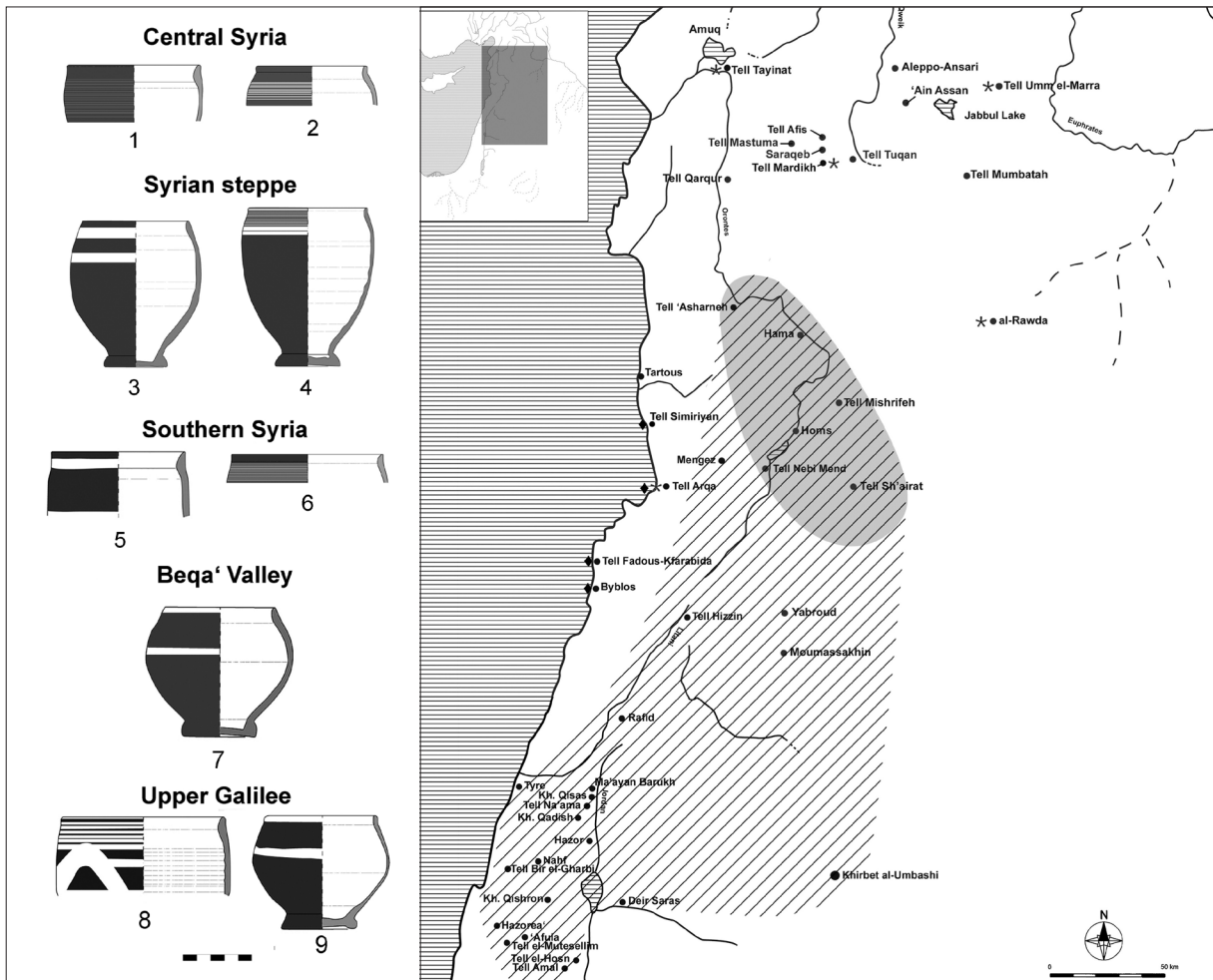


FIGURE 3
 EB IV “grey wares” in the Levant. On the left, vessels from Tell Nebi Mend (nos 1-2; redrawn after MATTHIAS 2000: fig. 23.5:87, 90); Tell Shayrat (nos 3-4; redrawn after MOUAMAR 2016: fig. 8: 8-9); Khirbet al-Umbashi (no. 5; redrawn after ÉCHALLIER, BRAEMER 2004: fig. 584: C.157); Moumassakhin (no. 6; redrawn after AL-MAQDISSI 1989: fig. 20(a): 130); Tell Hizzin (no. 7; redrawn after GENZ, SADER 2008: Pl. 1:2); Tell el-Waqas/Hazor (no. 8; redrawn after BECHAR 2015: fig. 5: 9), Khirbet Qadish/Qedesh (no. 9, redrawn after TADMOR 1978: fig. 8: 1). On the right, map of distribution of grey wares in EB IVA (grey area) and EB IV (dashed area); the star and diamond signs represent EB IVA and IVB imports respectively (map on the right reproduced after D’ANDREA 2017; fig. 3)

Tell Nebi Mend, expanded during EB IVB, and Qatna itself developed continuously all through EB IV and the EB/MB transition. Therefore, it might be possible to frame the re-establishment of permanent settlements in Southern Syria and Upper Galilee, including the substantial settlement at Hazor in the last quarter of the third millennium BC, within the phenomenon of expanding centres in Central Syria. Interestingly, this might antici-

pate some aspects of the Middle Bronze Age regional organization.

In this regard, it is worth emphasizing that from the second half of the EB IV period a common “technological milieu” was established in that larger area (see map on fig. 3). This is documented by the appearance of techno-stylistically related wares in Central (the Upper and Middle Orontes sectors) and Southern Syria, the Beqa’ and Upper

Galilee (fig. 3: 1-9), which seem not produced in the Ebla region in EB IVB, based on the evidence uncovered thus far. As anticipated above, we do not refer simply to the spread of goblets and teapots typical of the Levantine EB IV with several regional variants.⁸³ The phenomenon in question is different, well defined and represented by the grey hard-textured wares and related classes of pottery typical of the second half of the EB IV period (the Grey Ware,⁸⁴ the Black Wheel-made Ware,⁸⁵ and related wares found at Tell Nebi Mend⁸⁶), which are briefly described below, summarizing from the author's previous works.⁸⁷ It seems that regional variants of grey wares found in Central and Southern Syria, in the Beqa' and in Upper Galilee were locally produced at different sites and areas with various "recipes" whose petrographic properties reflect local geomorphology and availability of raw materials, though all aimed to achieve the same aesthetic results. Goblet, teapots, jars, and bottles have grey surfaces, often decorated with white painted motifs. The ancestry of this tradition lays in the EB IVA grey wares of the Upper and Middle Orontes sectors (e.g., the White-on-Black Ware), which might explain why certain earlier techno-stylistic and morphological traits are retained in the EB IVB tradition.⁸⁸ However, based on data available thus far, it seems likely that they spread outside this original core only during EB IVB.⁸⁹

⁸³ WELTON, COOPER 2014; D'ANDREA, VACCA 2015.

⁸⁴ MOUAMAR 2016: pp. 82-83, fig. 8:8-11; 2017b, pp. 82-83, fig. 14, 85-86, fig. 16; 2018; BOILEAU 2018.

⁸⁵ D'ANDREA 2014a; 2014b; 2017; in press d; BECHAR 2015; GENZ, BADRESHANY, JEAN in press.

⁸⁶ KENNEDY, BADRESHANY, PHILIP 2018.

⁸⁷ D'ANDREA 2017, in particular p. 181; 2018c, 83-84 and fig. 1.

⁸⁸ D'ANDREA 2014a, p. 163, citing earlier references; 2014b, pp. 198-200, fig. 10:b; 2017, p. 178; in press d; D'ANDREA, VACCA 2015, p. 48 and fig. 3:1-8 citing earlier references. On the ancestry of the grey EB IV vessels and parallels with the Orontes Valley assemblages, see already DEVER 1980, pp. 50-51, fig. 5, and n. 38 at p. 60; MAZZONI 1985, pp. 14-15, though more in the perspective of Syrian imports in the southern Levant. See also WELTON, COOPER 2014, pp. 335-336.

⁸⁹ See the analysis in D'ANDREA 2017, pp. 177-181 and D'ANDREA in press d, with bibliography.

6. Concluding Remarks. Ebla and the South in EB IV: Problems and Prospects

A peripheral involvement of the southern Levantine communities in large-scale herding activities in the drier agro-pastoral regions of Syria during EB IV has been proposed for quite a long time, but has not been proved, thus far, by means of either archaeological, textual or bioarchaeological data.

In the paper, we discussed the importance of a high-resolution definition of the chronological and geographic scales of connectivity between the northern and southern Levant through the EB IV period to understand the mechanisms lying behind contacts and interactions. The refinement of regional periodization schemes for the northern and southern Levant has made it possible to understand patterns of occupation of various areas through different EB IV phases, to synchronize these regions with one another, and to isolate blind spots in current scholarly knowledge (Tabs. I-II). In the proposed chronological scheme (Tab. II), apparent "gaps" during the earlier EB IV phase(s) in areas located at the northern edge of the southern Levant might be connected with subsistence strategies possibly including pastoralism and mobility at a higher degree than during EB III and the later EB IV phase(s). However, there is no evidence, at present, to connect these phenomena with the formation and rise of the Ebla polity in northern inner Syria. Conversely, the reappearance of occupation in those areas during the later EB IV phases was concurrent with a phase of expansion of sites in Central Syria after the fall of Ebla, an event which altered regional and inter-regional scenarios. The connections between Central and Southern Syria, the Beqa', and Upper Galilee visible from the pottery (the various regional "grey" wares techno-stylistically related to one another; fig. 3: 1-9) seem to be ascribable to the second half of the EB IV period too.⁹⁰

Therefore, seen from this perspective, connections between the northern and southern Levant in the EB IV period gain both chronological resolution – limited to the second half of the EB IV

⁹⁰ D'ANDREA 2017, in particular p. 181.

period, i.e. Syrian EB IVB – and geographic definition – concentrated in Central and Southern Syria, the Beqa', and the northernmost areas of the southern Levant, like Upper Galilee. This phenomenon might be explained as the result of increasing contacts among those areas triggered by the new role taken by sites in the Upper and Middle Orontes sector and the adjacent steppe region during EB IVB, after the vanishing of the Ebla polity, as we have proposed in this article. However, whether or not intense EB IVB interactions among the areas listed above, made possible by changes in regional socio-political balances, developed from less intense and “structured” contacts begun in EB IVA – and thus far not emerging from the archaeological and textual data – will, hopefully, be clarified when the stratigraphy and nature of earli-

er EB IV phases in northern regions of the southern Levant will come into sharper focus.

On the other hand, and concluding, absence of evidence might not be evidence of absence. Bioarchaeology might provide a means to re-investigate interactions between the northern and southern Levant in the EB IV period from a different perspective through isotopic analysis of human and animal bones in order to test both human residential mobility connected with pastoralism and movements of flocks. This method has not yet been applied to the study of the Levant in EB IV. The answer may be lying in the very same means of such proposed long-distance interactions between Ebla and its presumed southern horizon – the flocks and the people involved in their management – and the investigation of this issue may represent a prosperous future avenue of research.

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The ancestor worship in the third millennium BCE

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ABSTRACT

Ancestor worship is a combination of many distinctive elements, beliefs and rituals that had an important social meaning in ancient societies. Remains of ancestors and associated beliefs and rituals have been found in numerous archaeological sites of the Near East and the role of ancestors in ancient communities should not be underestimated.

This paper examines the characteristics of ancestor worship, with a focus on the archaeological remains found in the major geographical centres of Mesopotamia dated to the third millennium BCE. Through the analysis of this phenomenon this article argues that the study of ancestor worship could be used to investigate many different aspects of ancient societies, such as changes in the political, economic and religious systems and the movements of populations or cultures.

KEYWORDS

Ancestor, ancestor worship, ancestors' beliefs and rituals, Bronze Age, third millennium BCE, Mesopotamia, Syria, Israel

1. Introduction

Death and the loss of a relative, despite being a natural part of life which almost every human being has to face at some point, have been treated in many different ways throughout history and while death transforms the human body in an expected way, funerary practices may «mask, subvert, or re-imagine the social status of the dead with unexpected results».¹ Different cultures around the world have created several types of rituals involving ancestor veneration in order to manage problems related to the biological loss and the consequent social transformation. These differences are reflected in the meanings and categories of ancestor worship that are far from being entirely defined, although the term ‘ancestor’ has a long tradition of interpretations and epistemological backgrounds.

Using the case of Mesopotamian archaeological findings (fig. 1), this paper will analyse the archaeo-

logical remains and meanings of ancestor worship in the third millennium BCE. It will first define who was considered an ancestor and his/her characteristics, and then analyse the different stages of veneration. Three main veneration phases (fig. 2) can be distinguished:

- the pre-burial phase with the decomposition stages and the start of the ‘deification process’;
- the burial phase with the creation of the grave and relocation of the ancestral bones in the tomb;
- the post-burial phase with post-interment offerings (such as food) and rituals (such as *kispum*).²

This analysis aims to investigate the social significance of this cult, any similarities with ancestor rituals performed in Mesopotamia and the role that ancestor worship played in defining ancient cultures and social identities.

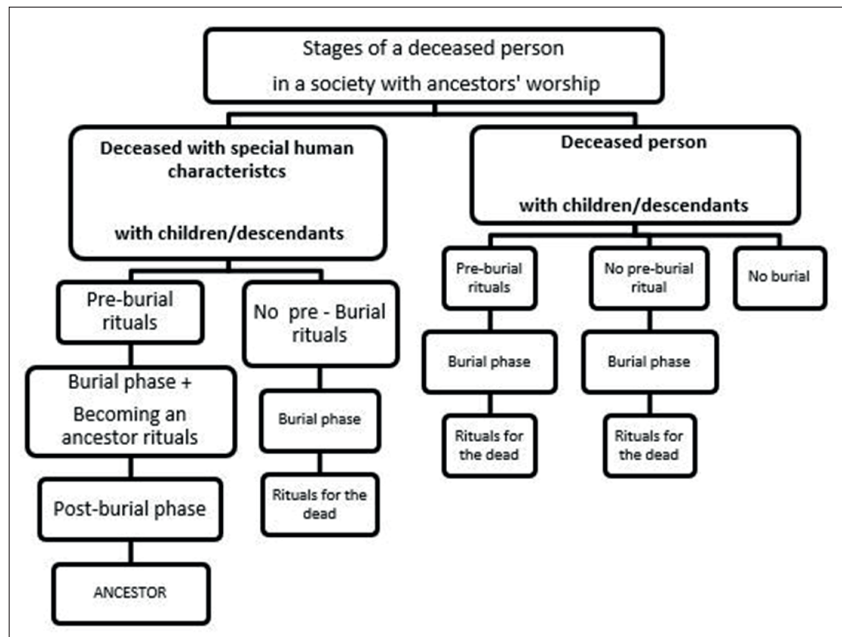


FIGURE 1
Archaeological sites included in this study (modern names in brackets; source and date of photo: Google Earth 2019)

¹ CRADIC 2017, p. 219; see also UCKO 1969; PARKER PEARSON 1999.

² For similar categories see also CRADIC 2017, pp. 219-248.

FIGURE 2
Ritual surrounding death
in a society with ancestor worship³



2. Who was an ancestor?

The definition of who was considered an ancestor in the ancient Near Eastern society of the Early and Middle Bronze Age is still a debatable topic. The ancestor is primarily defined as a person who died and left behind a variable amount of living descendants. Ancestors are further defined as «dead member(s) of society who are remembered and venerated as the source of entitlement and/or identity by their descendants, periodically or intermittently, through active lines of communication usually in the form of rituals and sacralisation of places».⁴ Such definitions by themselves, however, are reductive and as suggested by Campbell, the «myriad terms for something like 'ancestors' and their varied connotations in the many languages of the world alone should suggest the polyvalence and discursive nexus of memory, kinship, identity, power and place».⁵

In societies with some concept of the afterlife, as those of Mesopotamia and the Levant, the human

being was believed to exist beyond the death of the human body.⁶ In those cultures, in fact, the death was seen not as a definitive separation but as a transitional phase from a 'physical human existence' to a more 'spiritual existence', as a ghost for example.⁷ Death, however, even if it is a necessary step in acquiring ancestor-hood it is not a «sufficient condition for the attainment of ancestor-hood».⁸ In fact, death itself «has no deifying virtue»,⁹ as Durkheim affirmed, and the deceased «do not necessarily become ancestors automatically after they die».¹⁰ Instead, ancestor-hood was a privileged status acquired after a series of pre-conditions were satisfied and through the performance of numerous rituals.¹¹ These series of rituals, performed by the living, activated a transformational process which enabled the deceased to lose their human characteristics and acquire supernatural powers, thus, developing from a

⁶ TEINZ 2012, p. 236.

⁷ TEINZ 2012, p. 236.

⁸ FORTES, DIETERLEN (eds.) 1965, p. 125.

⁹ DURKHEIM 1915 (1964⁵), p. 62.

¹⁰ MATSUMOTO 2010, p. 3.

¹¹ TEINZ 2012, p. 236.

³ For a similar graph see also TEINZ 2012, fig. 1.

⁴ MATSUMOTO 2010.

⁵ CAMPBELL 2016, p. 82.

status of deceased to the final status of an ancestor.¹² These protocols were performed periodically at the grave or in designated remembering places not only to 'transform' the deceased to an ancestor but also as 'means of remembering'.¹³

This 'deification' process ensured that the ancestor was an almost divine figure with potent powers which could affect human events and that he/she could not make mistakes in his/her judgments. In fact, after the 'deification' process, the ancestor held supreme authority, and no other living person maintained decision-making autonomy without the ancestors' permission because the ancestors had 'the last word' in every decision.¹⁴ For their authority and control over human beings, ancestors were worshipped and revered many years after the death of the 'human body'. Ancestors were considered powerful spirits that could affect the life of their living descendants either by helping or punishing them and ancestor worship is based on this ambivalent power.¹⁵ The descendants, through specific rituals, could either thank the ancestor, ask for his/her help or use special practices to change the will or placate the anger of the ancestor.¹⁶

The ancestors' interest could extend to the whole of human affairs and the decision-making of the entire community of the living, especially if the ancestor was a king or member of the elite before death. Ancestors were considered 'active agents' who could make decisions that affected human life or the choices of the living.¹⁷ They also had an important role in political and economic dealings and decisions. Consequently political, social and religious aspects of ancient societies were closely linked with the worship of ancestors.

The studies of ancestor worship have created different interpretations used to explain reasons and meanings of this veneration. The most recognised interpretations state that ancestors could have been employed for creating a strong identity and a com-

pact social system, giving explanations to questions otherwise inexplicable to the living, resolving problems that cannot be managed by the living and justifying the leader and/or the elite family powers within the society. These interpretations are linked to different types of ancestors who have different characteristics, meanings and functions. There are three broad categories of ancestors:

- the biological ancestors tasked with supporting, protecting and guiding the family with which they were linked;
- the guardian ancestors who cared about the entire social system and the relationships between different families within the whole community; they were also able to protect people who were not blood-related to them;
- the spiritual ancestors who were worshipped by a large number of people and were considered important for the whole community because they had the critical task of guiding and advising the ruler and the elite leaders. Only people who distinguished themselves or helped the community during their 'mortal' life, such as heroes, rulers or elite officials, could become spiritual ancestors.¹⁸

Rituals and beliefs related to biological, guardian and spiritual ancestors were transmitted from generation to generation, initially in oral form. At the beginning of the cult, it took the form of memory that had been transmitted within families for generations through the use of oral stories and other forms of social interactions.¹⁹ These stories led to the creation of a social memory based on a shared past and ancestors, which was used to legitimise the social position of a group as well as their role within society. In this belief system, ancestor worship became a social mechanism that served to affirm the connection of kinship between families and, in a society made up of family clans, it also helped the creation of a social hierarchy.²⁰ Consequently, the

¹² MATSUMOTO 2010, p. 3.

¹³ MATSUMOTO 2010, p. 3.

¹⁴ FORTES 1959, p. 33.

¹⁵ FORTES 1959.

¹⁶ SPIER 1957.

¹⁷ LANERI 2011a.

¹⁸ N.B. These categories have been created only for explicative purposes and to better categorise the different interpretations, therefore they should not be interpreted as a standard canon. The meanings of the ancestor worship changed according to cultural, chronological and geographical variables.

¹⁹ JONKER 1995.

²⁰ GLUCKMAN 1937, p. 129.

social memory which led to the creation of a collective identity (a range of memories shared by a number of people within the same group), contributed to the development of a more stable social situation, in which the elite and the royal family could have a stronger authority and power. This social meaning acquired even more importance during the third and second millennium BCE, a period connected with a state of political, social and economic change, when ancestor worship (in some cultures of the Near East) was used with the purpose of strengthening relations and the social structure.²¹

During the Bronze Age, in fact, a primary interest of rising Near Eastern dynasties was control over every aspect of the funerary rituals and ancestor worship as these served to legitimate identity and power in a changing socio-economic system. Therefore, in this period, the various aspects of this worship were modified over time following the needs of the elite. In this period the Near Eastern ancestors played a preeminent role as active agents in supporting the elite's power in making political and economic decisions, as proved from the textual sources from Mari,²² Ebla,²³ and Ugarit.²⁴

Written sources can offer information useful to understand the thought processes behind certain archaeological remains and if we combine textual evidence with the latter, these suggest that ancestor worship in the Near East was evolving over time and some of its basic elements were shared among the Mesopotamian sites. These shared elements are: the presence of ceramic cooking and storage vessels, the occurrence of food, post-burial offerings, intramural and residential graves, underground burials, other types of tombs for 'special' deceased and tomb complexes.²⁵ This paper will analyse these categories in detail, following the discussion of the three phases (pre-burial phase, burial phase and post-burial phase) of ancestor worship.

In the next section the author will attempt to combine textual sources with archaeological remains

to study the main aspects of the Near Eastern ancestor worship during the third millennium BCE. Three case studies, Tell Banat, Umm el Marra and Jerablus Tahtani with their mortuary complexes and monumental tombs will be analysed as they exemplify a conspicuous corpus of data on this subject.

3.1 Ancestor worship

3.1 The pre-burial phase

During the Bronze Age, and in particular throughout the third millennium BCE in Mesopotamia «not all who died were mortal»,²⁶ in other words the death of the physical body, as already mentioned, did not mean a rupture of the relationship between the living and the deceased, but rather a moment used to reinforce the family relationship through a series of rituals.

In these ancient Near Eastern societies the veneration of the ancestors was usually performed using prayers, rituals, and offerings and accompanied or preceded by different kinds of burials. These sequences of reciprocal obligations were enacted, first of all, by the eldest son, who had the duty of 'taking care' of the deceased parent, and who acquired after that the ancestor's inheritance and privilege to continue the story of the family.²⁷ An important example of these obligations is provided by an ancient text, known as "Duties of an Ideal Son", from the city of Ugarit. In the text it is possible to read several responsibilities of the eldest son, who is designated to be the custodian of the family and has the responsibility to take care of the deceased father (the ancestor).²⁸ Similar ideas of duties and inheritance can be found in the customs and beliefs of the ancient city of Mari.²⁹

The first rituals which allowed the deceased person to become a venerated ancestor started soon after the physical death and took place during the fu-

²¹ LANERI 2011a, pp. 121-135.

²² BONECHI, CATAGNOTI 1996, pp. 89-116.

²³ ARCHI 2015, pp. 1-854.

²⁴ HEALEY 1995, pp. 186-191.

²⁵ CREECH 2015.

²⁶ SANDERS 2013, p. 36.

²⁷ CALHOUN 1980, pp. 304-319.

²⁸ CREECH 2015.

²⁹ CREECH 2015; see also SCHMIDT B. 1996. *The Beneficent Dead*. Winona Lake.

neral and before the burial. The second part focused on the decomposition stage. During this stage, the bones of the deceased could be: relocated in contexts with a strong political significance; divided among the relatives to create a physical connection between the ancestor and his/her family; divided among people not directly connected by family ties,³⁰ with the intent of creating new social connections under a common ancestor. In other cultures, some specific parts of the skeleton were considered with high level of value (e.g. the ancestor's skull in Mesopotamian prehistory³¹) and could be relocated to a secondary location, such as the house of the descendant or a shrine.

After the decomposition process and in some cases the division of the ancestral bones, veneration practices consisted of initially private rituals that took place in the presence of the family. These rituals were held first at home, later they were performed in a more elaborate structure such as a temple and/or a monumental tomb used by the whole community. Monumental and funerary complexes/mausoleums had been created for families and for elites and these were found all along the Euphrates Valley, as for example Tell Banat, Jerablus Tahtani, and Tell Ahmar,³² aboveground architecture for deceased elites has also been unearthed at Tell Bi'a, Gre Virike, and Umm el-Marra.³³ In these different types of sepulchres the worship of ancestors went beyond the family and it was extended not only to close relatives. In fact, in these new types of funerary structures it was possible to bury large groups of deceased and thus these tombs contained more than one ancestor. The dead of these burial groups can either follow a kinship line of family type or race or community and they may also be of different generations.³⁴

Disarticulated skeletons of 12 individuals (one infant, four children, two adults and five mature adults) were found in Tomb 302 (fig. 3) the largest and most elaborate grave of the mortuary com-

plex of Jerablus Tahtani.³⁵ This mortuary complex, located at the south end of the settlement, consisted of Tomb 302 and a series of adjacent pithoi and pit graves. The burial practices at Jerablus Tahtani, probably consisted of a many stage process which started with death, the disarticulation of the body, the creation of a primary interment and then continued with the secondary burial processes such as the relocation of the bones. During this last stage particular parts of the skeleton were separated from the body and deposited in specific locations, such as the skulls of adult which were carefully deposited on the floor near the visitors to the chamber.³⁶ This stage culminated with the transfer of the human bones inside the main chamber of Tomb 302 and the relocation of older inhumations.³⁷ The human remains inside Tomb 302 were not anatomically intact and this could suggest the interpretation that the disarticulated bones relocated in this tomb lost their individual characteristics to be admitted and worshipped into a collective identity.

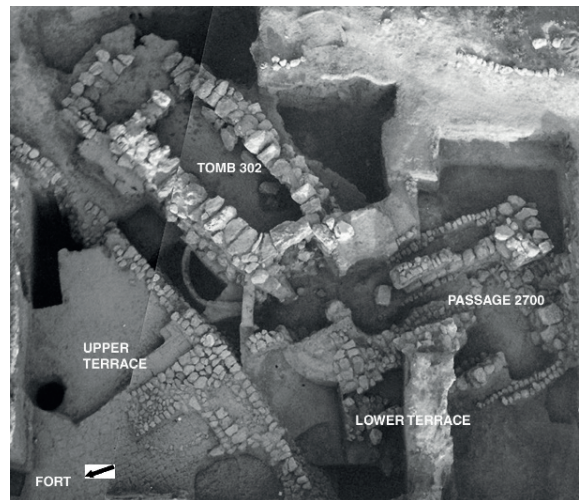


FIGURE 3
Tomb 302 at Jerablus Tahtani (photo E. Peltenburg)³⁸

³⁰ LANERI 2011b, p. 29.

³¹ KUIJT 2009.

³² NISHIMURA 2015.

³³ NISHIMURA 2015.

³⁴ PORTER 2002a, p. 9.

³⁵ PELTENBURG (ed.) 2015, pp. 37-98.

³⁶ SANG 2010, p. 208.

³⁷ SANG 2010, p. 48.

³⁸ PELTENBURG 2008, fig. 8, p. 231.

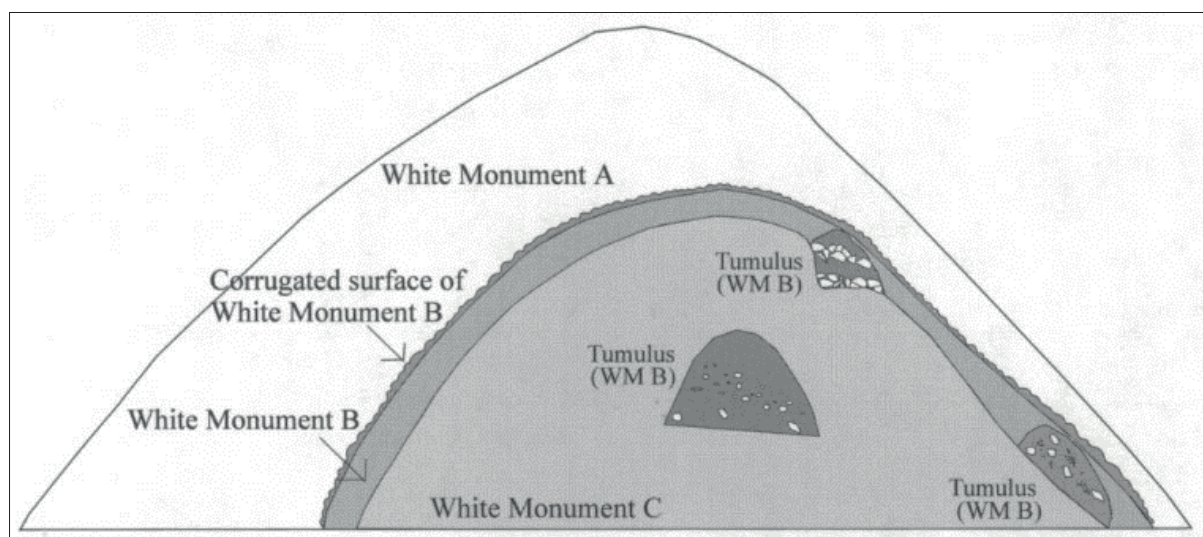


FIGURE 4
White Monuments of Tell Banat North
(schematic construction phases)³⁹

A multistage burial process of disarticulation, selection, and burning of skeletal remains, which probably allowed the deceased to be part of an ancestral group, was performed at the site of Tell Banat.

The site of Tell Banat North (fig. 4) is composed of free standing and somewhat pyramidal mortuary monuments named the “White Monuments”.⁴⁰ These monuments were created and used over a period of three to four hundred years, «from at least about 2700/2600 BCE (but probably earlier) until 2300 BCE». ⁴¹ The last version of the White Monument, termed White Monument A, is the visible phase of these mortuary monuments and it represents a single act of construction.⁴² Underneath there is White Monument B, a thick layer of white terra pisé which unified the more ancient White Monument C and a number of small tumuli constructed around the oldest monument. The White Monument B was built during the period of first expansive occupation (Period IV)⁴³ and the White Monument C indicated that it was used for a con-

siderable period. Inside the White Monuments of Tell Banat were buried a large number of deceased, but the selection criteria for these inhumations is uncertain. Individuals buried in those places may have been chosen because they could have been: part of a family, part of a particular group, significant members of the city or of a lineage or they may have had an ideological relationship.

Similar patterns can be observed in the mortuary complex of Umm el Marra (fig. 5). Umm el-Marra is an archaeological site located in Syria which has returned a set of data on the mortuary behaviour of the elites and the rituals associated with the worship of these. The site provides a large number of graves for people considered the elite of the city, but there are also other types of installations such as those for animal burials and for human infants.

During the Early Bronze Age, in the acropolis of Umm el-Marra a mortuary complex was constructed, which was used over three centuries from Early Bronze III to IVB (from ca. 2500 to 2200 BCE),⁴⁴ and composed of tombs (usually built adjacent)⁴⁵ and

³⁹ PORTER 2002a, fig. 4, p. 15.

⁴⁰ PORTER 2002b, p. 158.

⁴¹ PORTER 2002b, p. 158.

⁴² PORTER 2002b, p. 158.

⁴³ PORTER 2002b, pp. 158-159.

⁴⁴ SCHWARTZ 2012, pp. 59-60.

⁴⁵ SCHWARTZ 2007 (2008²), p. 41.

related installations.⁴⁶ Inside the tombs there have been found multiple interments which could suggest some sort of relations among the deceased either kinship of family ties.⁴⁷ Deceased members of the same family or group were buried and worshipped together judging from the offerings left for the ancestors.

Consequently, the mortuary remains of Tell Banat, Jerablus Tahtani and Umm el Marra suggest

that a multistage burial process was performed after the death, which started with the decomposition and disarticulation of the human body. Rituals such as disarticulation, selection, and burning of skeletal remains were performed at Tell Banat to destroy the human characteristics and «render them cultural artefacts to be used and manipulated in forming collective identities».⁴⁹

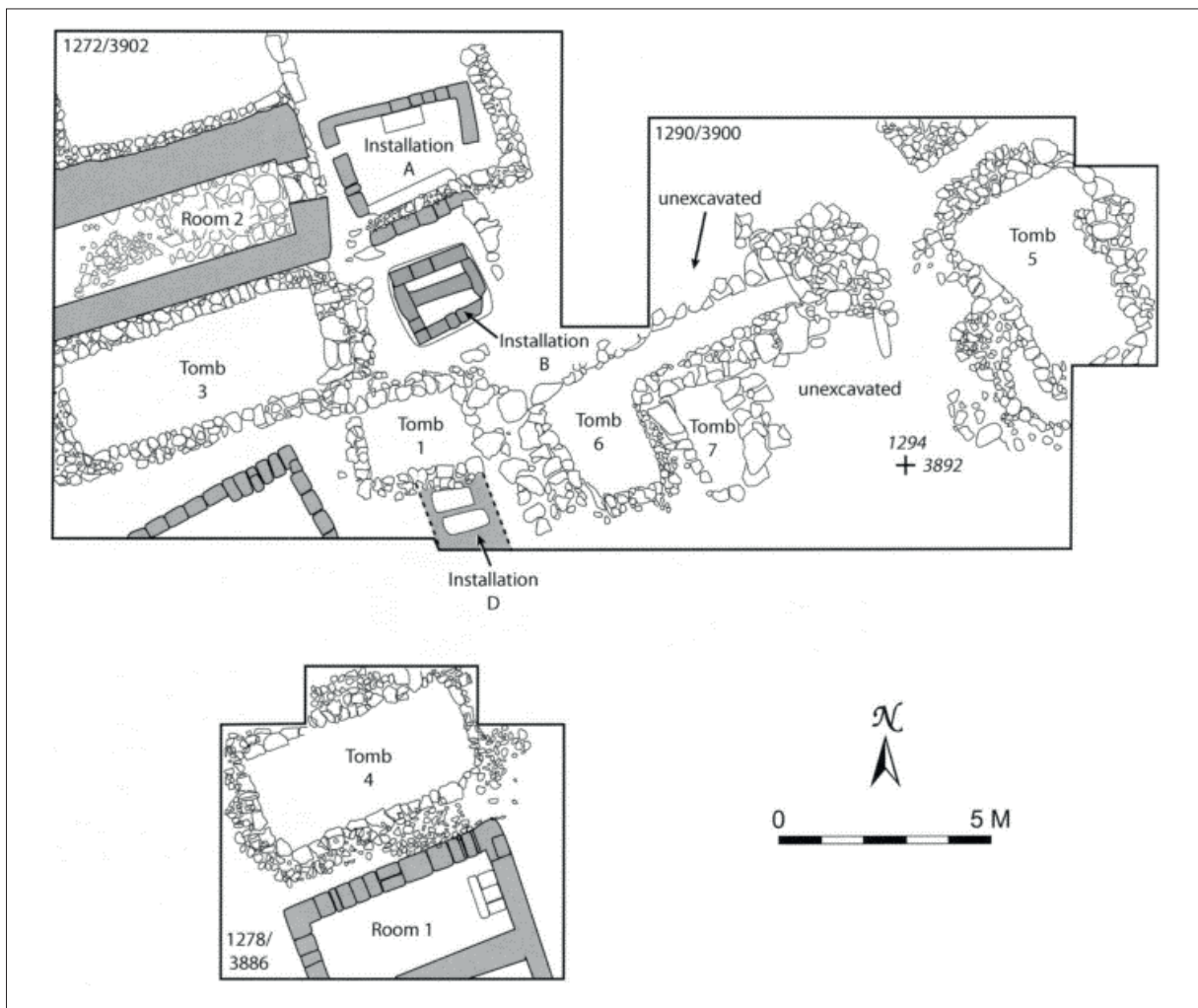


FIGURE 5
The mortuary complex of Umm el Marra⁴⁸

⁴⁶ SCHWARTZ 2012, pp. 59-60.

⁴⁷ SCHWARTZ 2012, pp. 73-74.

⁴⁸ SCHWARTZ ET AL. 2006, fig. 3, p. 606.

⁴⁹ PORTER 2002b, p. 166; see also TILLEY C. 1996, *An Ethnography of the Neolithic*, Cambridge University, pp. 241-243.

In the case of Tell Banat and Umm el Marra and Jerablus Tahtani the graves became a monumental place for the persistence of memory, ritual traditions and a marker of descent lines or kinship on which the social order was based. Consequently, family crypts, temples, shrines and monumental tombs not only represented the physical location of the ancestors' remains, but they also symbolised the power and authority of the deceased and his lineage and the collective identity, with an important emotional, social and political significance for the whole community.⁵⁰

3.2 The burial phase

The burial phase is the placement of the skeleton (or part of it) in a grave with some grave goods (such as vessels, bowls with food offerings, drink and cooking ware etc.) useful to feed the deceased due to the scarcity of food and drink in the Netherworld.⁵¹ The ancestor's body could be buried in a wide variety of graves types. Among these types, besides common burials, there are residential graves and large tomb structures used for collective burials.

The residential graves were funerary deposits created within the domestic dwelling which show a desire to keep the ancestor in proximity to their descendants. In this manner the ancestor could have been used «as a clear point of reference for the living family in the process of revising the memory of their ancestors (...) in strengthening familial lineages and reinforcing a sense of belonging among the family's members (...) as well as in the process of confrontation with groups that presented a different social, religious or ethnic identity».⁵² The bond with the ancestors, therefore, could represent a desire to maintain the family identity in the context of the death of the head of the family and within the socio-economic, political and military changes

⁵⁰ CAMPBELL 2016, p. 88.

⁵¹ In the ancient text the "*Death of Urnamma*" it was underlined the scarcity of food and drink in the Netherworld and in one line it was written: «Urnamma brings the ghosts of the Netherworld fresh food and drink, and so, his grave good nourish his own ghost and the ghosts of others» COHEN 2005, p. 103.

⁵² LANERI 2011b, p. 44.

affecting Mesopotamian society during the Bronze Age. During the Middle Bronze Age, the focus on strengthening of the family bond became more evident in both the archaeological record and textual sources. An example of this phenomenon is the increasing occurrence of residential graves in both palatial and non-elite private dwellings.

In the same period, in addition to the residential graves, it is possible to note a growing number of large tomb structures created for high-status people. This variety of tomb structures include: funerary crypts, intramural mausoleums, royal tombs and funerary monuments.⁵³ Similar monumental structures, which were probably used to worship common ancestors, were found at Tell Banat (the monumental mortuary mounds),⁵⁴ Gre Virike (the monumental mortuary complex),⁵⁵ Jerablus Tahtani (Tomb 302)⁵⁶ and in the mortuary complex at Umm el Marra.⁵⁷ Inside the mortuary structures of Tell Banat North, named "White Monuments", for example, a large number of deceased were, instead, found in the White Monument B and A and the inhumations, age and gender of the deceased vary substantially over the time.⁵⁸ This suggests that the deceased buried inside the White monuments were not only probably bound by family/group ties but also that these subjects, after being placed in this mortuary mounds, lost their individual characteristics to become part of an «unnamed amorphous group»⁵⁹ of selected (common) ancestors. Nevertheless, the enormous efforts invested and the constant and difficult work of regular maintenance indicate that this place was considered highly important for the Bronze Age society of Tell Banat.

The monumental funerary structures were created not only to collect the bodies of the ancestors

⁵³ LANERI 2011a.

⁵⁴ PORTER 2002b, pp. 158-173.

⁵⁵ ÖKSE 2005.

⁵⁶ PELTENBURG (ed.) 2015.

⁵⁷ SCHWARTZ ET AL. 2003, pp. 325-361.

⁵⁸ PORTER 2002b, p. 166.

⁵⁹ PORTER 2002b, p. 167; see also SCURDLOCK J. 1995, *Death and the Afterlife in Ancient Mesopotamian Thought*, in: SASSON J.M. (ed.) *Civilizations of the Ancient Near East*, Vol. 3, New York, p. 1892.

but also to gather information on their memories, language, personal stories, desires, expectations and emotions.⁶⁰ For this reason these structures become important places to understand different aspects related of the ancestor worship and the society. Indeed, an important indicator of possible changes in the social relationships, in the political-economic system or in the religion system can be detected tracking the positioning and/or moving of the ancestors' skeletons or burials inside these graves.⁶¹ These contexts, therefore, can provide important information about the relations between members of the society and about the evolution and/or changes in the social system. The Royal Hypogeum of Qaṭna is one of the most outstanding examples in this regard.

The Royal Hypogeum of Qaṭna is one of these large tombs and it is considered one of the richest and most important for understanding funeral rituals and the commemoration of ancestors. The tomb complex contained several skeletons and it seems to have been used for several hundred years. For this reason, it was necessary to re-arrange the 'too old deceased' periodically to find new space for the latest. In fact, after some years, when the remains were considered too old and no more worshipped, they were taken from the main chamber and moved in the eastern chamber «without respect to the unity of the individual person».⁶² This act showed a special consideration for these bones as they were not thrown out but still kept in the Royal Hypogeum but in a separate chamber.⁶³ In this chamber were also found a number of animal remains and offering bowls (probably used as offerings containers) that could relate to the *kispum* ritual. For these reasons the archaeologist Pfälzner thought that this room could be related to a cult of 'collective ancestors'⁶⁴, which are the dead that have lost their personal identity and are remembered simply as common ancestors. These common ancestors were not only the protectors of the community but also their presence created a com-

mon system of beliefs and cultural cohesion within the community which could be used to decrease the risk of social disintegration.⁶⁵

The creation of tombs that can accommodate many ancestors leads to a frequent reorganization of the spaces that contained the remains.⁶⁶ This reorganization means that the oldest ancestors were moved to make room for the new ones, as in the case of the Royal Hypogeum of Qaṭna and Tomb 302 of Jerablus Tahtani. This pattern of displacement of skeletons, or parts of skeletons, and their replacement with new ones is clearly detectable in the archaeological record. In addition to the repositioning and moving of the skeletons within a mortuary complex, the reconfiguration of these places or the destruction or intentional modification/desecration had an important role for the collective memory. Evidence of destruction or modification of these mortuary complexes could mean denying a common past and/or the desire to create a new apparatus of beliefs and a new social order. This could be the case of the Early Bronze Age mortuary complex of Umm el Marra which shows evidence of disturbance, in antiquity, of nearly all burials: Tomb 9 contained significant traces of apparently deliberate damage to the grave contents and it was also robbed soon after its period of use (before Early Bronze Age IVB); Tomb 8 presents damage in the west part but curiously not in the entryway; Tomb 4 was damaged around Early Bronze Age IVA before the installation of the upper level. The archaeological evidence suggested that «some, if not all, of the tombs were disturbed while the mortuary complex was still in use».⁶⁷ This intentional violation of the ancestors' graves could be driven by different motives including the will to destroy the connection between the living and the deceased for personal or political reason and the symbolic abolition of the old social order to establish a new one. Therefore, these places with their different inhumations, objects and memories

⁶⁰ CHESSON 2001, p. 100.

⁶¹ PORTER, BOUTIN (eds.) 2014, p. 3; see also JOFFE 1993; KESWANI 2004; RICHARDS 2005.

⁶² PFÄLZNER 2012, pp. 213-215.

⁶³ PFÄLZNER 2012, pp. 214-215.

⁶⁴ PFÄLZNER 2012, p. 215.

⁶⁵ Some scholars argued that the worship of communal ancestors played a coordinating role in the group during the evolution of the latter. See BARRETT, CARNEY 2015, pp. 307-317.

⁶⁶ PORTER 2002b; see also PELTENBURG 1999, p. 432.

⁶⁷ SCHWARTZ 2012, p. 72.

could be also a valuable tool to understand the socio-economic and political systems and could be important for the understanding of socio-political transformations.

3.3 The post-burial phase

Throughout the post-burial phase, a set of more specific ancestor worship rituals were performed, as libation rituals, offerings especially of food and drink and remembrance rituals.⁶⁸ Rituals of regularly taking care of the ghost/ ancestor were performed using food and drink offerings and for this reason a recurrent discovery among the Mesopotamian burials dedicated to ancestor worship is the presence of cooking or drinking ceramics.⁶⁹ These vessels, usually ordinary cooking and drinking pots and only in rare cases examples of fine or rare ceramics, were used either to leave fresh offerings, such as food and drink for the deceased, or for rituals dedicated to ancestor worship involving food preparation or consumption (fig. 6). At Qatna, for example, were found a large amount of food remains and numerous animal bones associated with ceramic tableware and the meaning of these is still debated as they can be both remains of ritual community meals and/or offerings of food for the deceased/ancestor.⁷⁰

Textual evidence from Mari confirmed the importance, during the Bronze Age, of providing a periodic remembrance of the dead with, performance of ceremonies of feasting, name-calling and post-burial offerings with offerings of food and drink to the dead.⁷¹ The most significant example is the ritual of *kispum*.

The *kispum* ritual is attested in Syria and Mesopotamia during the second millennium BCE and it seems to share similarities with ritual meals recorded in the Levant.



FIGURE 6
Vessels with remains of organic material, probably residue of food offerings, found at the northern end of sarcophagus 1, Qatna Royal Hypogeum (photo: K. Wita)⁷²

The greatest proof of this ritual came from the Middle and Late Bronze Age texts of Mari. The *kispa kasdpu* or *kispum*, described in these texts, was an important ritual of remembrance and taking care of the deceased family members.⁷³ The *kispum*, KI-ŠI-GA in Sumerian, was effectively a ritual meal shared between the livings and their ancestors⁷⁴ which was believed to be essential for a good-quality existence in the Netherworld.⁷⁵ The failure of providing the deceased the rituals of *kispum* could transform the ancestor into a hungry and dangerous ghost who become 'restless' and able to send misfortunes and diseases upon the living descendants.⁷⁶ Information on when this 'shared meal' ritual should be performed and on the types of food to use during

⁶⁸ TEINZ 2012, p. 239.

⁶⁹ CHESSON 2001, p. 45.

⁷⁰ SCHWARTZ 2007 (2008²); see also AL-MAQDISSI M. ET AL. 2003, pp. 189-218.

⁷¹ COHEN 2005, p. 15.

⁷² PFÄLZNER 2012, fig. 6, p. 213.

⁷³ COHEN 2005, pp. 106–108.

⁷⁴ JACQUET 2012, p. 130; BOTTÉRO 1992, p. 282.

⁷⁵ BOTTÉRO 1992, p. 282.

⁷⁶ COHEN 2005, p. 107.

the *kispum* could be found in the administrative texts of Mari's palatial archive. The *kispum*, according to Mari's texts, was performed firstly at the funeral and then regularly once a month, or twice in case of an elite person, and in special occasions such as during a full or new moon.⁷⁷ The food used during the *kispum*, as described in Mari's texts, seems to consist of mostly bread and oil, to which was added sometimes sauce, honey or sesame.⁷⁸ There were also some liquid offerings, such as milk, beer or water and the textual sources mentioned the use of libation pipes (*arūtum*)⁷⁹ to pour these liquids to the dead. Mari shares this attention to the *kispum* ritual with the ancient city of Ugarit. In the Ugaritic texts the term *r'phum* seems to refer to a festivity with the living, but there is no explicit mention if those who celebrate with the living are ghosts, spirits of the dead, gods or ancestors.

In addition to the textual sources the Near Eastern archaeological remains of the Early Bronze Age show the same attention to ritual with food and drink and in burial sites a constant discovery is the presence of ceramic for cooking or drinking and animal/food remains. Often the vessels were common ceramics, the same used by the living and only in rare cases archaeologists found fine or rare ceramics. One of the archaeological discoveries that can attest to the performance of this feast during the third millennium BCE is at Jerablus Tahtani, where next to a tomb (Tomb 302) were discovered numerous "champagne vessels" interpreted as being part of a mortuary feast.⁸⁰ Moreover, the presence in the upper stratification of Tomb 302 of a large quantity of disarticulated and butchered animal bones, some of which were cooked as they show traces of burning,⁸¹ reinforce the idea that post-mortem activities involving food consumption were held at Jerablus Tahtani. Hence, it could be inferred that the animal remains, and the champagne vessels could be part of post-mortem funerary banquets performed in the vicinity of the burials.

⁷⁷ BOTTÉRO 1992, p. 282.

⁷⁸ JACQUET 2012, pp. 129–30.

⁷⁹ BOTTÉRO 1992, p. 281.

⁸⁰ PELTENBURG 1999, pp. 427–42.

⁸¹ SANG 2010, p. 45.

The archaeological site of Umm el-Marra, supports this hypothesis with remains of food offerings and cooking ware brought to tombs either at the time of the funeral rituals or during other rituals post-deposition.⁸² Moreover, artefacts such as ceramics, bone fragments and a silver bowl found above the floor of Tomb 4⁸³ support the hypothesis of post-funerary libation rituals for the ancestors, as these finds could be brought to the tomb even several years after the burial phase and might be used for rituals involving food consumption. Therefore, it can be inferred that when the graves were no longer used to bury deceased the area was still in use for post-mortem rituals and thus as place deemed important for social identity and memory.

Vessels for food and drink offerings or used in rituals involving food consumption were found outside or near the entrance of ancestor graves or in front of statues. Statues holding bowls (fig. 7) and positioned at the entrance of graves, which could be identified as those of venerated ancestors, were found in some archaeological sites of the Levant and Mesopotamia, such as in Qatna, Ebla, Tell Brak, Hazor and Tell Halaf.⁸⁴

Similar statues have been found in both the Levant and Mesopotamia and as suggested by Creech: «They may have been symbolic reminders of the living's responsibility to the dead, or genuinely used as receptacles for specific offering».⁸⁵ It remains difficult to know unequivocally the purpose of these offerings, they could represent either contributions to the maintenance of the deceased in the afterlife or gifts to ask for the help or blessings of the ancestors. The similarities shown by the Mesopotamian and Levantine Bronze Age textual sources and archaeological remains demonstrate that potential parallels in ancestor worship practices existed during the Bronze Age. Therefore, these aspects might reveal that cultural practices performed by these different cultures could have been based on similar beliefs. This might be the result of changes in the Mesopotamian and Levantine political, economic and reli-

⁸² SCHWARTZ 2007 (2008²), p. 47.

⁸³ SCHWARTZ 2012, p. 66.

⁸⁴ TEINZ 2014, pp. 15-23.

⁸⁵ CREECH 2015.

gious systems and/or because of populations or cultural movements. For this reason, a deeper study of these aspects could reveal not only more and useful information on ancient cultures and beliefs, but it might also help to understand reasons for such similarities in beliefs and rituals.



FIGURE 7
Two statues, representing individuals who are seated and holding bowls (probably ancestors) are placed on both sides of the entrance to the hypogeum at Qaṭna, Syria. The remains of food offerings were found in the bowls placed before the statues, as well as inside the tomb, which contained the bones of several generations of the royal family (Qaṭna excavations, Eberhard Karls Universität Tübingen)⁸⁶

4. Conclusion

In conclusion, this analysis showed that during the Bronze Age and in particular during the third millennium BCE, the central role played by ancestors within Mesopotamian societies is evident in both historical and archaeological sources. Thanks to these it is possible to outline the most important features of ancestor worship:

- the presence of a successor;

- a connection with the ancestor: genealogical linkage between the dead and the living successor (legitimisation);
- rituals of transformation of the deceased who become the ‘deified’ ancestor;
- characteristics or qualities of the deceased that helped his/her family or group (such as material properties or particular socio-political rights and/or power);
- the creation of the burial site and/or structure, and/or design of the place for the veneration;
- periodic services of ritual and votive offerings.⁸⁷

In the monumental tombs, found all along the Euphrates Valley, the worship of ancestors went beyond the family and was extended not only to close relatives but also to a large section of the community. In these monumental graves, in fact, it was possible to bury a large number of deceased and, indeed, typically more than one ancestor was buried and worshipped. Therefore, the ancestors buried and worshipped in these monumental structures could belong to several generations of people linked by kinship, family bond, race or culture.⁸⁸ The presence of a large number of inhumations and more than one ancestor led to a frequent reorganization of the spaces and for this reason the positioning and/or moving skeletons or burials within these graves can be an important indicator of possible changes in the social-political relationship in a society. Consequently, the burial site becomes an important place to understand aspects of the worship and of the society because this context can provide us information about the relations between people in the same society and about so-called social memory.

It can be concluded that these funerary archaeological remains with their different inhumations, objects and memories can be a valuable tool to understand the socio-economic and political systems and important for the understanding of socio-political transformations. However, especially for the Early Bronze Age, this interpretation could encounter several unresolved problematic

⁸⁶ HERRMANN, SCHLOEN (eds.) 2014, fig. C9, p. 119.

⁸⁷ MATSUMOTO 2010.

⁸⁸ PORTER 2002a, p. 9.

issues, such as: what elements should we take into account when identifying relics of ancient ritual practices associated with ancestor worship and how can we correctly identify the ancestor worship from the archaeological remains? Hopefully answers to these questions can be found through an

intense analysis of the archaeological data, textual sources, human, faunal and botanical remains related to ancestor worship in ancient civilizations. It is clear that more and specific research on this topic is required.

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Distinction and affinity. The dualism of foreign features in the MBA Levantine palatial architecture

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ABSTRACT

The Middle Bronze Age in the Near East was a period of particular commercial and political developments. Numerous polities rose in the Levant as a result of internal and external triggers. The material culture and finds from this area, which had no fixed boundaries or clear identity, reveals a continuous and vibrant interaction and exchange with the stronger surrounding cultures. This is clearly reflected in the architecture of the excavated palaces. A *mélange* of local and foreign features could be identified: Aegean frescoes, Egyptianizing wall paintings, Mesopotamian architecture and Anatolian building technique. The architecture of these palaces was used by the Levantine Elites to communicate their political power and reach to their peers. But what was the intention and motivation of the various elites to integrate selected foreign features in the architecture and decoration of their palaces? This paper seeks to answer this question by identifying the preferences and the choices of foreign styles and features. Through defining the local or regional trends, some insights are gained about the nature of the relationship between the Levantine polities and their neighbors, and the various zones of influence.

KEYWORDS

Palatial architecture, Levant, cross-cultural interaction, elite identity, peer-polity interaction

1. Introduction

The Levant, often described as a cross-road, is an area encompassing the western region of the fertile crescent, bordered by the Mediterranean Sea on one side and the vast arid expanse of the desert on the other.¹ Textual source and archaeological finds attest that during the first half of the second millennium BCE the near eastern world was strongly interconnected, with goods, people and ideas moving in a network linking the Persian Gulf, with the Mediterranean and the Black Sea, and even with the Aegean and Egypt.² The particular commercial and political developments of the region during this period, namely the Middle Bronze Age (henceforth MBA), played a crucial role in the rise of several powerful Levantine polities and the establishment of the region's local culture.

The impressive large palatial structures, found at several sites in the Levant, are but witnesses of the powers that were at play during that period. Their architecture is diverse, complex and sophisticated and has a lot to tell about the interconnections between the neighboring cultures in the region. This paper examines the architecture of these structures to identify what appears to be specific, local or regional, aspects and single out elements that reveal foreign connections. This is then considered in the light of the socio-political context of the region during the MBA, to assess – from a palatial architecture point of view – whether the Levant was truly a cross-road between the neighboring cultures, or whether it played a different role in the dynamics of the cross-regional contact and interaction.

2. Culture and cultural region

Delving into the complexity of the definition of culture and cultural region is beyond the scope of this paper. Nonetheless, it remains necessary to stress some characteristics of a culture. These can be manifested in one or all of the three fundamental layers:

observable artifacts, values and basic underlying assumptions.³ Archaeological material, and amongst them architectural remains, are a manifestation of the first, the material layer of a culture. Second, a culture is associated with a social group and each individual can belong to a number of different groups simultaneously.⁴ In this case, the studied palaces represent the elites, who belong simultaneously to their own local culture, to a larger Levantine culture, to the Levantine Elite culture as well as to the wider Near Eastern Elite culture or even beyond.⁵

A third and quite relevant point is that “culture is subject to gradual change”.⁶ Accordingly what is manifested in any of a culture's fundamental layers, provides only a “snapshot view of one particular time”.⁷ The palaces of the MBA span a period of around 450 years, their architecture reflects a development of the palatial architecture, the elite culture and the local culture, as well as the changes and fluctuations in cross-cultural interaction and influence.

The concept of cultural regions or cultural zones comes from cultural geography and means an area of relative cultural uniformity.⁸ The core-domain-sphere model proposed by Meinig proposes that each culture starts at a core and develops around its cultural center.⁹ The core is surrounded by two zones, the domain and sphere, that have a gradually diminishing

³ SPENCER-OATEY 2012, p. 3; SCHEIN 1984, pp. 3-4.

⁴ SPENCER-OATEY 2012, pp. 7-8; FERRARO 1998, p. 16.

⁵ The term Elite is used here to label the group of people that had a vastly disproportionate control over or access to resources in the region during the MBA, such as members of the ruling class or the religious leaders, and who could commission the construction of palatial structures. This follows the Weberian definition of class, in which the elites are defined relatively to their power and the resources they possess (see: RAHMAN KHAN 2012 and PAKULSKI 2012). The distinction between local, Levantine and Near Eastern follows a structure similar to the American power model proposed by WRIGHT MILLS 2000. For the purpose of this article, the local culture is that of the city/town where the palatial structure was built and its immediate network of settlements, if present. While the Levantine Elite culture represents a middle stratum consisting of the grouping of the regional/local elites from the Levant proper, the Near Eastern Elite culture is a larger grouping of the Elites of all the Near Eastern regions.

⁶ SPENCER-OATEY 2012, p. 12.

⁷ FERRARO 1998, p. 25.

⁸ WINTHROP 1991, p. 61.

⁹ MEINIG 1965, p. 213.

¹ See KILLEBREW, STEINER 2014, p. 2; SURIANO 2014, p. 9 and related bibliography.

² LARSEN 2008, p. 13.

influence of the core.¹⁰ Nonetheless, these regions or zones should be viewed not merely as compartments for the grouping of data, or areas of static uniform patterns but as “dynamic areal growth”.¹¹ Several cultural cores or cultural zones, could exist next to each other, and their zones would expand or retract obeying specific circumstances. This would eventually lead to the transfer of cultural traits.¹² As cultures, also cultural regions or zones are not “inert stuff” contained within a static boundary, but are dynamic and constantly changing.¹³

One could conclude that for a cultural crossroad to exist, this requires two cultures close to each other but not adjacent as well as an unaffected zone in the middle that allows an indirect cross cultural exchange. This zone would be outside the zones of influence of both cultures, and could still hold its own cultural traits. Frontier zones on the other hand, lay in regions where the boundaries of a culture are not very well defined and not strong enough, somewhere beyond or at the border of a culture’s sphere. These areas are distinctive for their marginality rather than their belonging. They are not fully integrated in the cultural realm, and are often transitional with rapidly changing cultural identities.

3. Cultural and political context

Before going into the details of the palatial architecture, and to examine what it has to reveal about Levantine culture in the MBA, we need to have a look at the cultural and political situation of the period.

At the beginning of the second millennium BCE and after the collapse of the Third Dynasty of U_r, a complex pattern of small and competing Amorite states emerged in Mesopotamia.¹⁴ In the Levant, several polities rose during the MBA I possibly as a result of the military campaigns of the Mesopotamian kings.¹⁵ Yamḥad, Qaṭna, Ugarit, and Hazor in the Galilee, are identified as kingdoms in the

Mari texts.¹⁶ Amorite rulers resided in the former two.¹⁷ These cities, as well as others in the region, flourished mainly due to their strategic locations.¹⁸ Their spread follows the main trade routes: the Levantine coast from Ugarit to Ashkelon, and inland from Ḥalab (Aleppo) to Hazor.¹⁹

Eventually, Hammurabi of Babylon took control of all of the Mesopotamian floodplain and the Near East was divided into two poles: Yamḥad in the west and Babylon in the east.²⁰ Besides Yamḥad, the kingdom of Qaṭna in the northern Levant also remained unaffected by the campaigns of Babylon.²¹

The particular political situation of the MBA illustrates that Mesopotamia and western Syria were not a core and periphery, but were linked “culturally, economically, politically and ethnically”.²² Several scholars argue that the whole northern part of the fertile crescent was part of a network of “Amorite Kingdoms” united by diplomatic relations and trade.²³ In the Levant this was reflected in material culture, public architecture and burial traditions, indicating a change in the political and social trends.²⁴

To the south of the Levant, Egypt was reunited and witnessed a period of cultural achievements during the Middle Kingdom.²⁵ Asiatics, referred to as *Aamu*, came to Egypt mostly from the Northern Levant during the 12th Dynasty supposedly as economic immigrants, craftsmen and soldiers.²⁶ By the 13th Dynasty some of them rose to prominent

¹⁶ BURKE 2014a, p. 405.

¹⁷ SCHWARTZ 2013, p. 3.

¹⁸ BURKE 2014a, p. 407.

¹⁹ BURKE 2014a, pp. 406-407.

²⁰ ANDRÉ-SALVINI 2008, pp. 18-19; LARSEN 2008, p. 14; SCHWARTZ 2013, p. 7.

²¹ LARSEN 2008, p. 14; KLENGEL 2000, p. 247.

²² SCHWARTZ 2013, p. 2; STEIN 2002; DURAND 1992.

²³ See amongst others BURKE 2014a, pp. 404-406; 2014b; KLENGEL 1992, p. 43; SCHWARTZ 2013.

²⁴ BURKE 2014a, pp. 408-410; PINNOCK 2009, p. 79.

²⁵ GAKKENDER 2000, pp. 183, 149-150; VAN DE MIEROOP 2011, pp. 97, 100.

²⁶ BIETAK 2008, p. 110; VAN DE MIEROOP 2011, p. 118; GAKKENDER 2000, p. 169; BOURRIAU 2000, p. 187. An inscription from the 12th dynasty records a campaign by sea in the time of Amenemhat II to the Lebanese coast which returned with a booty including 1554 Asiatics (BOURRIAU 2000, p. 187).

¹⁰ MEINIG 1965, pp. 213-216.

¹¹ MEINIG 1965, p. 195.

¹² WINTHROP 1991, p. 82.

¹³ RODSETH, PARKER 2005, p. 8.

¹⁴ LARSEN 2008, pp. 13-14; SCHWARTZ 2013, p. 3.

¹⁵ BURKE 2014a, pp. 405-406.

positions and they eventually established their own domain in lower Egypt and founded their capital in Avaris.²⁷ This is the so-called Hyksos period.²⁸

It is still difficult to define the intensity of the involvement of the Middle Kingdom in the Levant.²⁹ Yet, the contact and propagation of Egyptian culture can be inferred from texts and the discovery of numerous objects throughout the region, amongst others from Ebla, Qatna, Ugarit, Byblos, Beirut and Hazor.³⁰ During the reign of the Hyksos, objects found at Byblos, Ebla and Jericho bore the names of Egyptian rulers.³¹ In the southern Levant, which saw the fortification of its cities, cultural relations with Egypt are apparent in the material culture.³²

The political circumstances in the Near East during the MBA, the movement of things, people and ideas played a crucial role in the rise of the MBA Levant and the establishment of its local culture. Complex shifting dynamic started at first on a limited scale and reached its zenith in the second half of this period when large city-states flourished across the region. Impressive fortified settlements have been uncovered in numerous archaeological projects. The large palaces and temples are witnesses of the powers that were at play during that period.

4. The Levantine palatial structures

In the Levant 15 sites yielded the remains of some 22 MBA palatial structures (fig. 1). They span the whole period and are not necessarily contemporary with each other. The state of preservation, excavation and publication of these structures is quite varied (fig. 2). It should be noted, that this work takes into consideration all the structures that have been labelled by their excavators as palaces. Although, this term is sometimes applied indiscriminately to any monumental structure which does not seem to be cultic or religious, or which is not residential given its dimensions, or given the complexity of its plan, or quality of its building material and technique, or richness of its furnishing.³³

Moreover, the evidence of interaction that can be drawn from the palatial architecture pertains only to the cultural and economic identities of the local ruling authority; kings, governors and local princes.³⁴ The evidence of cultural interaction is then strictly related to the elite or royal culture or identity. The questions about the wider cultures, their identities and interactions should not be answered with the evidence acquired from the palatial architecture.

With that in mind, the detailed analysis of the building material and techniques of the palatial structures, as well as of their planimetric and spatial characteristics, reveals both a wide range of diversity as well as some elements of homogeneity, and regional trends.

For the foundations and walls, which are the bulk of the preserved evidence, a general overview reveals that the most common material for the former is stone and for the latter is mudbrick. The only two exceptions with mudbrick foundations are the palaces of Qatna and Tell el-Burak. Nevertheless, despite the apparent uniformity in material choice and broad building technique, the details reveal such a diversity that it seems that each palace had its own unique building technique (fig. 3). This diversity is most probably an indication of local building technique and construction knowledge, revealing that local builders with their local knowhow and

²⁷ BIETAK 2008, p. 110; GAKKENDER 2000, p. 169; BOURRIAU 2000, pp. 185, 188; VAN DE MIEROOP 2011, p. 118.

²⁸ BIETAK 2008, p. 110 dates it to between 1640 and 1550 BCE. VAN DE MIEROOP 2011, pp. 127-128, prefers a longer time span of 150 years from ca. 1700 to 1550 BCE. For an up-to-date analysis on the rise of the Hyksos see MOURAD 2015.

²⁹ AHRENS 2015, p. 143; SCHNEIDER 2008, p. 61.

³⁰ SCHNEIDER 2008, p. 61; KLENGEL 1992, p. 40; MUMFORD 2014, p. 73; AHRENS 2015, pp. 143-144.

³¹ MUMFORD 2014, pp. 73-74. AHRENS 2015, pp. 143-145, notes that some of the Middle Kingdom Egyptian objects found in the Levant may have been dispatched later, during the Second Intermediate Period, plundered from the tombs. Hence they cannot be always used as chronological markers or signals of political/diplomatic connections.

³² BURKE 2014a, p. 410.

³³ See DE MIROSCHEJJI 2015 amongst others.

³⁴ AKAR 2006, p. 48; WINTER 1993, p. 29.



FIGURE 1
Location map of the palatial structures in the Levant and surrounding regions

techniques were certainly involved in the construction process.

Interestingly, preferences and peculiarity in material choices can be noted. For instance, basalt was found exclusively in the palaces of the northern Levant. Also some traits can be traced when it comes to the employment of building material. The usage of wood for wall paneling and reinforcement seems to have been restricted to Alalah, Qatna and Tell Kabri. Orthostats as wall cladding, were found in most of the palaces of the northern Levant, but only at Tell Kabri in the southern Levant. The usage of stone slabs as doorway jambs and stone socles seems to have also been a trait of the Northern Levant.

Similarly, when it comes to the layout one can isolate distinctive regional styles, and abundant local variations. For instance the palaces of Ebla de-

spite their apparent diversity show some common characteristics as noted by Matthiae.³⁵ These are a central location of the audience suite, the location of the food preparation sector at the northern back side of the structure, the orthogonal orientation of peripheral rooms, and a semi-peripheral circulation. On the other hand, in other sites the peripheral rooms seem to be oriented parallel to the outer walls, as can be noted for the palaces of Alalah, Qatna and Tell el-Burak (see fig. 2). A peripheral circulation as noted in Ebla, could also have been the case in Tell el-Burak and the Eastern Palace of Qatna. On the other hand, the Royal Palace of Qatna shows, as much as detectable, a more distributive pattern with corridors or courts.

³⁵ MATTHIAE 2010, p. 258.

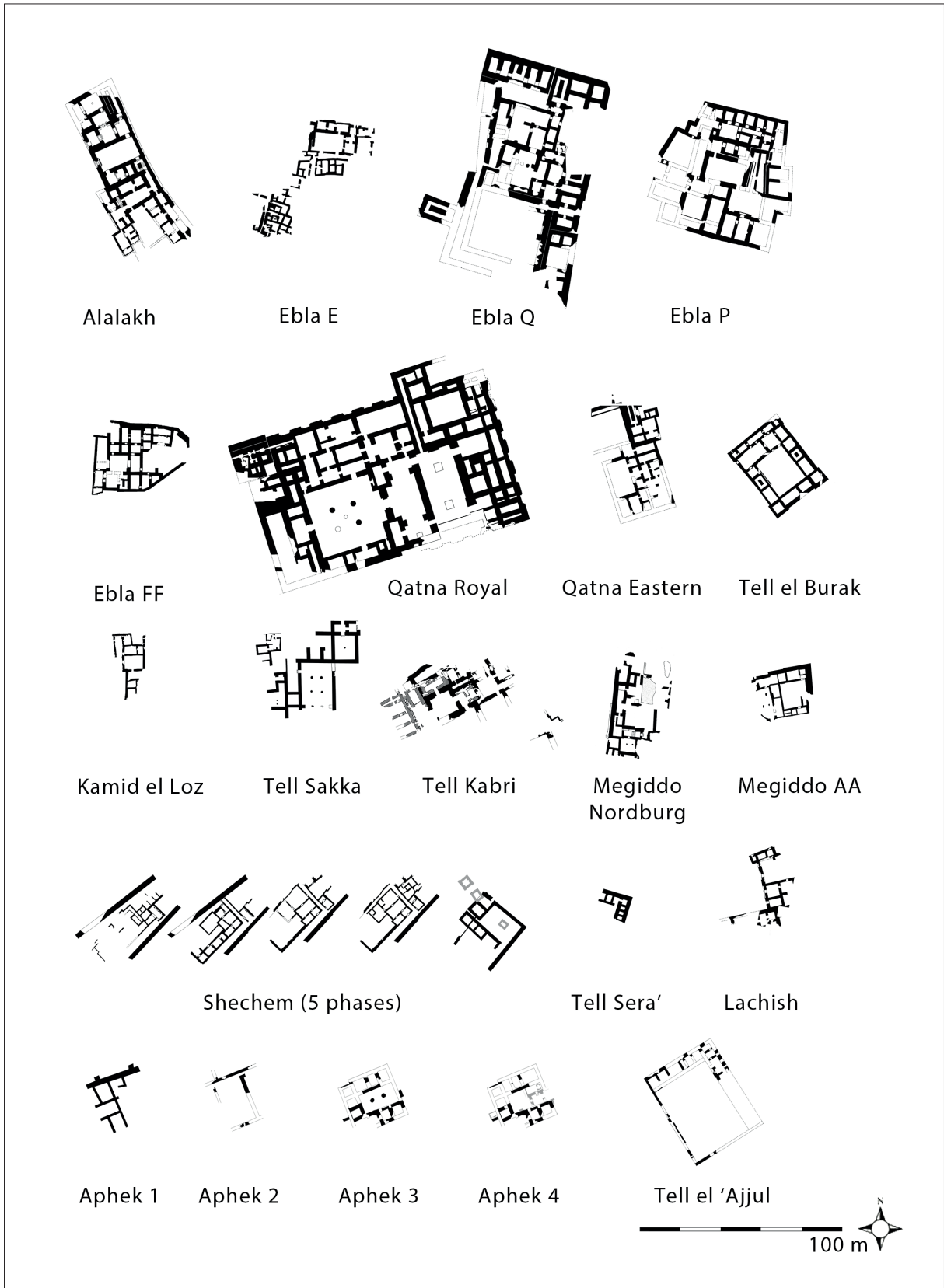


FIGURE 2
Plans of the Levantine palaces to the same scale

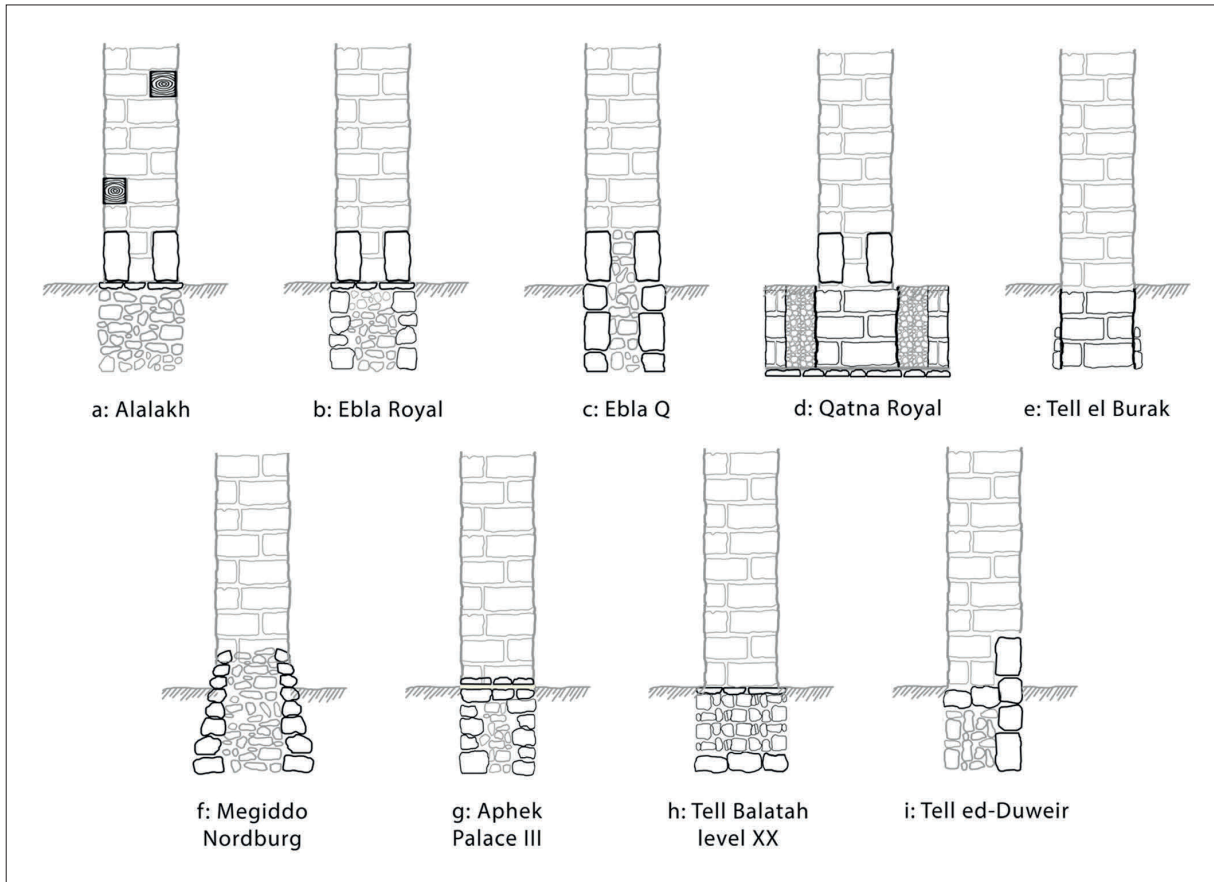


FIGURE 3
Details of the building technique of the walls of the palatial structure as per the descriptions in the respective publications

When the full extent of the structures were almost uncovered, a general elongated form is noted in the Levantine palaces, as is the case in the Northern Levant of the Palace of Alalakh, the western Palace of Ebla, the two palaces of Qatna and the Palace of Tell el-Burak, and in the southern Levant of the *Nordburg* of Megiddo and the Palace of Tell el 'Ajjūl. Some features are on the other hand completely local such as the grid layout and protruding corners of the structure of Tell el-Burak, the niched outer walls of the Royal Palace of Qatna, the triple recessed doorways of the Palace of Alalakh, the geometrically arranged brick in the walls of the northeastern sector of the Western Palace of Ebla.

An interesting aspect is the resemblance between the central representative units and the ty-

pology of the reception suite as a recurrent feature, albeit some minor differences.³⁶ A particular layout is seen in the palace of Alalakh and in the Western Palace Q of Ebla (fig. 4: a, b). It has a longitudinal north-south development and a tripartite articulation with two side wings, the central wing has a larger front hall and a narrow and long back room. This arrangement is also repeated, but in a simpler form in the southern Levantine Palace of Tell Kabri (fig. 4: c), and with a different orientation in the Eastern Palace of Qatna (fig. 4: d) and the southern palace of Ebla (fig. 4: e). In these three cases the tri-

³⁶ MATTHIAE 2013a; MARCHETTI 2006; PFÄLZNER 2007; IAMONI 2015. MATTHIAE 2013b further examines the formation of the north Levantine (Old Syrian) reception units and their layout.

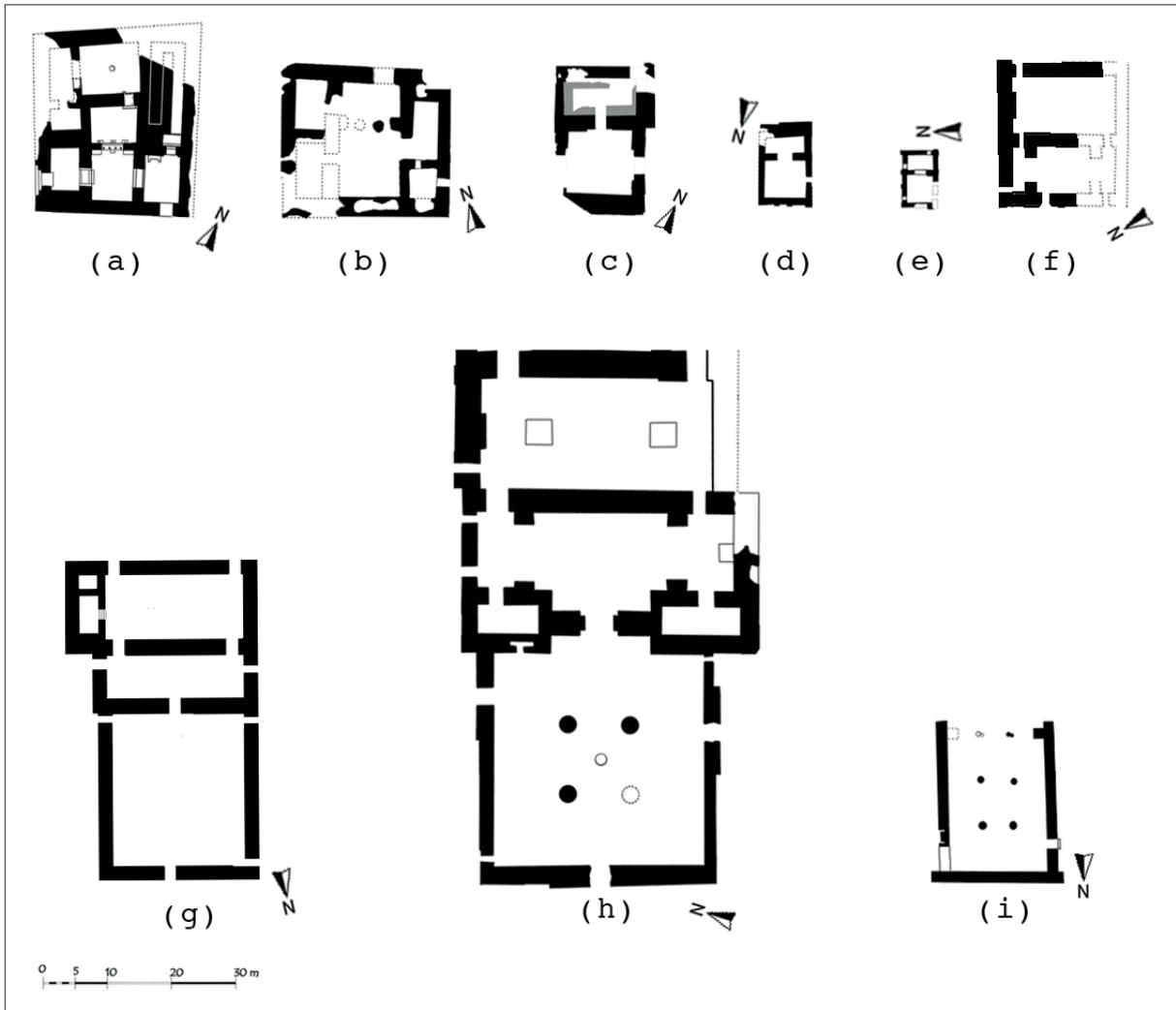


FIGURE 4
Plans of the reception suites to the same scale

partite division is lacking.³⁷ The palaces where this layout was found are in the Northern Levant, as well as Tell Kabri, repeating the same pattern identified for the presence of orthostats, stone slabs and wooden reinforcement, these combined indicate a regional trend.

Looking at the bigger picture, if we compare the general layout and the architecture of the palaces of the Levant with those found in neighboring Mesopotamia, Egypt, Crete and Anatolia, it is not very easy to identify any clear sign of direct influence.

³⁷ For more details, see KALLAS 2017, pp. 92-94.

5. Mesopotamian Influence

Mesopotamian palaces were excavated at Aššur, Ešnunna, Mari, Larsa, Tell al-Rimah, Uruk, Adab, Tell Leilān, and last but not least Tell Bi'a (fig. 1).³⁸ When completely uncovered they were revealed to be quite axial in plan with a regular shaped outer limit. The most important feature of this architectural tradition are the huge courtyards, which to some extent managed the circulation between the

³⁸ See RISTVET, WEISS 2010 for Tell Leilān; STROMMINGER, MIGLUS 2007, for Tell Bi'a; and MARGUERON 1982 for the other palaces.

various palace sectors. At the core of the structure is usually, on one side of the court, the elongated throne room with a vestibule and a retiring room.³⁹

The striking resemblance between the three-hall central representative unit of the Royal Palace in Qaṭna and that of the last phase of the Palace of Mari was noted by Pfälzner (fig. 4: g, h).⁴⁰ The layout consisted of a square front hall or court followed by two longitudinal halls. The reason for the rulers of Qaṭna to build a suite similar to the one of Mari, but on a much larger scale, has been interpreted by Pfälzner as a sign of a desire of the rulers of Qaṭna to emulate, and even outshine with sheer monumentality the rulers of Mari. By outrivaling the architecture of Mari, the rulers of Qaṭna could visually communicate through architecture their political power and their growing role in the region.⁴¹ This layout can also be seen, although only partially excavated in the smaller palace of Tell Sakka (fig. 4: i).⁴²

The similarities between the reception suites of the Royal Palace of Qaṭna, Tell Sakka and the Royal Palace of Mari should come as no surprise if we consider that they were all part of the so-called network of “Amorite Kingdoms”. Significantly, the reception suite of the Royal Palace of Mari is, as illustrated by Margueron, a final development of a tradition that can be traced in the palace of Mari itself as well as in the other palaces of Mesopotamia,⁴³ while on the other hand in Qaṭna and Tell Sakka it appears as a finished module.

Another Levantine palatial structure that also shows some Mesopotamian affinities is the one of Tell el Burak. This peculiar structure was erected together with the hill on which it rises.⁴⁴ It stands in contrast to all its Levantine counterparts with its ax-

ial layout and symmetry. Sader and Kamlah noted a similarity between its rectilinear plan with projecting corner towers, and that of Tell Bi‘a /Tuttul and the small Eastern Palace of Mari.⁴⁵

Furthermore, the mudbrick foundation systems of the palaces of Qaṭna and of Tell el-Burak seem out of place in the Levant. The royal Palace of Qaṭna had quite peculiar foundations, in which the almost exclusive use of mudbrick and the fact they were wider than the walls is reminiscent of the Mesopotamian technique. The same can be argued for the palace of Tell el-Burak, although in this case the artificial hill remains an exception. The excavators of Tell el-Burak concluded that the structure may have had the Mesopotamian palaces as a model, regarding both the choice of building material and the plan.⁴⁶

6. Egyptian Influence

Unfortunately, not much is known when it comes to the palatial architecture of Egypt during this period, and hence very few conclusions could be drawn. Palaces were found at the site of Tell Basta, Tell el-Dab‘a, ‘Ezbet Helmi, and two at Deir el Ballas (fig. 1).⁴⁷ Even when compared amongst each other the architecture of the Egyptian palaces does not show much in common. Furthermore, the available publications – with a few exceptions – do not go into the details of their architecture and building technique.

In general, and despite the meager evidence, it could be noted that the royal palaces of Egypt are quite axial in overall layout with a well-defined hierarchy.⁴⁸ These structures were architecturally and spatially distinct from the rest of the urban space.⁴⁹ This is not the case for Levantine palaces, where symmetry was only rarely identified in the overall palace plans and where the palaces were integrated in the urban texture.

³⁹ MARGUERON 1982, p. 533, fig. 366.

⁴⁰ PFÄLZNER 2007, pp. 33, 38. It was in fact MATTHIAE 2013b (originally 2002), pp. 344-345, who first drew attention to this similarity even before the palace of Qaṭna was completely excavated.

⁴¹ PFÄLZNER 2007, p. 33.

⁴² Only the square front hall was excavated and the throne room could be suspected to have been to its south via the doorway marked by the pair of double columns. MARCHETTI 2006, pp. 284, 288.

⁴³ See MARGUERON 2007, pp. 82-83, 88-93.

⁴⁴ KAMLAH, SADER 2010a, p. 98.

⁴⁵ KAMLAH, SADER 2010b, p. 135.

⁴⁶ KAMLAH, SADER 2010b, p. 140.

⁴⁷ BIETAK, LANGE 2014; BIETAK, MATH, MÜLLER 2012/2013; BIETAK 2007a; LACOVARA 2006, 2013.

⁴⁸ LACOVARA 2006, p. 192; 1997, p. 40.

⁴⁹ LACOVARA 1997, p. 41.

A similarity was between the so-called casemate structures of ‘Ezbet Helmi and Deir el Ballas on the one side and the construction technique of the Tell el Burak structure and the western half of the Royal Palace of Qaṭna on the other.⁵⁰ In the Levantine cases, mudbrick cells were built and filled with rubble, packed or simply dumber, until the desired height of the palace floor was reached.⁵¹ In the lack of accurate descriptions and photographs of the building techniques of the Egyptian structures, the available evidence points to a possible similarity. Furthermore, the palace of Tell el Burak was built atop a hill, albeit artificial, as was the “South Palace” of Deir el Ballas and the one at the northern end of the same site, further emphasizing a similar function as an observation post, a function not completely excluded by its excavators.⁵²

The strongest link with Egypt is however not in the layout or building technique but in the palace decoration. Wall paintings were found in the structure of Tell el-Burak.⁵³ Several elements of these wall paintings show Egyptian connections, such as the hunting scene.⁵⁴ Sader identified for the latter and a row of human figures clear parallels at the Middle Egyptian tomb of Beni Hassan.⁵⁵ However, it seems from the technique and the mixing of Near Eastern stylistic elements that the paintings were not carried out by Egyptian artists.⁵⁶ The Tell el-Burak wall paintings seem to have been the earliest example of fresco-technique, even predating the Minoan ones.⁵⁷ Despite some similarities in some elements with later Minoan wall paintings, in the lack of contemporary ones from Crete no clear connection can be established.

The fragments of the wall paintings from Tell Sakka seem to have been arranged based on a Near

Eastern thematic scheme, but clearly show Egyptian execution and arrangement elements.⁵⁸ For instance, the Amorite looking human figures with an Egyptian stylized head dress and the colors of the women’s garments.⁵⁹ Yet Bietak pointed out that this Egyptianizing head dress was not depicted correctly, its parallels can be better found on Old Syrian seals together with other Egyptian motifs.⁶⁰

Despite the temptation to see a strong evidence of Egyptian influence in both these cases, stylistic and technical observations seem to point out to a local art production with strong Egyptianizing inspiration, this is not surprising considering the strong connection between the Levant and Egypt during this period.⁶¹

7. Minoan Influence

In Crete three palaces were found and dated to the Minoan period, these are in Knossos, Malia and Phaistos (fig. 1).⁶² The debate is still ongoing about the function of these building and some scholars prefer to call them, at least for the earlier periods, courtyard buildings.⁶³ They are believed to have been built at the beginning of the Bronze Age (Early Minoan Period) and remained in use until the Late Minoan Period (LM).⁶⁴ Unfortunately, in all these cases the study focused on the later remains and not much is known about how they looked like or their building techniques of the Middle Minoan (MM), what is certain nonetheless is a continuity in the usage of the central courts.⁶⁵ The architectural language of these palaces, the location of the large courts, the placement of the magazines, and

⁵⁰ For Deir el Ballas see: LACOVARA 2006, pp. 188-189. For ‘Ezbet Helmi see: BIETAK 2007a, pp. 752-753, 768.

⁵¹ For Tell el-Burak see: KAMLAH, SADER 2010b, pp. 99-100. For the Royal Palace of Qaṭna see: DOHMANN-PFÄLZNER, PFÄLZNER 2011, pp. 29-31.

⁵² See: KAMLAH, SADER 2010b, pp. 135, 137, 139; 2010a, p. 111; LACOVARA 2013, p. 1967; 2006, pp. 189, 192.

⁵³ SADER 2009, p. 177.

⁵⁴ BERTSCH 2019, pp. 399-400.

⁵⁵ SADER 2011, pp. 80-81; 2015, pp. 120-121.

⁵⁶ BERTSCH 2019, p. 399.

⁵⁷ BERTSCH 2019, p. 399.

⁵⁸ DOUMAS 2008, pp. 128-129.

⁵⁹ TARAQJI 1999, p. 39; DOUMAS 2008, pp. 128-129.

⁶⁰ BIETAK 2007b, pp. 278-279; BERTSCH 2019, p. 400.

⁶¹ BERTSCH 2019, p. 400.

⁶² See amongst others: WHITELAW in press, p. 1; SCHOEP 2007, p. 213.

⁶³ See amongst others: SCHOEP 2012; TOMKINS 2012; WHITELAW in press. For an overview of the terminology used to describe these structures see SCHOEP 2006.

⁶⁴ See PELON 1987; DRIESSEN 2007; SCHOEP 2007, 2012; TOMKINS 2012.

⁶⁵ DRIESSEN 2007; PELON 1987, pp. 195-197.

the circulation, if assumed to be a development of the MM one, does not show so much similarities with the Levantine palaces. Given the scanty information available in the publication, it is difficult to reconstruct a plan of the palaces during the MM period or to form a clear idea about their building technique and layouts.

As for Egypt, the link with the Minoan tradition is also found in the wall paintings in the Levant. At Alalakh the imitation of orthostats covered the walls in one room of the reception suite, and motifs of griffin's wing and a bull's horn amongst others were found in another part of the structure.⁶⁶ Woolley saw a resemblance in coloring, technique and style of the wall paintings with those of Knossos, in Crete.⁶⁷ This was further supported by Niemeier and Niemeier after reexamining the evidence.⁶⁸ Other scholars tend to associate the motifs and colors with the Syro-Levantine, Syro-Mesopotamian or even Egyptian traditions.⁶⁹ This evidence should be nonetheless considered with caution given the fragmentary nature of the frescoes and their incomplete publication, mostly by Woolley, in black and white.⁷⁰

The fragments of miniature wall frescoes found at Tell Kabri in the filling of the threshold of the throne room, and their similarity to Theran themes and motifs also indicated an Aegean influence.⁷¹ The checkered floor was likened to painted stone imitation common in Minoan art.⁷² The origin of this tradition, as well as of the imitation of orthostats on the walls found in Alalakh, had been a matter of debate. While some scholars sought its beginning in Mesopotamia, others prefer a Levantine or Cretan origin, where orthostats were used in the structures.⁷³ Furthermore, the recent discovery at Tell Kabri of more fragments belonging to another wall

painting, also find similarities in Crete, in the Cyclades as well as in later Greek mainland examples.⁷⁴

It should be noted that the available evidence about the MM wall paintings in Crete is quite scarce. In fact, very few representational wall decorations in Crete can be stratigraphically dated before the MM IIIB/ LM IA transition.⁷⁵ A major complication in chronologically arranging the order of these frescoes lies in the problems of the chronologies of all these regions and the uncertainties about the dates of the frescoes in most of the palatial structure.⁷⁶ Despite their fragmentary nature, the wall paintings of the palaces of Alalakh and Tell Kabri are clearly applied in a true fresco technique and show more affinity to the Aegean tradition than they do the Near Eastern one.⁷⁷ Feldman notes that the motifs and styles of these frescoes seem to be more related with the wider spectrum of Aegean art clearly indicating their origin.⁷⁸

8. Anatolian Influence

Palaces dated to the first half of the MBA, or the Assyrian Colony period, were found in south central Anatolia at Kültepe and Achemhöyük, and two palaces dated to the second half of the MBA were found in southeastern Anatolia at Tilmen Höyük and Kinet Höyük (fig. 1).⁷⁹

The walls of the large palatial complexes of Kültepe and Achemhöyük are the earliest remarkable examples of the timber frame and mud brick architecture.⁸⁰ In the palaces of the Levant, the usage of timber in the construction of the walls is much less

⁷⁴ CLINE, YASUR-LANDAU, GOSHEN 2011, pp. 250-254.

⁷⁵ A fragment comes from Knossos and is dated anywhere between MM IIIA and LM IB (late 18th to early 16th century BCE), see NIEMEIER W.-D., NIEMEIER B. 1998, footnote 24; MACDONALD 2012, p. 532. Other fragments of Protopalatial decoration were found in the palace of Phaistos, MILITELLO 2012, pp. 249-250.

⁷⁶ NIEMEIER W.-D., NIEMEIER B. 1998, p. 75.

⁷⁷ FELDMAN 2007, pp. 42-43.

⁷⁸ FELDMAN 2007, p. 44.

⁷⁹ ÖZGÜÇ 1999; ÖZGÜÇ 2003; MARCHETTI 2006; MARCHETTI ET AL. 2011; AKAR 2006.

⁸⁰ MIELKE 2009, pp. 100-101; NAUMANN 1971, pp. 91-108.

⁶⁶ WOOLLEY 1955, pp. 92, 100, 102-103; 1948, p. 14.

⁶⁷ WOOLLEY 1955, pp. 92, 100.

⁶⁸ NIEMEIER W.-D., NIEMEIER B. 1998, pp. 82-85.

⁶⁹ See FARINELLI 2015.

⁷⁰ NIEMEIER 1992, pp. 191-192; NIEMEIER W.-D., NIEMEIER B. 1998, pp. 70-71.

⁷¹ NIEMEIER 1995, pp. 6-11; NIEMEIER W.-D., NIEMEIER B. 1998, pp. 76-78; CLINE, YASUR-LANDAU, GOSHEN 2011, pp. 250-254.

⁷² NIEMEIER 1992, pp. 198-199; NIEMEIER W.-D., NIEMEIER B. 1998, p. 73.

⁷³ NIEMEIER W.-D., NIEMEIER B. 1998, p. 74.

common than in Anatolia, nonetheless few examples were noted. These are in the Palace of Alalah, where indications for horizontal as well as vertical wooden beams were noted, in the Western Palace Q of Ebla and vertical posts in the Royal Palace of Qaṭna.⁸¹ Although the examples of the Levant are negligible in comparison with those of Anatolia, their concentration in the Northern Levant certainly indicates a regional tendency.

In the royal palace of Qaṭna it was noted that the northern and eastern outer walls were adorned with a sequence of double-recess buttresses (*Nischengliederung*).⁸² While this remains a unique case in the Levant, a comparable example could be seen in the Late Palace of Kültepe.⁸³ Differences can certainly be noted, namely the absence of the double recess and the smaller dimensions of the buttresses in the Anatolian example, nonetheless the fortified appearance of the outer wall of both these palaces was similar.

On the other hand, the palatial architecture of Tilmen Höyük and Kinet Höyük seems to be more linked with the north Syrian tradition instead of the Anatolian one. The closest parallels to the structure of Kinet Höyük were not found in the Anatolian palaces, but in the Northern Levant, in the Western Palace of Ebla, the North West Building of Umm el Marra and the Palace of Level VII at Alalah.⁸⁴ It was also noted by Akar that in the social and political context of the period, Kinet Höyük probably served as a subservient state to the Kingdom of Yamḥad.⁸⁵

As for the small palace A at Tilmen Höyük, the layout of its reception suite resembles those of the North Syrian palaces, namely Alalah and the Western palace Q of Ebla (fig. 4: f).⁸⁶ The structure is not particularly large in comparison with other Old Syr-

ian palaces but it has all the essential elements of this type of architecture.⁸⁷ According to Matthiae, the shared features may have been the result of the dominance of Yamḥad.⁸⁸ It does not seem to be a result of some intercity influence, but the employment of a shared building technique and construction knowledge mediated by the capital.⁸⁹ The exchange network seems to have also involved architects and craftsmen.⁹⁰

9. Conclusion

By looking at the architecture of the palaces of the MBA Levant and what it has to reveal about the culture of the ruling elites in the various kingdoms and polities, it becomes clear that the region was not all one. It is also difficult to argue for a similar line of progress for both the northern and southern Levant. The palaces of the northern Levant with their complex plans, seem to be a product of a regional elite culture, and differ from their southern counterparts. The northern palaces show common traits such as the usage of basalt, stone socles at the bottom of walls, wooden reinforcement of walls, and orthostats as wall cladding. These featured combined indicate a regional trend.

Based on the similarities, shared features and differences, it can be inferred that the northern Levant and its sphere of influence was a cultural zone by itself, its northern part showing affinities in building technique with Anatolia and its eastern part affinities with Mesopotamia. The zone of influence of this culture extend north until Tilmen Höyük and Kinet Höyük and south until Tell Kabri and maybe Hazor, about which palace unfortunately not much is known. It has been suggested by Matthiae that major urban centers, including Ebla and Qaṭna, contributed to the definition and spread of a main monumental architecture style “that distinguished the urban image of cities in Syro-Palestine”.

⁸¹ WOOLLEY 1955, pp. 100-103; MATTHIAE 1980, p. 7, endnote 38; DOHMANN-PFÄLZNER, PFÄLZNER 2006, p. 80; NOVÁK, PFÄLZNER 2005.

⁸² DOHMANN-PFÄLZNER, PFÄLZNER 2007, p. 151; BARRO 2003, p. 85.

⁸³ ÖZGÜÇ 1999, p. 79.

⁸⁴ AKAR 2006, pp. 48-64.

⁸⁵ AKAR 2006, pp. 68-69.

⁸⁶ MATTHIAE 1983, p. 541; 2013a, pp. 340-342; MARCHETTI 2006, pp. 278-278.

⁸⁷ MARCHETTI ET AL. 2011, p. 30.

⁸⁸ MATTHIAE 1982a, p. 55; 1985, TAV. 68.

⁸⁹ MATTHIAE 1982b, p. 313.

⁹⁰ This exchange of specialists is attested in an inscription from Mari (MATTHIAE 1982b, p. 313).

The marks of this influence could be seen in basic elements of architectural and urbanistic unity in several settlements from the northern to the southern Levant.⁹¹ Similarities with the southern Levantine palatial architecture are the most difficult to identify.⁹² This study shows that the southern Levant, south of Tell Kabri and Hazor, seems to be a frontier zone between the powers in the north and Egypt, not showing any clear affinities or any identifiable elite identity in palatial architecture. Furthermore, the evidence also indicates that a belt zone crossing Tell el-Burak, Tell Sakka, and Tell Kabri, where a mix of Mesopotamian, Egyptian, Cretan and north Levantine traditions can be found, was a cross road zone allowing the intertwining of all cultures.

The Levantine elite identity, as seen from the palaces, shows a great degree of affinity with the Amorites that ruled Mesopotamia, nonetheless it sets itself aside by showing similarities but preserving some differentiation.⁹³ In the process of emulating the Amorites of Mesopotamia the Levantine elites are paying homage and being inherently respectful to their rivals, however by exceeding them -such as in monumentality in the palace of Qaṭna- they are also asserting their role, capacity and distinction.⁹⁴ Nonetheless, the usage of a local layout for the reception suites and foreign elements in the decoration discloses the elites' desire to create a local Levantine identity and display their reach to the extravagant exotic.⁹⁵

⁹¹ MATTHIAE 1984, p. 20.

⁹² MATTHIAE 2002, footnote 70.

⁹³ BURKE 2014b, p. 367, argues that the Amorite identity did not necessarily mean the Amorite ethnicity. The identification of oneself as Amorite is an intentional association with the legacy it was thought to provide.

⁹⁴ On emulation see: MAYERNIK 2016, pp. 1-14, 31-48.

⁹⁵ On elite distinction see: DALOZ 2007; TARDE 1903.

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Gold jewellery as a marker of cultural interaction in Middle Bronze Age Qaṭna

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ABSTRACT

In 2009 and 2010, the Syrian-German mission excavated the richly furnished Tomb VII at Qaṭna which yielded an inventory dating to the Middle Bronze Age IIA-IIB. The inventory comprised a large assemblage of gold jewellery including pendants, rings, toggle pins and long bands. While some of these jewellery items represent types already known from Syria and the Northern Levant, other types from Tomb VII have previously been attested only in the Southern Levant. Hence, the jewellery assemblage from Tomb VII is composed of types referring to both the Syrian/Northern Levantine and the Southern Levantine region. In this study, a selection of the gold jewellery from Tomb VII will be discussed against the background of similar items from other sites in the Syro-Levantine region. This approach aims at embedding the assemblage from Tomb VII into its wider cultural context which will ultimately illuminate how the interregional relations between the Syro-Levantine states are reflected in the material culture of the ruling class of Middle Bronze Age Qaṭna.

KEYWORDS

Syria, Levant, Qaṭna, Middle Bronze Age, gold, jewellery, elite material culture

1. Introduction

In the first half of the second millennium BC, the political situation in the Syro-Levantine region was characterised by the existence of several regional states ruled by dynasties with Amorite names.¹ Particularly powerful were the kingdoms of Yamkhad, Mari and Qaṭna, whose political influence and economic strength probably derived from their position at important trading routes.² The ruling families of these states maintained close diplomatic relations, as evidenced by the palace archives of Mari. These document royal journeys into other kingdoms³, interdynastic marriages⁴ and gift exchange⁵. Thus, the textual evidence from Mari clearly shows a network of Near Eastern states in which interregional relations played a fundamental role. In this context, the ruling families made use of gold objects, such as jewellery, vessels or weapons, which were presented as gifts to other kings or queens.⁶ Interdynastic marriages, on the other hand, often involved gold jewellery as part of bridal dowries.⁷ Accordingly, the textual sources from Mari indicate that gold objects played a crucial role in the interaction of the socio-political elites.

In recent years, interregional relations between the Middle Bronze Age states in the Syro-Levantine region have been studied almost exclusively on the basis of cuneiform texts. In contrast, there have been only few attempts to investigate how these interactions are reflected in the elite's material culture

of this period.⁸ The present paper aims at addressing this issue using the example of the gold jewellery assemblage from Tomb VII at Qaṭna, which dates to the Middle Bronze Age IIA-IIB (see below). In illustrating the geographical distribution of typologically comparable items from other sites, the assemblage from Tomb VII will be embedded into its wider cultural and geographical context.

2. The archaeological context of Tomb VII

After the discovery of the Late Bronze Age Royal Hypogeum of Qaṭna in 2002, the Syrian-German archaeological mission found a second richly furnished hypogeum below the Royal Palace of Qaṭna. Being the seventh rock-cut chamber tomb found in this area, it was named 'Tomb VII'.⁹ It was accessible from a small antechamber connected to the northwestern wing of the building. Thus, Tomb VII is, besides the Royal Hypogeum, the second chamber tomb in use during the existence of the Royal Palace of Qaṭna from the Middle Bronze Age IIA on.¹⁰ Judging from its accessibility from the palace's rooms and its rich furnishing it is highly probable that Tomb VII served, like the Royal Hypogeum, as a burial place for members of the royal family of Qaṭna. However, unlike the Royal Hypogeum, which dates to the Late Bronze Age IIA, the inventory from Tomb VII can be dated mainly to the Middle Bronze Age IIA-IIB. This is demonstrated by both ¹⁴C-analyses and studies of pottery and small finds retrieved from Tomb VII.¹¹ Accordingly, the inventory represents the material culture of

¹ KLENGEL 1992, p. 43.

² KLENGEL 2000, p. 240. The interregional commercial ties between Syria and the neighbouring regions can be considered as a source of power and legitimacy, see: MORANDI BONACOSSÌ 2014, pp. 429-430. For a short account on archaeological evidence of interregional relations during the Middle Bronze Age, see: CHARAF 2014, pp. 443-445 (Northern Levant); COHEN 2014, p. 462 (Southern Levant).

³ For king Zimri-Lim's journey through Syria, see: VILLARD 1986; CHARPIN, ZIEGLER 2003, p. 215.

⁴ E.g. CHARPIN 2008.

⁵ LIMET 1986; LEROUXEL 2002.

⁶ E.g. A.1259, see: ARKHIPOV 2012, pp. 368-369; M.5291+M.11367, see: ARKHIPOV 2012, pp. 366-367; cf. also PULJIZ in press a.

⁷ E.g. ARM 25 484/M.11372, see: ARKHIPOV 2012, p. 192; ARM 22 322, see: KUPPER 1983, pp. 494-499; cf. also PULJIZ in press a.

⁸ E.g. BENZEL 2008; NIGRO 2009; PINNOCK 2012. FELDMAN 2018 conducted an art-historical study of various objects from the Syro-Levantine region with regard to the existence of a possible 'northern network'.

⁹ PFÄLZNER, DOHMANN-PFÄLZNER 2011, p. 64.

¹⁰ PFÄLZNER, DOHMANN-PFÄLZNER 2011, pp. 71-72; PFÄLZNER 2014, pp. 142-143. For a dissenting view on the date of the construction of the Royal Palace of Qaṭna, see: MORANDI BONACOSSÌ 2007, pp. 230-236; AL-MAQDISSI 2003, pp. 1510-1513.

¹¹ However, note that Tomb VII was accessible until the Late Bronze Age IIA (PFÄLZNER, DOHMANN-PFÄLZNER 2011, pp. 133-134; PFÄLZNER 2014, pp. 143-144). For the dating of the gold inventory, see: PULJIZ in press a.



FIGURE 1
View into the two chambers of Tomb VII, Qaṭna (Qaṭna Project, University of Tübingen/photo: M. Steinmetz)

the ruling class of Qaṭna at the peak of its political power in the first half of the second millennium BC.

Tomb VII consists of two small chambers separated by a short wall which was carved out of the rock (fig. 1). The careful excavation of the hypogeum allowed for the identification of decayed wooden boxes in which human remains and a large number of objects had been deposited. Preliminary anthropological analyses indicate a minimal number of 70 human individuals.¹² Since the majority of the human remains were disarticulated, it can be assumed that the tomb was not used as a primary but as a secondary burial place.¹³

¹² WITZEL, FLOHR, DEGENHARDT, pp. 102-103.

¹³ It should also be noted that each wooden box contained the remains of several human individuals as well as small finds. These were deposited in a space-saving way in the wooden boxes. Therefore, it is highly probable that they did not serve as coffins for the dead but as transport boxes from their primary burial place to Tomb VII (PFÄLZNER, DOHMANN-PFÄLZNER

3. Gold jewellery from Tomb VII

Tomb VII yielded a rich inventory with over 1000 small finds, among which approx. 350 gold objects of different types and functions. With very few exceptions, the gold objects were not found in direct association with a specific burial. Contrarily, most gold objects had been deposited in wooden boxes which contained predominantly disarticulated human remains.¹⁴ Consequently, it is not possible to assess the personal equipment of the human individuals from Tomb VII. Hence, the archaeological record does not allow for gender- or age-related studies with regard to the furnishing with gold jewellery. The lack of connection between burials and grave goods is best illustrated by a hoard of gold

2011, pp. 135-136; PFÄLZNER 2012, pp. 215-216).

¹⁴ PULJIZ in press a.



FIGURE 2
A hoard of gold jewellery deposited in an alabaster vessel in Tomb VII (Qaṭna Project, University of Tübingen/
photo: M. Steinmetz)

objects crammed into an alabaster vessel which was then placed in one of the wooden boxes (fig. 2).¹⁵ Although it can be assumed that the objects contained in the alabaster vessel were once associated with specific individuals, no indications of such a connection are traceable in the archaeological record of Tomb VII.

The vast majority of the gold objects were probably used as body adornment. Gold beads, of which approx. 150 specimens were found, are particularly numerous.¹⁶ Moreover, the inventory contained several pierced discs, which show radial decorations,

¹⁵ PFÄLZNER, DOHMANN-PFÄLZNER 2011, pp. 91-93; PULJIZ in press a.

¹⁶ The detailed study of the bead assemblages from Qaṭna, including the gold beads from Tomb VII, will be presented in PULJIZ in press b.

and a large number of rectangular or elliptical bands made of gold sheet. Both the bands and the discs are characterised by an imprecise and careless execution. Additionally, the decorations of some gold sheet discs from Tomb VII are unfinished. Therefore, it is plausible to assume that these bands and discs were used exclusively as funerary adornment.¹⁷ Many decorations attested on the specimens from Tomb VII have no direct parallels at other sites. In combination with the fact that some pieces are unfinished, this indicates that the gold sheet objects were produced locally.¹⁸

Apart from these objects, the inventory from Tomb VII also comprises very carefully executed items, among which there are gold pendants, a considerable number of rings, toggle pins, a gold-plated obsidian beaker of Egyptian origin and a duck-bill axe with gold-plated mounting.¹⁹ Some of these objects have no parallels at other sites. Other objects represent both chronologically and geographically widely distributed types, which are insignificant for a comparative study of gold jewellery. The latter include e.g. simple rings of solid gold without any decorations. However, Tomb VII also contained gold objects which, in terms of geography, show more specific distributional patterns. In the following, a selection of these items will be presented in order to illustrate the interregional links visible in the gold jewellery from Tomb VII.

3.1 A leaf-shaped pendant

Tomb VII contained seven pendants which consist completely or partially of gold. Among these, there is one specimen that is made of thin gold sheet. It

¹⁷ PULJIZ in press a. Bands and discs of gold or silver sheet are known from funerary contexts throughout the Near East, e.g. from Chalcolithic burials at Byblos (DUNAND 1973, pp. 319-320), from the Early Dynastic cemeteries at Ur (WOOLLEY 1934, pl. 139, pl. 145-146, pl. 148) and Kish (MACKAY 1929, pp. 178-179), as well as from Middle Bronze Age burials at Kültepe (ÖZGÜÇ 1986, pl. H nos. 5-17, pl. 63) and Megiddo (LOUD 1948, pl. 227 no. 2)

¹⁸ PULJIZ in press a.

¹⁹ PULJIZ in press a. For the Egyptian obsidian beaker with gold plating, see: PFÄLZNER, DOHMANN-PFÄLZNER 2011, pp. 127-129; AHRENS 2011, pp. 129-130.

consists of two roughly leaf-shaped pieces which are connected by twirled gold wire (fig. 3). A small gold wire spiral protrudes from the point of each leaf. The leaves' surfaces feature a punched decoration consisting of one central boss surrounded by smaller dots. Interestingly, an almost identical gold sheet pendant with punched decorations was found at Late Bronze Age Tarsus.²⁰ Further leaf-shaped pendants with one or two central bosses are known from Southern Levantine sites, such as Tell el-Ajjul²¹, Lachish²² and the Yavneh-Yam anchorage²³. Apart from the example from Qatna, pendants of this type seem unattested at other sites of Inner Syria or the Northern Levant. Hence, the pendant from Tomb VII represents a link between the specimens from the Southern Levant and the pendant from Cilicia, which previously seemed to occur in isolation.

3.2 Rings

More than 30 gold rings of different sizes and functions were discovered in Tomb VII. Two cylinder seal rings are of particular importance as they represent a jewellery type otherwise rarely attested.²⁴ The first example from Tomb VII consists of an oval gold shank with pointed ends which were inserted into the holes of a gold-mounted lapis lazuli cylinder seal (fig. 4).²⁵ The pointed ends of the ring shank were then covered by carefully coiled gold wire. Having an inner diameter of 4.7 cm, it is probably a bracelet. A stylistically closely comparable gold bracelet was found in a Level X tomb at Megiddo.²⁶ The only difference to the specimen from Tomb VII is that it is mounted with an undecorated bead instead of a seal.



FIGURE 3
A leaf-shaped pendant from Tomb VII, height 35.7 mm, length 29.3 mm (Qatna Project, University of Tübingen/photo: I. Nakai)



FIGURE 4
Cylinder seal bracelet from Tomb VII, max. outer diam. 55 mm (Qatna Project, University of Tübingen/photo: J. Gergovich)

The second cylinder seal ring from Tomb VII is, judging from its inner diameter of 1.8 cm, a finger ring (fig. 5). It is composed of a gold shank with open ends between which two cylinder seals were mounted. At the time of the ring's discovery only one seal remained in place (fig. 6), while the other was found detached in close proximity. The seals, which consist of a dark grey gemstone, were origi-

²⁰ GOLDMAN 1956, fig. 434 no. 7.

²¹ Hoard 1312, see: PETRIE 1934, pl. XX no. 144.

²² The Lachish pendant was found in the Fosse Temple, see: TUFNELL, INGE, HARDING 1940, pl. XXVI no. 8.

²³ GOLANI, GALILI 2015, p. 18 fig. 2b.

²⁴ Cf. ARKHIPOV, PULJIZ 2016.

²⁵ A study of the seal images from Qatna will be presented in a separate monograph by H. Dohmann.

²⁶ LOUD 1948, pl. 226 no. 2.



FIGURE 5
Double cylinder seal ring from Tomb VII, max. outer diam. 23 mm (Qatna Project, University of Tübingen/ photo: J. Gergovich)



FIGURE 6
Detail of the double cylinder seal ring from Tomb VII showing the spot where the second seal was originally mounted (Qatna Project, University of Tübingen/ photo: J. Gergovich)

nally arranged one next to the other.²⁷ Consequently, if the seals were rolled the impression of one seal would always have covered the impression of the other. Therefore, it is plausible to assume that the seals had a purely decorative purpose.

Apart from the abovementioned specimens, there are only two other rings from tombs at Ebla²⁸ and Gezer²⁹ with a cylinder seal and an uncarved cylinder bead, respectively. A third ring of this kind is part of the so-called *Trésor du Liban* which was acquired in the 1920s from the antiquities market.³⁰ A common feature of these specimens is their small size suggesting a use as finger rings. However, in contrast to the double-seal ring from Tomb VII, the examples from Ebla, Gezer and the *Trésor du Liban* feature only one seal. Given the rare occurrence of cylinder seal rings in archaeological contexts, it is all the more important to note that rings of this kind are mentioned in at least three administrative texts from the Middle Bronze Age palace archives at Mari.³¹ According to these, a bracelet with one seal and finger rings with one, two or even three cylin-

der seals were used as gifts, presented to kings and queens of other Syrian states.³²

Besides the cylinder seal rings, eleven rings with gold plating from Tomb VII ought to be mentioned. They are composed of a wooden or bronze core, which was carefully covered by gold sheet (figs. 7-8). While the wooden cores have completely decayed, leaving the respective rings hollow on the inside, the corroded bronze cores remained in place. The use of cores of other materials probably served the purpose of reducing the amount of gold needed. The gold-plated rings have open ends which are decorated with precisely engraved, parallel grooves. Most specimens are rather small with inner diameters of approx. 4 cm or less suggesting a use as bracelets for children. Five gold-plated, hollow bracelets included in the *Trésor du Liban* closely resemble the rings from Tomb VII.³³ A further comparison is offered by a silver-plated anklet with a bronze core that was found in a Middle Bronze Age tomb at Sidon.³⁴ Although lacking gold or silver plating, it is noteworthy that stylistically comparable, solid bronze rings with grooves at each

²⁷ See footnote 25.

²⁸ MATTHIAE 1980, fig. 8.

²⁹ MACALISTER 1912, pl. XXXI no. 2.

³⁰ CHÉHAB 1937, p. 11 fig. 2.

³¹ ARKHIPOV 2012, p. 386; ARKHIPOV, PULJIZ 2016.

³² M.5291+M.11367, see ARKHIPOV 2012, p. 367; A.1259, see: ARKHIPOV 2012, pp. 368-369. Cf. also ARKHIPOV, PULJIZ 2016 and PULJIZ in press a.

³³ CHÉHAB 1937, pl. V no. 5.

³⁴ DOUMET-SERHAL, KOPETZKY 2012, p. 42.



FIGURE 7
Gold-plated ring with incised ends and bronze core from Tomb VII, max. outer diam. 52.9 mm (Qatna Project, University of Tübingen/photo: J. Gergovich)



FIGURE 8
Hollow ring of gold sheet with incised ends from Tomb VII, max. outer diam. 48.8 mm (Qatna Project, University of Tübingen/photo: J. Gergovich)



FIGURE 9
Hollow ring of gold sheet with incised surface from Tomb VII, max. outer diam. 112.5 mm (Qatna Project, University of Tübingen/photo: J. Gergovich)



FIGURE 10
Solid gold ring with incised ends from Tomb VII, max. outer diam. 64.3 mm (Qatna Project, University of Tübingen/photo: C. Seitz)

end are attested in Middle Bronze Age contexts at Byblos³⁵ and Mari³⁶. From this, it may be concluded that the abovementioned rings from Tomb VII represent a jewellery type restricted to Middle Bronze Age Syria and the Northern Levant.

The inventory from Tomb VII also contained one gold ring whose entire surface is furnished

³⁵ Open bronze rings with grooved ends were part of the so-called *Jarre Montet*, see: MONTET 1929, pl. LXX no. 598; TUFNELL, WARD 1966, fig. 9 nos. 225-226, 228. Further examples were found in hoards deposited in the area of the Temple of the Obelisks, see: DUNAND 1950, pl. LXXXII nos. 18352-18353.

³⁶ Tomb 943, see: JEAN-MARIE 1999, pl. 200 nos. 2-3.

with carefully incised grooves (fig. 9). Being hollow on the inside, it most probably had a wooden core which decayed over time. The ring was bent violently so that it could be deposited in the aforementioned alabaster vessel. Its inner diameter of 10.4 cm suggests that it could have been used as bracelet, anklet or even as a torque. While the ring has no direct parallels in the Syro-Levantine region, its surface rendering is reminiscent of twisted gold bracelets and torques which are a common feature in Northern Levantine and western Inner Syrian jewellery assemblages of the Middle Bronze Age.³⁷

³⁷ PHILIP 2015, p. 134.

Two solid gold rings from Tomb VII with incised grooves at each end represent a widely distributed jewellery type (fig. 10). A closely comparable ring with grooves was found in a Level X grave at Megiddo.³⁸ Rings of this kind were also discovered in tombs and hoards dated to the late Middle Bronze Age to Late Bronze Age at Tell el-Ajjul.³⁹ Further parallels come from Middle Bronze Age contexts at Byblos⁴⁰ and Kültepe⁴¹. Hence, it appears that this ring type is restricted to the Middle Bronze Age in the Northern Levant, western Inner Syria and Anatolia, while it continues to the Late Bronze Age in the Southern Levant.

3.3 Toggle pins

Tomb VII yielded eight gold toggle pins which can, on typological grounds, be divided into two groups. The pins of the first group have oblate spherical heads which consist of one grooved or fluted bead.⁴² The latter, which are made of gold or sintered quartz, respectively, were fixed to the shank by means of a small gold rivet. In one case, the head is not preserved. The slender shanks of the pins may be straight or curved. Each pin has a narrow eyelet that is located in the upper half or the upper third section of the shank (fig. 11). One specimen of the first group features a small gold ring that was attached to its eyelet (fig. 12). The zone between the head and the eyelet of each pin is decorated with horizontal incisions, while one to three incised zig-zag lines are visible below the eyelet. Closely comparable toggle pins, most of which consist of bronze, were discovered at many sites in the Northern Levant and Inner Syria, such as Hama⁴³, Ugarit⁴⁴ and



FIGURE 11
Gold toggle pin with oblate spherical head from Tomb VII, max. length 95.3 mm (Qaṭna Project, University of Tübingen/photo: J. Gergovich)

FIGURE 12
Gold toggle pin from Tomb VII with oblate spherical head and ring attached to the eyelet, max. length 93.5 mm (Qaṭna Project, University of Tübingen/photo: K. Wita)

³⁸ Tomb 3060, see: LOUD 1948, pl. 226 no. 3.

³⁹ Tomb 447, see: PETRIE 1934, pl. XIX-XX nos. 155-158; cenotaph 1450, see: PETRIE 1932, pl. II; hoard 1299, see: PETRIE 1934, pl. XII (bottom left); hoard 1313, see: MAXWELL-HYSLOP 1971, p. 177 fig. 81 (bottom left).

⁴⁰ DUNAND 1937, pl. LXXII nos. 2540, 2542-2544.

⁴¹ KULAKOĞLU, KANGAL 2011, p. 313 no. 361.

⁴² These gold toggle pins represent variations of H. Klein's type I 12 A 6 b, see KLEIN 1992, p. 110, pl. 17. Cf. the discussion in PULJIZ in press a.

⁴³ FUGMANN 1958, pl. X no. 13.

⁴⁴ SCHAEFFER 1962, p. 308 fig. 6 no. 18.194.

Alalakh⁴⁵. A further comparison was found in the Eastern Palace of Qaṭna.⁴⁶ Interestingly, pins of this type are also part of the *Trésor du Liban*.⁴⁷ The southernmost parallels to this type of toggle pins come from Middle Bronze Age contexts at sites in Upper

⁴⁵ WOOLLEY 1955, pl. LXXIII no. P4.

⁴⁶ IAMONI 2012, p. 358 fig. 9 (right).

⁴⁷ CHÉHAB 1937, pl. V nos. 25-26.



FIGURE 13
Headless gold toggle pin from Tomb VII, max. length 40.4 mm (Qatna Project, University of Tübingen/photo: C. Seitz)

Galilee,⁴⁸ such as Hazor⁴⁹, Safed⁵⁰ and Tel Sasa⁵¹, and from Middle Bronze Age tombs at Rishon le-Zion⁵² in the coastal plain of modern Israel.

The second group of gold toggle pins found in Tomb VII includes two specimens. These differ formally from the pins of the first group as they lack a head (fig. 13). Instead, their top is very slightly convex-shaped. The eyelet of each pin is located in the upper third section of the rather compact shank. Both pins show incisions in the zone above the eyelet and one zigzag line below it. As can be concluded from the evidence from other sites published so far, typologically comparable toggle pins seem unattested in the Northern Levant or Inner Syria. However, similar pins of this type were found at Tell el-Ajjul⁵³, Amman⁵⁴ and Megiddo⁵⁵. From this, it may be deduced that headless toggle pins with incised upper body are a Southern Levantine type. Thus, it becomes clear that two different traditions of toggle pins are represented in the inventory of Tomb VII. While one tradition is associated mainly with the Northern Levantine and Inner Syrian regions, the other seems to be rooted in the Southern Levant.

⁴⁸ Two typologically comparable bronze toggle pins from Jericho (SCHAEFFER 1948, fig. 119 no. 1) and Tell el-Dab'a (PHILIP 2006, pp. 95, 97, fig. 46 no. 4) represent isolated finds.

⁴⁹ YADIN ET AL. 1958, pl. CXVIII no. 21.

⁵⁰ DAMATI, STEPANSKY 1996, p. 17*, fig. 18 nos. 1-6.

⁵¹ BEN-ARIEH 2004, p. 15*, fig. 14 no. 1.

⁵² KAN-CIPOR - MERON, SHALEV 2018, fig. 7.1.

⁵³ Tomb 1416, see: TUFNELL 1962, p. 20 fig. 8; tomb 331, see: MAXWELL-HYSLOP 1971, pl. 73; hoard 1299, see: PETRIE 1934, pl. XIII-XIV nos. 19 and 24.

⁵⁴ HENNESSY 1966, pl. XXXV A.

⁵⁵ LOUD 1948, pl. 223 nos. 72-73. Note that pin no. 72 has a twisted upper shank instead of horizontal incisions.

3.4 Bands with wire loops

Among the gold objects contained in Tomb VII there are approx. 90 rectangular and elliptical bands. The majority of these has either pierced or unpierced ends. Only two gold sheet bands from Tomb VII feature carefully executed wire loops on their ends. Each loop has two spiral-shaped ends. The bands differ with regard to their outline: while one specimen has straight sides (fig. 14), the other has a wavy outline (fig. 15). Being more than 40 cm long, both bands are of considerable length. Consequently, they might have been used as headdresses or as girdles for children. However, as one band was found crammed into the already mentioned alabaster vessel and the other specimen was deposited along with the remains of multiple human individuals in one of the wooden boxes their functions cannot be derived from the archaeological context.



FIGURE 14
Straight-sided band of gold sheet with wire loops from Tomb VII, max. length 458.3 mm (Qatna Project, University of Tübingen/photo: J. Gergovich)

One gold band with spiral wire loops included in the *Trésor du Liban* closely resembles the straight-sided specimen from Tomb VII.⁵⁶ Fragments of further straight-sided gold bands with spiral wire loops were found in tombs at Tell el-Ajjul⁵⁷, Lachish⁵⁸ and

⁵⁶ CHÉHAB 1937, pl. III no. 24.

⁵⁷ Tomb 1203, see: PETRIE 1934, pl. XV-XVI no. 42.

⁵⁸ Tomb 4004, see: MAXWELL-HYSLOP 1971, pl. 101.



FIGURE 15
Wavy band of gold sheet with wire loops from Tomb VII, max. length 423.3 mm
(Qatna Project, University of Tübingen/photo: J. Gergovich)

Gezer.⁵⁹ Thus, apart from the two specimens from Qatna, bands with spiral wire loops seem to occur only in the Southern Levant.

4 Conclusion

The Middle Bronze Age inventory of Tomb VII at Qatna includes a large number of gold jewellery. Some jewellery types from Tomb VII, such as the leaf-shaped pendant and the solid gold rings with grooved ends, are distributed over a wide area in the Syro-Levantine region and even Anatolia. Particularly noteworthy are the cylinder seal rings from Tomb VII which not only have archaeological comparisons at Ebla, Megiddo and Gezer but also textual parallels in the palace archives of Mari. Thus, the specimens from Tomb VII form a geographical link between the pieces from northwestern Inner Syria, Eastern Syria and the Southern Levant. Administrative texts from Mari clearly show that cylinder seal/

bead rings were used in the context of diplomatic gift exchange. Thus, the distribution of this jewellery type across the Syro-Levantine region might be taken as an indicator for a culturally interacting network into which the ruling class of Middle Bronze Age Qatna was integrated.

Other jewellery types from Tomb VII show more restricted distributional patterns. The latter applies to the gold-plated rings which occur mostly at Northern Levantine sites, such as Sidon and Byblos, and are not attested at all in the Southern Levant. Similarly, comparisons to the toggle pins with oblate spherical heads from Tomb VII are attested mostly at Northern Levantine/Inner Syrian sites, e.g. Hama, Ugarit and Alalakh. Toggle pins of this kind also appear in Upper Galilee and the coastal plain of modern Israel, however to a lesser extent.

On the other hand, headless toggle pins and long bands with spiral wire loops were, apart from the pieces from Tomb VII, discovered exclusively at Southern Levantine sites, among which Tell el-Ajjul, Lachish, Gezer, Megiddo and Amman. It is possible that the last-mentioned jewellery items

⁵⁹ Cave tomb 28 II, see: MACALISTER 1912, pl. XXXI no. 1.

were brought to Qatna from the South as commercial commodities or diplomatic gifts. Likewise, it cannot be ruled out that they were locally produced following imported concepts or ideas. In any case, the composition of the assemblage from Tomb VII displays the interaction between the Syrian/Northern Levantine and the Southern Levantine cultural spheres.

In conclusion, the present study has shown that the jewellery assemblage from Tomb VII allows for the detection of cultural interactions between social elites of the Middle Bronze Age, which thus far had been studied mostly on the basis of textual sources. The assemblage from Tomb VII comprises three groups of jewellery types. According to their parallels, these refer to either the Northern Levant and Syria, or the Southern Levant or the whole Syro-Le-

vantine region. This indicates three layers of cultural interaction with differing geographical extents in which Middle Bronze Age Qatna appears to have participated. The distinctive composition of the jewellery assemblage from Tomb VII with links to both Syrian/Northern Levantine and Southern Levantine sites suggests that Middle Bronze Age Qatna functioned as an interface between these regions. Hence, the gold jewellery from Tomb VII archaeologically exemplifies the interconnected network of Syro-Levantine states in which Qatna served as a node between Inner Syria and the Southern Levant. This corresponds to historical sources which indicate that Qatna's sphere of influence during the Middle Bronze Age extended as far as Southern Syria and perhaps even included Hazor in the Upper Galilee region.⁶⁰

⁶⁰ VAN KOPPEN 2015, pp. 88 and footnote 24.

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A reassessment of spinning bowls: new evidence from Egypt and Levant

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ABSTRACT

Spinning bowls are known especially from Egypt, but several examples have also been found in the Palestine area; they are spread from the Middle Bronze Age to the Late period. According to the traditional view the most ancient spinning bowls are those from Egypt, which do not predate the Middle Kingdom, while the Palestinian specimens were derived from the Egyptians', but some evidence challenges this dating. A spinning bowl kept in the Museo Egizio in Turin was traditionally dated to the New Kingdom, but it shows several features which suggest an earlier dating. Study of Schiaparelli's excavation notes and comparison with similar objects from Tell el-Farkha suggest that a Predynastic date is more plausible. Egyptian spinning bowls were thus probably introduced at least in late Predynastic times. Excavations in Jordan have shown that in that area these items existed as early as the late Chalcolithic period. Different types of morphologies and specimens that are only partially preserved can make the identification of these bowls quite challenging.

KEYWORDS

Spinning bowls, Southern Levant, Egypt, Heliopolis, Museo Egizio in Turin

1. Introduction

A spinning-bowl is a bowl with loops inside it which serve to hold the ball of yarn and to keep the thread under tension during the process of spinning. It generally contains from one to four loops inside, which are attached to the bottom of the bowl on the inside. Some have just a single loop, while others, like those of Tell el-Amarna (fig. 1),¹ have loops both on the bottom and on the side of the bowl. They are frequently made of pottery but there are a few examples made of stone.² Bowls with loops inside have been known archaeologically since Petrie's excavations in Kahun (Egypt); there is also iconographic evidence, from several Egyptian representations in tomb paintings and wooden funerary models of Middle and New Kingdom date. In these scenes, the bowls are always associated with spinners and it is evident that threads are pulled through the bowl and spun or plied. It is on this basis that they have been recognised in archaeological contexts. Today, they are one of the most valuable indications of spinning activity. However, the traditional chronology which sees their appearance in Egypt during the Middle Kingdom is challenged by a series of discoveries, from Egypt and Southern Levant.

2. Egyptian spinning-bowls

In Egypt, spinning-bowls are found in a great number of sites,³ in both Upper and Lower Egypt, and the highest number comes from the worker's villages of Kahun, Deir el-Medina and Amarna. The oldest are those of Kahun⁴ and Abu Ghalib,⁵ which date to the Middle Kingdom, followed by those of the Late Middle Kingdom of Karnak North,⁶ South Abydos⁷ and Memphis.⁸ The largest corpus is that of

the New Kingdom, from Deir el-Medina,⁹ Amarna,¹⁰ Abydos and Deir el-Ballas. Lastly, a few bowls are also known from the Third Intermediate Period at Lisht and from the Late Period at Mendes.¹¹ Most of them come from domestic contexts and this is the reason for their high concentration in workers' villages. However, some of them also come from other contexts: a temple in South Abydos, which houses some domestic units, and a production area located in the same site north-east of the funerary temple of Senwosret III, far from the actual village.¹²

Spinning-bowls are known also from the Aegean world; the oldest one comes from Myrtos in Crete and is dated to the Early Minoan II (which corresponds to the last part of the Old Kingdom),¹³ which predates the Egyptian examples and challenges the theory of an Egyptian origin of this artefact.

3. Spinning-bowls from Heliopolis

In 2015, I conducted a study on textile tools kept in the Egyptian Museum of Turin, which houses an impressive collection of wooden spindles and spindle whorls, as well as two spinning-bowls originally dated to the New Kingdom. These bowls come from Ernesto Schiaparelli's excavations of the site of Heliopolis, 20 km north-east of Cairo. The site was a very important religious centre and was occupied from the Predynastic Period until the Late Period. Schiaparelli found the remains of several religious buildings, such as a naos of Sethi I and a chapel of Djoser, and in 1905 – 1906, traces of a Predynastic settlement.¹⁴

One fragmentary bowl (S. 4087)¹⁵ shows the typical features of a spinning bowl: two loops joining in the middle. The other one (S. 4086, figs. 3-4), of which only the lower part is preserved, is quite dif-

¹ KEMP, VOGELSANG-EASTWOOD 2001, p. 293.

² PETRIE 1890, p. 25, pl. XIII.58

³ See ALLEN 1997, p. 33 for a more complete inventory.

⁴ PETRIE 1890, p. 25, pl. XIII.58.

⁵ LARSEN 1941, Abb. 14.

⁶ ALLEN 1997, p. 33.

⁷ WEGNER ET AL. 2000, p. 108, fig. 16. SMITH 2010, pl. 256.

⁸ BOURRIAU, GALLORINI 2016, p. 190, fig. 102.

⁹ DOTHAN 1963, p. 103. NAGEL 1938, pp. 183-184.

¹⁰ KEMP, VOGELSANG-EASTWOOD 2001, pp. 291-306.

¹¹ ALLEN 1997, p. 33.

¹² SMITH 2010, p. 256.

¹³ WARREN 1972, pp. 153, 207, 209.

¹⁴ DEL VESCO, UGLIANO 2017, p. 232. For a revision of Schiaparelli's documents, see SBRIGLIO, UGLIANO 2015, p. 282.

¹⁵ L. 14x13 cm, Museo Egizio Torino.

FIGURE 1
Spinning bowl from Amarna
with loops on the bottom
and on the side
(KEMP, VOGELSANG-
EASTWOOD 2001,
293, fig. 8.16a)

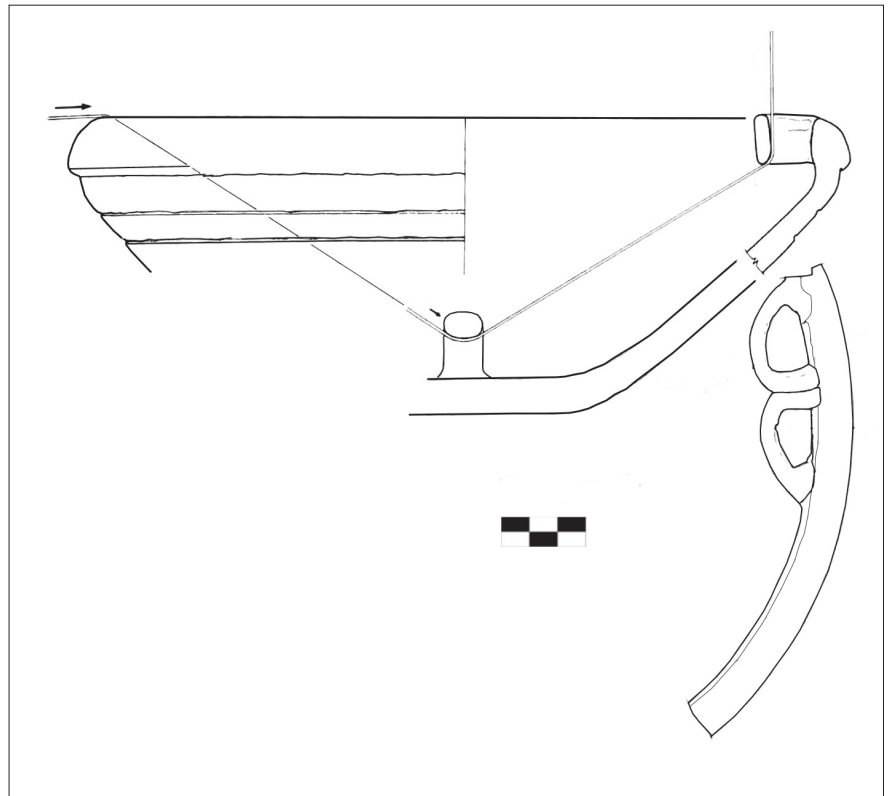


FIGURE 2
Different types
of spinning bowls
(selected from
DOTHAN 1963, fig. 1)

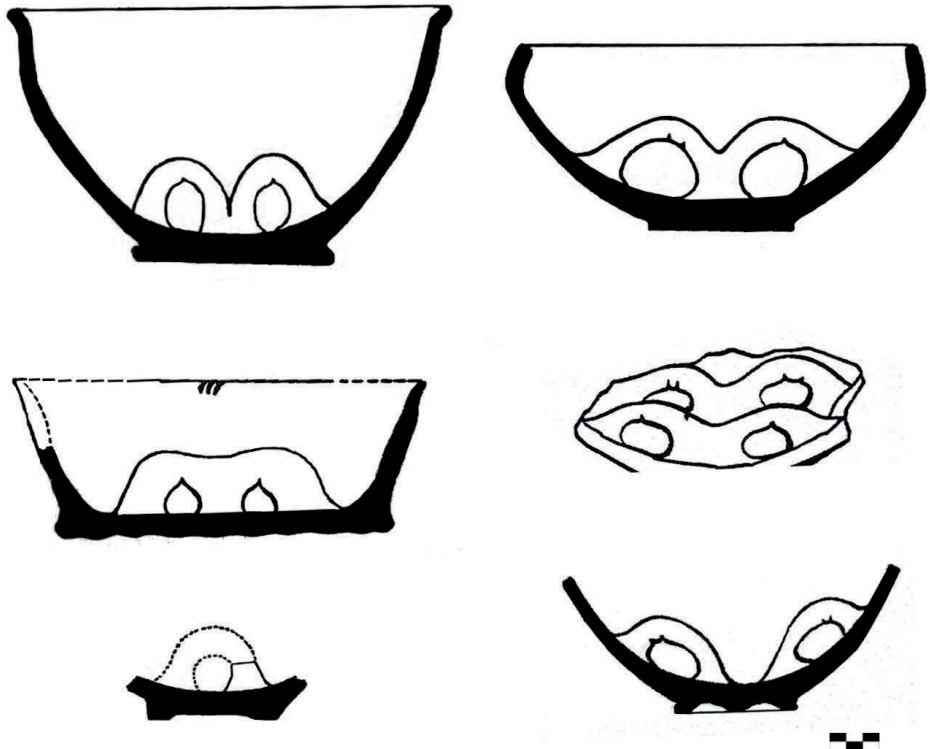


FIGURE 3
Drawing of S. 4086 from the Museo Egizio of Turin
(A. A. Rucco)

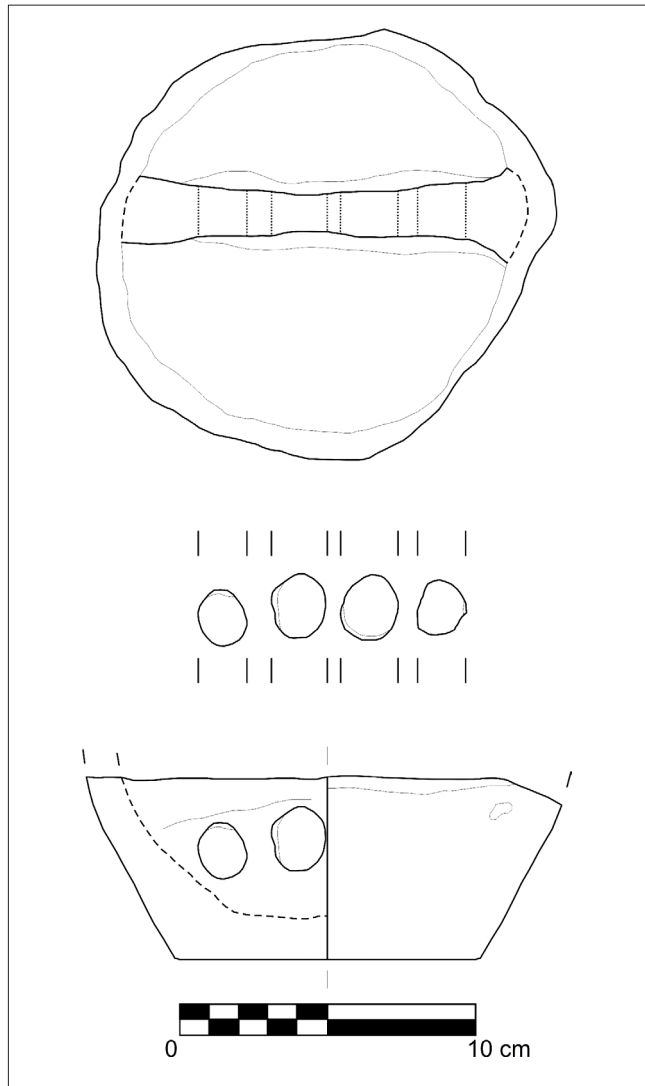
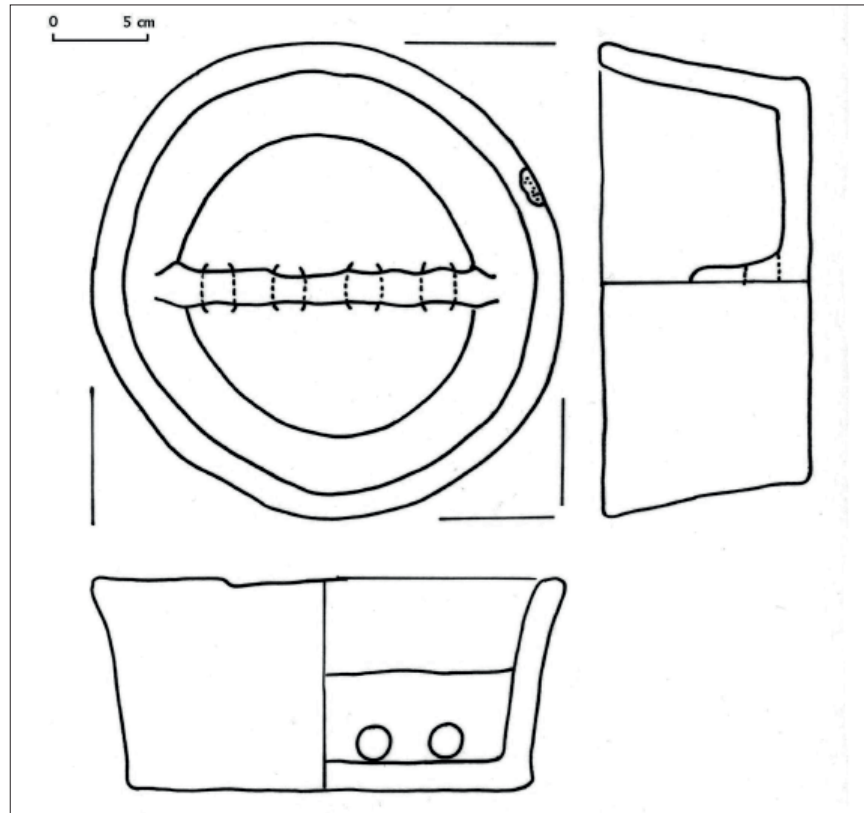


FIGURE 4
Photograph of S. 4086
(diam. 16.3 cm, h 5.9 cm,
Museo Egizio Torino)



FIGURE 5
Bowl from Tell el-Farkha
(MĄCZYŃSKA 2012, fig. 2)



ferent from the known examples of spinning-bowls because it has no loops inside, but instead a sort of large diaphragm with four holes. The diaphragm runs from side to side but it is not perfectly central, dividing two unequal parts. Inside, bowl, diaphragm and holes are highly polished, one side more carefully than the other. The holes are not at the same height, the two central ones are higher, and the other two lower. The bowl is hand-made; there are no signs of potter's wheel. All these features appear in contrast with the other spinning-bowls known from Middle and New Kingdom Egypt.

The closest parallels to this item come from a site in the eastern Nile Delta, Tell el-Farkha (fig. 5), where the artefacts were dated to the first part of the Naqada III period (Early Bronze Age Ib).¹⁶ They were found in various trenches from eastern, western and central Kom.¹⁷ The excavators were not sure about

their function because of various factors: first, the early chronology makes these spinning-bowls the earliest examples in Egypt – and apparently in the Mediterranean area. Second, their appearance is quite different from all the other known specimens. Third, only thirty fragments of spinning-bowls were found, a quantity too small for the entire settlement over two hundred years. Lastly, no textile tools were excavated except a very limited number of spindle-whorls.¹⁸

In my opinion, the first two elements of doubt are not matters for concern, since spinning-bowls vary a lot in morphology and the traditional chronology indicates their invention in the Middle Kingdom just because there was – until now – no other evidence from the preceding periods. There were no technical changes in weaving equipment or in textiles at the beginning of the Middle Kingdom which could justify their invention at that precise time. The small quantity seems actually a normal

¹⁶ MĄCZYŃSKA 2012, p. 66.

¹⁷ MĄCZYŃSKA 2012, p. 67, fig. 6, 10.

¹⁸ Pers. comm. C. CIAŁOWICZ.

condition of these discoveries, with the sole exception of Amarna. The only actual problem could be the scarcity of other textile tools at the site, but they might simply have not been preserved.

Even accepting that the bowls from Farkha were used in the spinning process, there is still the chronological gap with respect to the bowl from Turin to be explained. In the Manuscript inventory of Schiaparelli,¹⁹ it is stated that the bowl came from the strata below the Late Period temple, in trenches of the kom 5/6 metres under the modern level. Schiaparelli defines these materials as prehistoric. On the basis of its characteristics, the bowl may be dated to the Naqada III period and could be therefore contemporary with the Farkha bowls. The other spinning bowl kept in Turin (S. 4087), completely different with regard to morphology and manufacture, should instead be dated to the New Kingdom. Unfortunately, New Kingdom and Predynastic layers are in direct contact in Heliopolis and Schiaparelli might have missed the change of layers.²⁰

4. Levantine spinning-bowls

Thanks to the finds from Farkha and Heliopolis, an Egyptian origin of spinning-bowls would seem to be possible, but the Levantine corpus should also be rechecked. Spinning-bowls are well known in Southern Levant from several sites and they seem not to predate the Late Bronze Age I (fig. 2); the earliest examples come from Tell el-Ajjul, Beth Shean and Tell Jerishe. The largest number of them are known from the beginning of the Iron Age. The highest number comes from Beth Shean, but some examples are also known at Megiddo, Tel Qasile, Tel Jerishe, Tell Jemmeh, Tell Keisan and Ashdod. As Douthan's study pointed out, the loops can occur in a great variety of shapes, from one to three loops in a single line, to a bowl with two loops in two different lines. Fabric and morphology are usually local, but their late appearance led several scholars to suppose that they stemmed from Egyptian examples.

¹⁹ SCHIAPARELLI, E. Manuscript inventory, suppl. 4099-4188, stored in the State Archive.

²⁰ UGLIANO, F. pers. comm.

However, it turns out that items similar to spinning-bowls may be identified in Jordan from the Ghassulian Period,²¹ i.e. during the fifth millennium BCE, definitely more ancient than any Egyptian examples. One bowl comes from the site of Neve Ur, in the Beth Shean valley, the other from Safadi (Beersheba) and both were published by Perrot in 1967.²² They share a common feature, which is the shape of the loop: it is quadrangular, and attached to the bottom and to one side of the bowl, a form rarely attested in spinning-bowls but which does not compromise their functioning.

5. Spinning or plying bowls?

It is definitely tempting to connect the early appearance of spinning-bowls in the Levant with the contemporary production of linen. In fact, recent analysis of fibres found in the caves (Cave of the Warrior and Nahal Mishmar, for instance) and dated to the Chalcolithic period, strongly indicates the adoption of vegetable fibres, meaning flax, before wool.²³ Wool, on the other hand, seems to appear in the region only in the Bronze Age and its short fibres are not suitable for use with a spinning-bowl. This seems to link the early appearance of spinning-bowls in the Levant with the adoption of flax fibres as the essential raw material for textile production during the Chalcolithic period. There are, however, many aspects of this hypothesis that should be revised. First, spinning-bowls might be associated with the preparation of flax fibres, but there is no agreement between scholars.²⁴ It has been pointed out that the peculiar way that flax was prepared in both Egypt and the Levant, with the splicing of fibres, could have benefited greatly from the use of such bowls. Splicing means that the long flax fibres can be joined together by overlapping the two fibres for 5-10 cm and twisting this part (fig. 6); the fibres need to be wet to allow formation of a natural glue,

²¹ LEVY, GILEAD 2013, pp. 32-33.

²² PERROT, ZORI, REICH 1967, p. 223, pl. 42.

²³ SHAMIR 2014, p. 145.

²⁴ BARBER 1991, pp. 71-72. VOGELSANG-EASTWOOD 1989, pp. 85-86. ALLEN 1997, pp. 27-28.

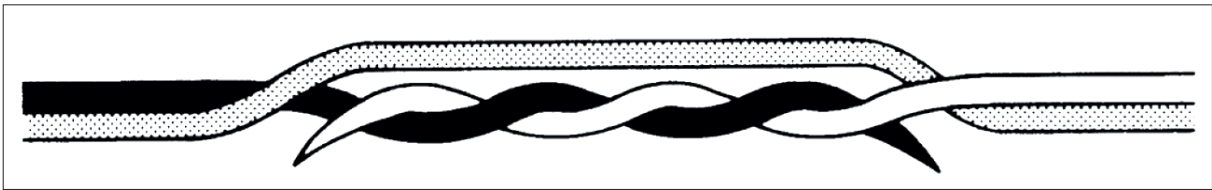


FIGURE 6
Example of splicing
(BARBER 1991, 47)

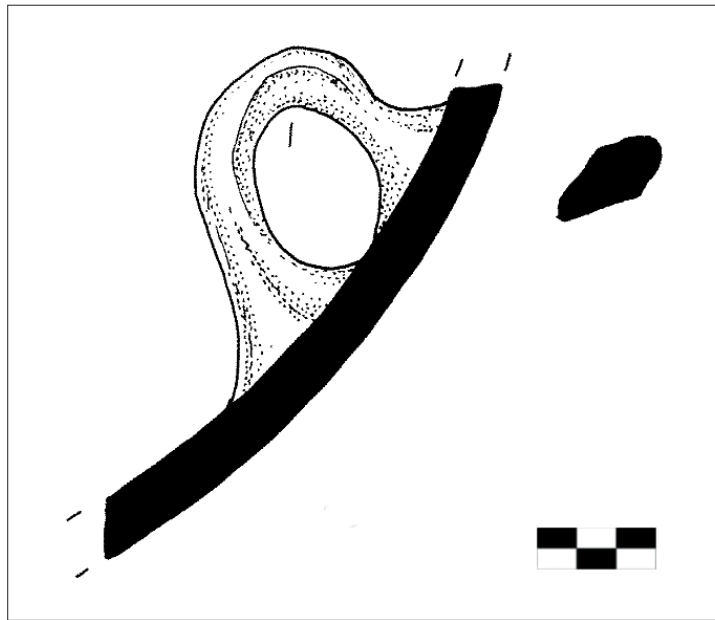


FIGURE 7
Fragment of a spinning bowl from Hazor
(BECHAR 2017, fig. 7.72)

which is present in the fibre and allows the creation of a long, continuous rove. The spliced points, however, are fragile and tend to come apart, so the thread needs to be properly spun or, better, plied. The spinning-bowls, as depicted in several occasions in Egyptian tomb paintings and wooden funerary models, might have helped this process by keeping the roves taught and separate and probably adding moisture from a liquid substance kept inside.²⁵ However, there are two problems with this interpretation.

²⁵ The choice of a bowl-shaped container seems to point directly to the use of liquids. Against this idea, see VOGELSANG-EASTWOOD 1989, pp. 85-86. Modern knitting bowls are not intended to contain liquid substances.

The first is that splicing is known from prehistoric European contexts too,²⁶ but so far, no spinning-bowl has been found in these areas. Even excluding an argumentation *ex silentio*, there is still an issue regarding Levantine textiles. There are several textiles preserved in caves that date to the Chalcolithic period, but very few Bronze Age textiles; in these few examples splicing seems to disappear in the Late Bronze Age.²⁷ It is especially at the end of the Late Bronze Age, however, that a sharp increase in the presence of spinning-bowls in the Levant is recorded, so the two phenomena seem not to be linked.

²⁶ LEUZINGER, RAST-EICHER 2011, p. 541.

²⁷ SHAMIR 2014, p. 147.

If not used in connection with splicing, these bowls might still have been used to ply yarns, as argued by G. Vogelsang-Eastwood,²⁸ and they may not necessarily have been tied to flax production, but used with any kind of fibre.

Since spinning-bowls might not be connected to a particular technique or a single fibre, I would also propose that we should not continue to seek for a single origin for these bowls. There are several areas where they were used in different periods, such as Egypt, Levant, the Aegean area and, in recent times, Japan.²⁹

Another aspect that should be kept in mind is the lack of continuity in the archaeological documentation. Hence it might be possible that in some periods other tools were developed as substitutes for spinning-bowls – or even different kinds of bowl that are more difficult to recognise.

For instance, only a few sites in the Levant have yielded evidence of spinning-bowls, while at most sites they do not seem to have been present. If we assume that spinning-bowls are not a product of Egyptian influence, we might expect to find some of them in other, more unusual contexts – such as in Late Bronze Age Hazor, where a sherd with an internal loop was found in a public building in area A1.³⁰

It is interesting to note the peculiar form of the loop, which closely resembles that of a handle (fig. 7). If the loop/handle had been found without the clear profile of the bowl, it would have been classified as an external handle, and the use of spinning-bowls in that site would have gone unrecorded.

6. Conclusions

In conclusion, spinning-bowls might have been connected with flax processing, but it is more probable that they were used to help plying threads. As is shown by the Ghassulian examples and those from Farkha and Heliopolis, they were in use since the Chalcolithic period in the Levant and since the final part of the Predynastic period in Egypt. They seem to disappear in the Early Bronze Age and in the Old Kingdom and to be in use once more in later periods. However, the two examples discussed here – the Heliopolis bowl and the Hazor sherd – show how difficult it is to recognize an item which can assume very different characteristics. It is probable that future excavations will find other examples of this tool in areas or periods in which its use is unknown today.

²⁸ VOGELSANG-EASTWOOD 1989, p. 86.

²⁹ BARBER 1991, p. 73.

³⁰ BECHAR 2017, p. 334

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Geopolitics of the Orontes valley in the Late Bronze Age

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ABSTRACT

The Orontes valley is a heterogeneous area located at the border of the humid Mediterranean zone and the dry Syrian steppe: surrounded by mountains, it has narrow valleys, deep gorges, marshes, extensive fertile plains, and marked differences in climate. All these factors have greatly influenced settlement in the region throughout its history. Their effects were exacerbated by the chaotic political situation that characterized the valley during the Late Bronze Age, when, along the river, the Great Powers of the time found themselves in direct contact for the first time. The paper tries to analyze how the region's morphology and natural environment affected both the local settlements and areas of foreign influence.

KEYWORDS

Late Bronze Age, Syria, Lebanon, Turkey, Orontes, Settlement, ancient geography

Introduction

According to the Encyclopædia Britannica, geopolitics is the «analysis of the geographic influences on power relationships in international relations» and, though «in contemporary discourse, *geopolitics* has been widely employed as a loose synonym for international politics», more practically it is the study of the «political effects of geography – particularly climate, topography, arable land, and access to the sea».¹

The conditioning of history by geography is particularly evident in a heterogeneous environment such as that of the Orontes valley. A quick glance at the region's topography shows clearly how diverse its landscape is, creating niches where local kingdoms arose, largely secluded one from the other, and how at the same time it represents one of the main connection and transition areas between different parts of the world – Europe to the north, Africa and the Arabian Peninsula to the south, Asia to the East. During the LBA, this led the local kingdoms, whose ambitions for growth were limited by their geographical positions, to become involved in the clash of the great international powers.

1. The River Valley

The Orontes is the main watercourse in the Levant, and its drainage basin covers over 23,000 km² between the Mediterranean and continental Asiatic areas, surrounded by the Syro-Lebanese coastal strip to the west, the Amanus mountains to the north, the Syrian desert to the east and the Hauran region to the south-east.² This extensive area has contrasting characteristics and is more a patchwork of small different geographic units than a uniform zone.

¹ DEUDNEY 2013

² The basins of the Afrin and the Karasu, tributaries of the Orontes, are included in the 23,000 km² but not the Ruj (WEULERSSE 1940, pp. 34-35). This is therefore to be considered an estimate by default. See also MARFOE 1998, pp. 21-22 and BESANÇON, SANLAVILLE 1993a, p. 16. WEULERSSE 1940 is still the reference work for the physical geography of the Orontes. See more literature in TURRI 2015, pp. 21-54.

The Orontes, which rises not far from Baalbek, because of its height on the sea level could be considered a mountain river for almost 2/3 of its 610 km course. The first part of its path is that of a typical mountain stream, very steep, often dry and without a proper bed; it becomes a permanent watercourse only at Hermel, thanks to the springs of Ayn ez-Zerqa.³ Since the river's greatest supply of water comes, as here, from underground springs scattered along its whole length, Weulersse defined the Orontes as «the river that is born from itself».⁴

In the northern part of the Beqaa the river flows through a deep gorge between the Lebanon and Anti-Lebanon ranges, and for this reason its water cannot be used for irrigation. This situation is repeated several times along the river's path and this difficulty of using its waters for agricultural purposes – if not through the use of machinery such as the famous norias – is another peculiar characteristic of the Orontes that differentiates it from the other large rivers of the Near East, the Tigris, the Euphrates and the Nile.

Outside of the Beqaa, the natural barrier of the basalt flows to the south of Homs transforms it into Lake Qattina. Thanks to its significant flow rate and precipitation of more than 500 mm/year, the river is not depleted by evaporation, and restarts its run on the Homs basaltic plain, then forming a great bend in the region of Hama, the only area of the valley with reduced rainfall, around 300 mm/year. In the Ghab its flow is revitalized by the increased rainfall and by 30 springs distributed along the graben, where once it used to stagnate in marshes, now drained.

After passing through a deep cut between Jirsh-Shoghur and Jir el-Hadid, it emerges onto the Amuq plain, where a U-turn saves it from the Amuq marshes. Finally, the Orontes turns into a normal Mediterranean river and pours its waters into the sea, to the south of Samandağ.

³ It is difficult to establish a precise starting point for the river. Some consider it to be Ayn ez-Zerqa, where underground springs, spread over 500 m in the river bed, pour out water at an average of 12 m³/s. From here there is a 570 km journey to the sea.

⁴ WEULERSSE 1940, p. 21.

The whole region is of relatively recent formation and is crossed by a number of faults, several of which formed during the Cenozoic.⁵ Here tectonics has predominated over water erosion, and this is the reason for the river's complex course: the Orontes, unlike most rivers, did not create the valley in which it flows, but was born after it. Because of this particular conformation, the river's catchment area includes a large part of the massifs aligned along the valley and its limit corresponds roughly to the 250 mm isohyet.⁶

These topographical features have a significant influence on the climate; temperature and precipitation vary considerably and suddenly, not only from north to south: westwards, the coastal mountain ranges mitigate the humid Mediterranean climate, while eastward lower mountains partially allow the arid desert climate to penetrate. This is the reason why two thermal gradients, one longitudinal and the other latitudinal, must be taken into consideration for the Orontes valley.⁷

In such a varied heterogeneous region – which lies in a natural area of transition, connecting Europe, Asia and Africa – the only common unifying feature is the river valley, that has always offered a connection between north and south. Considering that the western mountains seaward often slope directly into the sea leaving no space for valleys, and that they are rich in streams which flow into the sea through gorges, breaking the coastline, the valley provides the easiest – and almost the only practicable – land route between Anatolia and the Mediterranean world to the north and Palestine, Egypt and the Arabian peninsula to the south.⁸ Longitudinally, a couple of passages through the coastal mountain ranges connect the sea to the valley and then to the caravan routes that proceed across the Syrian desert to Mesopotamia and the Iranian plateau, continuing towards the Far East.

⁵ See BREW 2001, pp. 131-138 and MARFOE 1998, pp. 23, 12.

⁶ WEULERSSE 1940, pp. 25-29; BESANÇON, SANLAVILLE 1993a, pp. 16-17.

⁷ MARFOE 1995, p. 24.

⁸ The route through the marshy Ghab plateau might have presented some difficulties but it could be easily avoided by taking the one to the east of the *Massif Calcaire*.

Considering this geographical setting, it was natural that the LBA great powers, pharaonic Egypt and the kingdoms of Mitanni and Hatti, met and clashed along the river. This led to the development of a cosmopolitan, 'international' culture – normally found in coastal cities such as Ugarit but visible as well in the valley's big palaces, at Qatna and Alalakh – and was also the origin of the permanent political instability and repeated breakdown of alliances that characterized the valley's history in the following centuries.

In addition to this particular geographical position, other factors have influenced over time the history of the people who lived along the river, such as environment changes. A general drying of the climate had already started between the EBA and the MBA, partly as a result of the impoverishment of the soil due to a large-scale increase in exploitation, but during the LBA – when the ecological and environmental data used to study these trends become incoherent – against a background of constant and progressive global temperature increase, dryer periods started to alternate with wetter ones, growing in frequency and intensity, until widespread drought and famine afflicted the whole Levant at the beginning of the Iron Age.⁹

The decrease in rainfall went hand-in-hand with the degeneration of the pre-existing natural environment, exacerbated by anthropic factors. The deforestation of the lower areas of the Beqaa and the Ghab had been accomplished thousands of years earlier, but in the Bronze Age it was extended to the highlands too.¹⁰ Pollen diagrams from Mishrife/Qatna show that at the beginning of the EBA IV the primeval oak forests had already been destroyed, replaced in the MBA by secondary shrublands or *Juniperus* forests. These forests too decreased during the MBA/LBA transition, probably in part because of the large-scale use of wood as fuel, and were replaced by scattered deciduous oaks and the landscape became more open, though not a proper steppe.¹¹

⁹ ROBERTS ET AL. 2011, pp. 151-152; KANIEWSKI ET AL. 2010 e KANIEWSKI ET AL. 2011. A long-term process of climate drying had already started after the seventh millennium throughout the eastern Mediterranean and Near Eastern area.

¹⁰ MARFOE 1998, p. 38; YASUDA, KITAGAWA, NAKAGAWA 2000.

¹¹ VALSECCHI 2007, pp. 111-113.

2. Settlements in the Valley

Several archaeological surveys have been conducted in the region.¹² Even though some have not yet been fully published, on the basis of the data available, the first clear evidence is that throughout the entire Bronze Age human settlements were not evenly scattered across the valley but concentrated in well-defined areas: in northern Beqaa, north of Baalbek, with its karst spring oases;¹³ at the exit of the Homs Gap, near the shores of Lake Qattina and on the floodplains around Homs and Hama, where the river is surrounded by soft marl and basalt;¹⁴ in the southern portion of the Ghab graben, where a number of karst springs gush out and the surrounding hills are covered by a fertile red soil;¹⁵ lastly, in the Amuq floodplain, surrounded by mountains, where the confluence of three rivers creates a second wetland.¹⁶

Settlement appears to have been almost inexistent or much reduced outside of these areas, even near the Orontes itself, where the land is too marshy, as in northern Ghab, or where the river runs in narrow gorges that prevent the formation of an alluvial plain and make irrigation difficult, such as between the Beqaa and Lake Qattina or northward to Jisr esh-Shoghur.

It could be objected that survey areas were chosen on the basis of several considerations, among them the archaeological potential of the different regions, which implies that areas not suitable for human settlement would be normally avoided, but there is some evidence that supports the aforementioned considerations.

The Homs Gap is an area of great historical interest as it is a natural corridor linking the Syro-Lebanese coast with central Syria. The Syro-Lebanese-Spanish team that carried out the survey between the city of Homs and the Krak des Chevaliers – the Crusader fortress that dominates the

Bouqaia – did not find any big sites in the area that could be dated to the Bronze Age and very few traces of LBA settlements.¹⁷ Further south, the survey conducted by Graham Philip in the area to the south of Homs has not identified any Bronze Age sites for almost 20 km between Tell Nebi Mend/Qadesh and the LBA sites in the Beqaa Valley.¹⁸ More problematic is the almost complete absence of Bronze Age sites in central Ghab, as found by the Syro-Canadian survey conducted by Fortin:¹⁹ the only known site, Rasm et-Tanjara, was discovered after the construction of the Rastan dam and the drainage of Lake Houash in the 1960s. This might suggest that in antiquity there were other sites, so far unknown to us, and that these were submerged by the marshes sometime after the Neo-Assyrian epoch, to which the most recent known levels of Rasm et-Tanjara date.²⁰

With regard to the number of settlements, if we check the survey data in more detail, we notice that at the beginning of the LBA there was an overall decline in the Orontes valley: in the northern Beqaa only 18 LBA sites have been identified, vs. the 27 attested for the MBA; 35 (4 of which uncertain) vs. 46 in the region around Mishrife; 18 vs. 24 along the Orontes in the area of Hama and 8 vs. 13 to the west of the river.²¹ With very few exceptions, these sites were already inhabited during the MBA and most of them are not bigger than a couple of hectares.

This reduction in settlements shows an overall situation that appears to be a radical break with the past, although the evidence from archaeological excavations in bigger sites seems to be not so drastic and when a period of decline is detectable it does not begin everywhere simultaneously.

At Tell Atchana/Alalakh, located in the area affected by the Hurrian–Hittite wars, the city plan was subjected to consistent changes. The duration of the time span between the fire that destroyed the

¹² See a list in TURRI 2015, pp. 59-62 and literature *infra*.

¹³ MARFOE 1998, pp. 36-37.

¹⁴ PHILIP, BRADBURY 2016, pp. 379-380; BARTL, AL-MAQDISI 2016, p.304; VALSECCHI 2007, p. 106.

¹⁵ WEULERSSE 1940, p. 21; BESANÇON, SANLAVILLE 1993a, p. 19.

¹⁶ YENER 2005a, p. 2.

¹⁷ HAÏDAR-BOUSTANI ET AL. 2005-2006, pp. 11-12; 2007-2009, pp. 18-19 and 28-31 (Tableau 1).

¹⁸ PHILIP, BRADBURY 2016, fig. 9.

¹⁹ FORTIN 2016, fig. 1.

²⁰ On Rasm et-Tanjara, see ATHANASSIOU 1972, 204; 1977.

²¹ All the data are given in TURRI 2015, pp. 68-147 with literature.

FIGURE 1

Fluctuation in the number of settlements and rough estimates of the population in some regions of the Orontes Valley

Size (Ha)	up to 3	3-5	5-7	more than 7	n.a.	TOTAL	Population
Northern Beqaa (MARFOE 1998, TURRI 2015)							
MBA	17	4	1	1		25	8,000
LBA	15	2	0	1		18	6,000
IA	11	3	1	1		18	7,000
Region of Hama (BARTL, AL-MAQDISSI 2014, TURRI 2015)							
MBA	7	11	4	4	10	36	32,000
LBA	4	10	3	4	5	26	29,000
IA	7	8	4	4	7	30	30,000
Amuq (BRAIDWOOD 1937; CASANA, WILKINSON 2005, TURRI 2015)							
MBA	59	7	12	4		82	42,000
LBA	29	5	8	1		43	20,500
IA	70	9	12	2		93	39,500

Level VII palace in the early 16th century BC, at the time of Hattushili, and the beginning of Level IV is still debated but it seems not to have been less than a century and a half.²² Until the end of Level V there is no evidence of new palaces, but Levels VI and V are characterized by the strengthening and replanning of the city's fortifications, without the previous ones having suffered any violent destruction.²³ The new Level IV Palace was constructed to the east of the previous larger one only at the beginning of the LBA. The continuous reinforcement of the city was surely due to the turbulent international situation but this implies, considering the high cost involved, that at the time Alalakh must have had good economic resources.

In the archaeological record of Kamid el-Loz/Kumidi, located outside of the Orontes valley but in a contiguous area, the passage from the MBA to the LBA is marked by several changes, made over a long

time span; after the MBA palace burnt down, its site underwent a change of function and a small house was built in its place, before a new palace were erected in the same area at the beginning of the LBA. The temple too was destroyed by fire at the very end of the MBA – probably at a different time to the palace – but a new one, though different in plan and building type, was immediately built on the site. At least part of the living areas in the town had been abandoned during the MBA II and the area was used as a cemetery for a while before becoming a settlement again in the LBA.²⁴ It is unknown whether during the interval between the two palaces another one was built elsewhere the city, or if there was actually a temporary lowering in living standards, but it is certain that there was no interruption in the settlement. It was only at the end of the LBA that many buildings were abandoned – among them the temple and the palace, that had in the meantime been reconstructed or enlarged several times – and

²² VON DASSOW 2008, p. 6 n. 7, p. 15 and n. 34, 39-40.

²³ GATES 1981, pp. 7, 34-36.

²⁴ HEINZ 2011, pp. 23-98.

there was a lack of significant new constructions.²⁵ At the beginning of the Iron Age the settlement was no longer fortified and the residential buildings changed significantly.

More or less between the MBA and the LBA, a severe reduction in settlement area is attested at Tell Nebi Mend/Qadesh,²⁶ but at the same time in Mishrife/Qatna huge building works reshaped the topography of the city: a sumptuous royal palace was built in the northern part of the upper city while another two monumental buildings were subsequently erected north and south of it.²⁷ Moreover, the continuity of the city's administrative system may be seen in the uninterrupted use of the pottery production area on the top of the acropolis.²⁸ This reshaping of the city in the absence of extensive destruction clearly means that it was a prosperous time for Qatna.

Considering this continuity of settlement in many larger sites, it might be supposed that the drastic decrease in the numbers of smaller settlements was partially counterbalanced by the growth of the bigger cities, which could have been able to accommodate a larger population in a smaller space. Actually we know that many of the big centres of Syria and Mesopotamia during the second millennium BC, were 'hollow cities', places enclosed by huge fortifications and with sumptuous public buildings, that were the places of abode only of the ruling classes and the workers connected with the executive apparatus, the management and protection of the cities: scribes, specialised artisans, high-status officials, armies, and so forth.²⁹

In the enormous area encompassed by Qatna's ramparts, e.g., during the LBA I a residential quarter might have existed between the internal reservoir and the northern earthwork but no extensive residential areas have been found.³⁰ Enclosed within these fortifications there must have been open spaces with bodies of water and fields or gardens, as in

Mari.³¹ The majority of the population must have been basically rural and resided outside the city enclosure, probably in or just outside the triangular 180 km² area encompassed by two wadis, Wadi es-Silk (or Wadi Sin el-Aswad) westwards and Wadi Midan eastwards, at the centre of which the city stood – though there is a decrease in the number of occupied settlements identified in the region.³²

When we analyze variations in settlements it is important not to take just the number of sites but to consider also their size. Clearly a smaller site could hold less people than a bigger one, but the size has also a significant impact on population density which makes the size:population ratio different. For sites smaller than 4 hectares we can assume an average of 125 persons per hectare, while for those bigger this number can increase to 200.³³ Obviously, these areas consider only the place of abode of the population and not the productive areas that are required for their subsistence.

If we try to apply these numbers to the available data, two points must be borne in mind: on one hand there could exist sites that were not detected or recognized by the surveys; on the other it is impossible to estimate the real inhabited surface area of a settlement at a certain time without extensive excavations or intensive on-site surveys – and many of those conducted in the Orontes area were basically extensive surveys aimed at reconstructing the ancient settlement and its fluctuation in the different areas studied. Since the consequences of these two facts are an underestimation of site numbers in the first case and an overestimation of the settled area in the second, if we start from a basis of accurate data we can consider the results reliable, at least approximately.

These considerations can be applied only to the settled sedentary population, therefore not including the pastoral and nomadic components, who are intrinsic to every society and in the Near East are a strongly rooted presence even today.

²⁵ MARFOE 1995, pp. 100-103; HEINZ 2011, pp. 28-29.

²⁶ BOURKE 1993, p. 189.

²⁷ MORANDI BONACOSSO 2007, pp. 77-78.

²⁸ MORANDI BONACOSSO 2007, pp. 76-77; 2008, pp. 114.

²⁹ MORANDI BONACOSSO 2007, pp. 81-82.

³⁰ MORANDI BONACOSSO 2007, p. 79.

³¹ MARGUERON 2004, p. 446. On Qatna lakes see CREMASCHI 2007.

³² There is a third wadi, Wadi ez-Zora, running between these two and along the city's ramparts, feeding the city's lake. See CREMASCHI 2007; TURRI 2015, pp. 79-80, 89-99.

³³ WEBLEY 1972, p. 179.

3. Outside the Cities

3.1 The Rural World

Because of the difficulty of identifying small rural installations in the countryside, consisting of a few houses or a single large farm, maybe occupied for a relatively short time, it is not possible to determine whether the numerical reduction of small sites corresponded to an increase of these structures, perhaps directly dependent on the urban centre, which would have thus increased its rural role.³⁴ Similar sites, small centres of agricultural production, are currently attested only by written sources, in particular at Ugarit, which however is located on the coast, therefore outside the Orontes area.³⁵ But the texts of Alalakh and Qatna also seem to confirm a possible development in this sense. To the approximately 50 toponyms attested in the Alalakh level VII tablets there correspond more than 200 in those from level IV, many of them not mentioned anywhere else. It is true that the first texts concerned a peripheral centre dependent on the great kingdom of Yamkhad while the second regarded the capital of an extensive territorial entity and many of the names might refer to places outside of the surrounding Amuq valley, but some of them enumerate the inhabitants or houses of small settlements of three houses or so that may be considered located in the core territory of Mukish. Archaeological evidence shows many less settled tells in the Amuq during the LBA than those mentioned in the texts.³⁶ A similar situation could have occurred also in Qatna, where the number of sites identified in the surroundings of the city is less than those mentioned in the texts found in buildings within it.

³⁴ LIVERANI 1975 and HELTZER 1976, pp. 4-6, 43 and *infra* are sure of their existence in Ugarit vs. MAGNESS-GARDINER 1994 and CASANA 2009, p. 17.

³⁵ See in BELMONTE MARÍN 2001 *infra* the formations composed by *gittu* (AN.ZA.GAR₃ in Akkadian or *gt* in Ugaritic) followed by a toponym.

³⁶ We have to consider also that the intensive agricultural cultivation and urbanization of the region have hidden or destroyed several tells. See, e.g., YENER 2005a, p. 15.

3.2 Beyond the Political Entities

The decrease of settlements can also be linked to an increase in other components of society, such as pastoral and nomadic groups, but considering that the intensive exploitation of resources requires a small productive area, quantifiable as about 0.2 ha per person, while a non-intensive one, of a pastoral or semi-nomadic type, requires 40 ha per capita,³⁷ an increase in the non-urban or non-sedentary population, which is not quantifiable, should not lead to a large error in the estimated total.

As Jorge Silva Castillo has stated, «it is difficult to classify the diverse forms of nomadism into categories like seminomadism, semisedentarism, transhumance, and occasional nomadism. The combinations are very varied: the movement of the group can be partial or total; the establishment of the community can be temporary or permanent, in a fixed place, in two places, or more».³⁸ Moreover they leave very few traces and it is almost impossible to study them archaeologically, and even written sources contain little information concerning them in the Orontes valley.

The Mari texts are our main sources for the study of nomadic life in the Bronze Age Near East, but they are written from a sedentary, urban point of view, and settled citizens are often suspicious of those who do not conform to their values and way of life, so it is likely that the content of the texts does not reflect completely and objectively the real situation.³⁹

Moreover there are «patterns of economic, social, or political organization beyond local political entities, such as ethno-linguistic or tribal areas or patterns of exchange through trade»,⁴⁰ which are considered by the texts only when they interact with the established powers. Examples are the Suteans and the *habiru*.

The Suteans, Semitic tribes dedicated to semi-nomadic or nomadic pastoralism, are mentioned

³⁷ MARFOE 1998, p. 168.

³⁸ SILVA CASTILLO 2005, p. 127.

³⁹ For a general review on nomadism in the Ancient Near East see SILVA CASTILLO 2005. For Mari see KUPPER 1957.

⁴⁰ On the topic see CANCIK-KIRSCHBAUM, BRISCH, EIDEM (eds.) 2014, *infra*. Quote from *Introduction*, p. 3.

several times in the Amarna letters:⁴¹ Rib-Adda of Byblos complains that the Egyptian commissioner Pahuru, stationed at Kumidi, uses them against him (EA123-122); Suteans seems to have been in the service of Aziru of Amurru and when the king was stuck in Egypt, they left the country, convinced that he would not return (EA 169); the sons of Labaya of Sechem hired them, together with *habiru*, for hostile acts against Biridiya of Megiddo (EA 246); Suteans and *habiru* together are also at the service of Biryawaza of Ube who, according to himself, acts on behalf of the pharaoh (EA 195); finally Dagan-talka, most likely king of a south Palestinian city, asks the pharaoh for help against *habiru*, brigands and Suteans (EA 318).⁴²

In the Amarna letters, the *habiru* – people who have escaped from their social context for different reasons, political, economic or otherwise, thus not forming an ethnic group but rather a social category – are sometimes associated with the Suteans – and also with bandits: what they have in common is the fact that they do not participate in the political and social life of the cities. Not being part of the society automatically makes them, in the eyes of the citizens, outlaws, raiders, criminals and so on.

In LBA texts the word *habiru* is often used in a derogatory and negative way, to indicate any kind of enemy and anyone who does not respect, in the view of the different authors of the single letters, what should be the natural order of things. With this definition, anyone can become *habiru* and it is consequently difficult to understand if the statement (e.g.) that Tette, king of Nukhashe, is of *habiru* origin (CTH 63.A i 7), corresponds to reality or is used to denigrate the enemy.

It can not be ruled out that some of these people did indeed rely on brigandage as a means of surviving, but all the aforementioned texts show them as being somehow dependant on a king or other person integrated into the urban society of the time. This is also confirmed by the tablets of Alalakh where the *habiru* appear several times as mercenaries employed by the city.

The fact that one of the main activities of the Suteans was herding is confirmed by Idrimi, who before becoming king of Alalakh, while fleeing from Emar to the land of Canaan, resided among them: «I took my horse, my chariot, and my groom. I crossed over into a desolate region, where I joined the Sutean pastoralists. I spent the night with them within the shelters of the steppe» (*Idrimi* 13-17).⁴³ It was in the land of Canaan, at Ammiya, that Idrimi met other runaways coming from the north, among whom he subsequently lived for many years: «For seven long years, I stayed among the *habiru*» (*Idrimi* 27). The possibility that Suteans and *habiru* could participate somehow in social life is suggested by Idrimi himself, who, after becoming king of Alalakh, was able to give houses «even to those who lacked a dwelling» (*Idrimi* 85).

Geographically, most of the Amarna references to the Suteans come from letters sent either from the coast or from southern areas such as Palestine and Hauran; more to the north their presence is recorded in the Orontes valley only in the texts of Alalakh. It can therefore be inferred that, in addition to the steppes of central Syria, where their presence is well attested – by other sources as well as by Idrimi⁴⁴ – their presence was concentrated mainly in mountain areas with plentiful forests, in the Lebanon or on the Judean Mountains, especially their western sides – as the eastern slopes are very steep and descend almost straight down to the valley of the Beqaa – or along their passes.

In the same areas the Egyptian texts place the Shasu, who are depicted as fierce, savage and merciless. Papyrus Anastasi mentions a place «Magara, where the sky is dark by day. It is overgrown with junipers and oaks, and pine trees reach the sky. Lions are more abundant than leopards and bears, while it is hemmed in on all sides by Shasu-Beduin»,⁴⁵ a description that immediately leads us to think of an inhabited area, a hill or a mountain setting – and in fact the text immediately afterwards mentions a mountain («You have not climbed Mount Shawe...»). This area must have been located in the highest part

⁴¹ On the Suteans see HELTZER 1981 and ZIEGLER, RECULEAU 2014.

⁴² TURRI 2015, p. 235 with literature.

⁴³ Translation by LAUINGER 2017.

⁴⁴ KUPPER 1957, pp. 90-98.

⁴⁵ Translation by WENTE 1990, pp. 106-108.

of the Beqaa, at the watershed between the Litani and the Orontes, at a height of about 1000 metres above sea level, at the edge of a once wooded area, in a region where during the LBA, for over 10 km there were apparently no permanent settlements – all characteristics that would make the place an ideal refuge for run-aways, fugitives and bandits of all kinds.

Other Shasu are mentioned by the same text further south, in the passage connecting Megiddo to the Jordan Valley: «the narrow pass is dangerous, having Shasu-Beduin concealed beneath the bushes, some of whom are of four cubits or five cubits (from) their nose to foot and have fierce faces. They are unfriendly and do not take to cajolery...».

According to the texts, to sum up, the space left for these components of the society – considered unconventional from an urban point of view – was confined to the mountains of Lebanon and the areas immediately to the north, where there are uninhabitable regions – forests or swamps – located in the vicinity of large sites such as Qadesh, or still further northward, at Alalakh, to whose south and south-east there were the Ghab and the steppe.

4. Political Map of the Valley

The most densely settled areas of the valley, where the large centres arose, were those that have easy access to the coast and where the climate is more favourable. First, the Amuq valley, where Tell Atchana is favoured by the local climate as well as by the wide, fertile plain that lies around it, then the area eastward of the Homs Gap, that lets the Mediterranean climate penetrate inland beyond the coastal ranges, where Mishrife is located, and that gives access to the area of Hama. At the beginning of the LBA, the kingdoms centred in these areas, Alalakh and Qatna, appear to have been those with the most extensive territories under their control.

4.1 The Beginning of the LBA

At that time, Hittite power was in decline. The weakness that characterized it after the death of Murshili I, who had previously defeated the Great

Kingdom of Yamkhad, made room for the Hurrians and the kingdom of Mitanni, and Northern Syria was divided into a number of independent kingdoms, formed by the former annexes of Yamkhad.⁴⁶

Along the lower Orontes there was the region of Mukish which formed the core of the kingdom of Alalakh, likely extended for the whole Amuq valley since on the base of ALT 395 also the regions of Amae and Zalkhi seem to have been part of it.⁴⁷ According to the treaty with the city of Tunip, ALT 2, Alalakh shared a border with that city and so also the territory southward the Amuq, from Jebel Aqra to the north of Asharne, must have been under its control. This area was probably that called the land of Niya by the texts and its appurtenance to the kingdom of Alalakh seems to be confirmed also by Idrimi since, as he was able to form an army, leave Canaan and go back to the north, «in one day, as one man, the lands of Niya, Ama'e, (and) Mukiš and the city of Alalakh» turned to him (*Idrimi* 36-39).

Qatna, on the middle Orontes, in the 18th century was one of the most powerful kingdoms of the Ancient Near East, alongside Babylon, Larsa, Yamhad and Eshnunna. It dominated the great river bend and controlled passage to the desert of Palmyra. Even though its power had decreased, at the beginning of the LBA the kingdom's extension was still considerable: from the slopes of the Anti-Lebanon southward, with also some dependencies near the Lebanese coast, to el-Rastan and perhaps even as far as Hama northward.⁴⁸

In this latter region, many of the sites along the great bend arose inside or in front of the many small bends that characterize the course of the river in this area. Thanks to these positions, the tells could control and protect the fertile areas enclosed by the small river bends, where there could have been fields that they controlled directly. The partial or total obstruction of the passage to the inside of a bend made

⁴⁶ On these topics see VON DASSOW 2014 and DE MARTINO 2014.

⁴⁷ On ALT 395, see VAN DASSOW 2008, p. 55-56 and nn. 129-131.

⁴⁸ See RICHTER 2007, pp. 306-307 for Anti-Lebanon; Arashtan/Rastan is mentioned in TT 36 and TT 43 (texts in RICHTER, LANGE 2012); Hama could be mentioned as Amata in EIDEM 2007 n. 35. See TURRI 2016, p.146 and nn. 6-7.

FIGURE 2
Political map of the Orontes Valley
at the beginning of the LBA



it difficult to reach the inner part without passing by or crossing the tell.⁴⁹

Between Alalakh and Qatna there was Tunip, an ancient city already mentioned in the tablets from Ebla and later in MBA texts, which in the LBA began to use to its advantage its strategic location on one of the main Orontes fords and likely started to expand westward, along the Wadi Duarte, including cities as Iripa and Ishkhanik.⁵⁰ These and four other

cities are said to have been handed back to the city by an unknown Hittite king, after they were taken by Ilimilima of Alalakh (CTH 135, KUB 3.16 +21). If this Ilimilima were the successor of Niqmepa, son of Idrimi, this fact could have led to the abandonment of the mentioned treaty signed between the two cities at the time of the father (AIT 2).

Thanks to its position, which allowed easy access to the passage between the Orontes valley and the

⁴⁹ Among these tells there are, e.g., some big sites such as Tell es-Sus, Hama, and Tell Nasriye.

⁵⁰ Tunip should be modern Asharne, while Iripa and

Ishkhanik tentatively could correspond to modern Arifa and Khan Sheikhun. See discussion and literature in TURRI 2015, pp. 246-247, 283-287.

FIGURE 3
Late Bronze Age sites in the Orontes Valley (red dots; see complete catalogue in TURRI 2015) and places mentioned in the text



sea, along the Nahr el-Kabir, Tunip also managed to acquire an important role on the coast in the time of Thutmose III: it had a garrison in an unidentified city, Wartet (ARE II, § 456-459), and its king's son was a commander in Ullasa, on the northern Lebanese coast (ARE II, § 470).

To the east of the territories under the suzerainty of Alalakh there was the land of Nukhashe, whose first mention is in an Alalakh VII text written in «the year the plague was in the land of Nukhashe» at the time of Niqmepa king of Yamkhad (ALT*96, 15-16). To be chosen as a dating reference, the event must have had consequences for or at least caused fear to the inhabitants of Alalakh, indicating proximity between the two territories. But we must pay attention when we speak about Nukhashe: in the literature it is often considered a sort of *sui generis* tribal confederation that eludes a more precise definition.⁵¹ Many of the problems related to the interpretation of its history could be partially solved by interpreting the name Nukhashe in two different senses, one geographical and the other political. In a political sense, Nukhashe would indicate a well-defined kingdom, located north-east of Qatna and to the east of Niya, while geographically the name would refer to a wide region that encompasses the entire area east of the middle Orontes. In this area are included the homonymous kingdom of Nukhashe ruled by its own king, the kingdoms of Qatna, Tunip, Niya, Zinzar, Tunanat – these last three not yet independent in the first phase of the LBA and being parts respectively of Alalakh, Tunip and Qatna.⁵² Geographical names with double meanings are not uncommon, as is demonstrated, e.g., by the contemporary case of Amurru, which originally designated the entire region of Syria to the west of Mesopotamia, but which later acquired also two political meanings, referring to one of the areas under 18th Dynasty Egyptian control and also to a state that at the beginning of the LBA, before

Aziru became its king, was a small political entity on the northern Lebanon mountains.

It is difficult to establish how extensive the area controlled by Nukhashe was. There are very few mentions of it in the text of Alalakh and it is possible that before the time of Amarna it was a rather poor kingdom, centred in the area more or less near the shared borders between the modern governorates of Hama, Idlib and Aleppo, contiguous to the arid steppe of the Syrian Desert, where water is scarce, precipitation is less than 250 mm/year and a great part of the population, even in recent times, consisted of land-poor farmers or pastoralists.⁵³

No big cities are known in the area, either in antiquity or modern times, and this could have determined the structure of the kingdom, more similar to a tribal union, with small settlements scattered over a rather wide area and where the semi-nomadic components formed an important part of the society – and since they were far from the big cities, their presence did not bother them.

Southwards, Qadesh, another small kingdom situated south-west of Qatna, whose importance is due to its strategic position at the margin of the Beqaa valley, strengthened its influence to the south. The wooded area to the south of the city and the neighbouring region, respectively known as the Lebo Forest and Tahshi from several Egyptian texts,⁵⁴ must have had a fairly sparse population, similar to that of the nearby mountains of Lebanon and Anti-Lebanon or the more northern Jebel en-Nusayriye, but they also constituted the only land passage from the Beqaa and to the land of Ube, the region of Damascus. The military importance of this position is clearly shown by the huge fortified site of Tell Safinet Nuh just to the north of Tell Nebi Mend, far from water sources, in a position not suitable for a settlement, and by two parallel alignments of three small sites each to its east.⁵⁵ It is interesting to note that at least at Tell Aqarib and Tell Ahmar, the central and east-

⁵¹ See RICHTER 2002 with literature.

⁵² When the LBA texts mention «the kings of Nukhashe» in the plural, they refer to all the kings of these kingdoms, not only to the ruler of the kingdom of Nukhashe itself, to whom they refer in the singular. This distinction seems to be supported by the texts, see TURRI 2016, pp. 151-152.

⁵³ ICAARDA 2005. On the interaction between humans and environment in the steppe, see e.g. GEYER, CALVET (eds.) 2001 and many other works by the same scholars on this topic.

⁵⁴ TURRI 2015, pp. 251-252, 280.

⁵⁵ PHILIP, BRADBURY 2016, 387-388; PHILIP ET AL. 2002, p. 19.

ern tell of the northernmost alignment, there are traces of fortifications.⁵⁶ We may suppose that continuous raids, the endemic turbulence of the semi-nomadic population, foreign invasions or other similar circumstances pushed the local authorities to make the huge economic effort necessary for the construction of these defensive structures. Considering the small size of the sites, we can suppose that this could have been carried out only with the help a bigger site such as Qadesh.

It is well known from the texts that Qadesh became the fulcrum of the anti-Egyptian coalition after the first of the numerous campaigns of Thutmose III in Syria when the city led an alliance of Canaanite kings and rulers against the pharaoh's army at Megiddo.⁵⁷ In the subsequent 20 years, its defeat and numerous other clashes – equally unsuccessful – with Egypt are recorded, after which the city became the foremost Egyptian stronghold in internal Syria:⁵⁸ in the Memphis stele of Amenhotep II, successor of Thutmose III, it is said that the pharaoh went to Qadesh and met its prince, a signal that the city had a privileged position among the Egyptian's allies.⁵⁹

The region called Amqi in the Beqaa was the first to fall firmly into the hands of the Egyptians after the defeat of the Hyksos. With the exception of few isolated raids further north, the pharaohs of the 18th Dynasty before Thutmose III did not push their armies beyond this area, which was vital for reaching the northern regions and the only alternative to maritime routes.⁶⁰

During the Amarna age, according to the letters of the Syro-Palestinian petty kings found in Akhenaton's capital city, the number of small independent kingdoms in the Beqaa was relatively high compared to the limited space available. This implies that each of them must have had control of a restricted area, in close contact with its neighbours. The landscape of the region – highly diversified and

with no spaces suitable for the growth of a great political power with a large territorial extension – evidently favoured this process. No big cities are known in the area, especially in northern and central Beqaa – i.e. in the southernmost region of the Orontes valley – where most of the sites are concentrated near and to the south of the headwaters of the Orontes, near Labwe and Ayn Ahla, or further south, along the Litani. Between them, with the exception of two sites, Tell Maqna and Tell Ard et-Tlaili, no human settlement has been identified for an area of more than 200 km². This could be due to the fact that the watershed of the two rivers and the northern part of the Beqaa, north of Labwe, must have been covered respectively by the above-mentioned forests of Magara and Lebo, and that the northern extremity of the Beqaa is a plateau where the river runs in a deep gorge.

The boundary of the territories controlled by Egypt before Thutmose III was probably the edges of the forest of Lebo, where access was difficult and which represent a natural border. The forest became part of the Egyptian-controlled area only after the submission of Qadesh, but its extension and wild nature is still clearly mentioned by Amenhotep II who, on his way from Qadesh to Hashabu (a city in the land of Amqi), passed in the forest and «brought back gazelles, maset, hares, and wild asses without their limit».⁶¹

Urban development and intensive resource exploitation should therefore have been more modest in the Beqaa, divided into small juxtaposed enclaves and surrounded by mountains, with a smaller available workforce and lack of surplus arable land. Storage cannot have been as intensive here as in the big cities in the central-northern part of the Orontes valley. In a similar environment, the problems associated with rainfall variation, soil depletion, epidemics, and hostilities have a heavier and faster impact on the stability and well-being of the various individual areas. The collapse of a single centre creates a vacuum in the network formed between nearby polities and affects these, causing a chain phenomenon that quickly compromises the overall balance achieved.

⁵⁶ PHILIP ET AL. 2002.

⁵⁷ REDFORD 1992, pp. 156-158. For literature and references see TURRI 2016, pp. 161-162.

⁵⁸ For literature and references see TURRI 2016, pp. 315-316.

⁵⁹ ANET, pp. 245-247.

⁶⁰ REDFORD 1992, pp. 149-156.

⁶¹ ANET, p. 246.

The lack of political unity made control of the area by a great foreign power easier, moreover the secluded nature of the region meant it was less involved in the great international political manoeuvres and the control exercised by Egypt could have been light, and not too invasive.

At an international level, the first part of LBA was marked by the growth of Mitanni. To take power in Alalakh, Idrimi had to make a pact with Barattarna and also his successor Niqmepa appears to have been under King Shaushtatar. This implies that the treaty between Alalakh and Tunip must also have been signed under the auspices of the Hurrian king. The first recorded encounter/clash between Mitanni and Egypt is in the Inscription of Amenemhat and dates to the time of Thutmose I,⁶² and subsequently several incursions in their respective areas of influence are recorded,⁶³ until the first diplomatic contacts occurred during the reign of Amenhotep II, followed by the marriage of Artatama's daughter with Thutmose IV.⁶⁴ Towards the middle of the LBA, on the eve of the great campaigns of Shuppiluliuma, the local states seem to negotiate both with Mitanni and Egypt. Mukish and Nukhashe were still firmly in the Mitannian area, but Niya welcomed Amenhotep II into its lands.⁶⁵ Tunip, after having been for a short time an Egyptian headquarters at the time of Thutmose III,⁶⁶ returned to Mitanni, but had to renounce to its western dependencies, since the coast up to Ugarit passed into Egyptian control. Even Qatna, in whose language there is a marked presence of Hurrian elements, maintained some relations with Egypt.⁶⁷ The latter had still firm control over the coast and Amqi, and added Qadesh to its domain, as well as the land of Ubi further to the east.

⁶² REDFORD 1992, pp. 153-154 e n.117.

⁶³ See Mitannian support to Qadesh (ARE § 395) and the campaign in northern Syria with hunting in Niya in the Annals of Thutmose III and in the Tomb of Amenemheb (ARE II, § 481 and 588).

⁶⁴ REDFORD 1992, pp. 163-164.

⁶⁵ See the Stele of Menphis and Karnak (ANET 246).

⁶⁶ REDFORD 1992, p. 162. See also EA 59.

⁶⁷ See EA 51 and BOSCHLOOS 2012 for the scarab of Amenhotep III found in the Lower City Palace.

Before the rebirth of the Hittite Empire, the border between the lands linked to Egypt and those of Mitanni ran along the southern foothills of Jebel en-Nusayriye, which rises parallel to the course of the Orontes, and then continued eastward to the great bend of the river between Hama and Homs.

4.2 After Shuppiluliuma's Campaigns

The renewed expansionist policy of Hatti in the fourteenth century marks historically the transition between the first and second phase of the LBA. Early in his military advance into Syria, Shuppiluliuma attacked mainly the Mitannian dependencies, and Egypt did not intervene, apparently not interested in who was to rule over territories out of its domain. We must remember that Egypt was going through a particular phase in its history and a lot of energy was absorbed first by Akhenaton's reform, and then by the efforts of his successors to restore the *status quo ante* and to delete the 'heretic king' from history.

Egyptian control over the Syrian region was weakened by the appearance of a new entity on the political scene, the small kingdom of Amurru mentioned above, that grew from «a small highland chiefdom located on both banks of Nahr el-Kebir, on the slopes of Mount Lebanon»,⁶⁸ spreading along the coast and through the Homs Gap, taking advantage of the vacuum created by the loss by Tunip of its western area. Its king Aziru, while pretending to be a subject of the pharaoh, conducted an ambiguous, definitely philo-Hittite, policy, and formed an alliance with Etakama of Qadesh who attacked the lands of Amqi and Ubi (e.g. EA 53: 62; 140: 20-25; 162: 22)

With the rise of Shuppiluliuma, several towns in the valley experienced political divisions and the struggles between pro-Hittite and pro-Mitannian/Egyptian factions led to continuous internal reversals and clashes between the bigger local kingdoms, i.e. the centres of local power and so the first to be weakened.

The chaotic situation of this period is well evidenced by the letters of Qatna. After Idanda's attempt to pass over to the Hittite side,⁶⁹ Akizzi, the

⁶⁸ GOREN, FINKELSTEIN, NA'AMAN 2002, p. 199.

⁶⁹ TURRI 2016, pp. 154-156.

last known king of the city, vainly pleaded for Egyptian help (EA 52-56), but the city quickly declined and never regained much political power. Archaeologically, the decline of Qatna seems to start at the beginning of the LBA II, when the Royal Palace, the Lower City Palace and the Southern Palace were almost simultaneously replaced by relatively modest buildings made with poor materials.⁷⁰ The city disappears from the texts⁷¹ and this decline is mirrored in the surrounding region and northwards, where the surveyed sites date mainly to the LBA I.⁷²

Further south the situation seems to have been stable, in spite of the murder of Shuppiluliuma's son and the Hittite attacks against Amqi,⁷³ but at the northern end of the valley the political situation changed completely: the great kingdom of Alalakh disappeared and later texts mention only Mukish, Niya – that became once more an independent kingdom – and Nukhashe, that increased its possessions. Zalkhi, Amae and Barga gained their autonomy, too.⁷⁴ The city of Tunip was annexed to Amurru and this led to the separation of its former territories: Zulapa (tentatively modern Salba) became the main city to the north of the wadi Duarte and Zinzar (tentatively modern Sheizar) to its south, while Qatna's decline favoured Tunanab (tentatively modern Tell Hana).⁷⁵

The not-so-voluntary adhesion of the rich coastal city of Ugarit to Hatti, which took place in conjunction with the rebellion of the kings of Mukish, Nukhashe and Niya against Shuppiluliuma, marked another significant political change in favour of the Hittite king.⁷⁶

The situation after the Battle of Qadesh shows that Egyptian losses were huge: Ugarit, its southern annex Siyannu, and other coastal cities, including the island of Arwad, were under Hittite control, as well as Qadesh and Amurru.⁷⁷ Ramses only held on to the regions of Amqi and Ubi, plus some coastal cities: his domains were thus reduced to even less than Egypt's territory before Thutmose III.

4.3 Towards the Iron Age

At the end of the Bronze Age, the number of settlements started to grow, but among the large excavated sites Alalakh seems to have been abandoned, Qadesh and Qatna have a few centuries' gap in recorded occupation and Hama seems to have experienced a sharp reduction in living standards.⁷⁸ The increase actually concerns mainly the small sites, which almost doubled in number, but the phenomenon appears to be rather uneven in its distribution: site increase is almost imperceptible in Beqaa and particularly accentuated in the Amuq and the Ghab. This occurrence – a return to a more rural occupation of the land – is the opposite of that which marked the transition between the Middle and LBA

As already pointed out, the abandonment of structured centres in favour of rural life leads to a necessary reduction in the number of inhabitants and if we try to estimate the population on the basis of statistical calculations we can find some differences with respect to the simple numerical variation in site numbers. In the Amuq, where the number of Iron Age settlements might have been higher than those of the MBA, the growth rate probably did not correspond to an equal percentage increase in population, which seems to have been lower than the estimate during the MBA (see fig. 1).

⁷⁰ MORANDI BONACOSSÌ 2013, pp. 119-121.

⁷¹ The city is mentioned only in some Egyptian topographical lists, see TURRI 2015, p. 327.

⁷² MORANDI BONACOSSÌ 2013, p. 125.

⁷³ See literature and references in TURRI 2015, pp. 312-315.

⁷⁴ See e.g. EA 126:5 (Zalkhi) and CTH 63 (KBo 3.3++) (Barga). For modern identifications, see discussion and literature in TURRI 2015, pp. 231-232, 295-296.

⁷⁵ See e.g. EA 161:11-13 (Zulapa); CTH 176 (KUB 21.38: 14') (Zinzar); EA 53:43 (Tunanab). For modern identifications, see discussion and literature in TURRI 2015, pp. 233-236, 298-299.

⁷⁶ On the rebellion see ALTMAN 2001.

⁷⁷ Its king Benteshina was reinstated on the throne after his betrayal of the Egyptians. See CTH 92 (KBo 1.8++): 11-21. On Benteshina see SINGER 1991: 164.171.

⁷⁸ See YENER 2005b, p. 112 (Alalakh); PARR 1983, pp. 107-108 (Qadesh); MORANDI BONACOSSÌ 2013, p. 121 (Qatna); FUGMANN 1958, pp. 123-126 (Hama).

5. Some Concluding Remarks

On the basis of the above, it is clear that the political geography of the valley differed considerably between the first and second phases of the LBA, and this change seems to follow some rules connected to the different kinds of political control on one hand, and to the geographical position on the other. The only area that seems to have been excluded from this change was the Beqaa valley. The texts, in particular the Amarnian ones, record numerous small kingdoms in the area, which due to the limited space available could not have exceeded the dimensions of city-states, each one of them enclosed in its natural niche.⁷⁹ The area was for the whole LBA in the sphere of influence of Egypt, which controlled it through a commissioner stationed in Kumidi, but not too invasively, leaving the local rulers free to act at least locally, as long as their interests did not compromise their loyalty to Egypt.⁸⁰ The area, enclosed between the mountains of Lebanon and Antilebanon and located at a considerable altitude, was so isolated from the rest of the 'world' that the local kingdoms remained somehow outside of international political events – with very few exceptions⁸¹ – and the texts often designate it with generic geographical but non-political names, such as Amqi or Tahshi.

At the opposite end of the Orontes valley there is the Amuq plain, equally enclosed and protected by the mountains, the Amanus westward and the *Massif Calcaire* south and eastward.⁸² Unlike the narrow Beqaa, the Amuq is a wide fertile plain, with easy access to the coast along the course of the Orontes, or to the eastern plateau along the valley of its tributary Afrin. This prosperous and strategic position, plus the fall of the powerful kingdom of Yamkhad, favored the expansion of the Alalakh kingdom, which at the beginning of the LBA expanded over the whole plain and managed to extend its control on the plateau to the east and on the region of Niya to the south, a narrow strip enclosed between mountains like the Be-

qaa, and furthermore weakened by the constant advance of the Ghab marshes.

In the middle Orontes valley, the site of Qatna – already powerful in the MBA – maintained a certain size in the LBA too, and likely controlled, as well as its surroundings, also a large part of the area enclosed by the great bend of the Orontes. Like Alalakh, Qatna was blessed with an area suitable for agriculture, enclosed by two wadis and crossed by a third, while its proximity to the Homs Gap gave it a favourable climate. Moreover, the Gap represents the only passage through the coastal ranges that can be easily crossed throughout the year – and since it was close by, the city may have held some dependent territories in the hinterland of the Lebanese coast too.

The texts inform us that Tunip, another city of ancient tradition, also had domains on the coast and in addition – if its identification with modern Tell Asharne is correct – it too had easy access to the Homs Gap thanks to its position on an important ford across the Orontes. But Tunip, lacking in natural protection such as mountains or river bends, was squeezed between territories controlled by Alalakh and Qatna; however, it was able to expand eastwards along the Orontes, up to Zinzar, and then along its tributary Wadi Duarte.

In imagining these kingdoms, it is necessary to bear in mind that «the modern concept of a state territory as a continuous area delimited by a continuous border is surely an anachronism during much of antiquity; one should rather visualize the territory of a Late Bronze Age polity in the form of a network of towns, with the routes linking them, leaving the land beyond the hinterlands of towns more or less vacant of state control».⁸³ Not only does the presence of outposts in the Lebanese area confirm this picture, but this territorial non-continuity appears evident in the Homs Gap, which does not seem to have been dominated by any specific kingdom – and indeed the surveys conducted in the area were not able to identify any major site there – as the route through it seems to have been used indifferently by various kingdoms and powers, including Egypt, which was in control of a large part of the coast at the time.

⁷⁹ TURRI 2015, pp. 223 and 300

⁸⁰ LIVERANI 1998, pp. 257-258 with literature. See also NA'AMAN 1981 and HACHMANN 1982.

⁸¹ See e.g. the Hittite attacks on Amqi; TURRI 2015, pp. 311-315 with literature.

⁸² TURRI 2015, pp. 30-31, 33-34.

⁸³ VON DASSOW 2008, p. 67.

In the second half of the 14th century, Hatti expansionist ambitions led to the disruption of these dense networks of cities and especially of the two greatest ones, the kingdom of Alalakh, which was confined to the Amuq plain, and that of Qatna, reduced to the area between the two wadis. Most of the territories previously controlled by them became small kingdoms of very limited range but often centred in key positions, e.g. in the Amuq, Amae – between Alalakh and Aleppo⁸⁴ – controlled the passage towards the eastern plateau, and Zalkhi – on the mountain slopes between Alalakh and Ugarit⁸⁵ – that to the coast.

The importance of passageways is also shown by the case of Qadesh, a small kingdom sited south of Qatna near a forest area, yet one of the most frequently mentioned in the texts and one of the most contended by foreign powers throughout the LBA. Controlling one of the most important passages along the river, that at the northern exit of the Beqaa, it was able to preserve for most of the time a sort of freedom – or at least the possibility to act independently in the area – despite the many destructions.

The disruption process in the second part of the LBA was also exacerbated by the advance of Amurru, which took advantage of the chaos created by the Hittite wars and the lack of proper political control in the Homs Gap, and, from the Leb-

anese coast, managed to enter and expand within the Orontes valley.

The passageways offered by the river and the openings between the mountains that allow access to the coast or inland were therefore crucial in determining the fate of local states, becoming a resource in the periods in which the interference of the great foreign powers was limited or involved loose control, as in the case of Egypt, but also a great weakness when other powers decided to expand and to control the territory directly, as e.g. with the policy of interdynastic marriages applied by the Hittites.

The only local kingdom that seemed to benefit from this desegregation process was Nukhashe in the Syrian steppe, that occupied a large area but not very favorable for settlements and with poor soils. Due to this nature it is likely that, compared to neighbouring lands, Nukhashe had a different pattern of social and political organization, more similar to the rural or non-urban world. Although politically irrelevant throughout the first part of the LBA, after the expansion of Hatti, Nukhashe took advantage of its peculiar nature and, thanks to its capability to control the land in a different, less centralized way, filled the voids left by the collapse of the neighbouring local kingdoms – Alalakh, Tunip and Qatna – gaining also some political weight in the region.

⁸⁴ On the identification of Amae, see TURRI 2015, pp. 220-221.

⁸⁵ On the identification of Zalkhi, see TURRI 2015, pp. 295-296.

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From Thebes to Arslantaş: ivory iconography through Egypt, Ugarit, Byblos and Megiddo

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ABSTRACT

The Levant has always been a crucial zone for contacts between Egypt and the ancient Near East. During the Late Bronze Age (the ‘international period’) and the Iron Age, pharaonic Egypt, the Hittite empire, and later the Neo-Hittite and Aramaic states shared many occasions of exchange and interaction, testified both by texts and artefacts: among them, luxury objects like ivories. This paper aims to retrace the circulation of some iconographic motifs of different origins attested on the ivories of Arslantaş/Hadātu (near the border of modern Syria and Turkey), comparing this material with other ivories found in sites of the Levantine area (Ugarit, Byblos, Megiddo): a journey through precious items from Egypt to Anatolia, across the Levant throughout the Bronze and Iron Age, to the rediscovery of those people who, despite geographical distances, travelled, circulated and interlaced relationships.

KEYWORDS

Ivory, Iconography, Ancient Near East, Egypt, Arslantaş/Hadātu, Byblos, Megiddo, Samaria, Ugarit

τὸν δ' αὐτὲ προσέειπε περίφρων Πηνελόπεια·
 “Ξεῖν’, ἢ τοὶ μὲν ὄνειροι ἀμήχανοι ἀκριτόμυθοι
 γίγνοντ’, οὐδέ τι πάντα τελείεται ἀνθρώποισι.
 δοιαὶ γάρ τε πύλαι ἀμενηνῶν εἰσὶν ὄνειρων·
 αἱ μὲν γὰρ κεράεσσι τετεύχεται, αἱ δ' ἐλέφαντι·
 τῶν οἱ μὲν κ' ἔλθωσι διὰ πριστοῦ ἐλέφαντος,
 οἱ ῥ' ἐλεφαίρονται, ἔπε' ἀκράαντα φέροντες·
 οἱ δὲ διὰ ξεστῶν κεράων ἔλθωσι θύραζε,
 οἱ ῥ' ἔτυμα κραίνουσι, βροτῶν ὅτε κέν τις ἴδῃται”.

Then wise Penelope answered him again: «Stranger, dreams verily are baffling and unclear of meaning, and in no wise do they find fulfilment in all things for men. For two are the gates of shadowy dreams, and one is fashioned of horn and one of ivory. Those dreams that pass through the gate of sawn ivory deceive men, bringing words that find no fulfilment. But those that come forth through the gate of polished horn bring true issues to pass, when any mortal sees them».

(Hom. *Od.* 19.559-567)¹

הַשְׁכָּבִים עַל־מִטּוֹת לֶשֶׁן וְסִרְחִים עַל־עַרְשׂוֹתָם
 וְאֶכְלִים כְּרִים מְצֹאן וְעִגְלִים מִתּוֹךְ מַרְיָק:

You lie on beds adorned with ivory and lounge on your couches. You dine on choice lambs and fattened calves.

(Amos 6.4)²

1. Introduction to the topic

The contacts between pharaonic Egypt and the ancient Near East have been regarded with specific attention by many scholars: indeed, both textual and archaeological sources allow us to reconstruct the dynamic situation of exchanging among these two areas.

¹ Greek text and English translation after MURRAY 1946, pp. 268-269.

² Hebrew text according to ELLIGER, RUDOLPH 1966/1967 (1997³), p. 1023; English text as in *New International Version*, Biblica, 2011 (on line at link: <https://www.biblegateway.com/passage/?search=Amos+6.4&version=NIV>; 8th February 2019).

During its long-lasting history, Egypt interlaced prolific connections with many entities of ancient Middle and Near East: the routes to Anatolia and Mesopotamia were surely well known to Egyptian officials, militaries and merchants who travelled between these countries for many different purposes. In this respect, a peculiar role has been played by the areas in between Egypt and Mesopotamia, specifically Syria and the Levant, a very crucial zone for these ancient contacts. During the Late Bronze Age (particularly in the so-called ‘international period’) and the Iron Age, many political entities (Egypt, Hittites, Neo-Hittite and Aramaic states, Assyrians, Phoenicians, Mycenaeans) shared many occasions of exchange and interaction, testified both by texts and artefacts: among them stand out luxury objects, like the ivories. In this contribution, I will analyse some iconographic motifs of different origin attested on the ivories of Arslantaş/Hadātu, located near the border of modern Syria and Turkey (fig. 1), comparing these materials with ivories found in other sites, and retracing the paths of the diffusion of some of these motifs. Of course, the present contribution represents just a specimen, being Arslantaş ivories to be considered as a study case, aiming to point out some peculiar comparisons, with no presumption to be an all-embracing discussion about this topic (for which I refer to previous bibliography).

2. Ivories: materiality and iconographic sources

Ivory has always been considered as a precious and cherished material as Irene Winter perfectly stated: «Ivory as a material, has a unique and fascinating appeal by virtue of its rich warm colour and sheen».³ Therefore, ivories have been abundantly widespread all over Egypt⁴ and the Near

³ WINTER 2010, p. 187; cf. BÉAL, GOYON 2000 (an entire publication devoted to this topic, with many contributions). About ivories in general, cf. also KRZYSZKOWSKA 1990 and KRZYSZKOWSKA, MORKOT 2000. An interesting approach about the interpretation of history throughout the analysis of ivory production can be found in LILYQUIST 1998.

⁴ For the Egyptian ivories, see LÄ I, p. 1225 (s.v. ‘Elfenbein’, by Rosemarie Drenkhahn); cf. LUCAS 1962⁴ and ACQUAVIVA 2000. For the definition of an ‘Egyptian style’ on



FIGURE 1
The location of Arslantaş, ancient Hadātu (source and date of photo: Google Earth 2019, elaboration of the author)

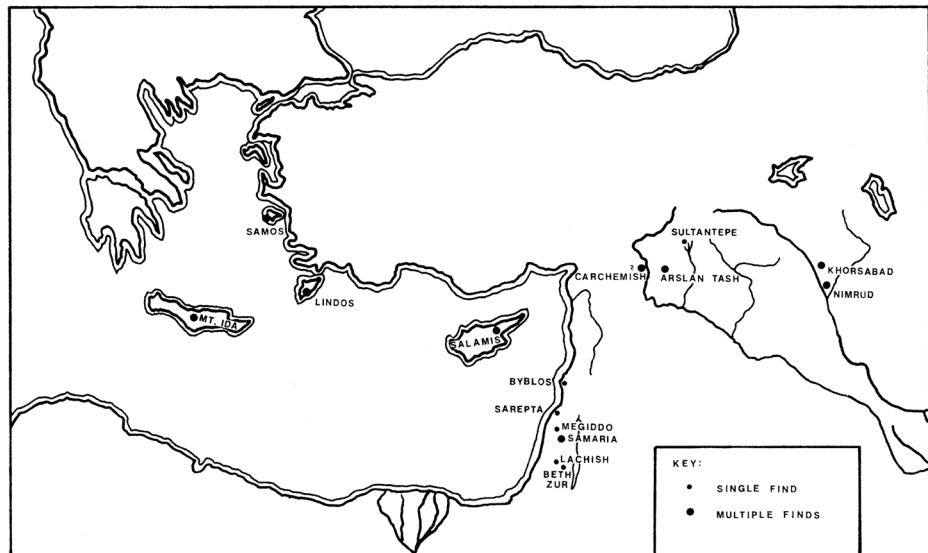


FIGURE 2
The location of the most important cities where ivories were discovered (after WINTER 1976, p. 12, fig. 2)

East (Byblos, Megiddo, Samaria, Ugarit, Nimrud, Arslantaş and many others) (fig. 2); this diffusion is also reflected in their decorations, because ivories are usually described and classified with different

ivory, see CAUBET 2000, p. 123; cf. also LEIBOVITCH 1947. A peculiar kind of elephant tusks are also attested in Egypt, namely the ‘elephant of Niyi’ (probably coming from the homonymous city in Syria-Palestine): see GABOLDE 2000. In Egypt, a particular kind of ivory objects, defined as ‘ointment spoons’ were discovered: for this topic, see FRÉDÉRICQ 1927.

‘labels’, such as ‘Egyptian/Egyptianizing’, ‘Hittite’, ‘Canaanite’, ‘Mycenaean’, ‘hybrid Canaanite-Mycenaean’, ‘extreme Mycenaeanizing’, ‘Assyrian’, ‘North/South Syrian’ and ‘Phoenician’.⁵

⁵ About the ‘Mycenaean style’, see FITTON 1992; a discussion on the ‘Egyptian style’ (mostly about the Egyptianizing features of Nimrud ivories) can be found in HAWKES 1981. Some information about the ‘Hittite style’ or, much more in general, about Hittite iconographical features, see ÖZGUÇ ET AL. (eds.) 1993. Concerning the ‘Assyrian sty-



FIGURE 3

An elephant tusk brought as a tribute; tomb of Rekhmire (TT100), 18th dyn., reigns of Thutmose III-Amenhotep II, ca. 1479-1400 BC (after ARUZ, BENZEL, EVANS 2008, p. 294, fig. 85)

As it is well-known, ivory was obtained from elephant (both Asian and African species) or hippopotamus tusks: many Egyptian paintings and reliefs, among which are those from the tomb of Rekhmire (TT100) at Thebes, dated to the 18th dyn. (fig. 3), show craftsmen working ivory tusks, Syrians paying the tribute of bringing an elephant to the pharaoh's vizier or representations of hippopotamus hunting. Accordingly, also in the Mesopotamian area images of elephants can be found, like that of the Black Obelisk of Shalmaneser III (found in Nimrud and dated to 825 BC) and a small statuette kept in the Archaeological Museum of Istanbul (no. 726).⁶

le', see MALLOWAN M., DAVIES L.G. 1970. As about the 'Syro-Phoenician style', see STÉPHAN 1996 and CECCHINI, MAZZONI, SCIGLIUZZO 2009; cf. also some previous literature: CONTENAU 1949, pp. 219-222; DECAMPS DE MERTZENFELD 1954; other Phoenician ivories (kept in the Badisches Landesmuseum, Karlsruhe) are published in PETRASCH 1973. For the 'Syro-Palestinian style', see e.g. KANTOR 1956. For further comparisons with the Persian area, see MUSCARELLA 1980 (about Hasanlu's ivories, presenting similarities with Syrian and Assyrian specimens); similarly, other ivories from the so-called 'Ziwiye hoard' (Kurdistan) could be considered as another possible case of study (see WILKINSON 1975 and MAZZONI 1977).

⁶ For both the artefacts, see RIA II, p. 354 ('Elefant'),

3. Ivories: a philological enquiry

In both Egyptian and Mesopotamian texts, there are many quotations of the word for 'ivory', respectively $\text{𓆎} \text{𓆏} \text{𓆐} \text{𓆑}$ *3bw* (in Egyptian), $\text{ZU}_2\text{-AM-SI}$ (in Sumerian) and *šin piri* (in Akkadian), literally 'tooth/tusk of elephant'.⁷ The commerce of ivory was also very extensive during the Amarna Age (ca. 14th cent. BC), as proved by many El-Amarna letters (e.g. EA 5, 11, 13, 14, 22, 24, 25, 40, 77).⁸ I quote here, for instance, a short passage of EA 25, a list of gifts sent to an undefined pharaoh by the Mittanian king Tušratta:

with further bibliography. Cf. EBERT 1925, pp. 87-89 and COLLON 1977.

⁷ See Wb 1, p. 7: «Elefantenzahn, Elfenbein» (for Egyptian); DEIMEL 1928, p. 54, no. 13; cf. also the 'Leipzig-Münchener sumerischer Zettelkasten', p. 714, available in the online version at: https://www.assyriologie.uni-muenchen.de/forschung/forschungsprojekte/sumglossar/zettelkasten2006_09.pdf; 25th February 2019 (for Sumerian); CAD 17, part. 3 (Š), pp. 48-53 (for Akkadian).

⁸ MORAN 1992; RAINEY 2015.

EA 25, 35-41:

Transliteration

- (35) 25 S[**I ZÚ**⁹.SÚN GAL.MEŠ] KÙ].GI GAR 12 SU [*i-na lib-bi-šu-nu na-di*]
 (36) [x] [**SI ZÚ** SÚN GAL.MEŠ] GAR 12 SU [*i-na lib-bi-šu-nu na-di*]
 (37) [x] [**SI ZÚ** SÚN GAL.MEŠ KÙ.]GI GAR 1 mu-[.....]
 (38) 4 [SU KÙ.GI *i-na lib-bi-šu-nu na-di*]
 (39) 5 **SI Z**[**Ú** SÚN GAL.MEŠ KÙ.]GI GAR 18 [SU] ¹KÙ.GI ¹*i-na lib-bi-šu-nu na-di*
 (40) *ša 1-en i-na [lib-bi-šu-nu.....]*
 (41) 5 **SI ZÚ** SÚN TUR.MEŠ [.....SAG]-*sú-nu* KÙ.GI GAR 16 SU K[¹Ù.GI GAR]

Translation

- (35) 25 [large] **ivory** wild cow-[rhytons] overlaid with gold. 12 shekels of [gold have been used on them].
 (36) [x] [large **ivory** wild cow-rhytons...] overlaid [with gold]. 12 shekels of [gold have been used o]n t[hem].
 (37) [x] [large **ivory** wild cow-rhytons] overlaid [with gol]d I [....]
 (38) 4 [...have been used o]n t[hem].
 (39) 5 [large] **ivo**[**ry** wild cow-rhytons] overlaid [with go]ld. 18 [shekels] of gold [have been used on them],
 (40) among [which] 1 [of them.....]
 (41) 5 small **ivory** wild cow-rhytons, of **ivory** [...] their [top] overlaid with gold. 16 shekels [of gold overlaid].¹⁰

In his introduction to the publication of El-Amarna letters between the ‘Great Kings’, Mario Liverani refers to ancient ivory trade in this respect (mostly focusing on Egypt): «L’Egitto esporta anche mobilia d’ebano, spesso placcata d’avorio intagliato, nonché altri prodotti africani, e gli intagli d’avorio (con soggetti vegetali e animali che ‘sembrino vivi’)

⁹ The word ‘ivory’ is here rendered with the sumerograms SI, ‘(animal) horn’ and ZÚ, ‘tooth/tusk’.

¹⁰ RAINEY 2015, pp. 262-263; in bold the Sumerian word for ‘ivory’ (SI ZÚ).

sono espressamente richiesti (LA 278, 284-285)».¹¹

An evidence for the ancient peculiar interest towards ivories can be found in EA 11 (already quoted in Liverani’s citation as LA 285), sent by the Kassite king Burna-Buriāš to Amenophi IV; it reports a summary of marriage negotiations, in which the Babylonian king insisted in asking ivories as wedding gift:

EA 11, Vo. 1-12:

Transliteration

Rev.

- 01) [.....]MEŠ-*šu-nu*
 02) [.....]¹*aš-šu*
 03) [.....*li-*]il-pu-tu₄
 04) [.....]¹*li-il-qu*[-*ni*.....*li-*]il-pu-tu₄
 05) [*ša a-na*.....M]EŠ *ba-al-tú-t*[*i ma-aš-lu*.....]¹*li-il-qu-ni*
 06) *šum-ma la-bi-ru-tu₄ ga-mi-ru-tu₄ i[-ba-aš-š]u h[a-mu-t]a šu-bi-i-la!*
 07) *šum-ma la-bi-ru-tu₄ ia-¹ a-¹ nu eš-šu-ú-ti ¹li-il-¹pu-¹tu-ú-ma*
 08) ¹*ša-al-ma* DAM.GÀR *šu-bi-i-la šum-ma* ¹*ša-al-mu* ¹DAM. ¹GÀR ¹*it-ta-at-la-ka*
 09) DUMU *ši-ip-ri-i-ka ša il-la-ka li-il-qa-a*
 10) GIŠ.MEŠ ¹*ša* ¹**ši-in-ni** *li-il-pu-tu₄ ù li-iš-ru-ú-pu*
 11) *ša-am-mi ša še-e-ri ša a-na a-ḥa-mi-iš ma-aš-lu ša* ¹**ši-in-ni**
 12) *li-il-pu-tu₄ ù li-iš-ru-pu-ú-ma li-il-qu-ni.*

Translation

(1–5) [...] their [...] to him [...] may] they fashion [...] may they bring [to me ... may] they fashion [that resemble] live [...] may they bring to me.

(6–12) If [there i]s a full quota of old ones, have them brought to me im[mediate]ly. If there

¹¹ LIVERANI 1999, p. 326: «Egypt also exported ebony furniture, often decorated with carved ivory, as well as other African goods, and the carved ivories (with vegetal and zoological elements that ‘resemble live’) are specially requested» (the English translation is mine).

are no old ones, let them fashion new ones and send Šalmu, the merchant. If Šalmu, the merchant has already departed, let your envoy who is coming bring (them) to me. Let them fashion and color trees of **ivory**. Plants of the countryside that match let them fashion of **ivory** and may they color (them) and may they bring them to me.¹²

4. First ivories in Egypt

The use of ivory is well attested in Egypt since the Pre-Dynastic period (Naqada II-III, ca. fourth millennium BC) for different kinds of objects, such as royal accounting labels, statuettes or amulets, jewelry and furniture appliques. An interesting piece of evidence which supports iconographic influences from ancient Near East is represented by the well-known male figure carved on the handle of the ivory knife from Gebel el-Arak (end of the Pre-Dynastic Period, ca. 3150 BC, now in the Louvre Museum, inv. no. E 11517), which features typical Mesopotamian traits as well as the presence of surrounding rampant animals, in this case two lions, quite common in the early Mesopotamian glyptic.¹³

5. Arslantaş ivories: discovery and description

Focusing on the main topic of this paper, some ivory plaquettes have been found in the modern city of Arslantaş (whose name in Turkish means ‘the lion stone’ because of the presence of impressive lion statues); it is situated in northern Syria, Aleppo Governorate, near the town of Kobane (‘Ain al-Arab), not so far from the Turkish-Syrian border. The citadel, called Hadātu in ancient Assyrian sources, was the

¹² RAINEY 2015, pp. 102-103; cf. the translation in MORAN 1992, p. 21.

¹³ For the Gebel el-Arak knife, see SCHULZ, SEIDEL 1999, pp. 26-28 and mostly fig. 31 on p. 26. In Egypt, the iconographic motif of the man surrounded by animals seems to be quite ancient, since it is attested in the decorated tomb (tomb 100) of Hierakonpolis (culture of Naqada II, ca. 3300 BC): see KEMP 2000, p. 49, fig. 15 (cf. also the colour image in SCHULZ, SEIDEL 1999, p. 21, fig. 26).

centre of an Aramean Iron Age kingdom (called Bit-Adini), which was conquered by the Assyrian king Tiglat-pileser III in the 9th cent. BC. The site includes a Late Assyrian palace, an early shrine of Ishtar and a later Hellenistic temple, surrounded by city walls and gates adorned with lions carved in stone. It was first investigated in 1836 by an expedition led by Francis Rawdon Chesney;¹⁴ later on, excavations were conducted by the French archaeologist François Thureau-Dangin on behalf of the Louvre Museum during two short seasons, in 1928. Lastly, the University of Bologna (Italy), undertook further excavations and investigations from 2007 to 2010.¹⁵

The Louvre Museum stores 16 ivories coming from Arslantaş (inv. nos. AO 11452-11497);¹⁶ other ivories are held in the Aleppo Museum, in the Metropolitan Museum of Art (New York), in the Badisches Landesmuseum (Karlsruhe) and in the private collection of Elie Borowski (now in the Bible Land Museum, Jerusalem). They have all been discovered in 1928 in a hall of Tiglat-pileser II-I’s palace (745-727 BC): the ivory plaquettes laid on the ground, their position suggesting they probably belonged to the same furniture, maybe a bed (fig. 4).¹⁷ The presence of an Aramaic inscription carved on one of the ivories led Giovanni Garbini to connect these artefacts to those described in a text of the time of Adad-nirāri III (809-782 BC):¹⁸ this inscription states that ivories were used to decorate

¹⁴ RAWDON CHESNEY 1850.

¹⁵ CECCHINI, VENTURI 2012; cf. also TURNER G. 1968 and lastly FONTAN, AFFANNI 2018; the presentation of the excavation project on the site of UNIBO is available at the following links:
<https://cris.unibo.it/handle/11585/54997#.XF1j7DNKjIU> (2007);
<https://cris.unibo.it/handle/11585/68033#.XF1j4jNKjIU> (2008);
<https://cris.unibo.it/handle/11585/85657#.XF1j0TNKjIU> (2009) [8th February 2019].

¹⁶ All the data and pictures of these items are available online, on the site of the Louvre Museum, in the *Atlas* database, at link: http://cartelfr.louvre.fr/cartelfr/visite?srv=crt_firm_rs&langue=fr&initCritere=true (8th February 2019). To find out the pictures, just search for the inventory numbers, e.g. AO 11452. Cf. also THUREAU-DANGIN ET AL. 1931, vol. 2, pls. 19-47.

¹⁷ About a discussion on ivory decoration on furniture, see e.g. GRUBER 2004 (specifically about beds, see pp. 89-91 and 282-288).

¹⁸ GARBINI 1958.



FIGURE 4

The ivory plaquettes from Arslantaş/Hadātu, at the time of the discovery (after THUREAU-DANGIN ET AL. 1931, vol. 2, pl. 18, fig. 1)

the furniture of Hazael, king of Damascus (9th cent. BC); his successor, king Bar Hadad III, gave this object to king Adad-nirāri III of Assyria, probably as a tribute. Eventually, the Assyrian king Tiglat-pileser III brought it from Damascus to Hadātu in 732 BC. Garbini's interpretation is supported by the already mentioned inscription on one of the ivories, inv. no. AO 11489 (fig. 5):

... בר . עמא . למראן . הזאל . בשנת ...
 ... *b'r. 'm'. lmr'n. hz'l. bšnt* ...

«[Ce ... a sculpté (un tel)], fils de ^cAmmâ, pour notre seigneur Hazaël, en l'année de ...».¹⁹

The typical formulaic expression, envisaged already in the French translation proposed by Thureau-Dangin, was confirmed by the proposal of textual integration made by Barnett:

¹⁹ THUREAU-DANGIN ET AL. 1931, vol. 1, p. 136.

... זת . ה . [...]. בר . עמא . למראן . הזאל . בשנת

«[This ...] son of ^cAmma [made] for our lord Hazael, in the year ...».²⁰

King Hazael quoted in this inscription can be easily identified with Hazael of Aram, king of Damascus, a contemporary and opponent of Shalmaneser, about 840 BC. It is also noteworthy that Hazael's successor, Ben Hadad III (the Bar Hadad III cited by Garbini), sent to Adad-nirāri III, as tribute, ivory beds decorated in two different techniques, called *ihzū* and *tamlū*;²¹ these terms are used to qualify different kinds of ivories: according to Thureau-Dangin, the term *ihzū*, translated as «mountings (for setting stones and decorating costly objects)»,²² can be reconnected to the verb *ahāzu* «saisir, épouser»,²³ «to mount (an object in precious metal)» or «to

²⁰ BARNETT 1957, p. 126.

²¹ BARNETT 1957, p. 126, note 2.

²² CAD 7 (I-J), pp. 47-48.

²³ THUREAU-DANGIN ET AL. 1931, p. 139.

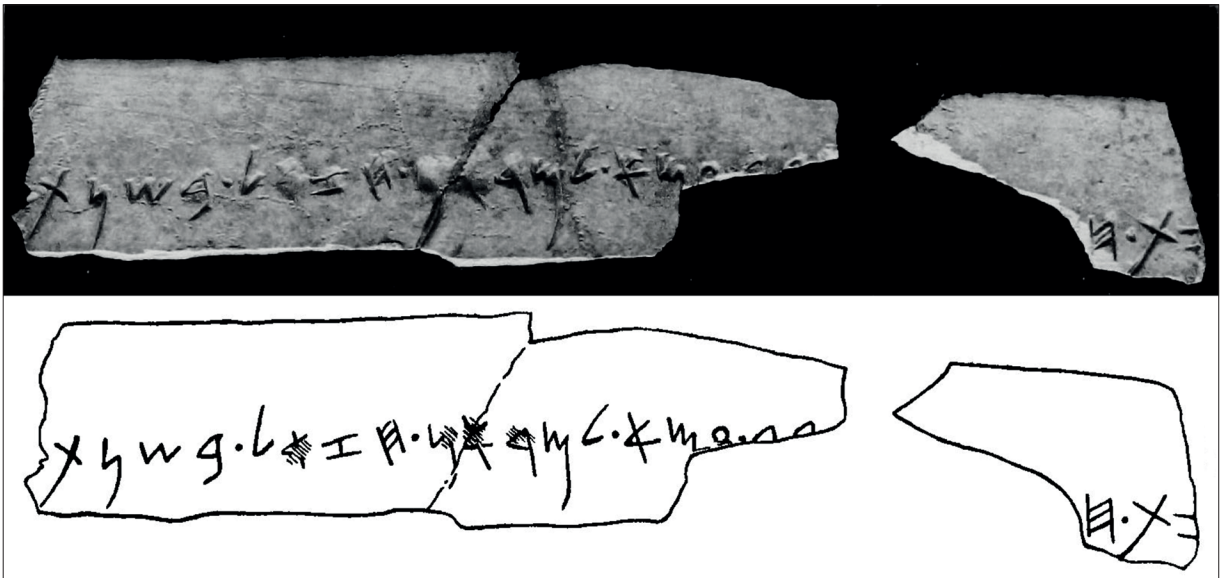


FIGURE 5

Inscribed ivory plaquette; Arslantaş/Hadātu; elephant ivory, 9th cent. BC (?), Louvre Museum (Paris), AO 11489 (after THUREAU-DANGIN ET AL. 1931, vol. 2, pl. 47, figs. 112a-b and THUREAU-DANGIN ET AL. 1931, vol. 1, p. 135, fig. 49)

make hold (an object)»;²⁴ the substantive *tamlû/tamlîtu* can be instead translated as «remplissage» or «stone inlay, incrustation, inset, decoration»:²⁵ both the terms probably refer to a marquetry-like technique of assembling different materials (wood, stones, metals, ivory) to craft a single piece of furniture. Evidence could be traced in the alphabetical signs present on the back of some of the bed ivories from Arslantaş, maybe inscribed to assemble them in a precise order.

The discovery of the Arslantaş ivories is described by Thureau-Dangin with these words:

C'est à l'extrémité Nord de la chambre 14 que se trouvait le gisement le plus important. Dans l'angle Nord-Est de cette chambre, nous avons trouvé, très sensiblement au niveau du sol ancien, des débris de lames d'ivoire poli, disposées de façon à dessiner les deux côtés longs et un des petits côtés d'un rectangle.²⁶

The particular depositional context of these items (fig. 6) has already been stressed by Richard Barnett:

«These ivory beds appear to have been carefully deposited in a manner which suggests that they were used, not merely stored, in the doorway of the court of the pre-Assyrian palace».²⁷ Barnett also proposed that the other ivory fragments, not directly connected to the bed structure, could have been «the remains of the other usual items of furniture commonly associated with couches in banqueting [...] scenes».²⁸

Another interesting feature of all these objects is the possibility of reconstructing, throughout scientific analysis, their original polychromy and the decoration techniques: the results of a study conducted by Marie Alberic on some ivories of the Louvre Museum show that these artefacts did not look like pure, white objects, but something rather impressive and multicolour, with traces of blue, red and green colour, as well as gilding obtained with gold leaves.²⁹

²⁴ CAD 1, part 1 (A), pp. 173-183.

²⁵ CAD 18 (T), pp. 142-145.

²⁶ THUREAU-DANGIN ET AL. 1931, p. 89.

²⁷ BARNETT 1957, p. 126.

²⁸ BARNETT 1957, p. 127.

²⁹ ALBERIC 2014; cf. FONTAN, REICHE 2011.

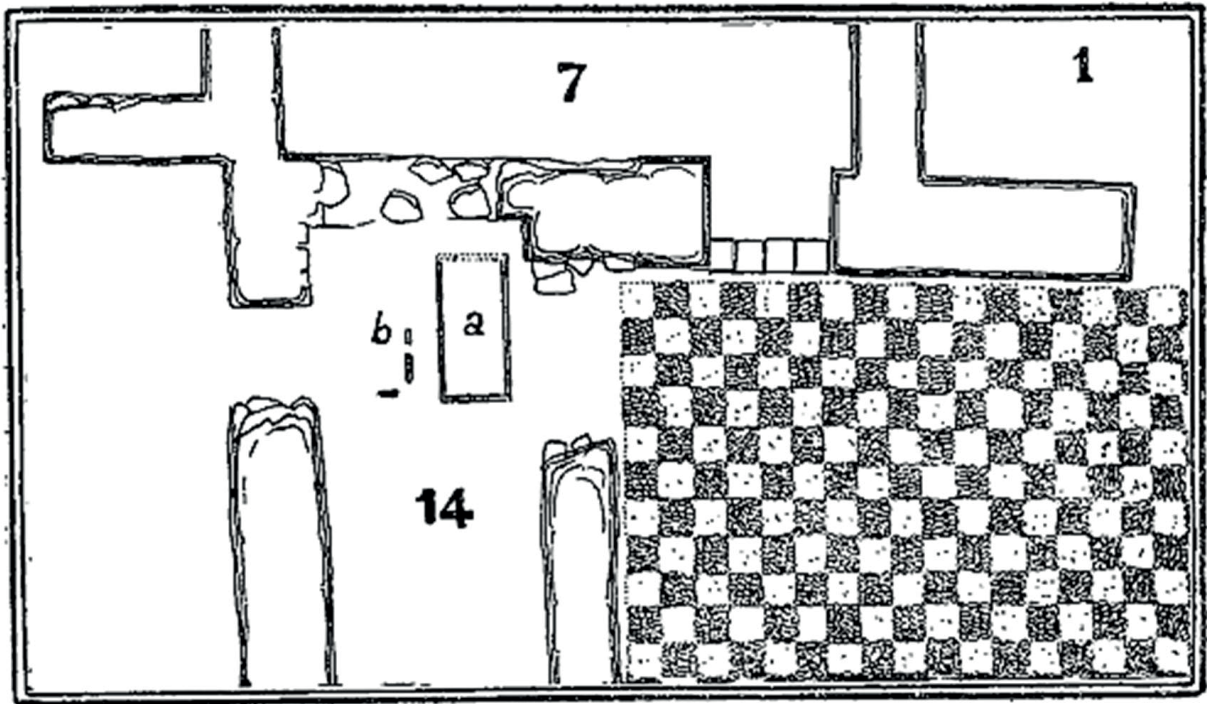


FIGURE 6
The find spot of the ivory plaquettes at Arslantaş/Hadātu (after THUREAU-DANGIN ET AL. 1931, vol. 1, p. 89, fig. 31)

6. Iconographical elements on Arslantaş ivories

Arslantaş ivories can be usefully divided into six categories, according to their iconography:

1. zoomorphic elements, such as the cow nursing her calf or just a cow or a deer alone;
2. the so-called ‘woman at the window’ motif;³⁰
3. anthropomorphic figures or divinities;
4. mythological carvings, like the sphinx;
5. vegetal or geometrical decorations;
6. inscribed ivories.

³⁰ For this motif, see recently WINTER 2016; more generally, about woman figures carved on ivories, see GANSELL 2008.

7. Arslantaş ivories: comparison with objects from other sites (Egypt, Syria-Levant and Mesopotamia)

As a whole, Arslantaş ivories show a style quite close to other specimens from **Nimrud**, **Megiddo** and **Samaria**, with clear influences from different areas, as it is briefly summarized, just as an example, here below.³¹

Garbini, for instance, recognizes an evident Egyptian influence in the representation of the birth of Horus, upon a lotus-flower or between two winged sphinxes or deities; the motif of the so-called ‘woman at the window’ could instead be related

³¹ For a discussion about ivories in Greece and the Eastern Mediterranean, between the Bronze Age and the Hellenistic period, see FITTON 1992. About the strong Egyptian influence on Nimrud ivories, see HAWKES 1981.

to the cult of the Babylonian goddess Kilili, who was called 'the goddess at the window'. A typical Aegean decoration, on the other hand, can be easily recognized in the representation of animals, like the deer or the cow suckling a calf.

Beside these foreign influences, it is also noteworthy to underline the presence of some decorative motifs of local origin, like the bearded standing man, wearing a long skirt, the hands crossed on his chest. Beyond the motif of the 'birth of Horus', already recognized by Garbini as an Egyptian influence, further features of Arslantaş ivories could have been inspired by Egyptian elements, namely: the lotus-flower in the middle of two worshipping figures which resembles, to some respects, the *sema-tawy* pattern of many Egyptian depictions; some other vegetal decorations mixing the lotus-flower with the papyrus plant and the presence of the sphinx, although in a more Syrian or Aegean shape.

Iconographic commontraits are shared by Arslantaş ivories and other Near Eastern artefacts, such as those found at **Ugarit/Ras Shamra**,³² where in Court III of the citadel palace, an ivory panel from a bed has been discovered (fig. 7):³³ it displays several anthropomorphic figures and vegetal motifs which resemble, in many respects, those from Arslantaş. A similar panel was found in Room SW7 of the palace of Fort Shalmanesser in Nimrud, now kept in the British Museum, inv. no. WAA 132961 (fig. 8).³⁴ Another site that could offer further comparisons is **Byblos**:³⁵ among the others, two of the most famous ivories which show exotic influences are surely a Hathor plaque dated to the

Middle Bronze Age and a pyxis lid incised with figures of plunging hawk-griffins, which resemble some mythical motifs attested in Megiddo and Cyprus, too.³⁶ From the Byblos necropolis, instead, comes a rectangular ivory plaque, found in the tomb of Ahiram (10th cent. BC), which presents some zoomorphic elements – a lion and a griffin attacking a bull – quite common in the Levant-Mycenaean area.³⁷ An analogous comparison can be traced to Arslantaş vegetal patterns, showing lotus-flowers or different plants, as well as the others geometrical decorations, also attested at Byblos.³⁸

A further comparison can be observed on ivories found at **Megiddo**,³⁹ in the so-called 'Ivory Rooms', inside Area A, dated via stratigraphy to the 12th cent. BC: the fashion of these artefacts shows more defined Egyptianizing traits, as is clear in the case of the typical vegetal decorations and emerges straightforwardly in the case of a sphinx plaque (fig. 9).⁴⁰ A direct connection to **Egypt** for this latter object is suggested by a sardonyx plaque found in Egypt and dated to the 18th dyn. (fig. 10),⁴¹ depicting a sphinx which clearly resembles the one on the Megiddo ivory.⁴² This aside, some more comparisons could be advanced including the analysis of the geometrical decorations, i.e. the incised spiral motif.⁴³

³⁶ ARUZ, BENZEL, EVANS 2008, pp. 55-56, 140-141; cf. BARNETT 1982, p. 30, pl. 19c.

³⁷ BARNETT 1982, pp. 46-47, pl. 24a.

³⁸ See e.g. DUNAND 1937, pl. 121, mainly no. 3670; pl. 122, nos. 1067, 1643; cf. DUNAND 1950, pl. 113, no. 15467; pl. 151, nos. 17016, 19058; pl. 188, no. 10534; pl. 189, nos. 7677, 14745.

³⁹ About Megiddo ivories, see WILSON 1938; DI PAOLO 1996; FISCHER 2007 and FELDMAN 2009.

⁴⁰ For the vegetal decoration, compare AO 11485 (THUREAU-DANGIN ET AL. 1931, vol. 2, pl. 44, no. 44) with e.g. LOUD 1939, pls. 34-35. For the sphinx motif, see e.g. the artefact OIM A22213 (cf. following note), compared with AO 11497 (THUREAU-DANGIN ET AL. 1931, vol. 2, pl. 28, no. 25).

⁴¹ Today kept in the Metropolitan Museum of Art, New York (inv. no. 26.7.1342); ARUZ, BENZEL, EVANS 2008, pp. 144-145, fig. 123. For another ivory sphinx from Abydos, (today at the British Museum), cf. also GARSTANG 1928. For further studies and analysis of this motif, see FISCHER 2007.

⁴² Today kept in the Oriental Institute Museum, Chicago (OIM A22213; online at link: <https://oi-idb.uchicago.edu/id/7a15dd18-e3f2-4058-876b-23f5d6b39d14>; 8th February 2019); ARUZ, BENZEL, EVANS 2008, pp. 144-145, fig. 47.

⁴³ Compare AO 11493 (THUREAU-DANGIN ET AL. 1931, vol. 2, pl. 47, no. 109) with e.g. LOUD 1939, pl. 59, no. 328.

³² About the craftsmanship of ivory at Ugarit and in the Levant in general during the Late Bronze Age, see GACHET 2000; cf. also CAUBET, GACHET-BIZOLLON 2013; cf. also GANSELL ET AL. 2014 and GANSELL ET AL. 2007. For another ivory panel probably belonging to a bed (as the one from Arslantaş), see LANARO 2012.

³³ GACHET-BIZOLLON 2001 and 2007, pp. 135-137, 275-276, figs. 40-43 and pls. 25-27, 79-88.

³⁴ WINTER 2010, p. 217, fig. 3; cf. BARNETT 1982, pl. 55; WINTER 1976, pl. 1c; cf. also HERRMANN 1986a, 1986b, 1992; HERRMANN, LAIDLAW 2013a-b; HERRMANN, LAIDLAW, COFFEY 1987; HERRMANN, COFFEY, LAIDLAW 2004; further, cf. MALLOWAN, HERRMANN 1974; ORCHARD 1967; SAFER, SA'ID AL-IRAQI 1987.

³⁵ About the contacts and influences between Byblos and Egypt, see e.g. MONTET 1928.

FIGURE 7
The ivory decorative panel (of bed?);
Ugarit/Ras Shamra
(discovered in 1952);
elephant ivory,
l. 1.0 m x h. 0.5 m,
13th cent. BC;
Damascus Museum,
no. 3599 = RS 16.56
and RS 28.31
(after GACHET-
BIZOLLON 2001,
p. 22, fig. 2)



FIGURE 8
The ivory decorative panel (of bed or
throne?); Nimrud/
Kalkhu; elephant
ivory, h. 0.56 m,
late 8th cent. BC;
British Museum,
London,
WAA 132961
(after WINTER 1976,
pl. 1c)



FIGURE 9

Ivory plaquette, portraying a sphinx; openwork; Megiddo (Locus SQ K-7, STR 7A); elephant ivory, h. 9.9 cm x w. 7.0 cm x th. 0.7 cm, Late Bronze Age IIB; Oriental Institute, Chicago, OIM A22213 (after ARUZ, BENZEL, EVANS 2008, p. 145, fig. 47)



FIGURE 10

Sardonyx plaque with sphinx; Egypt; h. 3.4 cm x w. 2 cm x th. 0.8 cm, New Kingdom, 18th dyn. (ca. 1390-1352 BC); The Metropolitan Museum of Art, New York, Edward S. Harkness Gift (purchased in 1956), 26.7.1342 (after ARUZ, BENZEL, EVANS 2008, p. 145, no. 84)



FIGURE 11

Ivory plaquette with a sphinx; Arslantaş/Hadātu; elephant ivory, 9th cent. BC (?), Louvre Museum (Paris), AO 11497
(after THUREAU-DANGIN ET AL. 1931, vol. 2, pl. 28, fig. 25)



FIGURE 12

Ivory plaquette with a sphinx; Samaria-Sebaste; elephant ivory
(after CROWFOOT J.W., CROWFOOT M. 1938, pl. 5, no. 1)





FIGURE 13
Ivory plaquette with a vegetal motif; Arslantaş/Hadātu; elephant ivory, 9th cent. BC (?), Louvre Museum (Paris), AO 11485 (after THUREAU-DANGIN ET AL. 1931, vol. 2, pl. 44, fig. 94)



FIGURE 14
Ivory plaquette with a vegetal motif; Samaria-Sebaste; elephant ivory (after CROWFOOT J.W., CROWFOOT M. 1938, pl. 20, no. 1)

Other interesting parallels for Arslantaş ivories come from **Samaria Sebaste**, the ancient capital of the Northern State of Israel, namely in the iconographic treatment of the animals, the sphinx (figs. 11-12), the vegetal flower decorations (figs. 13-14) and the ‘woman at the window’ (figs. 15-16).⁴⁴ As for the Megiddo sphinx, the direct

Egyptian provenance of some of the Samaria motifs can be confirmed by observing actual Egyptian artefacts: this is the case of the Samaritan iconography of the lion biting another animal,⁴⁵ well attested in Egypt as depicted, e.g. on a cosmetic spoon stored in Cairo Museum.⁴⁶

⁴⁴ For the animal depictions, compare e.g. AO 11452 (THUREAU-DANGIN ET AL. 1931, vol. 2, pl. 41, no. 75) with CROWFOOT J.W., CROWFOOT M. 1938, pl. 10, no. 1; for the sphinx motif, compare e.g. AO 11497 (THUREAU-DANGIN ET AL. 1931, vol. 2, pl. 28, no. 25) with CROWFOOT J.W., CROWFOOT M. 1938, pl. 5, no. 1; for the vegetal decorations, compare e.g. AO 11485 (THUREAU-DANGIN ET AL. 1931, vol. 2, pl. 44,

no. 94) with CROWFOOT J.W., CROWFOOT M. 1938, pl. 20, no. 1; for the ‘woman at the window’, compare e.g. AO 11459 (THUREAU-DANGIN ET AL. 1931, vol. 2, pl. 34, no. 45) with CROWFOOT J.W., CROWFOOT M. 1938, pl. 13, no. 2.

⁴⁵ See CROWFOOT J.W., CROWFOOT M. 1938, pl. 10, no. 1.

⁴⁶ JE 47009; ARUZ, BENZEL, EVANS 2008, p. 391, fig. 123.



FIGURE 15
Ivory plaque with the 'woman at the window'; Arslantaş/
Hadātu; elephant ivory, 9th cent. BC (?), Louvre Museum
(Paris), AO 11459
(after THUREAU-DANGIN ET AL. 1931, vol. 2, pl. 34,
fig. 45)



FIGURE 16
Ivory plaque with the 'woman at the window';
Samaria-Sebaste; elephant ivory
(after CROWFOOT J.W., CROWFOOT M. 1938, pl. 13,
no. 2)

Pushing forwards the geographic boundaries hitherto traced, from Assyria comes a quite strict comparison for another item found at Arslantaş: an ivory object in the shape of a vegetal element found in Room 23 of Residence K at **Khorsabad** (fig. 18), dated between 722-705 BC, shows some resemblances with a phytomorphic ivory of Arslantaş, possibly a furniture support (AO 11484, fig. 17).⁴⁷

A last remark on the motif of the cow nursing a cattle shows how scholars, thanks to the ivories,

have tentatively recognized the presence of Asiatic influences on Egyptian artefacts: in 1947, Louis Keimer published an ivory vessel which could have been found in Saqqara, or maybe in Helmia (near Cairo);⁴⁸ according to Keimer, the decoration of the fleece of the rampant goats (fig. 19) is close to the treatment of the cow on one of Arslantaş ivories (fig. 20).⁴⁹ The scholar, with the support of George Steindorff, proposed for this specific decoration, usually not attested in Egypt, a specifically Asiatic model.

⁴⁷ For AO 11484, see THUREAU-DANGIN ET AL. 1931, vol. 2, pl. 44, nos. 92-93; compare it with that from Khorsabad, no. DS 1017.30.B (Chicago, Oriental Institute Museum, Photographic Archives, no. photo 31151 / negative 18720; cf. LOUD, ALTMAN 1938, pp. 96-97 and pl. 56, nos. 69-70 and WINTER 2010, p. 331, fig. 42).

⁴⁸ KEIMER 1947, pl. 5; the object is now kept in the Cairo Museum, registered as JE 85750.

⁴⁹ Above all, a close comparison can be proposed with AO 11452: see THUREAU-DANGIN ET AL. 1931, vol. 2, pl. 41, no. 75.



FIGURE 17
Ivory furniture support; Arslantaş/Hadātu; elephant ivory, 9th cent. BC (?), Louvre Museum (Paris), AO 11484 (after THUREAU-DANGIN ET AL. 1931, vol. 2, pl. 44, fig. 92)



FIGURE 18
Ivory furniture support; Khorsabad/Dur Sharrukin; ca. 722-705 BC; elephant ivory; Oriental Institute Museum, Chicago, DS 1017.30.B (after LOUD, ALTMAN 1938 pl. 56, no. 70)

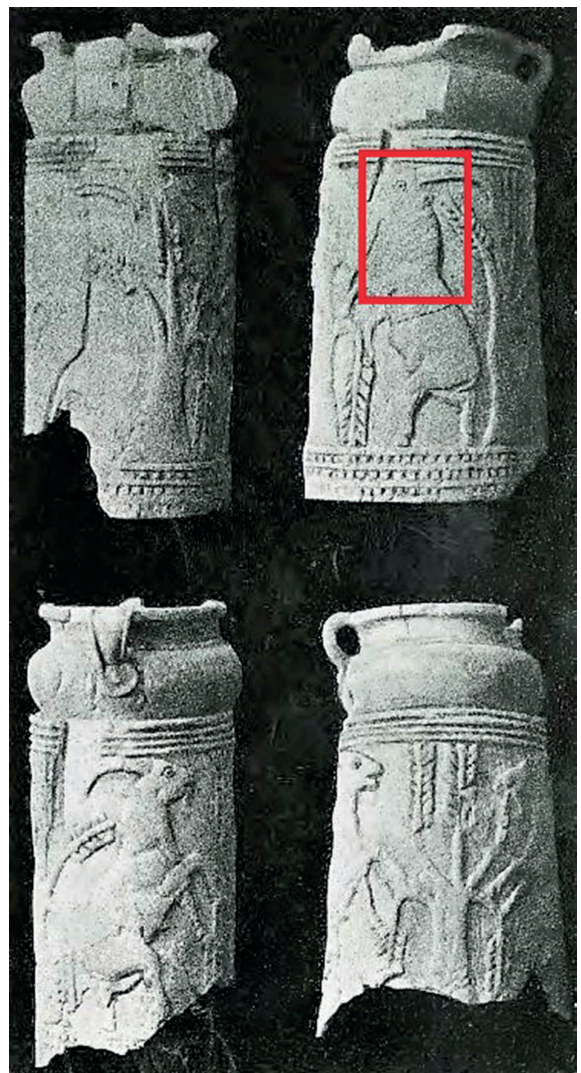


FIGURE 19
Ivory plaquette with animals; Arslantaş/Hadātu; elephant ivory, 9th cent. BC (?), Louvre Museum (Paris), AO 11452 (after THUREAU-DANGIN ET AL. 1931, vol. 2, pl. 41, fig. 75)

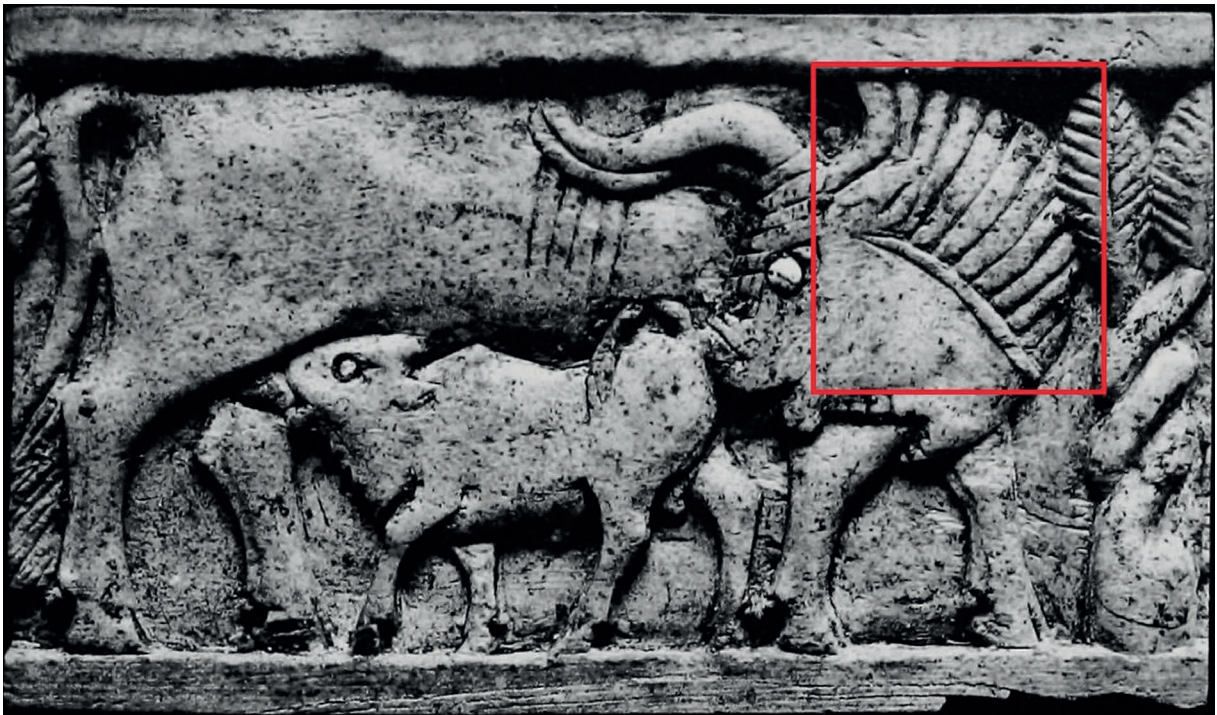


FIGURE 20
Ivory vessel with animals; perhaps discovered in 1942 in Egypt (Saqqara/Helmia?); elephant ivory, h. 16.5 cm
(after KEIMER 1947, pl. 5)

8. Conclusions

In conclusion, all the comparisons proposed here (and many others) clearly show that ivories, with their widespread diffusion all over Egypt and the ancient Near East, can be considered as one of the principal vehicles of motifs in the whole basin of the Eastern Mediterranean, during both the Bronze and the Iron Age. The iconographic study of these materials provides us with a chance to better analyse and understand the reciprocal influences between pharaonic Egypt, Levant, Aegean and Near East: these areas produced an ‘international style’⁵⁰ which testi-

⁵⁰ As for the definition of ‘international style’, still discussed, see mostly FELDMAN 2006, p. 1: «The term *international style* has entered art historical parlance to describe the use of shared visual form across multiple cultural regions»; cf. *ivi*, p. 25: «The term *international style* has become entrenched in the literature as an artistic and stylistic category of the Late Bronze Age, and while some refinements have been undertaken since William Stevenson Smith [SMITH 1965] introdu-

fies, once again, to a strict connection between two worlds that needs and deserves to be studied and considered in their actual relationships. Specifically, Arslantaş ivories, with their commingling of motifs of different origins (Egyptian, Aegean, Syro-Phoenician and Assyrian) surely stand as shining evidence of this ancient and prolific art tradition.

ced it as a classificatory category in 1965, it remains essentially unchallenged yet persistently problematic. Earlier studies touched on a general sense of shared and transferred artistic ideas, particularly between the regions of the Aegean and Egypt, with the Levant and Cyprus as a meeting ground ripe for intermingling. Later works have attempted to pin down specific mechanisms of artistic transference and to attribute pieces of localized workshops associated with given geographic areas. As scholars, we are becoming aware of the multiple ways in which our range of vocabulary determines in part the types of questions we ask and the lines of argument in which we engage»; cf. also FELDMAN 2014, pp. 47-51, discussing the role of the ‘artistic intentionality’, connected to the concept of sharing iconographic patterns and depictions. For the ‘international style’ in Syria and the Levant, see also CAUBET 1998.

ABBREVIATIONS

- AJA American Journal of Archaeology. The Journal of the Archaeological Institute of America – Boston, 1885ff.
- BASOR Bulletin of the American School of Oriental Research – New Haven, 1920ff.
- BIE Bulletin de l’Institut d’Égypte – Le Caire, 1859ff.
- CAD AA. VV. 1956-2010, *The Assyrian Dictionary of The Oriental Institute of the University of Chicago*, 21 vols., Chicago.
- CHANE Culture and History of the Ancient Near East – Leiden-Boston-Köln.
- IEJ Israel Exploration Journal – Jerusalem, 1950ff.
- JE Journal d’Entrée (Musée du Caire).
- JEA The Journal of Egyptian Archaeology – London, 1914ff.
- LÄ I HELCK W. (ed.) 1975, *Lexikon der Ägyptologie*, Band 1 (A-Ernte), Wiesbaden.
- LÄ II HELCK W. (ed.) 1977, *Lexikon der Ägyptologie*, Band 2 (Erntefest-Hordjedef), Wiesbaden.
- OIP Oriental Institute Publications (Chicago); also available online at link: <https://oi.uchicago.edu/research/publications/oriental-institute-publications-oip> (8th February 2019).
- RIA II EBELING E., MEISSNER B. (eds.) 1938, *Reallexikon der Assyriologie und Vorderasiatischen Archäologie*, Band II (Ber-Ezur), Berlin – Leipzig.
- VO Vicino Oriente. Annuario dell’Istituto del Vicino Oriente, Università di Roma – Roma, 1978ff.
- Wb ERMAN A., GRAPOW H. 1926-1963, *Wörterbuch der Ägyptischen Sprache*, I-VII, Leipzig – Berlin.

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Transmission and reception of Babylonian knowledge in Ugarit. A preliminary study

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ABSTRACT

In the Late Bronze Age, the Near East saw the Babylonian intellectual heritage expansion throughout the region. Although previous works only studied this phenomenon from the Babylonian perspective, recent trends and methodologies prefer to present it from the reception sites. One of them was the Levantine city of Ugarit. This kingdom developed an active and profitable international commerce as well as intense diplomatic contacts with the cradles of that knowledge, Babylon and Assyria. On this matter, clay tablets that belong to Babylonian tradition were unearthed in several private houses whose owners were important merchants and administrators of the Kingdom. Some of these texts reveal that these houses were also schools where Babylonians and Assyrians worked as teachers.

KEYWORDS

Trade, diplomacy, intellectual, Ugarit, Babylon

1. Introduction: Ugarit and Babylonian intellectual heritage expansion in the Late Bronze Age

The Near Eastern Late Bronze Age became an international age; this means that different political entities were in continuous contact with each other.¹ Commerce and diplomacy underwent an incredible development and, with the rise of international relations, some authors have considered the appearance of an international society who shared institutions, codes of communications and common tastes.² In this context, Babylonia became a leading cultural centre like the brand of high culture in the Late Bronze Age. We can see this fact in the spreading of Babylonian scholarly texts along the Near East.

One of the first states that received this intellectual tradition was the Mitanni Empire. Once Samsu-iluna (1749-1712 BC) lost the south of the unified reign inherited from his father, the king Hammurabi, many scholars took up exile to cities and states on the North of Babylonia and beyond, making contact with territories that after will belong to Mitanni. These cities constituted the nexus between the Late Old Babylonian intellectual heritage and its expansion in the Early Late Bronze Age.³ In this way, the Mitanni Empire was an important agent in the expansion of Babylonian intellectual heritage as we can see in Nuzi⁴ and Alalah.⁵

On his behalf, Assyria played an important role in the process of irradiation of Babylonian intellectual heritage. When Assyria woke up from the submission to Mitanni (ca. 1350 BC), Assyrians did not have any intellectual tradition so they began to import Babylonian texts and scholars.⁶ It is possible that imperialistic policy carried out by Assyrians from this moment onwards, as well as their admiration for Babylonian culture, were the main factors for the intellectual development in Assyria⁷. It is ev-

ident the special use that Assyrian kings made with the Babylonian intellectual tradition imported to Assur and Ninive from the reign of Tukulti-Ninurta I onwards, when Babylonian scholars and texts are present in the Assyrian court.⁸ This scholarly knowledge was necessary in construction of the ideological apparatus of Assyrian kingship.⁹ This process fed an increasing expertise in Assyrian scribes, and they were well valued by other societies, such as Emar and Ugarit.¹⁰

However, we cannot forget that around 13th century BC Nippur was reborn as cultural and intellectual centre under a Kassite dynasty. This was a period of great creativity in Babylonian *belles-lettres* with the compilation and canonization of Mesopotamian cultural heritage.¹¹ Therefore, we can establish several places (Nippur, North-Babylonia, Mitanni, Assyria, etc.) where scribes cultivated the Babylonian intellectual heritage and, from which, these “intellectuals” will spread it to other cities.¹²

However, by what means travelled this intellectual heritage? How and why did it arrive to other cultural environments? In order to answer these questions, Ugarit offers interesting explanatory possibilities. On one hand, Ugarit harboured one of the most important Babylonian text *corpora* outside Mesopotamia; on the other, this city was an important trading centre. Therefore, in this article I hope to explain the relationship between the international trade development of Ugarit and the special interest of this city in Babylonian knowledge.

2. Intellectual History in the Ancient Near East: recent trends and perspectives

The interest in culture contact and exchange of knowledge studies have increased in last years. Recent questions in modern societies about globalization and intercultural relationships have influ-

¹ VAN DE MIEROOP 2016a, pp. 45-46.

² RAGONERI 2000, p. 43.

³ VAN DE MIEROOP 2016a, pp. 45-46.

⁴ LION 2015, pp. 23-24.

⁵ NIEDORF 2008, pp. 119-120.

⁶ VELDHUIS 2012, pp. 11-17.

⁷ LIVERANI 2017, pp. 73-74.

⁸ PONGRATZ-LEISTEN 2015, p. 31.

⁹ PONGRATZ-LEISTEN 2015, p. 25.

¹⁰ PONGRATZ-LEISTEN 2015, p. 27.

¹¹ VAN DE MIEROOP 2007, pp. 196-205.

¹² VIANO 2016, pp. 374-375.

enced these new motivations and the renewal of this kind of studies. Among the recent trends in the research of the Ancient Near East, intellectual history is one of the most powerful and it has as object of study the production and transmission of knowledge.¹³

Previously, historical research understood intercultural relationships as unequal relationships and scholars studied it from a unidirectional point of view: from states or political structures more complex and powerful (“centres”), to political environments considered more simple, (“peripheries”). Therefore, the scholarship analysed exclusively the external dynamic, studying exclusively the diffusion of cultural forms from centres to peripheries. Two were the theoretical frameworks of reference: the concept of acculturation and the world-system theory.¹⁴ Acculturation implies the loss of cultural identity by the peripheral society and the gradual adoption of central culture features. On his behalf, the world system theory establishes that culture contact depends on the economical network of exchange: while peripheries supplied raw materials to the centre, the centre sold commodities and spread its own culture to the periphery. Both theories came from studies about modern and contemporary history and, despite they were the first to considering the culture contact as object of study, nowadays they have serious explanatory and conceptual limitations.¹⁵ In relation to Babylonian knowledge diffusion to the “western periphery” in the Late Bronze Age, historiographical tradition has always studied it from the perspective of the original “pure” Babylonian centre to less qualified peripheries.¹⁶

Nowadays, we know that these paradigms are completely inefficient in order to explain the complexity of intercultural relations; so then, postcolonial thinkers like E. Said and H. Bhabha established new ways and concepts in order to explain intercultural relationships.¹⁷ These authors understood the complete artificiality of the concept “unitary cul-

ture”, concluding that inside each “culture” there was a great heterogeneity, being internally different including social identities, political interests and economic and intellectual levels.¹⁸ In addition, they considered that cultural exchange was not spontaneous but deliberate, according to personal, social, economic and cultural interests, which shape a network of objects, ideas, and agents who carry out the cultural exchange.¹⁹

From the 90’s onwards, we count on innovative approaches that emerged from the archaeology and the anthropology. These have proposed new methodologies that support that cultural exchange is double: top-down relationships where the culture travelled through political, economic and social networks; and the bottom-up relationships, where distinct social and cultural environments accepted, re-contextualized and manipulated those transmitted motifs according to their own interests.²⁰ In relation to the latter, these new perspectives understand that exchange and reception of knowledge is intrinsic to the society and to interests and necessities of individuals and institutions.²¹ Fortunately, in the Ancient Near East we count on the advantage of studying Babylonian scholarly texts in their archaeological context together with other sort of texts (administrative, economic, letters, etc.).²² Therefore, our task may consist in explaining the economic, social, political and ideological context where social groups received foreign cultural motifs.²³

3. Ugaritic commerce and diplomacy: international contacts with Assyria and Babylon in the Late Bronze Age

While some scholars see the arrival of this culture via Hurrian intermediaries, others consider that the main corpus of Babylonian literature and

¹³ VAN DE MIEROOP 2013, pp. 89-92.

¹⁴ STEIN 2002, pp. 903-905.

¹⁵ SCHORTMAN, URBAN 1998, pp. 103-106.

¹⁶ VAN DE MIEROOP 2016b, p. 259.

¹⁷ VAN DE MIEROOP 2016b, p. 261.

¹⁸ WELSCH 1999, p. 197.

¹⁹ BHABHA 2006, p. 3.

²⁰ STEIN 2002, pp. 906-908.

²¹ VELDHUIS 2014, pp. 22-23.

²² DELNERO, LAUNGER 2015, pp. 1-2.

²³ VELDHUIS 2014, pp. 22-23.

scholarly texts reached Ugarit directly²⁴ from Babylon and Assyria.²⁵ In fact, the Akkadian taht was used at Ugarit is very similar to Middle Babylonian²⁶ as well as the presence of assyrianisms in several texts reveals the Assyrian influence.²⁷ Possibly, we should accept different routes of transmission. Firstly, Ugarit belonged to the Mitanni Empire at the beginning of the Late Bronze Age;²⁸ besides, the presence of ugaritians at Ta'udu texts (in the heart of Mitannian Empire) proves contacts between Mitanni and Ugarit. So, that could be one way of transmission.²⁹

In relation to direct contacts with Babylonians, there were merchants from Babylon at Ugarit as we can see in the letter of Hattusili III, king of Hatti, sent to Kadeshman-Enlil II, king of Babylon. In this document, the former quoted the complaint of the second: «[Furthermore, my brother: Because] you wrote to me as follows “My merchants are being killed in the land of Amurru, the land of Ugarit...”».³⁰ Also, there are evidences of direct contacts between Ugaritians and Babylonians in Emar. In this city on the west mid-Euphrates riverbank, Ugaritians were involved together with Emariot merchants in commercial enterprises, as we can see in documents from the House of Urtenu at Ugarit and from the House 5 of Emar.³¹ Here, there was a colony of Babylonian merchants,³² who carried out contacts with Ugaritians as we can see in private letters like RS 34.152: «Thus to my lord. Regarding you had furnished compensation. Sin-Šumati-ušabši and Eriba-Marduk (Babylonian) went to meet with you».³³ As well as in the document RS 23.025 where someone called Ili-Hamadi from Dur Hadad, informed about the survival of the Babylonian king Kaštilias IV, probably after being defeated by Tukulti Ninurta I of Assyria, so we

can talk about information channels between Babylonian and Ugaritic territories.³⁴

It is evident that Babylonia saw in Emar and Ugarit gateways for its merchandises like lapis-lazuli.³⁵ However, the most important goods were those highly demanded by Great Empires of the Late Bronze Age: horses and metals. Babylonia was a great intermediary in the commerce of horses³⁶ as well as of tin,³⁷ both imported from Central Asia and Iran and also commercialised by Ugaritic merchants.

With respect to contacts between Ugaritians and Assyria, also Emariot merchants linked Syrian trade routes with Assyria.³⁸ However, the letter that Tukulti Ninurta I sent to Ibiranu VI of Ugarit telling him his victory against Tudhaliya IV in the battle of Nihriya is an interesting proof of direct relationships between both kingdoms.³⁹ For presence of Assyrian merchants in Ugarit, we count on the trade embargo against Assyrians commanded by Tudhaliya IV, which we can see in the treaty signed with Amurru and, surely, extended to the rest of vassal kingdoms: «Since the King of Assyria is My Majesty enemy; he shall be your enemy. Your merchant shall not go to Assyria and you shall not allow his merchant into your land».⁴⁰

3. Texts in their contexts: Babylonian libraries and private owners at Ugarit

Almost all of Babylonian scholarly texts from Ugarit have been unearthed in private contexts and the majority were written in the last stage of Ugarit history (ca. 1300-1200 BC). We are talking about the so-called houses of Yabninu, Rap'anu, Rašap'abu, Urtenu, the house “literary tablets” and the house of Magician-Priest. Fortunately, administrative texts found in these houses allow to identify their owners.

²⁴ MONROE 2009, p. 142.

²⁵ ARNAUD 2007, pp. 7-10.

²⁶ VERMAAK 2009, p. 517.

²⁷ VAN SOLDT 1999, p. 43.

²⁸ FREU 2006, p. 26.

²⁹ KESSLER 2014, p. 39.

³⁰ BECKMAN 1996, p. 136.

³¹ COHEN, SINGER 2006, p. 123.

³² PRUZSINSZKY, SOLANS 2015, pp. 326-328.

³³ LACKENBACHER 1991, p. 86.

³⁴ ARNAUD 2003, pp. 9-12.

³⁵ VERMAAK 2009, pp. 516-520.

³⁶ VERMAAK 2009, p. 521.

³⁷ MONTERO FENOLLÓS 1994-1995, pp. 191-193.

³⁸ PRUZSINSZKY, SOLANS 2015, p. 325.

³⁹ LACKENBACHER 1991, pp. 90-100.

⁴⁰ BECKMAN 1996, p. 106.

On the other hand, the Royal palace archive contained some scholarly texts, just like religious compositions (almost all in Hurrian) and lexical tablets, but we cannot say that this space functioned as a space of Babylonian studies.⁴¹

The first owner mentioned, Yabninu, was involved in palatial administration: he controlled issues like censuses, the merchant record or the supply of the city of Ugarit.⁴² He could be one of the most important heads of palatial administration⁴³ with the control of people movements, importation of raw materials and agricultural products as well as the control over maritime activities.⁴⁴ In addition, he managed diplomatic affairs like different negotiations with the nearby kingdom of Amurru.⁴⁵ He combined this public function with private commercial business in Egypt, Hatti and several cities of Eastern Mediterranean.⁴⁶ In fact, the name of Yabninu appears taking part in two commercial firms.⁴⁷ In spite of being an important man of the city and the Kingdom, the house of Yabninu has given us few scholarly tablets, and they are not enough to place it among one of the most important sites of Babylonian knowledge reception.⁴⁸

On the contrary, the house of Rap'anu contains one of the most important libraries of Babylonian texts in Ugarit and it was possibly the main school of the city.⁴⁹ On the other hand, in the house of Rašap'abu only four Sumero-Akkadian texts were found;⁵⁰ however, recent studies have interpreted that the adjoined house called *du lettré*, whose texts consist in ten lexical lists, two literary letters and two incantations, really could belong to the house of Rašap'abu.⁵¹ Like Yabninu, these two individuals combined public responsibilities with personal

business.⁵² Rap'anu alternated his work as administrator of diplomatic correspondence, in the light of international letters found in his archive,⁵³ with private commercial activities carried out in Anatolia, Upper Mesopotamia and other cities of the Levant.⁵⁴ On the contrary, Rašap'abu held the charge of port manager and the position of *wakil tamkari* (chief of merchants), so he had a special link with commercial activities and the administration.⁵⁵

On the south of the city lies the House of Urtenu, probably one of the most interesting archive of the city because of the high number and variety of texts unearthed here. His archives have provided documents that involved Urtenu with the administration.⁵⁶ In addition, he directed the international diplomacy because of the high number of international letters discovered in his house.⁵⁷ On the other hand, he carried out his own business as participant in a lucrative firm that managed commercial activities between Ugarit, Emar and Tyre.⁵⁸ Regarding his importance and authority inside of Ugaritian society, he belonged (as well as Yabninu) to "the greats and elders of Ugarit" mentioned in RS 88.2009.⁵⁹ "Elders" represented the most prominent families of the city and, in the case of Ugarit, they performed an important international role⁶⁰ and the "greatest" were those which assumed positions of maximum responsibility.⁶¹

We have to highlight that the majority of these private houses are near to the Royal Palace; this implies a special closeness with the centre of power.⁶² Definitely, these four individuals accumulated a huge fortune as important traders; besides, they took part in diplomatic relationships.⁶³ Unlike other merchants, they did not owe their position to

⁴¹ COHEN 2013, pp. 43-50.

⁴² COURTOIS 1990, pp. 113-133.

⁴³ BELL 2012, p. 182.

⁴⁴ COURTOIS 1990, pp. 140-142.

⁴⁵ MCGEOUGH 2015, p. 92.

⁴⁶ BELL 2012, p. 182.

⁴⁷ COURTOIS 1990, p. 107.

⁴⁸ VAN SOLDT 2000, pp. 230-231.

⁴⁹ MONROE 2009, p. 142.

⁵⁰ VAN SOLDT 2000, pp. 231-232.

⁵¹ MATOĀIAN 2013, pp. 180-181.

⁵² BELL 2012, p. 182.

⁵³ VAN SOLDT 2000, p. 233.

⁵⁴ BELL 2012, p. 55.

⁵⁵ MONROE 2009, p. 69.

⁵⁶ VAN SOLDT 2000, pp. 240-241.

⁵⁷ BELL 2012, p. 183.

⁵⁸ MCGEOUGH 2015, p. 92.

⁵⁹ SOLANS 2015, p. 377.

⁶⁰ SOLANS 2015, pp. 233-235.

⁶¹ SOLANS 2015, pp. 267-268.

⁶² MONROE 2009, p. 32.

⁶³ MCGEOUGH 2015, p. 91.

palace concessions; mainly the way of funding was the entrepreneurial association among them and with foreign merchants.⁶⁴ These important magnates were associated with the most lucrative trade, the trade of metals:⁶⁵ on the one hand, the purchase of gold in Egypt and its sale in other places of the Eastern Mediterranean;⁶⁶ on the other hand, the exchange of strategic metals which fed the weaponry of great armies of the Late Bronze Age: copper and tin.⁶⁷ Also, some of these merchants were involved in the commerce of horses, like Urtenu, to whom is probably sent a letter talking about a commercial operation regarding horses with a tradesman from the “land of Mari” and probably part of the Babylonian kingdom.⁶⁸

Outside of great ones individual merchants, two other important places of Babylonian intellectual heritage reception were “The House of Literary Tablets” and the “House of the Magician-Priest”. The first one contained a collection of Babylonian scholarly and literary texts whose authors were members of an important family of local scribes (the patriarch was someone called Nume-Rašap).⁶⁹ In this house appeared some documents that linked this family with other magnates seen before, such as Yabninu and Urtenu.⁷⁰ Besides, some letters sent to the king, the queen and other officials of Ugarit relates them with high palatial circles,⁷¹ and the owners of this house were important oil producers and traders.⁷² The second one, the House of the Magician-Priest, has given us an important library of ritual texts in a specific part of the house, the so-called Lamaštu archive.⁷³ His owner should be an important man in the Ugaritian society too, not a merchant or high official, but a diviner or a priest. Nevertheless, a list of herdsmen, whose names appear in some lists of

personnel in the palace, joined him with the administration as well.⁷⁴

Summing up, the owners of these libraries were important administrators of the kingdom, diplomats, rich merchants and/or religious-moral authorities as well as visible heads of the society.

4. Transmission and Reception: Scribal Babylonian education and foreign teachers in Ugarit

The presence of Babylonian school texts in private houses at Ugarit means, of course, that they were schools or places of scribal activity. This is not abnormal, because modern researchers have demonstrated that education from the Old Babylonian Period onwards belonged to private contexts.⁷⁵ While previous studies about schooling focused in literary texts which describe the school institution of É.DUB.BA.A (tablet house), new archaeological approaches consider, on the contrary the private and familiar nature of teaching along the second millennium.⁷⁶ In Ugarit, the evidence assures that education was a practice completely decentralised and teaching was organised around individual scribes in those private houses described above.⁷⁷ On this matter, Babylonian texts unearthed in Ugarit correspond to schooling materials⁷⁸ and students signed their works and, sometimes, they added the name of their masters in the colophons.⁷⁹

The family (probable) owner of the House of Literary Tablets is a good example of local scribes well trained in Babylonian *belles-lettres*, and they were able to do true innovations on that subject just like the Babylonian Deluge Poem written by Nume-Rašap. Other members of the family were involved in scholarly and teaching activities, names like Ur-Teššub, ‘Ili-Šapšu, TIL.IŠKUR, Ewri-Mudu,

⁶⁴ MONROE 2009, pp. 106-108.

⁶⁵ BELL 2012, p. 181.

⁶⁶ CASTLE 1992, pp. 254-255.

⁶⁷ BELL 2012, pp. 180-183.

⁶⁸ LACKENBACHER 1991, pp. 101-104.

⁶⁹ ROCHE-HAWLEY 2013, p. 421.

⁷⁰ ROCHE-HAWLEY 2013, p. 415.

⁷¹ VAN SOLDT 2000, pp. 234-235.

⁷² ROCHE-HAWLEY 2013, pp. 425-426.

⁷³ YON 1997 (2006²), pp. 100-101.

⁷⁴ VAN SOLDT 2000, pp. 235-236.

⁷⁵ GEORGE, 2005, p. 131.

⁷⁶ ROBSON 2001, pp. 39-40.

⁷⁷ ROCHE-HAWLEY, HAWLEY, PARDEE 2016, p. 246.

⁷⁸ MÁRQUEZ ROWE 2006, pp. 105-120.

⁷⁹ VAN SOLDT 2015, pp. 567-568.

or 'Ahi-Rašap signed colophons of several tablets.⁸⁰ For example, at the houses of Rap'anu and Urtenu, the scribe Ur-Teššub, from Nume-Rašap's family, practised its labour as teacher.⁸¹ However, among all the scribes identified one of them stands out, Aššur-reši-išši, an Assyrian teacher settled at Ugarit and whose name was written by a student in the colophon of the wisdom composition *Šima Milka* ("Hear the advice").⁸² It looks like that a native Babylonian worked as scribe and teacher in the so-called Lamaštu archive: the cuneiform signs used in the text point to the presence of a native Babylonian writer.⁸³ This typical Babylonian writing appears in several scholarly texts⁸⁴ and, we can see that, in two Marduk-Ea incantations, one of them has a typical Babylonian writing, and the other has an Ugaritian one.⁸⁵ Therefore, we can infer a possible relationship between Babylonian teacher and Ugaritian trainee.

On the other side of the city, in the House of Yabninu, W. van Soldt has identified an Assyrian scribe with the name of Nahis-Šalmu, because this name stands out for its foreign origin and the palaeography and grammar of his documents presents Assyrian features.⁸⁶ Despite the House of Yabninu could not be a teaching centre; it does not deny that Nahis-Šalmu could taught in another house.⁸⁷

These foreign scribes could reach the city by diplomatic contacts. Several scholars assure that one of the most important diplomatic practices was the exchange of professionals⁸⁸ just like that mentioned in the letter CTH 172 that Hattusili III of Hatti sent to Kadasman-Enlil II of Babylon where it is discussed the delivery of some professionals like physicians and incantation priests.⁸⁹ Another example is the figure of Marduk-nadin-ahhe, a Babylonian scribe and teacher in Assur and a royal scribe in the court of Aššur-uballit

I of Assyria.⁹⁰ Of course, the presence of foreign professionals provided prestige to royal courts as well as material advantages, just like the possibility of keeping in contact with intellectual and artistic trends and innovations.⁹¹ Although this practice is more usual between great kings, we know by other letters that Ugarit did not have problems in asking for specialised personnel to great kings as we can see in the letter EA 49 that Niqmaddu III sent to Pharaoh asking for a physician.⁹²

However, their presence in private context points out that these scribes travelled in commercial rather than diplomatic environments. Despite some authors established the impossibility of exchange of professionals in private channels,⁹³ others argued that the scribal culture was not accessible exclusively to scribes, and the knowledge was extended to wide social sectors of urban elites, including merchants, in the second millennium BC thanks to the decentralization of scribal education.⁹⁴

In this sense, we count on parallels about the practice of hiring foreign teachers in private contexts and involved in commercial business, for example in Emar. In the House 5 of Emar, a Babylonian called Kidin-Gula signs several texts.⁹⁵ This individual also looks like involved in commercial or financial activities with other compatriots attested in this House 5. Nevertheless, the most interesting information around Kidin-Gula is his presence as teacher in the House of the Zu-Ba'la family.⁹⁶ On the other hand, Emar also counted on an Assyrian teacher whose name was Mar-Šeru'a, and he was involved in trade as well.⁹⁷ Emar and Ugarit also shared similar scholarly corpora, just like Sumerian compositions found in each place.⁹⁸ Therefore, we can deduce that private individuals of Ugarit also employed foreign teachers at their homes.

⁸⁰ ROCHE-HAWLEY, HAWLEY 2013, pp. 244-248.

⁸¹ MALBRAN-LABAT, ROCHE-HAWLEY 2007, pp. 88-89.

⁸² COHEN 2017, p. 274.

⁸³ VAN SOLDT 2012, pp. 173-177.

⁸⁴ VIANO 2016, pp. 325-330.

⁸⁵ VIANO 2016, p. 366.

⁸⁶ VAN SOLDT 2001, pp. 443-444.

⁸⁷ ROCHE-HAWLEY, HAWLEY, PARDEE 2016, pp. 238-239.

⁸⁸ ZACCAGNINI 1983, pp. 249-256.

⁸⁹ BECKMAN 1983, p. 106.

⁹⁰ WIGGERMAN 2008, p. 203.

⁹¹ LIVERANI 1990 (2003²), pp. 116-117.

⁹² MORAN 1992, p. 120.

⁹³ ZACCAGNINI 1983, pp. 257-264.

⁹⁴ CHARPIN 2008, pp. 39-40.

⁹⁵ COHEN 2004, p. 90.

⁹⁶ COHEN, SINGER 2006, p. 130.

⁹⁷ COHEN 2009, p. 117.

⁹⁸ VIANO 2016, p. 361.

5. Conclusion

Thanks to new methodologies, we can see the intellectual production and transmission as a phenomenon inserted in social structures and ideologies and we can make new questions to data we have. In relation to Babylonian knowledge transmission to Ugarit, this intellectual heritage circulated along commerce and diplomatic contacts, which linked Mesopotamia and Yazira with Ugarit. However, commerce and diplomacy by themselves do not explain the cultural transmission, so we must understand the context where Ugaritic Babylonian texts appeared.

These libraries were proprieties of elite men and families who were in close contact with trends of their current culture, where the Babylonian knowledge was the brand of high culture. For this reason, they were eager to fill their archives and libraries with Babylonian literary and scholarly texts. These magnates supported as patrons scribal schools at their home, providing them with a huge staff of scribes and instructed people who could serve them in administrative duties and private business. They played an important role in the sponsorship of foreign teachers from Babylon or Assyria (places where the ancient and powerful cuneiform tradition came from) who provided these elites the prestige of foreigners at royal courts, as well as commercial partners.

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More than a pile of sherds: functional analysis and social behaviour during Iron Age Alalakh

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ABSTRACT

Recent excavations at the site of Tell Atchana, ancient Alalakh, have clarified the presence of Iron Age periods. Despite being at the centre of these changes, the Late Bronze-Iron Age transition at Alalakh and in the Amuq remains poorly understood in terms of chronology and its social impact. A key question is the degree to which changes evident in the archaeological records should be credited to population movements or to the reorganization of social, economic and political structures by the local population. This paper considers the assemblage from a functional point of view to discuss any change or continuity in habits and actions evident from the Late Bronze Age to the Iron Age and during the Iron Age. In particular, this article aims to be a first attempt to propose a functional study of pottery from the Amuq Valley, thus linking the documentation of Northern Syria with that of Southern Anatolia. Furthermore, it will try to establish a set of morphological and physical characteristics of pottery vessels that, within limits, can be used to define how well suited particular vessels are to perform particular tasks.

KEYWORDS

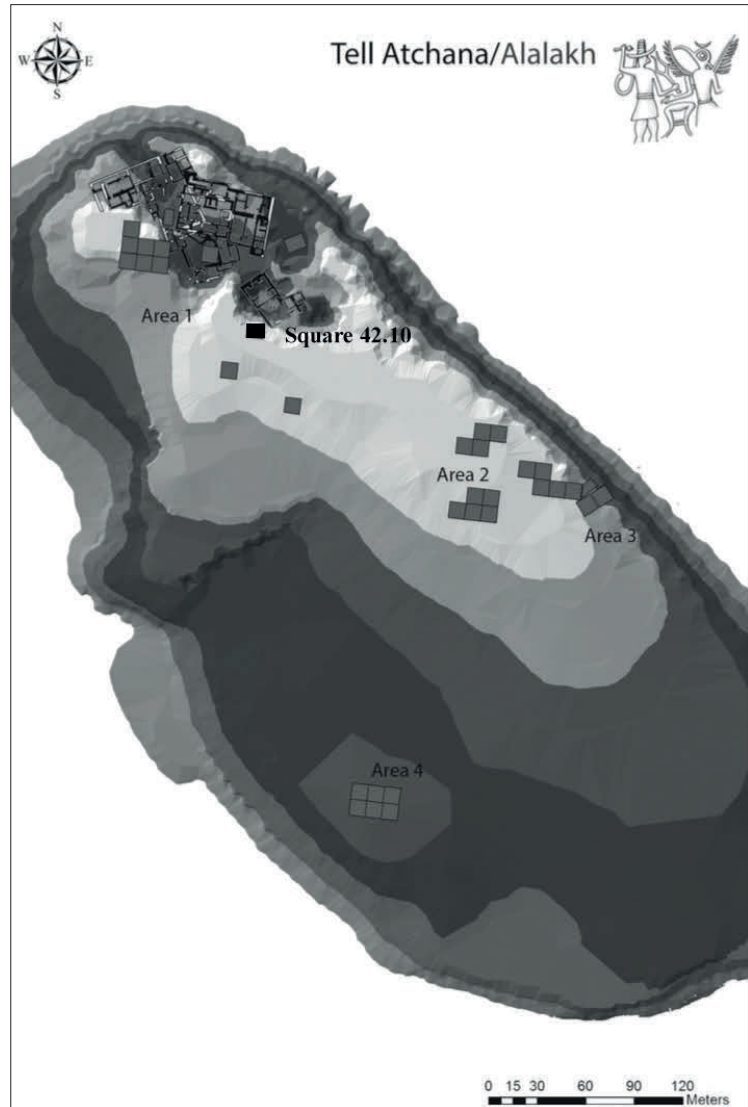
Pottery, Iron Age, Northern Levant, Archaeological theory, functional analysis, Tell Atchana/Alalakh, Amuq Valley

1. Alalakh in the Iron Age

The site of Tell Atchana, ancient Alalakh is located in the Amuq Valley, modern province of Hatay, Turkey.¹ Recent excavations on the site have clarified the presence of Iron Age periods.² While it was previously thought that the city was abandoned towards the end of the Late Bronze Age, new research revealed a prolonged period of occupation into the Iron Age.

Recent excavations in square 42.10 (fig. 1) yielded a number of contexts dated to the Iron Age I and Iron Age II period (ca. 12th-9th century BC). Excavations in this square uncovered a sequence of three architectural phases (local phases 3-1) dated to the Iron Age I and II. This paper will focus on the functional analysis of pottery vessels retrieved from these phases to offer a deep understanding of changes in social habits during the Iron Age at Alalakh.

FIGURE 1
Map of Tell Atchana with location
of square 42.10
© Atchana Excavation Project



¹ YENER (ed.) 2010; YENER 2013.

² YENER 2013; YENER, AKAR 2013.

Square 42.10 is an open area with very few architectural features that has been identified as an area related with food preparation and consumption and it is supported by the finding of objects such as grinding slabs, querns, handstones, mortars and basins, related to the processing of foodstuff, by the presence of vessels linked to the processing (cooking pots), and consumption (plates and bowls) and by the recovery of a pyrotechnical installation interpreted as a circular oven in phase 3 and of rounded stone structures interpreted as potsherds hearths. The square yielded three phases that have been dated from the Iron Age I to the Iron Age II on the base of the pottery recovered. Phases 3a-b have been dated to the Iron Age I (mid-12th century BC), phases 2a-b have been dated to the late Iron Age I and phase 1 to the Iron Age II (9th century BC).

2. Background on functional analysis

Food and the variety of human activities related to it have received a particular focus in the archaeological research over the past years.³ Recently, an increasing number of archaeologists focused on studying food preparation and consumption to reveal social information beyond activity areas, subsistence and tool inventories.

Food, foodways, cooking pots and tablewares are increasingly occupying an important place in scholarly research.⁴ This renewed interest in food production and consumption and in the tools used to perform these activities is strictly connected with the understanding of the relation between food (and any tool associated with it) and social practices.

Most of the archaeological studies debate the role that food had in daily practices and events, craft production and culinary practice, identities and culinary labour, politics and economics, social boundaries, communities and ritual.⁵

Some scholars⁶ dedicated their research on establishing a way to interpret pottery vessels as specific tools employed during food production and consumption practices that is to define the affordances⁷ of the vessels and to assign them to a food-related function.

Vessels are made for a certain purpose and therefore the study of vessel function is fundamental for the understanding of how the vessels were used. The study of function is generally based on the analysis of the archaeological context and on the study of the performance characteristics of vessels. Many studies have been related to the study of ceramic function and this article aims to be a first attempt to propose a functional study of pottery from the Amuq Valley, thus linking the documentation of Northern Syria with that of Southern Anatolia.

The aim of this article is to establish a set of morphological and physical characteristics of pottery vessels that, within limits, can be used to define how well suited particular vessels are to perform particular tasks.

Indeed, if we consider pottery vessels as tools, the morphological and physical characteristics of the vessels may determine their performance.

Individual pottery vessels may be used for different tasks, however, they will not perform all tasks equally well. The different attributes of vessels give them different affordances; i.e. they make some task easier and other more difficult to perform.

Hence, vessel attributes give us a material means of suggesting possible uses for different ceramic forms; in this way it is possible to characterise given ceramic assemblages in terms of the set of tasks they were suited to perform.

However, while archaeologists may identify the function of the pottery vessels with a certain reliability, functional distinctions can be made only at a general level. This is due in part to the nature of the archaeological pottery, mainly consisting of sherds and rarely of complete vessels, and because of the lack of a direct connection with potters and users of the past.

³ DIETLER, HAYDEN (eds.) 2001; BRAY (ed.) 2003; MEE, RENARD (eds.) 2007; GRAFF, RODRÍGUEZ-ALEGRÍA (eds.) 2012; SPATARO, VILLING (eds.) 2015.

⁴ SPATARO, VILLING (eds.) 2015; GRAFF 2018.

⁵ GRAFF 2018.

⁶ HENRICKSON, MCDONALD 1983; RICE 1987; SMITH 1988; HALLY 1986; DUISTERMAAT 2008.

⁷ COSTALL 1995.

Several scholars⁸ have classified pottery assemblages according to different functional classes, divided according to specific features of shapes, fabric and surface treatment.⁹

In the analysis of the ancient function of a vessel, form and material seem most important. For example, the relative openness of the vessel profile, rim shape and diameter, its volume and size and its surface treatment and decoration are commonly regarded as indicative of use.¹⁰ More specifically, when considering the morphological and physical variables that define vessel function, one might look at maximum diameter by size class, the vessel height-maximum diameter ratio, vessel's stability as defined by the type of base used, and effective vessel capacity as defined by the maximum volume of material that was normally placed in the vessel. The volume is determined by vessel shape and size and by the level to which the vessel was filled.

Other characteristics that define the function of a vessel are: the ease with which the content of the vessel could have been manipulated as determined by the size of the opening and the height of the vessel and the way the content was removed from the vessel. This characteristic is very important in order to determine how the content was consumed and manipulated. Material can be removed from a vessel in two ways. It can be lifted out with the help of a tool or poured. Pouring is affected by a series of factors: vessel size, opening dimensions and rim orientation. The direction and shape of the rim is directly linked with pouring as the tendency of liquids to adhere to the surface of the vessel lip during this action increase the stream velocity. This effect can be modified by changing the direction of the rim and in particular by using out-flaring rims. In contrast, large vessels may be heavy when full to lift and therefore the content must be removed by using a ladle or a spoon.

It has been decided to divide the vessels into three functional groups that mirror a simplified

schema of the different steps of food provision: food processing, consumption and storage.

This division was made by identifying particular attributes that may hint at the affordances (i.e. the physical characteristics) of particular shapes. The function of transport has been omitted as, in general, ceramic vessels are mainly suited for the transport of liquids.¹¹ However, the physical characteristics that define the suitability of ceramic vessels for the transport of liquid goods also define ceramic vessels designed to store liquids. The analysis carried out in this article is based mainly on the rim sherds recovered as it is not always possible to clearly identify the vessel's shape from the body sherds.

Because all of the functional analysis of pottery is generally made on the morphological attributes of the vessels, on residual analysis and on ethnographic comparisons rather than on pure archaeological data, it can be subject to criticism.

Functional analysis, besides being dependent on the affordances of the vessels, it is subordinate to the analysis of the archaeological context and therefore it must be applied to a single excavated area and it cannot be considered valid for a wider region without comparing the functional set with similar and more abundant sets and dating to the same period.

Although many scholars used the physical characteristics of pottery vessels to establish a range of functional categories, this study would like to combine previous studies on the subjects with a theory borrowed from sociology. In 1977 the sociologist James J. Gibson¹² coined the term "affordances" to describe the potential actions that are made possible by a given object. As such, the affordances exist independently of the act of perception and they correspond to how the object can be used according to its morphological characteristics and to the environment surrounding it. When applied to ancient ceramics, this theory will result in a set of attributes including design parameters that define the affordance of a vessel for a specific task.

⁸ RICE 1987; DUISSTERMAAT 2008.

⁹ SKIBO 2013; HENRICKSON, MCDONALD 1983; SINOPOLI 1991; SKIBO 1992; GRAZIADIO, PEZZI 2013; MAZOW 2005; HENDRIX, DREY, STORFJELL 1997.

¹⁰ RICE 1987, pp. 224-226; SMITH 1988; HALLY 1986.

¹¹ DUISSTERMAAT 2008, p. 440.

¹² GIBSON 1977.

3. Food processing

Food processing is the transformation of raw materials into food, or of food items into other forms for consumption. This processing involves non-ceramic utensils such as grinding stones, mortars, knives and other objects that were used to process raw materials. However, since the main focus of this article is pottery, only pottery vessels will be considered in the analysis of food processing.

In order to be considered part of the processing category, a vessel has to have particular attributes that allow an involvement in the transformation of food into a consumable product. These attributes include design parameters that define the affordance of a vessel for a specific task. Of these, cooking is the food processing task that is most dependant on the design parameters of vessels because of the problem of thermal shock that is the differential expansion caused by the contact with a heat source.¹³ Hence, the most specialised vessel for the processing of food is the cooking pot.

The main feature related to this type of vessel is the ware. Cookware is a very particular type of fabric designed to resist to thermal shock. In order to be resistant to thermal shock, cookware is usually made of different types of clay minerals that are more or less naturally resistant to thermal shock. However, even the most ideal cookware must be mixed with a large quantity of tempering material in order to strengthen the vessel and make it possible for the vessel to be placed on the fire. Even the best cookware will not withstand the difference in thermal expansion between the hotter bottom and the cooler top without cracking if not tempered.¹⁴

In Late Bronze and Iron Age Atchana cookware is made of a highly plastic material with few grits or sand. The fabric is heavily tempered with crushed shells. The adding of a large amount of tempered material increases the thermal shock resistance.¹⁵ The primary component of shell is calcium carbonate and the inclusion of calcite elements to clay pastes reduces the shrinkage during drying

and increases thermal shock resistance during firing and use.¹⁶

Other attributes that make a vessel suited for food processing are its size and shape. Shapes fitted to process food need to be suitable to be put close to a heating source, they need to be able to withstand thermal shock and to have a body shape with no sharp carinations in order to minimise different thermal inclinations from one side of the vessel to the other.

Two shapes of cooking pot have been recovered from the Iron Age levels of Alalakh: the Broad Cooking Pot (BRCP, fig. 3: e) and the Holemouth Cooking Pot (HMCP, fig. 2: k).

Generally, BRCPs have a wide opening, a kind of neck and a biconical body. They have a diameter rim range of 25-35 cm¹⁷ with a volume ranging from ca. 10 to 28 lt. HMCPs have a narrower opening when compared to the BRCP, a biconical body and a low carination. Furthermore, they often have strap or, in later levels, ear-like handles. They have a diameter rim range of 12-25 cm and with a volume of ca. 6-8 lt.

Broad cooking pots represent the 4% of the whole assemblage and they are more popular in the first levels of the Iron Age (3-5%; phases 3b and 3a), while they become less popular in later levels (5-2%; phases 2b-1). Hole-mouthed cooking pots represent the 5% of the whole assemblage. They are less popular in the first levels of the Iron Age (2%; phases 3b-a) but they become quite popular in the later phases (6-8%; phases 2b-1).

Cooking pots with wide mouths, such as the broad cooking pots, enable an easy access to the content and a fast evaporation and are usually meant to cook dishes that are meant to thicken liquids and that require frequent stirring.¹⁸

In contrast, cooking pots with a narrow opening, such as the hole-mouthed cooking pots, reduce the relative surface area so that the liquid evaporates more slowly and it is practical to cook food with high liquid contents, such as stew, porridges, broth and legumes.

¹³ RICE 1987.

¹⁴ RICE 1987.

¹⁵ MÜLLER ET AL. 2014, p. 269.

¹⁶ RICE 1987, pp. 97-98; RYE 1976.

¹⁷ HOROWITZ in press.

¹⁸ VILLING, SPATARO 2015, p.6.

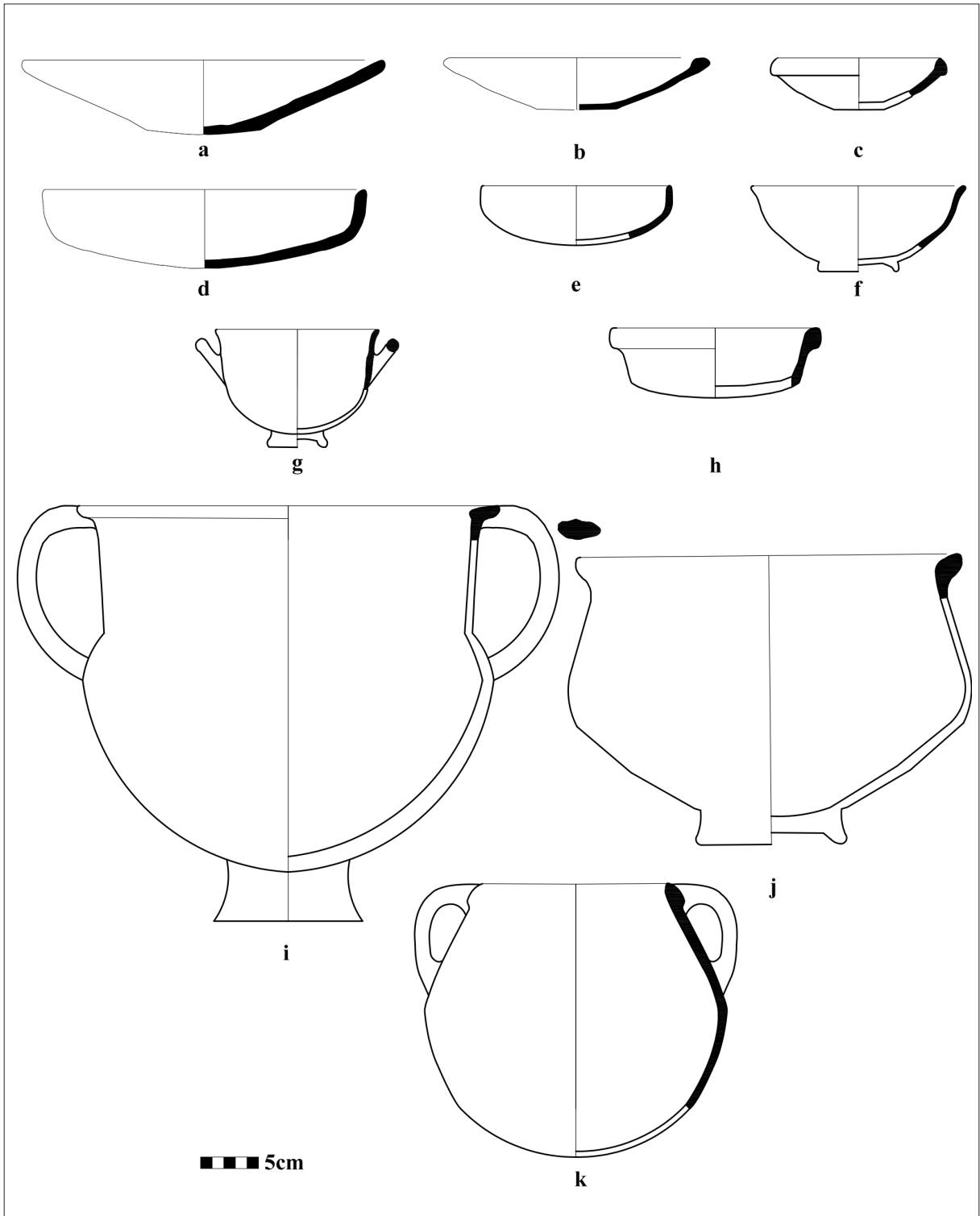


FIGURE 2

Selected Iron Age pottery reconstructed:

a) flat plate; b) rim bowl; c) shallow bowl; d-e) bowl with straight upper part; f) hemispherical rounded bowl; g) carinated bowl; h) hemispherical flaring bowl; i) biconical krater; j) flanged krater; k) holemouth cooking pot

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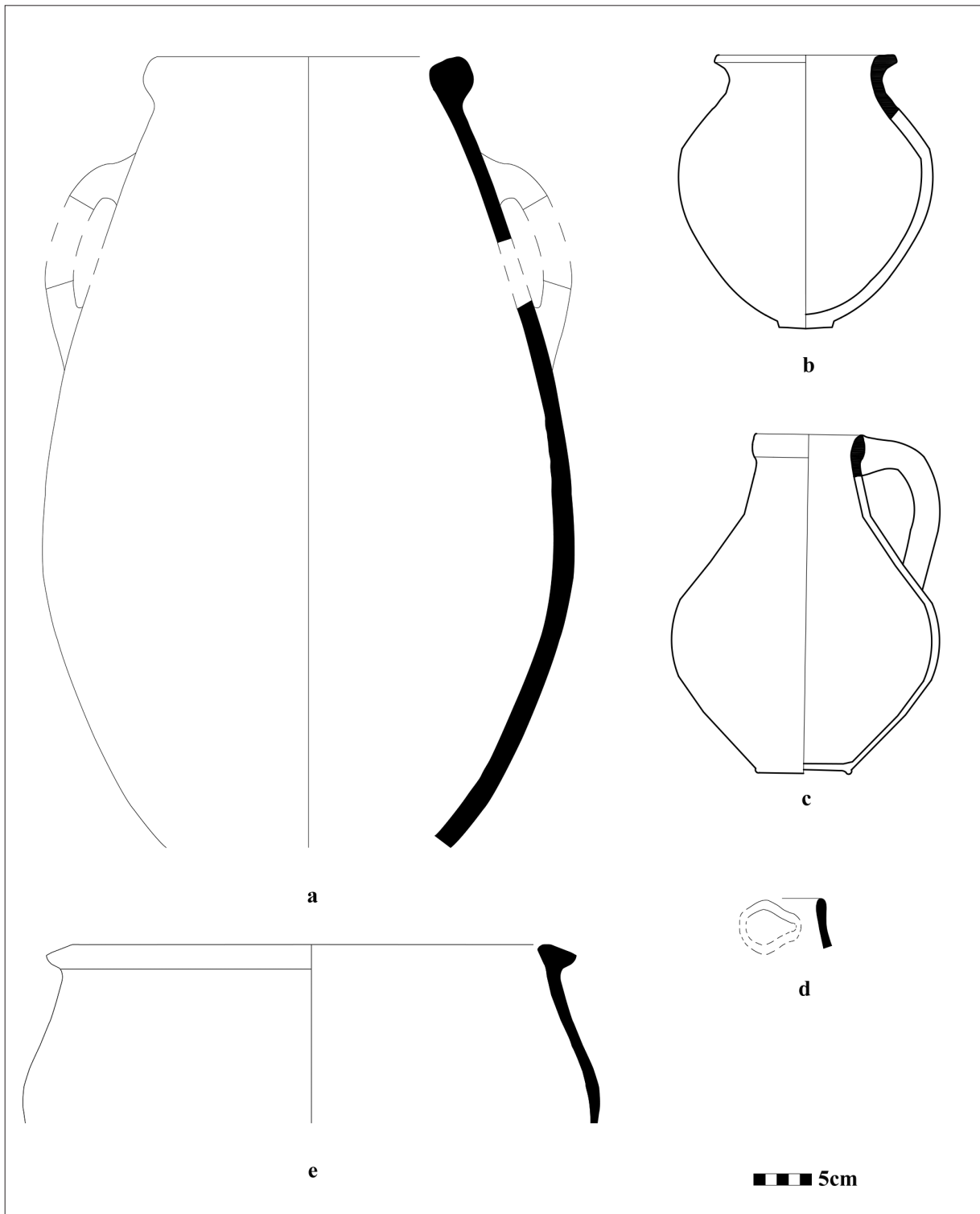


FIGURE 3
Selected Iron Age pottery:
a) pithoid jar; b) globular jar; c) high-necked jar; d) pitcher; e) broad cooking pot
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The functional analysis of cooking pots can also be used to understand social daily life and practices of ancient societies. The differences in size and volume may show a different strategy used when cooking a meal for a bigger or a smaller household. The size of cooking vessels is related to the quantity of food and thus to the number of people for whom the food is prepared. Therefore, cooking pot's capacity might be related to the contexts in which the consumption of food took place. Large cooking vessels imply the consumption of a large quantity of food and point to a greater number of people involved, while smaller cooking vessels might point to a house's ordinary cooking pot assemblage and therefore they might reflect a more domestic scale of food preparation and consumption.

It is possible that larger sized cooking pots, as the majority of the broad cooking pots, were used to cook more than one meal at once or a meal for a higher number of people in comparison to the medium sized cooking pot, as the majority of the hole-mouthed cooking pots, that could have been used for a smaller number of people or for one or two meals for a small household.

The increase of the hole-mouthed cooking pot in Iron Age levels and the gradual decrease of the use of the broad cooking pot may be linked with a change in cooking habits with regard to what was cooked inside these vessels, and possibly it may suggest a reduction in size in the households.

It seems that the hole-mouthed cooking pot does not replace the broad cooking pot as they appear together from the first layers of the Iron Age up to the end of the Iron Age occupation on the site. However, it can be noted the preference for a new way of cooking, probably linked with the adoption of new recipes and of new cooking habits.

4. Food and drink consumption

Food and drink consumption includes all the activities related with the act of consuming food, such as serving and short-term containment. This process may involve vessels not made of clay but of different material such as metal and wood that will not be considered here.

In order to be considered as part of this category, a vessel must have some particular attributes to make its affordance suitable to consume food and drink. All food consumption is facilitated by vessels with certain general qualities (e.g. impermeability, accessibility, manipulability). However, due to the different natures of solid and liquid foods, these general qualities are often realised by means of distinct vessel attributes in each case.

One of the main attributes to consider when dealing with vessels related to food and drink consumption is their fabric. In order to contain food or liquids the fabric has to have a very low permeability coefficient, a low level of porosity and ideally it has to have surface treatments thought to decrease the permeability of the vessel.

Furthermore, very important attributes to consider when dealing with vessels used for food consumption are shape and size. More particularly, in order to be considered as part of this functional category, a vessel should have a shape that provides an easy access to its content, it should be of an average size to allow the vessel to be handled easily and it should have physical characteristic to make the vessel suitable to contain dry and/or liquid food and drinks.¹⁹

Once it has been established that the vessel could have been used for food and drink consumption according to their shape, and in particular to the form of the body and of the rim, it may be possible to divide vessels into those used for the consumption of dry or liquid food, i.e. eating and vessels used for the consumption of drinks.

To do this it was taken into consideration their average rim diameter size. The rim sizes have been plotted into a table (table 1) in order to define the more frequent rim clusters per each shape:

- Bowls with average rim size of 26-28 cm and a capacity up to 2 lt.
- Bowls with average rim size of 20-24 cm and a capacity of ca. 0.50/0.80 lt.
- Bowls with average rim size of 12-16 cm and a capacity of ca. 0.20/0.30 lt.

¹⁹ HENRICKSON, MCDONALD, 1983, p. 632; HALLY, 1986.

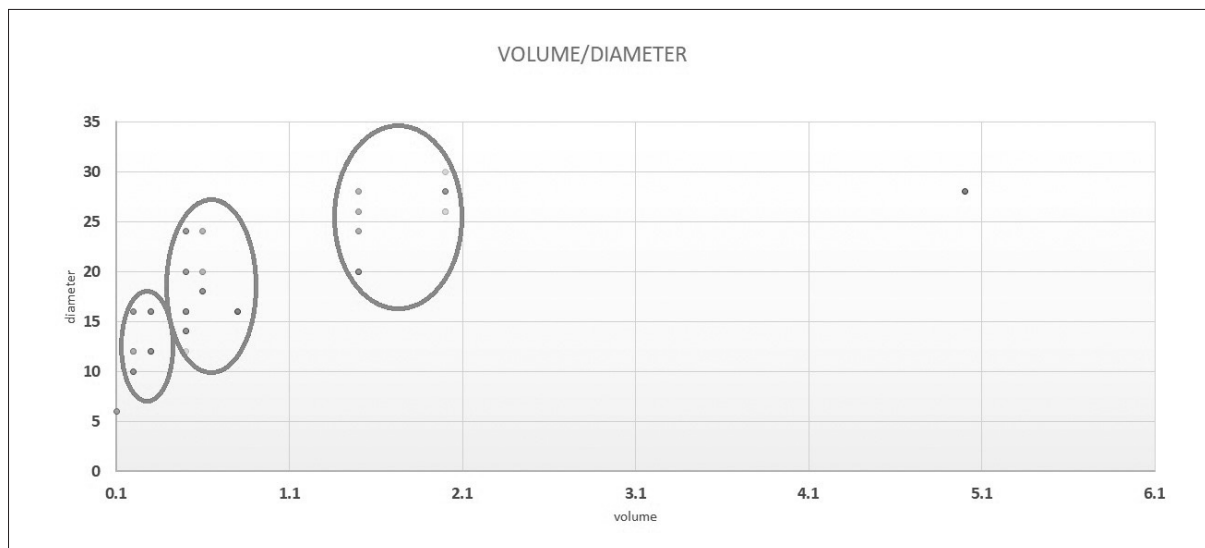


TABLE 1
Correlation between rim diameter and volume/size
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In addition, the table shows a set of miniature vessels, hemispherical rounded bowls, with an average rim size of 6-8 cm and a capacity of less than 0.1 lt. These vessels are suitable for the consumption of drinks but given their volume and size it is possible that they were used during rituals.²⁰

The graph also shows a cluster of bowls with an average rim size of 30 cm and a capacity of ca. 5 lt. Due to their size and capacity they might be considered as saucers or serving bowls.

Bowls with an average rim size of 12-16 cm and a volume capacity of ca. 0.20/0.30 lt can be considered as single portion, drinking bowls; bowls with an average rim size of 20-24 cm and a capacity of ca. 0.80/1 lt might be too big to be considered for single portion drink consumption and they might have been used as eating bowls.

The analysis of the average rim size and capacity allowed to distinguish eating bowls from drinking bowls. The criteria used to make this division are based on the attributes of the vessels, their size and capacity.²¹

²⁰ GLATZ 2009, 2015.

²¹ DUISTERMAAT 2008.

As a result the first two categories of bowls might be considered as exclusively eating bowls (rim size of 26-20 cm and 20-24 cm) while the last category of bowls might have been used both as drinking and as eating bowls (rim size of 12-16 cm). Flat plates have been considered as eating vessels.

The other criteria used to distinguish in between eating and drinking bowls was the analysis of the rim type: thickened internal and thickened external rim types are not suitable for direct consumption of the liquid content while simple or out-flaring rims, increasing the velocity of the stream while leaving the vessel, facilitate the direct drinking of the content.

Having made this first division on between eating and drinking bowls, based on average rim size and capacity and rim types, we can discuss the content of these bowls.

The main difference noticeable is the way the food was consumed: depending on the rim type it would have been consumed by using a tool or by direct consumption.

The division made in between dry and liquid food consumption is therefore arbitrary and at the end, vessels used for dry and liquid food consumption will be considered as part of the same function that is eating.

5. Eating: dry food

A vessel, in order to be considered satisfactory to be used to eat dry food, must have an open shape, designed to allow an easy access to the food. It might have a flat or shallow or flat body not suitable to hold a reasonable amount of liquid. It should have a flat or ring base to facilitate its stability and a rim shape designed not to obstruct the interior surface.

The shape recovered in Alalakh that best suits these characteristics is the flat plate (fig. 2: a). Flat plates are very simple, open vessels with flat or slight shallow body, straight or thickened rim (not protruding inward) and with mostly flat and ring bases. Their very shallow form and absence of an obstructing rim, makes these vessels unsuitable to contain and to consume liquid food.

According to their size, flat plates can be divided into serving plates and eating plates. Flat plates with an average rim diameter of 30-35 cm and 40 cm should be considered as serving plates. They might have been used to carry food such as bread or to contain food to be used during communal eating events. Flat plates with an average rim diameter of 24-28 cm and 18-22 cm should be considered as eating plates. Their relatively small dimension might imply the use of these plates as single portion dishes. Plates do not occur in Middle Bronze Age Atchana while they were introduced during the Late Bronze Age.²² Local versions of the 40 cm Anatolian plate were recovered from Late Bronze Age II levels and from phase 3. This type of plate has a stepped rim formed by scraping away the clay on the inside ca. 3-4 cm down the rim. It can be considered a local imitation of the Hittite style platter rim found in many Hittite sites.²³ Flat plates with an average rim diameter of 40 cm are not very common in the Iron Age levels of Alalakh while they are very popular in all contexts dated to the Late Bronze Age II.²⁴ In contrast, flat plates with an average rim diameter of 24-28 cm and 18-22 cm are very popular throughout all the Iron Age levels. Flat plates are not deep enough to con-

tain liquid as any attempt to move the flat plates will result in the spilling of the liquid and therefore they have been considered as compatible with the dry food consumption.

Flat plates represent the 12.40% of the whole assemblage. They are more popular in the first phases of the Iron Age (phases 3a-b: 23.27%); and less popular in the later phase of the settlement (phases 2a-b: 24.57%; phase 1: 12.36%).

6. Eating: liquid food consumption

A vessel, in order to be considered suitable to consume liquid food, must have an open shape, to provide an easy access to its content; a shallow body form apt to contain liquids; a flat or ring base to give the vessel stability and a rim shape designed to obstruct the flat surface and to prevent the spilling of its content or that facilitates the direct ingestion of the content.²⁵ The shapes recovered in Atchana Iron Age levels that best suit these features are the rim bowls (fig. 2: b) and the shallow bowls (fig. 2: c).²⁶

Rim bowls have a shallow body, a flat or a ring base and a thickened internal rim that can prevent the spilling of its content. The design of their shape and in particular of the rim, that is thickened internal, make them unsuitable for the consumption of liquid food by lifting them to the mouth.

Shallow bowls have a shallow body, a flat or a ring base and a thickened external rim. The presence of the thickened external rim will not prevent the spilling of a liquid content but it may allow the consumption of fluid contents by using tools such as a spoon or bread.

These shapes represent the 12.69% of the whole pottery assemblage: shallow bowls are more common during the first phases of the Iron Age I (phases 3a-b: 18.62%) and they decrease during the later phases (phases 2a-b: 10.65%; phase 1: 0.11%); rim bowls stay constant during the Iron Age I (phases 3a-b: 21.2%; phases 2a-b: 21.2%) and decrease during the Iron Age II (phase 1: 3.56%).

²² HOROWITZ in press.

²³ GLATZ 2009, p. 130; HOROWITZ 2015, p. 171.

²⁴ HOROWITZ in press.

²⁵ GLATZ 2015, p. 197.

²⁶ PUCCI in press.

In addition to these shapes, it should be noted that the carinated bowls (fig. 2: f), the hemispherical (flaring) bowls (fig. 2: g) and the hemispherical rounded bowls (fig. 2: e) with an average rim diameter of 18-20 cm and with a capacity of 1 lt might have been used as eating bowls.

7. Drinking

Vessels suitable for direct drinking must have an open shape and a rim shape that facilitates the direct access to the drink and a size and capacity suitable for a single portion.²⁷ Shapes in the Iron Age Atchana typology with affordances that meet these features are the carinated bowls (fig. 2: f), the hemispherical (flaring) bowls (fig. 2: g) and the hemispherical rounded bowls (fig. 2: e).

They come in two sizes: bowls with an average rim diameter of 14-18 cm and a capacity of 0.50-0.60 lt and bowls with an average rim diameter of 10-12 cm and a capacity of 0.20-0.30 lt.

Although their design suggests that these shapes were used as drinking vessels, as already suggested previously, the bigger ones might have been used as eating vessels.

All these shapes represent the 12.04% of the whole pottery assemblage: carinated bowls are less popular during the first phases of the Iron Age (phases 3a-b: 5.26%) and more popular in the later phases (phases 2a-b: 12.53%; phase 1: 6.3%); hemispherical (flaring) bowls are not very common during the Iron Age I (phases 3a-b: 0.83%; phases 2a-b: 0.83%) but increase during the beginning of the Iron Age II (phase 1: 2.73%). A similar pattern can be noted with the hemispherical rounded bowls (phases 3a-b: 7.9%; phases 2a-b: 23.5%; phase 1: 3.09%).

8. Serving

The functional category of food consumption includes a category of vessels meant to contain, to mix and to serve food.

These containers need to be deep enough to contain a substantial amount of liquid or more generally of food, and they need to have a rim designed in order to avoid the spilling of the content; they might also have such a volume and size to be easily lifted and the design might include attributes modelled to facilitate the lifting.

These vessels are considered serving or mixing vessels and not as short-time storage vessels as they were possibly used as part of the tableware.

Vessels that satisfy these attributes found in Iron Age levels of Alalakh are the pitchers (fig. 3: d), the kraters (figs. 2: i-j), the deep bowls (fig. 2: h) and the bigger size version of the eating bowls (fig. 2: d). Pitchers are vessels designed to contain liquids and modelled to facilitate the lifting. These are closed shapes, jars, with a spout.

The use of kraters as mixing vessels for wine and other drinks is very well established in the literature regarding the Near East and the Mediterranean area.²⁸ While it is very well possible that kraters were used as mixing vessels, it is also possible that mixing was not the only function they were used for.

Other vessels suitable as liquid containers and possibly used as serving vessels or for short-term dry storage are the deep bowls (fig. 2: h). They have a deep and large body and a simple or thickened external rim but they are too large and might have resulted too heavy to be lifted for a direct consumption. The shape and size of the kraters and the deep bowls suggests that they were used together with serving tools such as spoons or dippers. However, no spoon has been found in Iron Age Alalakh and very few dippers have been retrieved,²⁹ therefore it is possible that the bowls were directly dipped in the kraters or deep bowls.³⁰ Kraters represent the 1.11% of the whole pottery assemblage. Their frequency is constant towards all the phases of the Iron Age (phases 3a-b: 2.61%; phases 2a-b: 2.35%; phases 1: 1.4%).

²⁷ HENRICKSON, MCDONALD 1983; HALLY 1986.

²⁸ YASUR-LANDAU 2010; STEEL 2004; 2013, p. 31.

²⁹ KOHEL 2017, fig. 18.4.1.2.

³⁰ PUCCI in press.

9. Storage

This functional category includes all vessel used to store liquid or solid food. They can be further divided into short and long term storage vessels and dry and liquid storage.³¹

The main difference in between liquid and dry storage vessels is in the dimension of their opening and the presence of the neck.

10 Liquid Storage

Vessels suitable to store liquid contents should have a combination of attributes to satisfy certain needs. Vessels used to store liquid products should have a small opening size and a neck in order to reduce the spillage and the evaporation of the content itself and to facilitate the pouring. Vessels used to store liquids with an opening not allowing the insertion of a tool such a ladle, must have a size and a volume to allow them to be easily lifted when needed. Consequently, according to their size and volume, the vessels should be divided into short and long term storage: a short-term storage vessel will have a smaller size and volume in comparison to the long-term storage vessel.

Vessels that satisfy the requirements for short-term storage are the high-necked jars (fig. 3: c). They have an average rim diameter of 4-11 cm and a capacity of ca. 3 lt, a thickened or pinched rim, a high and narrow neck and possibly a piriform or globular body and ring base.

Other vessels suitable to store liquid food for a short term are the globular jars (fig. 3: b). They have a ratio of height more than twice its radius; a relative wide opening with an average rim diameter of 12-14 cm and a capacity of ca. 13 lt. Generally, they have an everted rim, a short neck, a globular body and a flat base.

Some rounded jar stoppers have been found in phase 1 and 2: they were cut out of pottery vessels and their diameter ranges from 4 cm to 5.5 cm. The presence of these jar stoppers suggests that

they were used to cover vessels with a small opening such as the High necked jars with a small rim diameter. Liquid storage vessels represent the 5.06% of the whole assemblage. They are not very common during the Iron Age I phases (phases 3a-b: 4.24%), but they tend to increase during the late Iron Age I (phases 2a-b: 9.37%) and the Iron Age II (phase 1: 10.10%).

11. Dry Storage

Vessels suited to store a dry content need to have an opening large enough to allow the insertion of a hand or of a tool but the same time they need of providing restrict access to the content in order to avoid decay and therefore they need a type of rim or an applied decoration on the body to facilitate the fastening of a flexible covering on top of it. Any type of food and in particular dry food needs to be kept in a dry place, with a stable temperature, ventilated and with no light. The presence of the neck might facilitate the observance of some of these conditions and therefore, when present might indicate the necessity of frequent access to the content. As we have seen in the previous paragraphs, vessels such as the deep bowl, the krater and the large-sized eating bowls, all of these shapes lacking of the neck, might have been used also as short-term dry storage vessels.

Vessels suited to store dry food for a long-term are the pithoid jars (fig. 3: a). Usually they have a thickened external rim, a pointed base and a sort of decoration underneath the rim to help fastening the cloth in order to close the opening. They have an average rim diameter of 40 cm and a capacity of ca. 60 to 150 lt.

Pithoid jars are very uncommon throughout all the Iron Age at Alalakh, they represent the 0.73% of the whole assemblage and their numbers is very constant throughout all the phases (phases 3a-b: 0.5%; phases 2a-b: 1.85%; phase 1: 0.35%).

³¹ HENRICKSON, MCDONALD 1983.

12. Conclusions

Social habits and behaviours involving food preparation and consumption are connected with vessels use and with their function. By identifying functional attributes of different vessel shapes and size it is possible to relate archaeological pottery assemblages to past foodways. This approach holds certain advantages over more traditional type-variety classification systems as the analytical units defined are functionally meaningful. This article was meant to be a methodological baseline for future studies based on the pottery assemblages of the Amuq Valley and, more in general, of Northern Syria and Southeastern Anatolia. This study identified three functional categories for the Alalakh pottery assemblage in the Iron Age. These functional categories have been identified according to specific attributes of shape and design, physical and morphological variables as well as vessels capacity. The analysis performed on the Iron Age pottery assemblage from Alalakh resulted in the definition of three functional categories, namely: food processing, food consumption and storage. The analysis of the pottery according to these categories, rather than according to the morphology of the vessels, provides important data for identifying changes in habits and behaviours over time. When

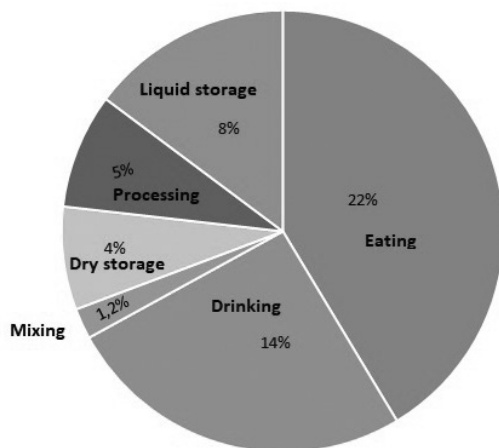


TABLE 2
Vessel functional distribution
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looking at quantities of pottery and at their functional categories it is possible to provide a detailed overview (table 2). The major changes are visible in the food processing and food consumption functional categories.

For instance, the increase use of the hole-mouthed cooking pot over the broad cooking pot might be linked with the introduction of new recipes, of new cooking installations and it might also suggest a change in the site's and household's economy during the first centuries of the Iron Age I and through the Iron Age II. According to the shapes and sizes of the Iron Age cooking pots from Alalakh, there was a certain variety of dishes that comprised an ordinary meal in that period. Meals were prepared for a large number of people and for a limited number of people. The presence of cooking pots of larger capacities indicates the consumption of food by a larger group of people who shared the everyday meals, or it may be related to their use in special events that involved a larger number of people. The use of smaller cooking pots indicates that meals were consumed by a rather limited number of people, suggesting a more domestic scale for their use.

The study of cooking pots' shape also shows morphological differentiation which points to different culinary practices. It appears that during the Iron Age I there was a preference for ceramic vessels used for boiling, while during the Iron Age II cooking vessels used for stewing were more popular.

Drinking and eating assemblages were influenced by the introduction of Aegean shapes and elements: the single portion shallow bowls (fig. 2: b) and rim bowls (fig. 2: c), which were so popular during the first phases of the Iron Age strongly decrease towards the Iron Age II while large quantities of bowls (figs. 2: e-g) have been found towards the end of the Iron Age I. The rim and size (0.80/1 lt) suggest that these shapes may have replaced the disappearing shallow bowls as single portion eating vessels.

The hemispherical (flaring) bowl is the local imitation of an Aegean shape (FS 284-286)³² and together with the carinated bowl and the hemispherical rounded bowl became very popular to-

³² FURUMARK 1941; MOUNTJOY 1999.

wards the end of the Iron Age I. These shapes are homogeneous in their general attributes and size (0.20/0.30-0.50/0.60 lt) and they can be considered as single portion drinking vessels.

As a result, the study of Alalakh's pottery assemblage demonstrates a change in culinary practices and household's economy as well as a strong presence of Aegean elements in the eating and drinking sets with the introduction of a new single portion bowl. However, the introduction of this new shape did not influence the division of food, which was still carried out through single portion bowls, or the way of drinking out of them.

In the Aegean world, stemmed vessels (i.e. kylikes) were used as drinking vessels, however, Aegean-type kylikes are considerably rarer in the Levant when compared to other Aegean shapes and recently their function as drinking vessels has been questioned and they have been considered as an Aegean imitation of Levantine incense burners.³³

Looking at the depiction of feasting and drinking in the Near East in between the Late Bronze Age and the Iron Age it can be noted that they represent the same gestures and the same way of drinking by using a bowl. In particular, it can be noted on the representation of feasting or banquet scenes from Zincirli³⁴ and other Neo-Hittite sites and from the Neo-Assyrian reliefs.

Because of this we might assume that the most common drinking vessel during the Iron Age in the Northern Levant was the bowl. The only vessels that can be compared with the ones represented in the depictions are the bowls grouped in the drinking bowls. Thus, we can suggest that the way of drinking did not change over time despite the introduction of new shapes and attributes.

Moving the focus on the introduction of Aegean shapes in the local pottery assemblages and particularly in the drinking assemblage we may notice that representation of feasting activities taking places in the Aegean depict people holding the drinking vessels by their stem.

As Landau rightly pointed out, people might have found new uses for the "Aegean" items linked with existing behavioural patterns.³⁵

The functional analysis of pottery is useful in understanding any change in the way specific vessels were used within a society. These changes may be markers of social and behavioural changes in social practice within a site or a community. The analysis performed on the pottery material from Alalakh revealed that, despite the change in the organisation of the Near Eastern states witnessed during the Iron Age I, the local material culture, drinking and eating habits point towards a strong continuity in the local tradition in which new habits merged.

³³ STOCKHAMMER 2012, p. 29; 2014, p. 140.

³⁴ STRUBLE, HERMANN 2009.

³⁵ YASUR-LANDAU 2005, p. 171.

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