



HAL
open science

The emergence of cultural identities and territorial policies in the longue durée: A view from the Zagros Piedmont

Régis Vallet, Johnny Samuele Baldi, Melania Zingarello, Martin Sauvage, Hugo Naccaro, Clélia Paladre, Claire Padovani, François Bridey, Kamal Rasheed, Kamal Raeuf, et al.

► **To cite this version:**

Régis Vallet, Johnny Samuele Baldi, Melania Zingarello, Martin Sauvage, Hugo Naccaro, et al.. The emergence of cultural identities and territorial policies in the longue durée: A view from the Zagros Piedmont. *Paléorient*, 2019, 45-2, pp.163-189. 10.4000/paleorient.751 . hal-03879201

HAL Id: hal-03879201

<https://hal.science/hal-03879201v1>

Submitted on 22 Dec 2022

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

The emergence of cultural identities and territorial policies in the *longue durée*: A view from the Zagros Piedmont

Régis Vallet, Johnny Samuele Baldi, Melania Zingarello, Martin Sauvage, Hugo Naccaro, Clélia Paladre, Claire Padovani, François Bridey, Kamal Rasheed, Kamal Raeuf and Qader Halkawt



Electronic version

URL: <https://journals.openedition.org/paleorient/751>

DOI: 10.4000/paleorient.751

ISSN: 1957-701X

Publisher

CNRS Éditions

Printed version

Date of publication: 1 December 2019

Number of pages: 163-189

ISSN: 0153-9345

Brought to you by Université Paris Nanterre



Electronic reference

Régis Vallet, Johnny Samuele Baldi, Melania Zingarello, Martin Sauvage, Hugo Naccaro, Clélia Paladre, Claire Padovani, François Bridey, Kamal Rasheed, Kamal Raeuf and Qader Halkawt, "The emergence of cultural identities and territorial policies in the *longue durée*: A view from the Zagros Piedmont", *Paléorient* [Online], 45-2 | 2019, Online since 01 December 2021, connection on 22 December 2022.

URL: <http://journals.openedition.org/paleorient/751> ; DOI: <https://doi.org/10.4000/paleorient.751>

THE EMERGENCE OF CULTURAL IDENTITIES AND TERRITORIAL POLICIES IN THE *LONGUE DURÉE*: A VIEW FROM THE ZAGROS PIEDMONT

R. VALLET, J.S. BALDI, M. ZINGARELLO, M. SAUVAGE, H. NACCARO,
C. PALADRE, F. BRIDEY, C. PADOVANI, K. RASHEED, K. RAEUF and Q. HALKAWT

Abstract. *Since 2015, fieldwork in the Western Qara Dagħ (Sulaymānīyah governorate, Iraqi Kurdistan) is opening up new perspectives on the dynamics of interaction between late prehistoric Southern and Northern Mesopotamia. Two sites, Girdi Qala and Logardan, are being investigated with a special focus on three main historical phenomena between 6th and 3rd millennia BC. A first major event is represented by the diffusion of the Ubaid horizon, which appears to occur as a very early process of acculturation between Halaf and Ubaid cultural entities. Then, the so-called Uruk “oikumene” is attested in the Qara Dagħ, three centuries earlier than previously documented in Northern Mesopotamia, at the very beginning of the 4th millennium BC. Later, around the middle of the 3rd millennium BC, the emergence of the so-called “Early Dynastic states” is documented at Logardan by the rebuilding of a monumental citadel. Architectural and ceramic data allow us to reassess these three major cultural dynamics, each of which implies specific modalities of interaction between the North and the South. This variable range of relationships shows that simplistic dichotomies between Northern and Southern people or “cultures” are misleading and ineffective. Indeed, as of the Late Prehistory, northern and southern communities have never evolved separately.*

Résumé. *Depuis 2015, la mission pluridisciplinaire du Qara Dagħ occidental (gouvernorat de Sulaymānīyah, Kurdistan irakien) ouvre de nouvelles perspectives sur les dynamiques d’interaction entre la Mésopotamie du Nord et du Sud. Deux sites, Girdi Qala et Logardan, font l’objet de recherches visant notamment à éclaircir trois grands phénomènes historiques compris entre le 6^e et 3^e millénaire av. J.-C. La première de ces dynamiques concerne l’expansion de l’horizon Obeid, qui se manifeste comme un processus très précoce d’acculturation entre Halaf et Obeid. Plus tard, l’“oikumene” urukienne est attestée dans le Qara Dagħ, trois siècles plus tôt que ce que l’on pensait jusqu’ici, dès le début du 4^e millénaire av. J.-C. Enfin, au milieu du 3^e millénaire av. J.-C., l’émergence d’« États proto-dynastiques » est documentée par la (re)construction à Logardan d’une citadelle monumentale. Les données collectées invitent à reconsidérer ces trois processus macro-historiques, impliquant chacun des modalités spécifiques d’interaction entre le Nord et le Sud. Cette vaste gamme de relations montre que les dichotomies élémentaires traditionnelles entre peuples ou « cultures » du Nord et du Sud ne permettent pas de rendre compte de phénomènes complexes qui, depuis la Protohistoire, n’évoluent jamais de façon autonome.*

Keywords. *Late Chalcolithic, Early Bronze Age, Kurdistan, cultural identity*

Mots clés. *Chalcolithique final, Bronze ancien, Kurdistan, identité culturelle*

One of the main topics of archaeological studies on Late Prehistory in Mesopotamia has always been the evolutionary modalities of so-called complex societies. Between 7th and 3rd millennia BC, the communities of the so-called Greater Mesopotamia radically transformed their internal organisation and reciprocal socio-economic interactions (Rothman

2001, 2002; Frangipane 2002, 2009, 2010; Nissen 2002; Carter and Philip 2010a; Marro 2010). Yet in no way does this justify an essentialist definition of those societies as “simple” or “complex” in themselves (with the latter supposed to have inevitably evolved out of the former). Likewise, this does not imply a linear or teleological development of social

“complexity” towards organisational features more and more similar to formal structures of current societies (Bolger and Maguire 2010; Verhoeven 2010). Therefore, although Mesopotamian Late Prehistory has seen the gradual emergence of large communities characterised by an increasing degree of political and economic integration, the stereotyped sequence of evolution from villages to cities to territorial states can no longer be seen as a broad-based linear narrative. The succession village-cities-states does not define a synthesis of social evolution (with dashes to indicate a linear consequentiality): it rather constitutes a schematic conceptualisation aimed at suggesting a series of organisational steps, each of which implies major discontinuities with respect to previous stages and therefore needs to be studied in its local and cultural specificities (Carter and Philip 2010b; Marro 2012; Iamoni 2016). To avoid using the notion of complexity merely in terms of neo-evolutionary thinking,¹ recent research focused both on site-specific processes of social change and large-scale dynamics of interactions between different cultural entities.

On the one hand, beyond broad regional syntheses, most of the recent archaeological literature tends to emphasise the need to explicitly examine the development of complexity on the basis of site-based and micro-regional data documenting historically grounded social transformations (Stein 2002; Butterlin 2003; Oates *et al.* 2007; Parker and Kennedy 2010; Rothman and Badler 2011; Baldi 2013; Strommenger *et al.* 2014; Vallet and Baldi 2016; Vallet 2018). In this sense, in the last few years, prehistoric research in Iraqi Kurdistan has opened up completely new scenarios, thus renewing historical paradigms about emerging social complexity and testing them in an area about which very little was previously known (Gavagnin *et al.* 2016).

On the other hand, late prehistoric processes of culture-contact have been approached as inherently complex phenomena since they involve dynamics of relationship and integration with a structural impact on political, economic, ideological, and identity levels (Özbal 2010; Stein 2010; Rothman and Gopnik 2011; Emberling and Minc 2016). Even

in this sense, recent research in Iraqi Kurdistan has offered the possibility of investigating cultural relations between northern and southern cultural entities in an almost unknown region, but also of overcoming this long-standing North-South dichotomy by suggesting unprecedented comparative perspectives between the West (the Euphrates basin) and the East (especially the areas east of the Tigris River) of Greater Mesopotamia (Wengrow *et al.* 2016; Vallet *et al.* 2017).

The intersection of these two tendencies—the study of complex processes in their local specificities and the analysis of cultural interactions as a factor of complexity—has led to an increased focus on three major phases of political and social expansion of complex societies in Mesopotamia: the emergence of the Ubaid ranked polities in the 6th millennium BC, the development of the Uruk urbanisation and “colonial”² network in the 4th millennium BC, and the rise of the so-called “Early Dynastic states” around the middle of the 3rd millennium BC. In a seminal article, by citing C. Dikens, G.J. Stein and R. Özbal (2007) used the term “*oikumēnai*” to indicate the Ubaid and Uruk spheres of cultural interaction, not only defined by specific architectural, ceramic and artefactual communalities, but also by distinct modalities of socio-economic expansion. The third “*oikumēne*”, represented by Early Dynastic states, is also a distinct phenomenon, which involves increasingly complex and articulated relations concerning both local political organisation and supra-regional interactions with other areas of Greater Mesopotamia (Steinkeller 1993; Huot 2004; Evans 2007). To account for these dynamics, here the concept of “*oikumēnai*” is not just adopted, but also slightly adapted to define polythetic and non-normative “social fields” (Wolf 1982; Layton 1997: 38-39; Welsch and Terrel 1998), intended and unintended³ sets of interactions and social influences on a territory.

1. On the *longue durée* scale, the Mesopotamian panorama seems to adapt to the classification of organisational forms proposed by Service (1975). But, as many scholars have pointed out (Francfort 1997; Beekman and Baden 2005; Thiel *et al.* 2010), the problem is rather to take for granted some form of evolutionary continuity between different organisational systems such as villages, cities, and territorial states. In order to account for an evolution emerging from deep discontinuities in terms of historical causalities and modalities of social structuring (Roux and Courty 2013), it is, therefore, necessary to define the mechanisms specific to each one of these organisational systems.

2. The debate on nature (commercial, colonial, political, etc.) and reasons (due to demographic or environmental factors) of the Uruk expansion has lasted for decades (Algaze 1993; Stein 2001, 2002; Butterlin 2003, 2018) and has re-emerged these last years because of recent fieldwork research in Iraqi Kurdistan (Vallet *et al.* 2017). See also BALDI J.S., Encounters: Pots and people in the early days of the Uruk expansion in the Qara Dagh area (Zagros Piedmont), *Journal of Anthropological Archaeology*, forthcoming. Here, the term “colony” referred to the Uruk settlements in Qara Dagh is not aimed at interpreting them as non-independently self-controlled communities, or as villages under the control of a separate entity serving the capital function. Therefore, the term “colony” is not intended here in its political significance (Balandier 1955; Cooper 2005), but rather according to its etymological meaning, from Latin “*colere*” (“farming”), as village communities of foreign immigrants have settled on a permanent basis in a territory and mainly engaged in agricultural activities (Baldi 2016).

3. Namely sometimes not voluntary and not perceived, but always influenced by the social habitus (Bourdieu 1972).

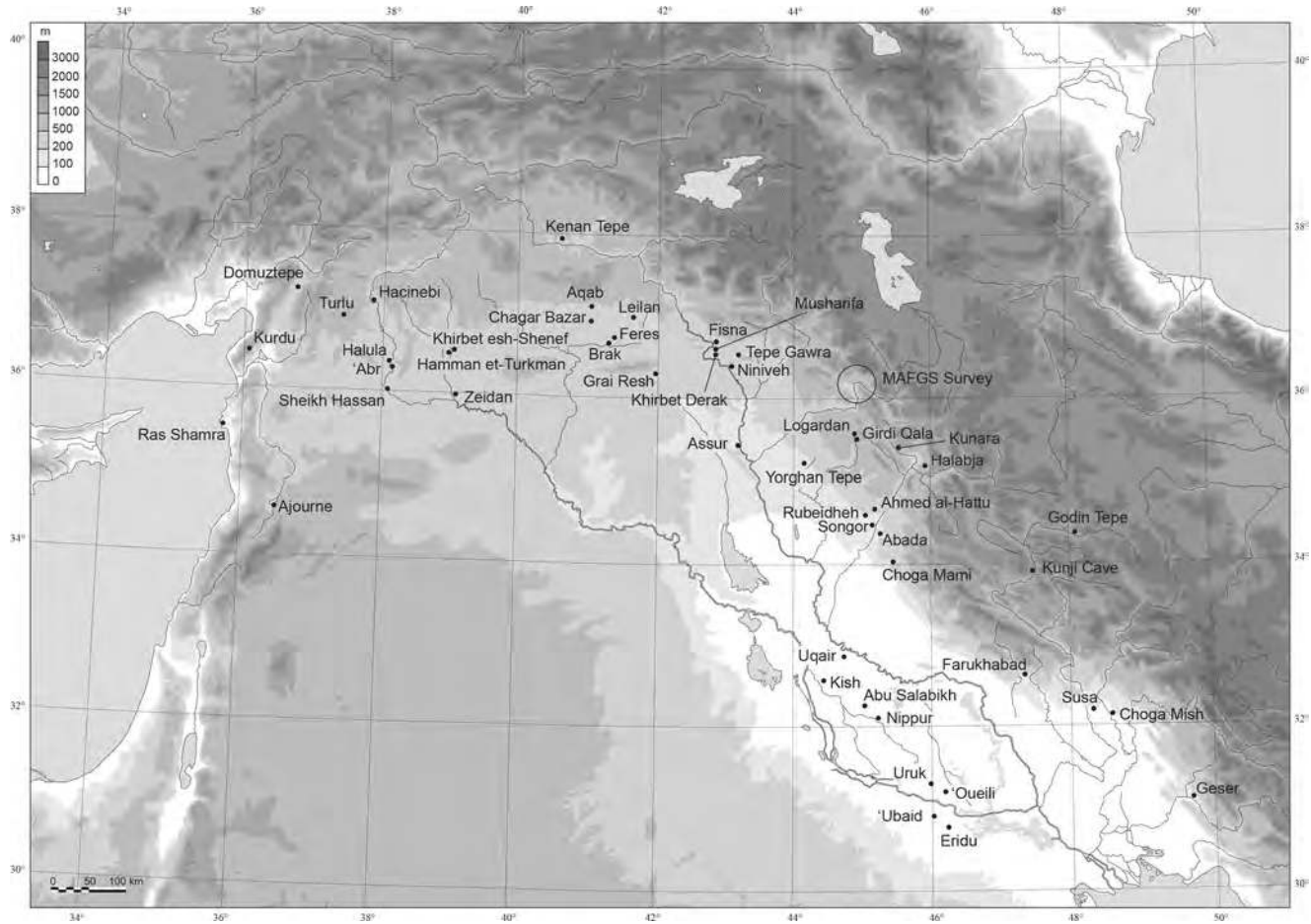


Fig. 1a – Sites mentioned in the text and geographical location of the *Qara Dagh* area (background map and CAD M. Sauvage).

In the history of the shifting and multifaceted relationships between North and South, all these “*oikumenai*” imply specific modalities of interaction between different but constantly intertwined cultural areas. The case-study here presented is based on recent data of the archaeological expedition in the western *Qara Dagh* (Sulaymānīyah governorate, Iraqi Kurdistan). Since 2015, this mission has been investigating different cultural and political homogeneities in a micro-region around two sites: Logardan and Girdi Qala—main and north mounds (fig. 1a-b).⁴ Boundaries and intersections between “*oikumenai*” have been observed and defined not only on the basis of architectural and material-cultural evidence, but also through the *chaîne opératoire* approach applied to the 6th-3rd millennia ceramic assemblages. *Chaînes*

opératoires express culturally-based series of actions transforming raw materials into finished products and allow to identify traditional ways of producing ceramics as part of traditional technical identities associated with specific groups of craftspeople (Stark *et al.* 2008; Roux 2019a). The aim of this article is not to discuss detailed data on ceramic technology, which other studies present more extensively.⁵ Nevertheless, some distinctive features of indigenous or allogeneous *chaînes opératoires* will be evoked to describe similarities or differences between traditional operational sequences. In fact, similar or identical *chaînes opératoires* signal craftspeople affiliated to the same social group, while divergent *chaînes opératoires* indicate different groups of artisans (Gosselain 2011; Shennan *et al.* 2015; Roux *et al.* 2017).

4. *Paléorient* has already reported our first results (Vallet *et al.* 2017). The annual reports are available at <http://cnrs.academia.edu/RegisVallet>.

5. Baldi forthcoming, see note 2.



Fig. 1b – Aerial view showing the relative location of Girdi Qala and Logardan (background map and CAD M. Sauvage).

Therefore, technical relationships (parallelisms, hybridisations, borrowings, etc.) between methods for producing ceramics constitute reliable indicators of synchronic and diachronic social relationships (borders, exchanges, reciprocal links, etc.) between the groups of producers underlying the traditional *chaînes opératoires* (Roux 2019b).⁶

Far from providing a linear narrative of increasing social complexity, the broad picture emerging from the Qara Dagh suggests a much more nuanced approach to relationships between the so-called late prehistoric “cultures” of the different sectors of Mesopotamia.

6. Consequently, in this paper, issues related to the “identity” (namely the perception and definition of the “self” and the “other”) of North and South Mesopotamian groups, are understood from the point of view of the various “technical identities” (Baldi and Roux 2016) and “communities of practices” forged by the transmission of traditional ways of doing within learning networks belonging to specific groups (Lave and Wenger 1991; Shennan 2013).

AN ACCULTURATED VILLAGE “OIKUMENE”: THE EMERGENCE OF THE UBAID

Clear evidence for the first one of these “*oikumenai*” comes from the bottom levels of trench C at Logardan. 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 were embedded in one another, forming one architectural (probably domestic) unit. Levels 8 and 7 are composed of several kilns arranged on different layers. The whole area yielded both Halaf and Ubaid sherds unusually associated in the same dwelling (fig. 2-3).

Level 9, with the burnt circular and rectangular buildings, shows the whole package of the Halaf “culture”: perforated potsherds, spindle whorls, circular ceramic discs, coarse flattened-base basins, miniature stone vessels, fine painted wares, orange (plain and sometimes painted) pottery, a roughly

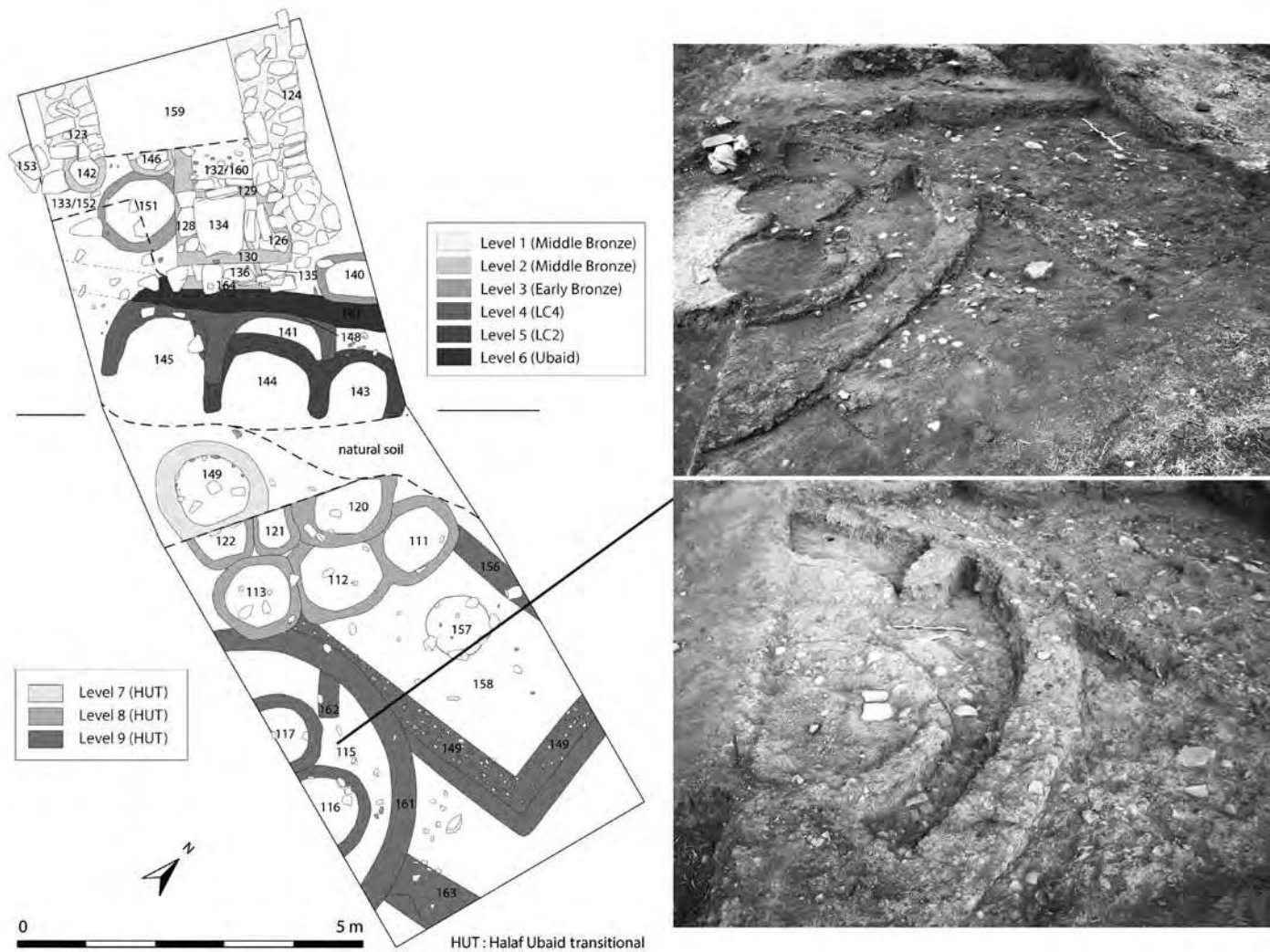


Fig. 2 – Trench C at Logardan: plan and photos of levels 9-7 Halaf-Ubaid transition (CAD H. Naccaro; Qara Dagh Archaeological Mission).

conical figurine, and a rounded *tholos*. Nevertheless, the ceramic assemblage from this level is characterised by some anomalous features. In particular, 12% of sherds show proper Ubaid attributes (fig. 3.2, 4, 8-10), such as black-on-buff dense mineral fabrics, geometric designs, and shapes inconsistent with Halaf typology, such as hemispherical bowls with in-turned rims and shallow bowls with beaded rims (fig. 3.1, 8). Moreover, Ubaid-like and Halaf-like ceramics share some motifs, such as the “Maltese cross” which is documented both on Halaf red-painted sherds and Ubaid black painted ceramics (fig. 3.23). 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 and decorations largely

attested in Central Iraq during the Early Ubaid (Ubaid 1-2).⁷ 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 (fig. 3.3, 5-6, 11-26). Although clearly corresponding to a generic Halaf horizon, these finds do 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. Indeed, in trench C level 9 at Logardan, the presence of some rare polychrome decoration, some

7. See for instance at Tell Abada III-II, during the Early Ubaid and the Halaf-Ubaid transition (motifs in fig. 3.11; Jasim 1985: fig. 202d, 220a), or at Tell Songor B (see the motif in fig. 3.22; Jasim 1985: fig. 252.4).

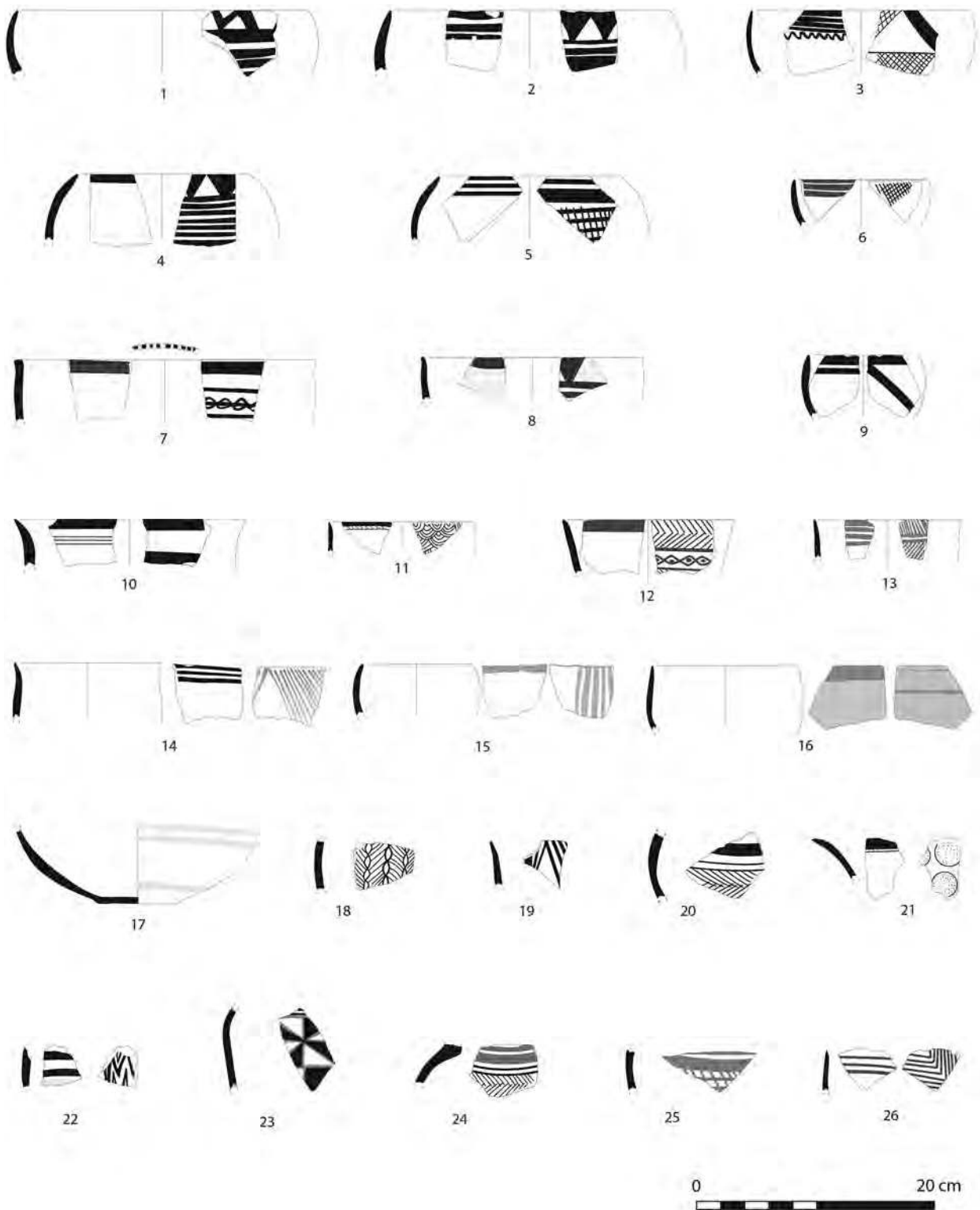


Fig. 3 – Halaf-Ubaid transitional sherds from Logardan trench C levels 9-7 (CAD X. Desormeau; Qara Dagħ Archaeological Mission).

fragments of “rusticated” (or fingernail impressed) ware and bow rim jars could suggest a quite Late Halaf phase.⁸ But, at the same time, Final Halaf assemblages are characterised by several types which are absent at Logardan, such as miniature zoomorphic and anthropomorphic vessels, or footed vessels, while a Late Halaf hallmark like carinated so-called “cream-bowl” is extremely rare (just one example). Moreover, a reasonable number of sherds have very simple linear geometric motifs (fig. 3.12-15, 20, 24, 26), considered as typical of the proto-Halaf and Early Halaf phases.⁹

Later on, in levels 8 and 7, what initially (in level 9) might have appeared as mixing or simple contact between two different cultural spheres becomes entirely recognisable as a process of evolution. The Halaf-Ubaid transition becomes more and more discernible, with a decreasing quantity of Halaf sherds and an increasing percentage of black-on-buff Ubaid ceramics. From level 8, the Halaf-related red-painted decoration becomes extremely rare. Some Halaf material-cultural traits, like the presence of small stone vessels and pierced potsherds, are still attested in 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 completely consistent with a “mature” typical northern Ubaid horizon (Ubaid 3).¹⁰

This evolutionary dynamic is outlined as an acculturation, since the elements of a cultural system give way to (or are transformed into) those of another system because of a transfer of ideas, practices, and ways of doing things due to continuous, direct and long-lasting contact between groups of individuals from different cultures (Rudmin 2003; Sam 2006). This tendency is also evident from ceramic technology (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 hollowing-out a lump of clay, while Ubaid ceramics were made by hammering on convex support or by overlapping 2.5 cm thick coils. Later, in level 8, Ubaid pastes start to be shared by the entire assemblage, 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).

From level 9, it seems that both Halaf-related and Ubaid-related sherds represent quite an early phase (Campbell and Fletcher 2010), characterised by linear decoration similar to the so-called Choga Mami transitional pattern in Central and Southern Mesopotamia (defined by Oates 1960b, 1969, especially in the Hamrin valley, at Tell Songor and Tell Abada (Jasim 1985: fig. 98b-c, 107d, 108-109). All these features are consistent with an Early/Middle Halaf phase (Cruells 2017),¹¹ with the Ubaid 1-2 tradition (the Early Ubaid phases in the South; see Oates 1960a; Jasim 1985; Huot and Vallet 1990, 125; Bréniquet 1996b) and even with Early/Early-Middle Susiana phases at Choga Mish (Alizadeh 2008). Decorative styles and technical hybridisations recalling the Central Iraqi “Choga-Mami transitional” style have also been recently recorded close to Halabja, in Northeastern Iraqi Kurdistan (Altaweel *et al.* 2012: 24, fig. 10.6-9). Likewise, an early emergence of the Ubaid horizon is also documented in the Zagros Piedmont, in the region around the Dukan Lake (districts of Rania, Bingrd and Peshdar: see Giraud *et al.* this volume).¹² Technical hybridisations, with pastes shared by sherds showing different painted decoration, clearly indicates contacts between Late Pottery Neolithic cultural entities (namely Samarra and Halaf) and the first evidence for the North Mesopotamian Ubaid. In level 9, the presence of Ubaid sherds suggests that the first cultural Halaf marker to be replaced was pottery, as a material element reflecting community membership and public identity. Then, in levels 8 and 7, all the other Halaf highly visible goods and badges of rank progressively disappear. By contrast, the longest-lived Halaf attributes are small artefacts such as pierced ceramic pendants, stamp seals, and stone vessels, namely items used as indicators of personal identity in face-to-face or domestic interactions. The persistence of these material traits relating to the personal sphere indicates that there has been no abrupt cultural change, but rather a progressive transformation (Berry 2003; Sam 2006) which, with different rhythms, has affected various practices and social contexts and has translated the Ubaid culture into the pre-existing material and symbolic system. This is the same process of acculturation already stressed both for ceramics and other material cultural elements at Khirbet

8. See at Tell Halula, in Northern Syria (Gómez-Bach 2017: 45, fig. 4.4d-e), or at Khirbet Derak, in Central Iraq (Bréniquet 1996a: 159).

9. See for instance at Tell Halula or Chagar Bazar, in Northern Syria (Cruells 2017, fig. 2.6).

10. The overall Ubaid 3 assemblage at Logardan is closely similar to the repertoire from the Hamrin basin (as at Tell Abada phase II-I; Jasim 1985, fig. 176, 179-180, 190e) and confirms the existence since the 6th millennium BC of a north-south corridor running alongside the Zagros Piedmont (see Giraud *et al.* in this volume).

11. For Early-Middle Halaf close and recent parallels coming from Tell Begum and Tepe Marani in the Shahrizor area in Iraqi Kurdistan, see Wengrow *et al.* 2016: fig. 18; Nieuwenhuys 2018: 49.

12. Other sectors recently surveyed in Iraqi Kurdistan attest analogous settlement and ceramic dynamics for the Halaf-Ubaid transition: see, for instance in the Halabja region, Mühl and Nieuwenhuys 2016.

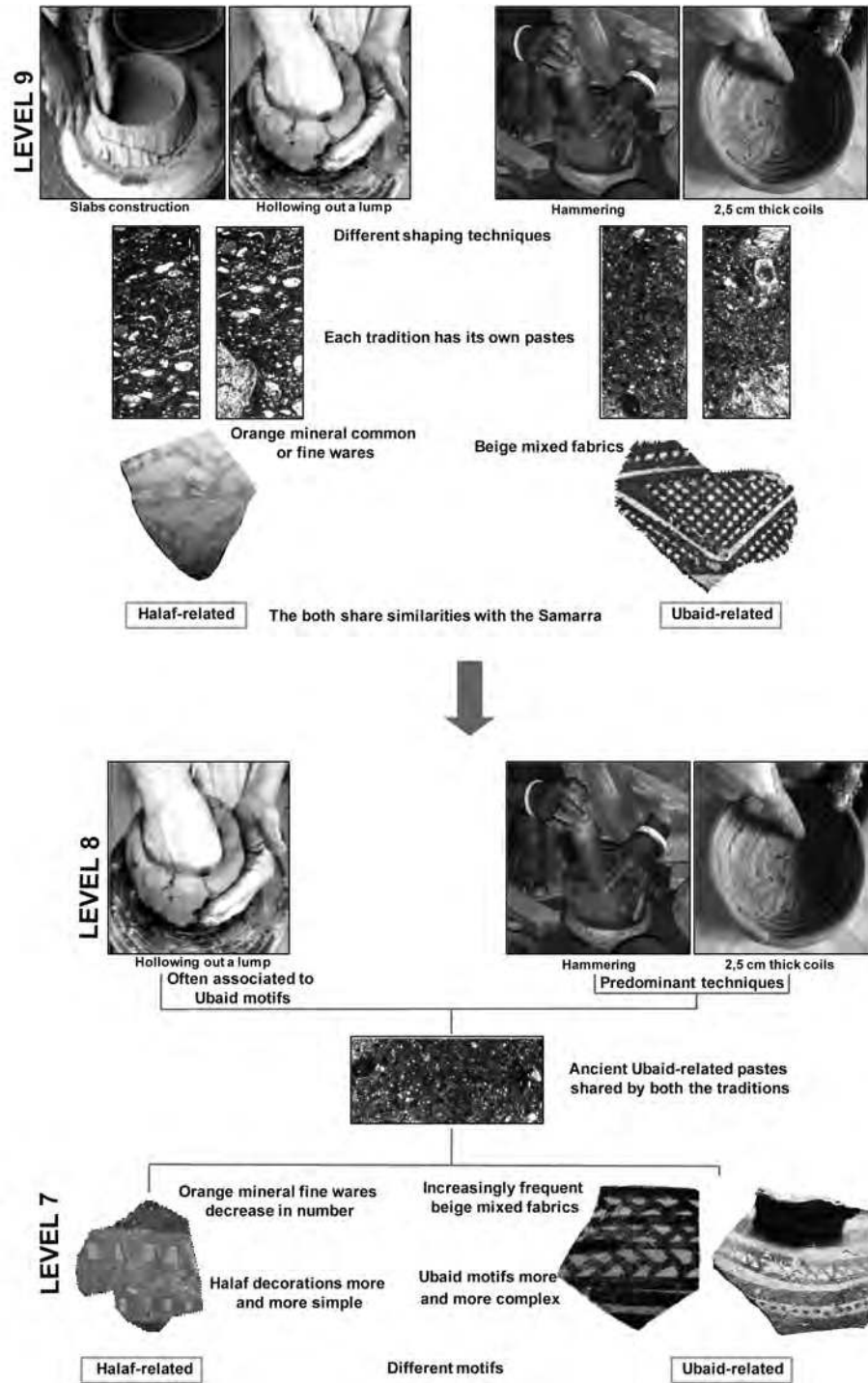


Fig. 4 – Process of techno-petrographic acculturation of the ceramics at Logardan trench C levels 9-7 (CAD J.S. Baldi).

esh-Shenef (Akkermans and Wittman 1993), Tell Turlu (Bréniquet 1991), Domuztepe (Campbell and Fletcher 2010), and above all at Tell Kurdu (Özbal 2010) and Tepe Gawra XIX-XVII (Stein and Özbal 2007; Stein 2010: fig. 2.6). Trench C at Logardan provides clear evidence that this long and deep process is not limited to superficial characters and determines intertwining and reciprocal transformations between distinct traditions. These data seem to indicate a process begun by the mobility of relatively small groups during the Ubaid 1-2 (beginning of the 6th millennium BC). The consequence of this acculturation, with the appearance of the large-scale homogeneity of the Ubaid as an “*oikumene*” is, in fact, the result of the emergence of several local Ubaid assemblages strongly characterised by local elements depending on the various regions (Stein and Özabal 2007; Stein 2010: 24).

A PROTO-URBAN FOREIGN “*OIKUMENE*”: THE URUK SETTLERS

The rise of the Uruk sphere in the North constitutes a different kind of cultural and organisational homogeneity (Butterlin 2003, 2018). In the western Qara Dagh area, surface surveys have produced purely North Mesopotamian ceramics alongside abundant South Mesopotamian Uruk materials. Morpho-stylistic analyses and regional parallels have shown that local and foreign inhabitants lived together over many centuries since the beginning of the 4th millennium BC. Evidence in this sense comes both from Girdi Qala and Logardan.

Table 1 summarises current stratigraphic data about the Uruk presence at Girdi Qala and Logardan. Three main chronological phases are documented, each one characterised by a specific ceramic assemblage.

In the Early Uruk/Late LC2 phase, at the beginning of the 4th millennium BC, Uruk artisans produced South Mesopotamian ceramics in the basal levels (10-8—but the

sequence might continue deeper) of trench C at Girdi Qala, where several large pottery kilns were clustered and organised in batteries connected to each other to fire South Mesopotamian vessels (fig. 5.2). At the same time, the upper part of Logardan was occupied by a monumental acropolis accessed by a stone ramp on the southwestern slope of the site (fig. 6.2). This structure, identified in trenches A-B, was built of uneven stones supporting a causeway with mortar, fragments of bricks and Early Uruk sherds between the stones (Vallet *et al.* 2017: fig. 8-10). Such a huge construction implied use of a considerable workforce to provide an access to the high part of a site, where some Uruk decorative clay cones, collected during the survey (Vallet *et al.* 2017: fig. 7), were probably associated with the conspicuous buildings excavated in trenches D and E. On the upper terrace of Logardan, in trench E, a system of gates (fig. 6.3) made up a passage towards the top of the hill, occupied at its northern edge by a monumental building, extensively excavated in a trench D over about 450 m² and a depth of almost 6 m (fig. 6.4). Even if, for the moment, the planimetry (bipartite or tripartite) of this huge edifice is only partially exposed, it was integrated into an acropolis, where 98% of the sherds belong the same South Mesopotamian tradition recognised in the Early Uruk kilns of trench C at Girdi Qala.

Indeed, just 30% (coming from filling layers) of the assemblage in the basal levels of the ceramic workshop of trench C at Girdi Qala is represented by indigenous shapes (fig. 7.1-8): inwards bevelled rim bowls (fig. 7.1), hole-mouth jars (fig. 7.7), small fine carinated bowls (fig. 7.3), double-rim and flange-rim jars (fig. 7.8). The same North Mesopotamian assemblage is documented in the Northern Syrian steppe, Southern Anatolia and in the Mosul area.¹³ *In situ* materials (about 70%) from the same basal levels (10-8) of trench C at Girdi Qala, as well as

13. See for instance at Feres, Brak, Grai Resh, Yorghan Tepe, Nineveh, or Musharifa: Starr 1939; Lloyd 1938, 1940; Oates 1986, 1987; Numoto 1987: fig. 14; Gut 1995: 248, 2002; Kepinski 2011; Baldi 2013, 2016; Vallet 2018.

Table 1 – Chronological sequence of the Uruk presence at Girdi Qala and Logardan. Absolute dates and relative chronologies are based on recent ¹⁴C analyses (Stein 2012: table 1; Emberling and Minc 2016: table 1; Vignola et al. 2019: fig. 4).

Absolute chronology	South-Mesopotamian phases	North-Mesopotamian phases	Southern reference sequence: Uruk Eanna	Northern reference sequence: Tell Feres	Girdi Qala	Logardan
3500 BC	Middle Uruk	LC4	VII	1c	Northern mound (trench D)	
3800 BC		Early LC3	VIII	2		
				3	Trench C 1-7	Trenches D-E: D 4a/E IVa
4000 BC	Early Uruk	Late LC2	XI-IX	4	Main mound Trench C 8-10	Trenches A-B (ramp) Trenches D-E: D 5-4b/E IVb
			XII	5		
4200 BC	Ubaid 5 (Final Ubaid)	Early LC2	XIII	6		

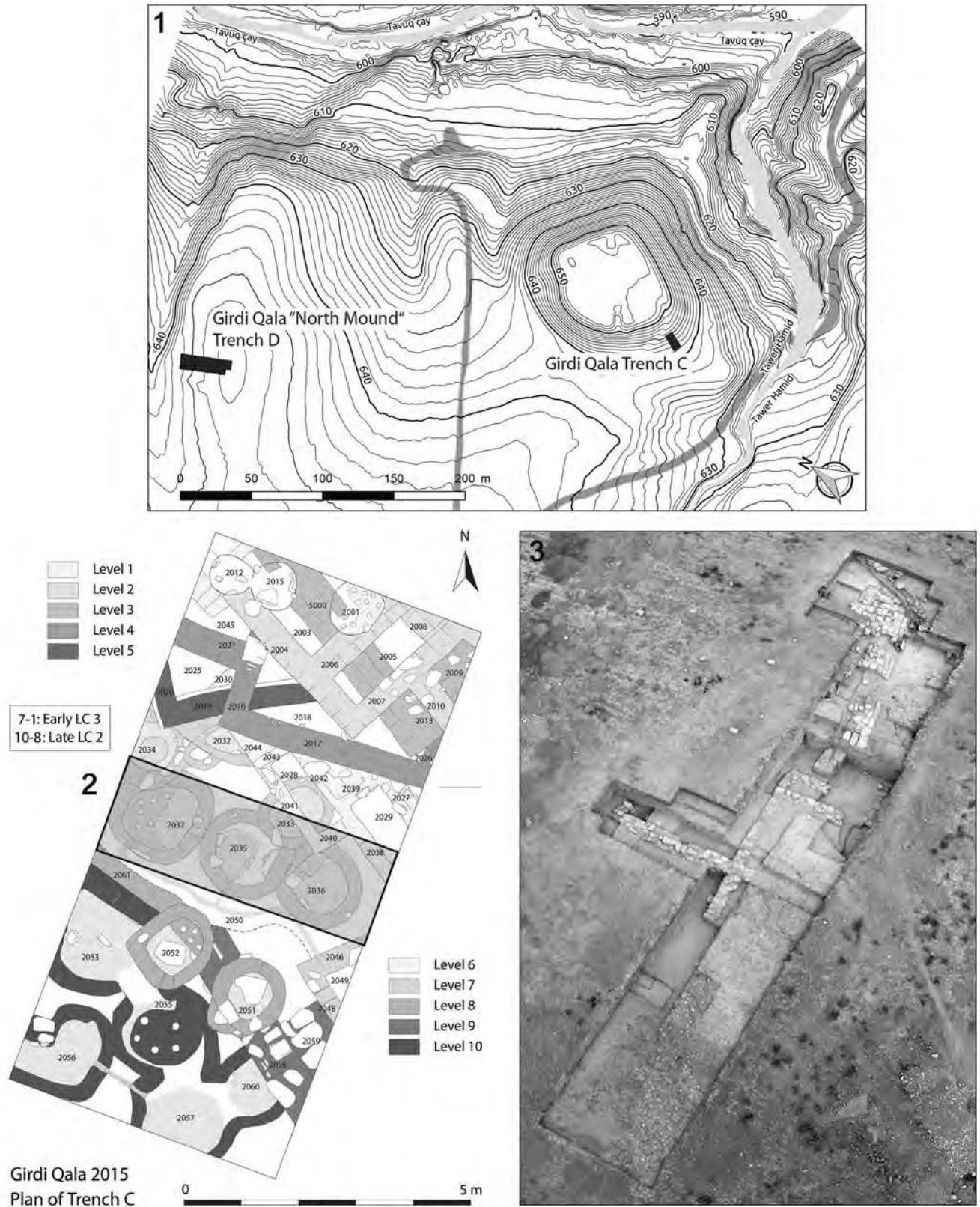


Fig. 5 – Girdi Qala (CAD H. Naccaro; Qara Dagh Archaeological Mission). 1. Plan of trench C on the main mound; 2. Topographical plan of the site; 3. Aerial view of trench D on the northern extension.

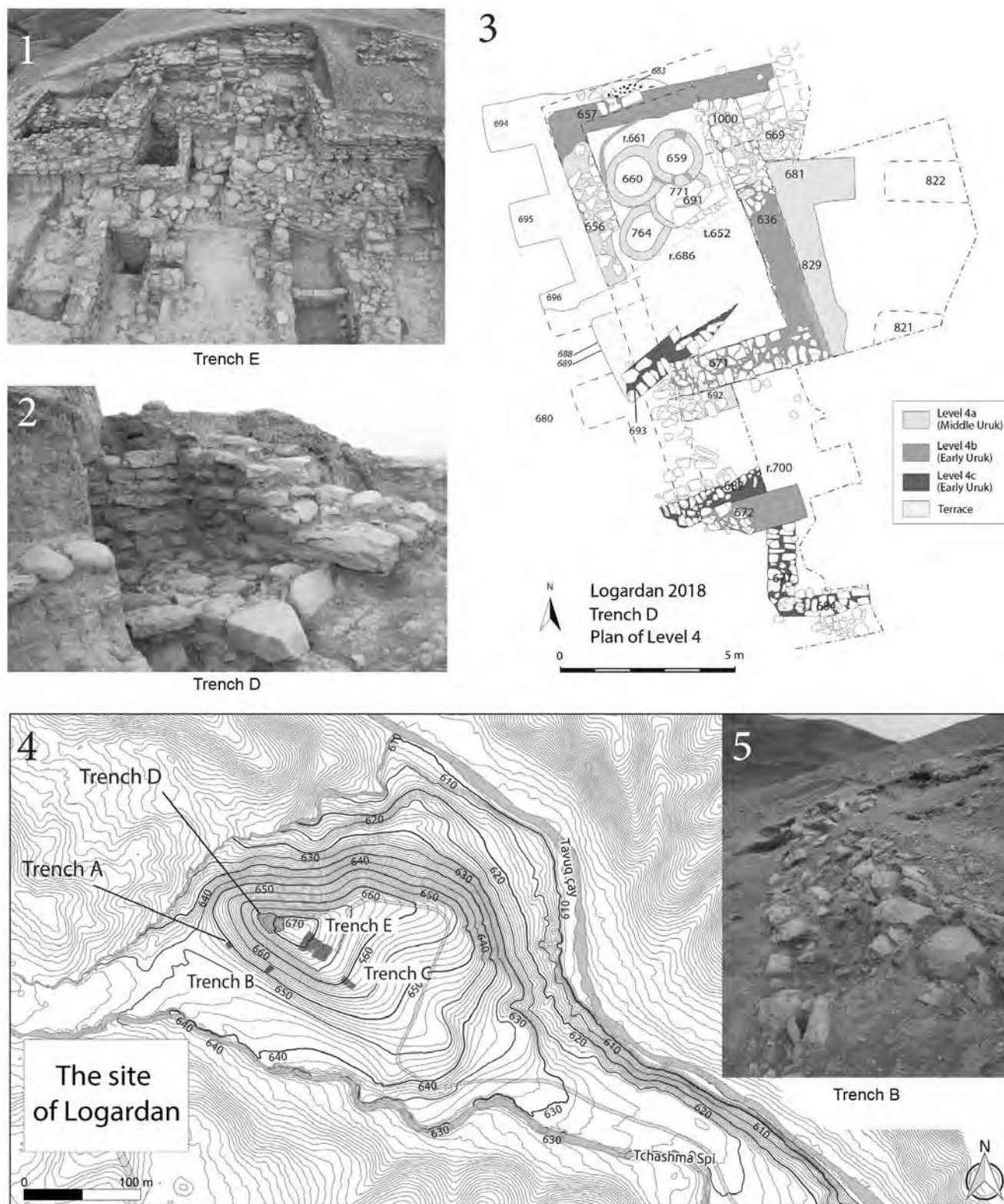
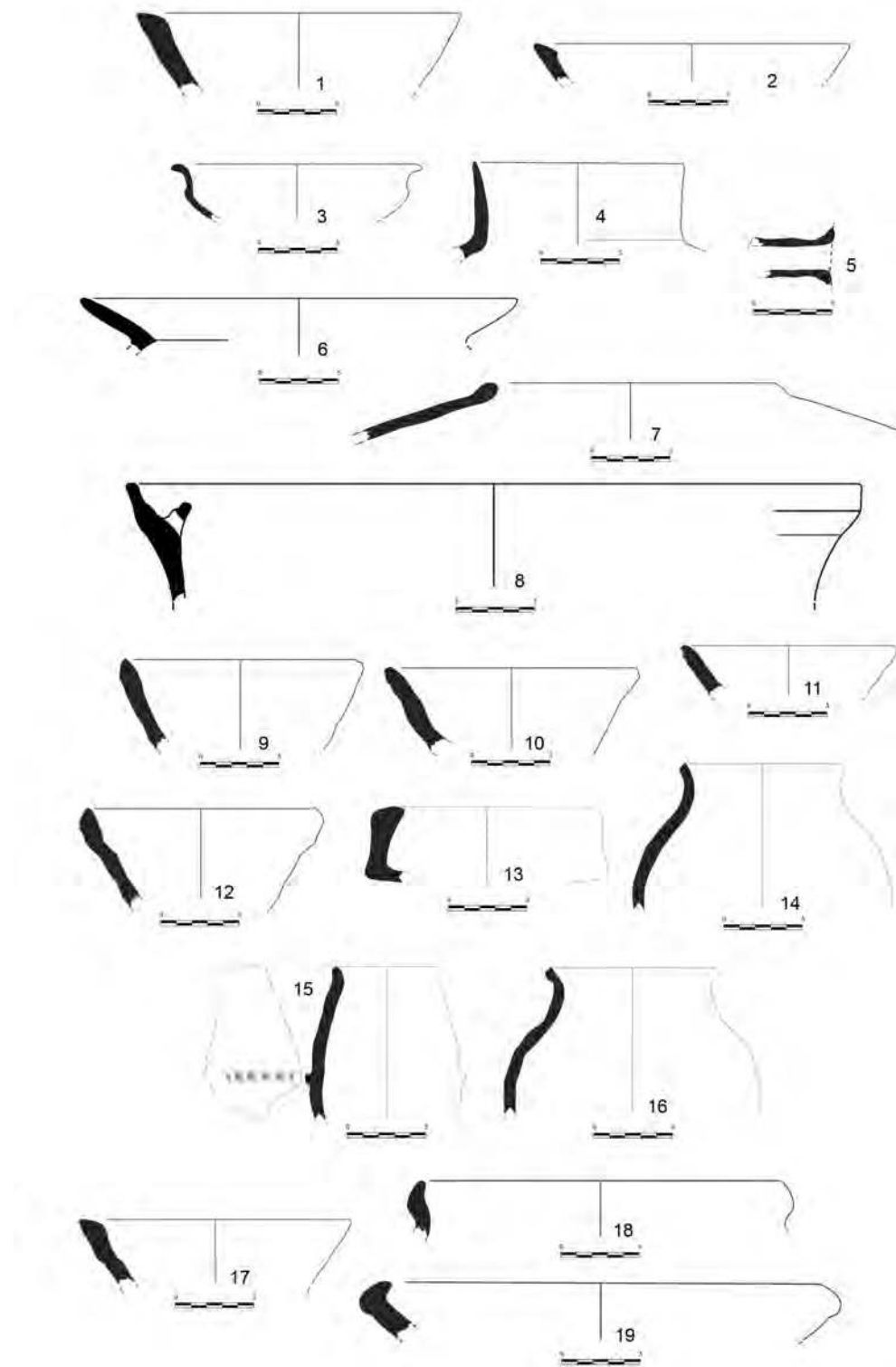


Fig. 6 – Logardan. 1. Trench E, gate of the citadel; 2-3. Trench D, monumental complex; 4. Topographical plan of the site; 5. Trenches A-B, stone ramp (CAD H. Naccaro; Qara Dagh Archaeological Mission).



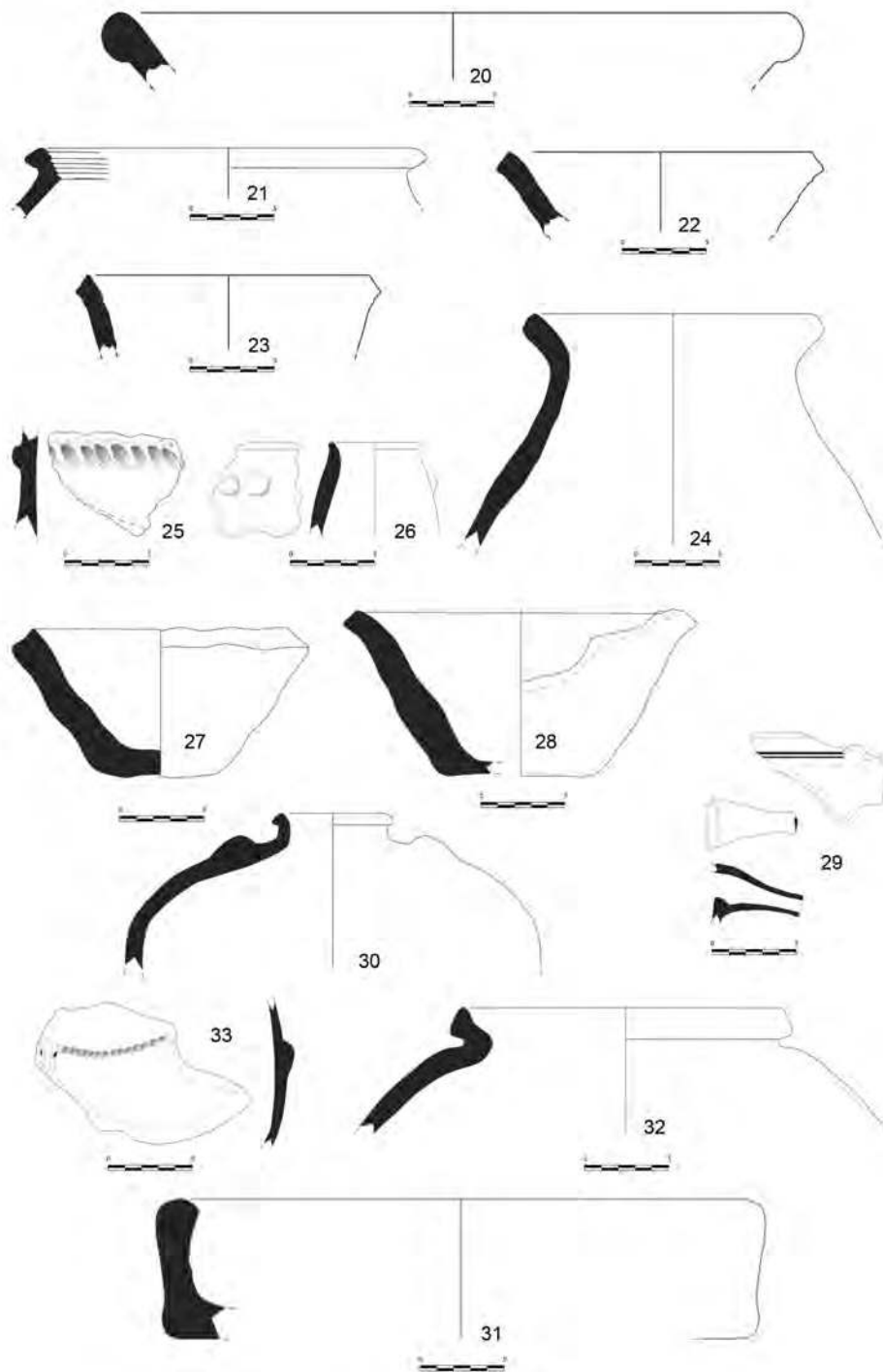


Fig. 7—Late Chalcolithic and Uruk ceramics from Girdi Qala and Logardan (X. Desormeau; Qara Dagħ Archaeological Mission). 1-8. LC2 sherds from filling layers of Girdi Qala trench C levels 10-8; 9-16. Early Uruk sherds from Logardan trench D level 4c-b, trench E level IVB and Girdi Qala trench C in situ levels 10-8; 17-21. Early LC3 sherds from filling layers of Girdi Qala trench C levels 7-1; 22-26. Early-Middle Uruk sherds from Logardan trench D level 4a, trench E level IVA and Girdi Qala trench C in situ levels 7-1; 27-33. Middle Uruk sherds from Girdi Qala “Northern Extension” trench D.

all the pottery from trench E level IVB and trench D levels 4c-b at Logardan belong to a South Mesopotamian Uruk morphological tradition (fig. 7.9-16). Among open shapes, some specimens of flattened-base basins, a widespread shape of the Middle Uruk period, appear since this early phase (fig. 7.13).¹⁴ The most characteristic open containers are the so-called proto bevelled-rim bowls (hereafter BRBs; Dyson 1966: 320; Alizadeh 2014: 30; Wright 2014: 119), with rims sometimes thinned, rounded, or loosely cut and bevelled in various ways and with varying orientations (fig. 7.9-12).¹⁵ Early Uruk closed shapes are basically represented by ovoid jars with flared necks and flattened or bevelled rims, sometimes provided with straight or conical spouts (fig. 7.14-16).¹⁶ Decorations are rare, but some sporadic samples of deep goblets show the first emergence of appliqué fingered cordons (fig. 7.15).¹⁷

Later (at the beginning of the Middle Uruk/local Early LC3 phase), the top of Logardan was reused for productive or redistributive activities. In trench D level 4a, the previous monumental building was divided into smaller and more agglutinated units, with thick walls and a kitchen occupied by large cooking ovens at the northern end of the complex (fig. 6.4, level 4a). At the same time, in trench E level IVA, several production units with pottery kilns were built in the space in front of the door system. In this Early-Middle Uruk phase, ceramic production was also carried out intensively in trench C at Girdi Qala (levels 7-1), where kilns were still used for firing Uruk pottery. Both in trench E at Logardan and in trench C at Girdi Qala Uruk craftsmen used an extremely complex technique, with batteries of several firing structures connected by internal ventilation channels and by external pipes to evacuate the smoke (see how highlighted in fig. 5.2).

During this phase, indigenous North Mesopotamian ceramics were still present in filling layers of levels 7-1 of trench C at Girdi Qala (fig. 7.17-21). This local assemblage is composed of shapes very distinctive of the transition between North Mesopotamian Late LC2 and Early LC3: inwards bevelled-rim bowls (fig. 7.17), short neck jars with “S”-shaped

rims (fig. 7.18), hammerhead or club-headed bowls (fig. 7.19-20),¹⁸ and hollowed-rim jars (fig. 7.21).¹⁹ But assemblages from Logardan (trench E level IVA and trench D level 4a) and *in situ* layers at Girdi Qala are entirely Southern Uruk. Amongst South Mesopotamian shapes, the Early-Middle Uruk assemblage is essentially composed of BRBs (fig. 7.22-23),²⁰ knobbed jars (fig. 7.26), shallow basins with irregular ovoid profiles, urns, and jars decorated with finger-impressed cordons (fig. 7.25) and some red-slipped wares.²¹

Finally, a little bit later (during the mature Middle Uruk/local Late LC3-Early LC4) a South Mesopotamian village was built on the northern mound of Girdi Qala.²² On this 1 ha settlement, trench D revealed ten successive levels of Middle Uruk domestic occupation, (fig. 5.3). The first architectural phase of the settlement (level 6B) was built on a terrace delimited to the north by a wide retaining wall made of *pisé*. Soon (level 6A), the periphery of the village began to be occupied by dump pits, some open-air spaces were carefully pebbled (as in level 5), while a large-sized edifice in level 3 was provided with stone foundations, clay cones, and pottery pipes similar to those found in Late Uruk colonies.

About 98% of the pottery belongs to the South Mesopotamian Middle Uruk horizon.²³ Obviously, if compared with the previous chronological stage (namely the beginning of the Middle Uruk), the assemblage of this phase (fig. 7.27-33) shows a strong continuity, in particular concerning finger-impressed decorations, reddish or grey slipped ceramics, massive amounts of bevelled-rim bowls (fig. 7.27-28), in-turned rim bowls,²⁴ V-shaped bowls with pouring lips,²⁵ shallow basins

14. See Uruk/Warka XII-IX (Haller 1932: table 18B.v, 18C.c), Farukhabad (Wright 1981: fig. 42a), Geser 14 (Alizadeh 2014: fig. 60B).

15. See SUSA “Acropole III” levels 7-11 (Le Brun 1971: fig. 40.4; Wright 2014: fig. 7.5a-b), Farukhabad (Wright 1981: fig. 45h-k), Geser 11, 13 (Alizadeh 2014: fig. 57H, 59H).

16. See Eridu (Safar *et al.* 1981: table 3: 1-2, 12, 17-18, 21; Wright 2014: fig. 7.3b-e), in the Uruk region site WS022 (Adams and Nissen 1972: fig. 33: 8, 53.6; Wright 2014: fig. 7.4f-g), SUSA “Acropole III” 7-11 (Le Brun 1971: fig. 40.8-9; Wright 2014: fig. 7.6g, i-k), Farukhabad (Wright 1981: fig. 51.g-o), Geser 14-15 (Alizadeh 2014: fig. 60F, 61S; for straight spouts since levels 9-10, see fig. 56A).

17. See Uruk/Warka (Sürenhagen 1986: 42T/198-223; Haller 1932: tabl. 18C.n), Geser 13 (Alizadeh 2014: fig. 59C).

18. Hammerhead or club-headed bowls are a main hallmark of the LC3 in Northern Mesopotamia: for closest parallels, see at Brak HS1, Leilan V, Hacinebi A, Nineveh 5-37 “Norduruk A” (see Gut 1995: pl. 58: 853-857; Schwartz 1988: fig. 57.2; Pearce 2000: fig. 5a-e, 6c; Matthews 2003: fig. 4.17.12).

19. See for instance LC3 samples from Brak CH9-12 (Oates 1985: fig. 1.13, fig. 2.17-18), Hacinebi (Pearce 2000: fig. 4e-g) and Leilan V (Schwartz 1988: fig. 60.5).

20. As in Uruk/Warka Middle Uruk level VIII, BRBs are extremely rare at Logardan and Girdi Qala during the Early Uruk phase and start being serially produced in the Early-Middle Uruk.

21. See at Uruk/Warka level VIII (Haller 1932: table 18C: g¹, c¹, f¹) and Rubeideh (McAdam and Mynors 1988: fig. 30: 46; 34: 100; 36: 122).

22. According to the ceramic materials, there is no chronological gap between levels 2-1 in trench C at the main mound of Girdi Qala (Early-Middle Uruk in date) and the first levels of the Middle Uruk village at the northern mound of Girdi Qala.

23. This is essentially the same assemblage documented in this phase at the Middle Uruk settlement of Gurga Chiya in the Shahrizor area (Wengrow *et al.* 2016).

24. See Rubeideh (Sürenhagen 1979, McAdam and Mynors 1988: 45; fig. 28.10) and Ahmed al-Hattu (McAdam and Mynors 1988: 45).

25. See Sheikh Hassan (Boese 1995: fig. 21), Hacinebi B2 (Stein 2001:

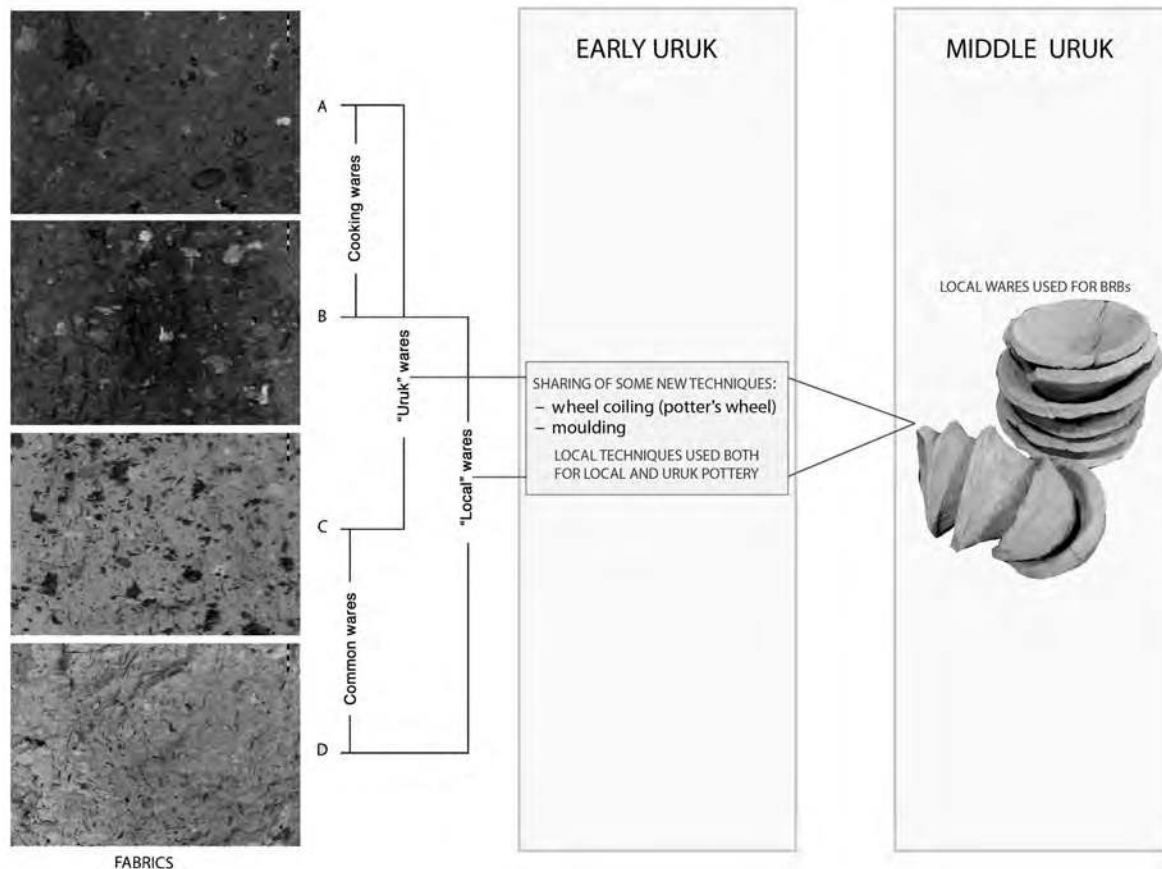


Fig. 8 – Evolution of some 4th millennium BC ceramic technical traits at Girdi Qala and Logardan (CAD J.S. Baldi).

(fig. 7.31),²⁶ and several types of interior-angled rimmed jars (fig. 7.32) with frequent pierced lugs (fig. 7.30).²⁷ Spouts can be upwards conical or slightly drooping (fig. 7.29), while strongly drooping spouts or twisted handles, typical of the Late Uruk phase, are extremely rare.

The overall archaeological record shows that the Uruk presence in the west of Qara Dagħ began very early and lasted many centuries (table 1), allowing to take into account changes occurring over time. Nevertheless, beyond morphological features, between local LC and foreign Uruk ceramic

traditions there was not a sharp technical distinction: their differentiation has been rather a progressive evolution.

Ceramic *chaînes opératoires* show these relationships. Four main petrographic macro-groups have been identified (A-D: fig. 8).²⁸ Pastes belonging to B and D groups perfectly fit the definition of the well-known North Mesopotamian Late Chalcolithic chaff-faced wares (Marro 2010). On the other hand, A and C groups reflect the South Mesopotamian mineral tradition. This might seem like a normal division, as documented at several sites with mixed local-Uruk assemblages (especially in the Euphrates basin, as at Hacinebi, Tell Feres or Tell Brak). But this separation expresses only a rather superficial level of technical relations. Indeed, in the

fig. 8.6J-L), Tell Brak TW 13 (Oates and Oates 1993: fig. 51.33-35), Susa "Acropole I" 18 (Le Brun 1978: fig. 32.7).

26. See Abu Salabikh "Uruk Mound" (Pollock 1990: fig. 5I), Nippur "Inanna" XX-XVII (Hansen 1965: fig. 8), Uruk/Warka "Eanna-Tiefschnitt" XI-VI (Sürenhagen 1986: no. T/99).

27. See Rubeidheh (McAdam and Mynors 1988: fig. 31: 66, fig. 34: 98-99), Abu Salabikh "Uruk Mound" (Pollock 1990: fig. 3e), Nippur "Inanna" XVIII (Hansen 1965: fig. 14), Uruk/Warka "Eanna-Tiefschnitt" VI (Sürenhagen 1986: no. T/48, 77, 93).

28. Here, the purpose is not to present a detailed study of pottery technology, but rather to show how the traditional dichotomic distinction between North Mesopotamian chaff-faced wares and South Uruk mineral traditions does not always match with field data and real relationships between local inhabitants and Uruk settlers.

4th millennium BC, the notion of “foreign” wares is quite inappropriate because in the Qara Dagh all the fabrics (even for the manufacture of Uruk sherds) are locally produced through locally available raw materials.²⁹ Moreover, since the Early Uruk phase, it is remarkable that even if some South Mesopotamian Uruk shapes are indeed manufactured by foreign techniques and mineral-tempered (in A and C wares), the large majority of them (about 76%) have chaff-faced B and D pastes, as local LC2 shapes. In other words, at the first moment of the culture-contact between indigenous and South Mesopotamian artisans, for a predominant portion of the assemblage, there was no distinction between fabrics used for local LC2 containers and foreign Early Uruk vessels. A distinction between local LC3 shapes associated with chaff-faced B-D fabrics and Uruk shapes associated with mineral A-C pastes emerges only later, slowly and gradually, during the mature phase of the Middle Uruk (local Late LC3-LC4). Likewise, since the Early Uruk phase, some technical phenomena—such as the emergence of the potter’s wheel³⁰ and the diffusion of shaping by moulding—affect both local and foreign technical traditions (fig. 8). Later, in the Middle Uruk period, a progressive distinction emerges but, despite this tendency, BRBs (that during the Middle Uruk period start being serially produced and become the most widespread and distinctive Uruk material) were made by different shaping methods—foreign and local—and different pastes—mineral and chaff-faced (fig. 8).

The data accumulated, the sequences and the inferred evolutionary framework indicate a very early, large and lasting South Mesopotamian presence. Nevertheless, the Uruk “*oikumene*” in the Qara Dagh is not the expression of a purely southern phenomenon transferred or spread in the North, but rather of a series of very deeply intertwined cultural relations made of daily ties affecting reciprocal ways of doing and living. In particular, although architectural remains (stone ramps, monumental buildings, crafts areas) indicate a rather large number of southern immigrants since the beginning of the 4th millennium BC, Uruk settlers were not independent in terms of ceramic production. Many local craftspeople were also regularly engaged in the manufacture of South Mesopotamian vessels by their own techniques, implying a strong interpenetration between the two components of society.

29. As also demonstrated by Ghazal *et al.* (2008: 93-99, fig. 90-91) and Emberling and Minc (2016) for large areas affected by the Uruk expansion between Khuzestan and Northern Mesopotamia.

30. Both for local North and South Mesopotamian Uruk traditions the first use of the potter’s wheel occurs according with to same technical modalities (see Baldi and Roux 2016).

Later, in the Middle Uruk, the emergence of a separate, exclusively Uruk settlement at the northern mound of Girdi Qala could suggest an increasingly massive arrival of immigrants from the South. And, at this stage, southern people become increasingly able to provide for their own needs in pottery. However, ceramics continue to document a durable and complex trend towards social integration and interpenetration between groups that, although culturally different, form not so much two distinct communities as a single society.

A TERRITORIAL “*OIKUMENE*” OF STATES

The transition between the end of Late Prehistory and the first centuries of the Bronze Age, with the slow development of state entities, implies the formation of new organisational systems. This is not a purely quantitative discontinuity, due only to a trend towards substantial economic and social expansion, but rather the emergence of qualitatively new political entities. Often, stratigraphic discontinuities at several important sites (Oates 1986) express major social changes. Thus Logardan, after the phase of reuse of the Early Uruk citadel at the beginning of the Middle Uruk, is abandoned for many centuries. Although reoccupied during the first half of the 3rd millennium BC, the citadel was affected by a main phase of reconstruction only in the Early Dynastic IIIb period.

In trench E, the renewal of the citadel is documented by the reconstruction of the gate system. The main access occupied the space of the Early Uruk entrance, but the gate (although narrow because of its defensive function) assumed a monumental character: it was accessible by a stone staircase and had a megalithic threshold. Furthermore, the entire complex was expanded with the construction of two quadrangular bastions on both sides of the gate.

More substantial information comes from trench D. After a long stratigraphic gap, two Early Bronze Age levels (3d and 3c), Early Dynastic IIIb in date, were provided with massive architecture and constitute a stronghold overlooking the site. Level 3d (fig. 9.1) is still very little known, but an entrance with a stone threshold was located to the south, through its massive enclosure wall (1.5 m wide, equipped with a stone door-socket). Nevertheless, despite huge walls, structures no longer had a monumental character and were rather divided into small rooms with thick, buttressed (and sometimes double) walls, while the northern access of the complex, close to the very steep slopes of the tell, was narrow and followed a restricted

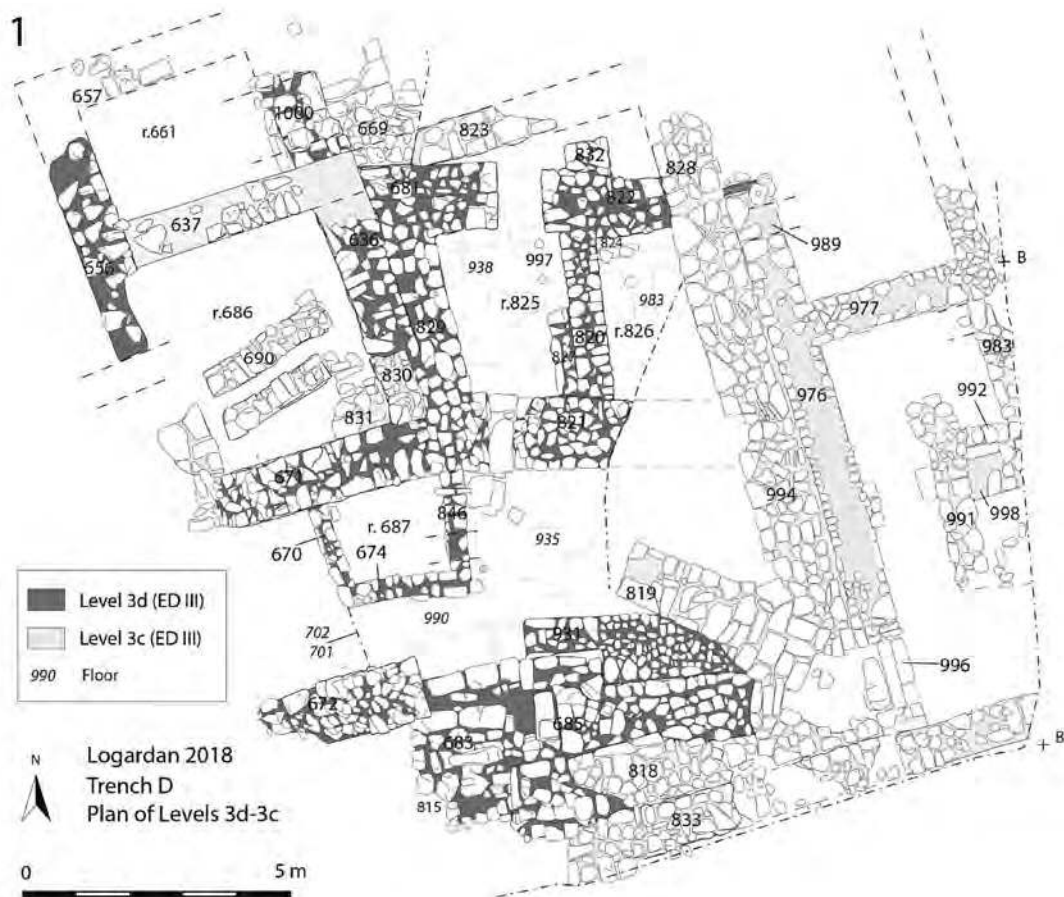


Fig. 9 – Logardan trench D (CAD H. Naccaro; Qara Dagħ Archaeological Mission).
1. Plan of levels 3d-3c; 2. Causeways of level 3c.

and non-rectilinear path. Even if previous (Middle Uruk) structures were largely respected, this well-established plan with thick-walled agglutinated rooms and serpentine accesses clearly had a defensive function.

Level 3c (fig. 9.1) saw the construction of a large raised courtyard, provided with superb stone-paved walkways, above the former building, along with a new building in a dominant position to the east (with two large rectangular rooms for the moment). The access to the courtyard was moved to the west, through a staircase going down, set in a room of level 3d. This staircase, adapted to the sloping shape on the tell in this sector, gave access to the main building through a system of three finely paved walkways.

The elegant layout, the wide spaces, the megalithic threshold of the southern door of the main building, as well as the well-planned organisation and homogeneous dimensions of the walkways suggest for this conspicuous complex a non-ordinary function (administrative, or residential for a dignitary or a high-ranking official).

The ceramic assemblages of levels 3d and 3c are very homogeneous, with typical shapes dating back to the end of Early Dynastic III or occurring at the very beginning of the Akkadian period. Open shapes include shallow carinated bowls in common or fine ware with slightly thickened rounded or beaded rims respectively (fig. 10.6). A hemispherical bowl (fig. 10.1) with two notched ridges under a smooth-edged rim and a large bowl decorated similarly (fig. 10.9) may represent a link with the South Mesopotamian ceramic tradition, conceivably being part of a stemmed dish or a fruit stand. There are also several medium-sized deep bowls with thickened rounded rims. As for the closed shapes, a wide variety of medium and medium-to-large-sized jars were found. They include quite a high percentage of wide-mouthed bag-shaped vessels with thickened, band or out-turned rim on a short neck or without neck (fig. 10.4-5, 8, 10), often decorated with simple horizontal lines (usually in groups of three), with a combination of horizontal and wavy lines or even with groups of diagonal alternated lines made with a multiple-pointed comb (fig. 10.4). Decorations with simple ridges on the shoulder (fig. 10.3) or with a notched ridge at the base of the neck, combined at times with comb-incised lines are likewise attested (fig. 10.2). Assemblages of levels 3c and 3d seem to have the most reliable parallels in northern contexts, such as levels VII-VI in area KG at Nineveh (McMahon 1998), levels G-F of Ishtar Temple at Assur (Beuger 2008, 2013), and levels dating from the end of the Early Dynastic III-Akkadian period at sites in the Middle Tigris valley such as Tell Fisna (Numoto 1988: fig. 21-25).

Similarities with the southern alluvium are less frequent but very distinctive, such as the stemmed dishes (fig. 10.1, 9).³¹

The overall horizon is very stable: the two levels essentially present the same ceramic types in very similar quantities, with a majority of parallels with northern sites and a quantitatively consistent minority of ceramics types shared with southern assemblages. One might suggest that Logardan and the Qara Dagħ area were under the control of a state with a nearby major site as its capital, like Kirkouk to the west or Kunara to the east.³² But it is a truism to say that without written attestations, ceramic data can never confirm such hypotheses. Nevertheless, these ceramic relations express the belonging of the west of Qara Dagħ to a material-cultural continuity matching with a wide cultural sphere of pre-Akkadian city-states. Obviously, this “*oikumene*” is extremely composite. Even within the ceramic repertoire of Logardan levels 3d-3c, at least five different types of ceramic fabrics can be recognised (using different clay matrices, with or without the addition of plant inclusions and using different firing methods), as well as six different manufacturing techniques (hammering, moulding, two distinct coiling methods and two different wheel techniques). Therefore, on a supra-regional basis, the presence of morpho-stylistic specificities and distinctions with repertoires of distant centers such as Kish or Nippur are not surprising in themselves. But on the other hand, although this material-cultural homogeneity is composite, its results are characterised by an evident regularity. Thus, within the local assemblage, containers produced from different pastes and by different techniques always have extremely standardised dimensions,³³ while as far as ceramic types shared with distant areas, and particularly with Southern Mesopotamia, their quantity and features remain stable over time. Even from a technical point of

31. For the geographical distribution of this very typical southern shape, see Moon 1982: fig. 1.

32. Kirkouk, 40 km to the west, on the other side of the low Bani Makam djebl that separates it from the plain of Chemchemal, is archaeologically (almost) unknown, but with no doubt a major site at that time. Kunara, 96 km to the east, is located in the valley of the Tanjaro river, close to the modern city of Sulaymaniyah. Beyond ceramics, close parallels between Logardan and Kunara are documented by architectural specificities: see for instance the use in this period of stone-paved walkways (Tenu *et al.* 2018: fig. 10).

33. The measurement of these variables is part of ongoing research. The dimensional standardisation has been observed as a function of the coefficient of variation of wall thickness, base circumference, and above all of rim diameter. The relationship between very limited oscillations of the coefficient of variation and a strong productive specialisation in Early Dynastic Mesopotamia has already been stressed for some centers in the North (Stein and Blackman 1993). At Logardan, the very low coefficients of variation indicate that, regardless of the techniques and fabric used in the manufacturing process, ceramic production was carried out by a very small number of potters.

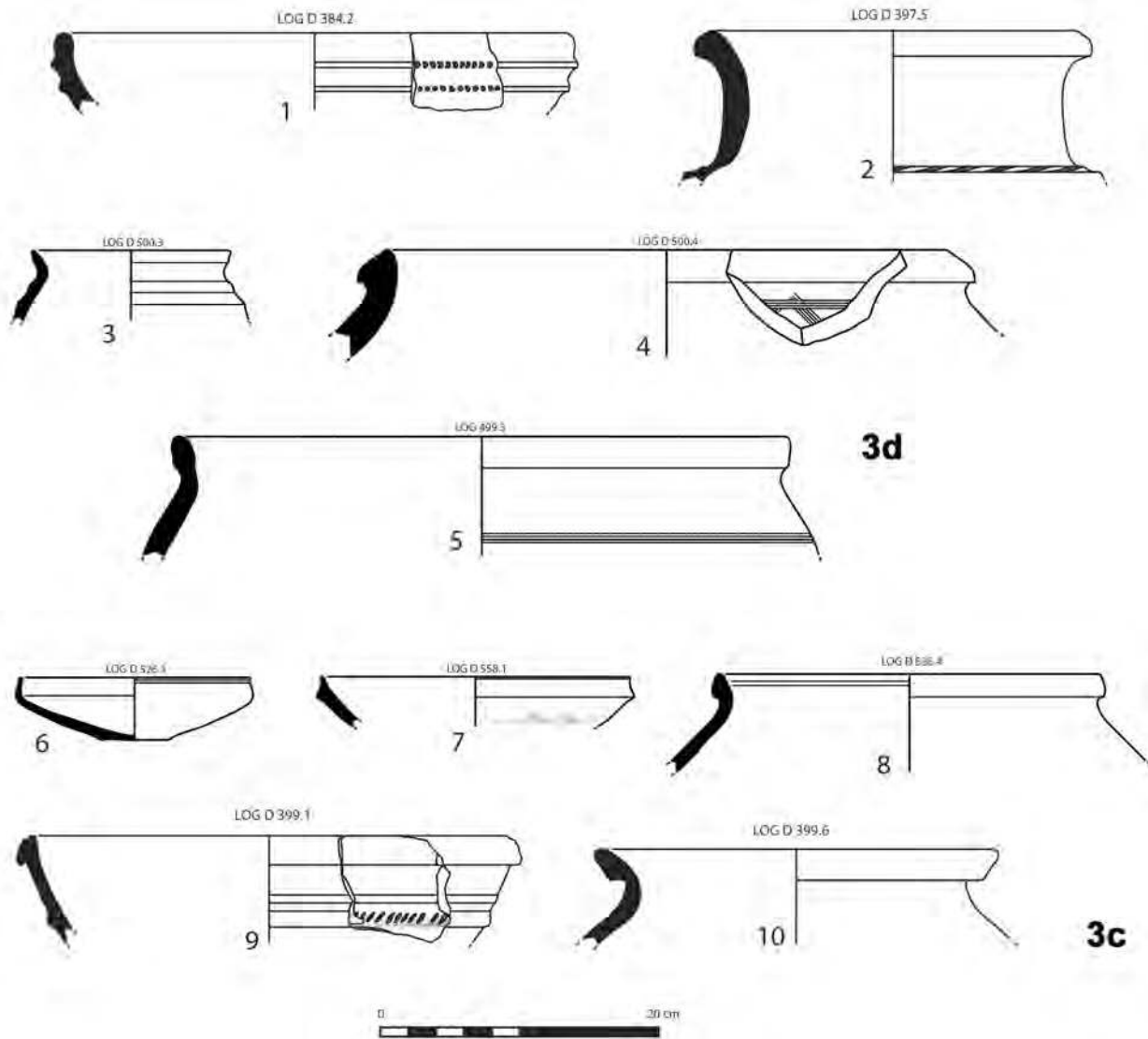


Fig. 10 – Early Dynastic IIIb sherds from Logardan trench D (X. Desormeau and M. Zingarello; Qara Dagh Archaeological Mission). 1-5. Level 3d; 6-10. Level 3c.

view, southern-related shapes are occasionally characterised by foreign fabrics and shaping methods, while some other southern specimens were produced by local *chaînes opératoires* and, in any case, they always respect the same dimensional standards. Indeed, this homogeneity does not seem to match at first glance with the shattered political context of the city-states, but rather with the unified framework of the Akkad Empire. Yet, assemblages from the area east of the Tigris river show that this cultural homogeneity existed before any form of political unity was established (see also Gavagnin *et al.* 2016, Tenu *et al.* 2018). Similarly, although they represent a minority of the

assemblage, typically South Mesopotamian ceramic traits are documented before the Akkadian expansion.

This durable pre-Akkadian material-cultural *koiné* evolves very slowly during the second half of the 3rd millennium: a *longue durée* process that cannot be explained on the basis of simple historical events. If this was the case, in fact, between levels 3d and 3c there would have to be a transformation, given that the area seems to change in function, with the construction of a building (in level 3c) that could in a certain way suggest the integration of Logardan within the administrative network of a peripheral kingdom. Indeed, the most likely hypothesis is that

a nearby city-state has established a fortress at Logardan in level 3d, and then (in level 3c) installed an administrator, without any large-scale political change at this stage. Consequently, it might seem reasonable that between levels 3d and 3c nothing (or very little) changes. But even later, when the entire area of trench D is occupied by large-scale ceramic production (with a radical change in function that this time perfectly matches with the chronology and modalities of a major political event such as the Akkadian expansion)³⁴ the pottery evolution remains extremely gradual. This is not so much because the repertoire retains, for a long time, traditional local elements despite political developments (which is not at all surprising), but rather for the opposite reason. The South Mesopotamian ceramic traits do not appear with the emergence of an Akkadian power, but well before, within a cultural community of proto-dynastic states.³⁵ Furthermore, these southern ceramic attributes do not become predominant over time as a consequence of the Akkadian imperial growth: their quantitatively unchanging presence within the assemblage outlines them as a structural component of the repertoire.

In this sense, the assemblage from Logardan shows that a large-scale north-orientated cultural homogeneity integrating distinctive southern ceramic types was not a product of the Akkadian imperial power, but, on the contrary, the emergence of the Akkadian phenomenon could appear, with respect of material culture, as the long continuation of an Early Dynastic process of cultural homogenisation.

A PATH OF EARLY CONTACTS

The Ubaid, Uruk and Early-Dynastic IIIb cultural spheres emerge on the basis of different scales and modalities of social integration: a process of acculturation of one group from another, use of reciprocal labour between culturally different

groups, and inclusion within a cultural community that transcends political divisions. But whether the organisational framework is a village community, a “colonial” network established in a proto-urban context, or city-states controlling large provinces, the emergence of these different cultural homogeneities always occurs sooner than expected.

As far as the first appearance of the Ubaid, the ceramic features of the Halaf horizon that begins to acculturate to the Ubaid do not coincide with the repertoire of the Final Halaf (during the last quarter of the 6th millennium BC), but rather with the Early or Middle Halaf (at the end of the first half of the 6th millennium BC). In the same way, the widespread “Choga Mami Transitional” painted patterns, typical of a very early phase, as well as the evolution of the ceramic techniques, confirm that Halaf and Ubaid entities, before following one another, co-existed for a long time, interlaced in a long-lasting manner. Nothing suggests that this progressive and longstanding cultural interaction has occurred between two asymmetric groups, one of which had a somewhat dominant position. This process of acculturation can, therefore, be defined more precisely as an “inter-culturation” (Guerraoui 2009; Azzam 2012), since it is not configured as a path of assimilation or integration, but rather as a process of mutual influence. This process started earlier than previously thought, probably from an Ubaid 1-2 early stage.³⁶

Concerning the Uruk network, the presence of a “colonial” (Baldi 2016) Middle Uruk settlement at the northern mound of Girdi Qala perfectly fits the framework of the Uruk expansion. But socio-historiographic models used so far to explain this phenomenon have been challenged by the presence at Girdi Qala and Logardan of South Uruk groups since the beginning of the 4th millennium BC. The material culture of settlers who built the citadel, its large stone buildings and ramps at Logardan included very distinctive objects, such as disc-shaped or conical tokens,³⁷ accounting and computational tools,³⁸ architectural decorations³⁹ and backed-clay mosaic cones of various sizes.⁴⁰ The South Mesopotamian ceramic shapes, therefore,

34. The impressive size and productive capacity of the ceramic workshop of Logardan in the later levels (3b, 3a2, 3a1, 2 and 1), can only reflect centralised production by a power controlling a very large region. Moreover, radiocarbon dating from levels 3b and 3a (Vallet 2016: 159-160), as well as a later Akkadian cylinder seal from level 3a2 (Paladre *in* Vallet 2016: 39-44), clearly indicate that Akkadian power extends into the Zagros Piedmont a little after the phase here discussed.

35. This is not intended, here, to postulate the existence of a typically “Akkadian” assemblage in the Central-Southern Mesopotamia, or to attribute this label to southern traits according to a culturalist point of view. On the contrary, the purpose here is to stress that some typical (and exclusively) southern traits, such as upright handles jars or stemmed dishes, appeared in Qara Dagh well before the Akkadian expansion and remained stable for a long time, as well as the entire assemblage, despite political changes.

36. See BALDI J.S., Evolution as a way of intertwining: Regional approach and new data on the Halaf-Ubaid transition in Northern Mesopotamia, *In: Proceedings of the Broadening Horizons 5 conference (BH5)*, Udine, 5th-8th June 2017. Leuven: Peeters (Ancient West and East Suppl.), forthcoming.

37. See for instance at Tell Rubeidheh in a Late Ubaid context (McAdam and Mynors 1988: fig. 37: 140), at Choga Mish Protoliterate (Alizadeh 2008: pl. 24A, C, E), or at Geser in a middle 4th millennium context (Alizadeh 2014: fig. 88F-H).

38. See at Susa “Acropole 1” level 18 (Le Brun 1978: fig. 37), right side, or at Choga Mish Protoliterate (Alizadeh 2008: pl. 22F-H).

39. See at Tell Uqair (Lloyd and Safar 1943: pl. XXVIII A).

40. See at Tell Uqair (Lloyd and Safar 1943: pl. XVII A).

represent just one of the peculiar traits of the Uruk cultural packaging and cannot be considered as local imitations of southern models. Indeed, about a quarter of this Uruk assemblage is actually produced by foreign techniques, never documented in Qara Dagh before the arrival of southern settlers. But at the same time, these settlers, although producing their own ceramics in large workshops, also used an enormous quantity of containers manufactured with southern shapes by local inhabitants and by non-Uruk techniques. In other words, early 4th millennium Uruk structures and facilities clearly indicate that since Early Uruk, the South Mesopotamian presence was not simply intended to facilitate occasional contacts but actually corresponded to a stable and durable installation of a community resident in the west of Qara Dagh, stably and durably interacting with local inhabitants.

Later, in the second half of the 3rd millennium BC, both architecture and pottery from levels 3d-3c are completely consistent with well-known cultural traits of the Early Dynastic city-states: defensive needs due to frequent warfare or particularly fragmented political situations, monumental buildings associated with administration and power and a ceramic repertoire suitable for very complex commensal practices. But in this kind of context, the early ceramic parallels with the South are surprising. It would be reductive to attribute the presence of southern traits to a generically “hybrid” nature inherent to the geographical location. In fact, such a distinction would be based exclusively on the assumption of a sharp cultural discontinuity between North and South, while in reality, the assemblage of Logardan shows the opposite. Moreover, if one simply considers their latitude, Girdi Qala and Logardan are located quite far from large Early Dynastic city-states of the Diyala valley and of the South.

Indeed, scenarios are different, but the early chronology of these three “*oikumenai*” cannot be taken into account without the existence of a direct physical connection with Southern Mesopotamia: a network of down-the-line trade roads forming a corridor along the Zagros Piedmont.

The Tigris river, easily accessible via Kirkuk, undoubtedly played a fundamental role in the mobility of people, things, and ideas, but was probably not the central axis of this road system. In fact, since the Ubaid phase, this “corridor” exploited rather the valleys of the left-bank tributaries of the Tigris—Hamrin, Diyala and their streams—to approach the foothills of the Zagros, as suggested by the fact that, at this stage, the Qara Dagh area belonged to the same ceramic province of Choga Mami, Tell Abada and Tell Songor (Baldi 2016: fig. 1). At the beginning of the 4th millennium BC, clear evidence of Early Uruk presence is documented at several

sites on the Iranian side of the Zagros, such as Susa, Farukhabad and Kunji Cave (fig. 1; Wright *et al.* 1975). Since the beginning of the Middle Uruk, this route has shown deviations both on the Iranian side (towards Godin Tepe) and on the Iraqi side (with Uruk villages in the Hamrin valley, as Rubeidheh and Ahmad al-Hattu, up to Halabja). In fact, during the Early Dynastic period, connections along the so-called “Trans-Tigridian Corridor” between Luristan, Deh Luran and Iraqi Zagros Piedmont to the Adhaim and Lower Zab rivers have been recently stressed (Renette 2013).

The early appearance of Ubaid and Uruk, as well as connections with Central and Southern Mesopotamia pre-dating the rise of the Akkadian Empire, suggest that this network of paths facilitated over time the formation of these “*oikumenai*” on distant regions. Such lasting physical and cultural connections challenge traditional convictions and shift the focus on bonds rather than on borders between Northern and Southern Mesopotamia. For the future, multi-site research programs like the fieldwork in the west of Qara Dagh, and close cooperation between different missions, would be very suitable for documenting how distinct micro-regions integrated the formation processes of large cultural homogeneities with their regionalised facies.

CONCLUSIONS: NON-LINEAR “*OIKUMENAI*”

The use of the term “*oikumenai*” for the Ubaid, Uruk and pre-Akkadian spheres of interaction is not just an expedient way to avoid the notion of “cultures” with its inherent risk of essentialism (Roberts and Vander Linden 2011). The emergence of distinct organisational systems between 6th and 3rd millennia BC occurs by different modalities, but always on the basis of deep interweaving between South and North Mesopotamian entities. In particular, as far as the ceramic evidence, it is not really surprising to notice that “pots are not people” (Kramer 1977) and a too “culturalist” notion of “cultures” as faithful mirrors of the distinctions between human groups would inevitably bring to simplistic reconstructions.⁴¹ On the contrary, recent data from the Qara Dagh suggest the variability, intricacy and non-monolithic nature of the diffusion of the Ubaid, Uruk and pre-Akkadian homogeneities.

41. As a consequence, the *chaîne opératoire* approach is useful precisely because rather than being (or being considered as, or representing) people or peoples, pots embody the peculiar ways of doing of their potters, they are product and expression of them, their differences, organisation, traditions and technical identities (Baldi 2016).

Each one of these “*oikumēnai*” gathers all (at least many) typical traits of social complexity (Verhoeven 2010): clear diversification of social practices, monumental constructions requiring significant use of labour, large-scale planning of the inhabited landscape, long-distance relationships and indicators of hierarchical social systems. Moreover, they show a growing degree of demographic, economic and political expansion: the village society where the Halaf-Ubaid transition occurs precedes the proto-urban context of the emerging Uruk network in the North, before the appearance of the Proto-Dynastic city-states controlling large territories. Nevertheless, to imagine a linear evolutionary trend would be just an interpretative effect biased by a teleological prejudice deployed in the *longue durée*.

Indeed, field data from Logardan and Girdi Qala offer a fresh perspective on each “*oikumēne*”, with its own organisational specificities that do not fit into linear evolutionary schemes. Details of the transition through which the Ubaid emerged (very soon) in the Zagros Piedmont demonstrate that the Ubaid cultural entity is not an “*oikumēne*” in itself, but rather the consequence of different acculturation processes, in different areas, producing a composite homogeneity that combined many local variants (Stein and Özbal 2007; Stein 2010; Baldi 2016). Technical borrowing documented by ceramic assemblages, with local potters involved in the production of southern vessels, indicates that the Uruk colonial network and material cultural homogeneity is not the mere result of an exogenous demic expansion to the North, but rather the outcome of deep processes of social integration based on economic and identity interactions. The ceramic similarities between the Proto-Dynastic Qara Dagħ and a very different South Mesopotamian cultural area are not the effect of administrative ties, but rather the corollary of cultural bonds much stronger than political fragmentation. There is no qualitative continuity between these “*oikumēnai*”, the internal dynamics of which do not work in the same way. However, the common denominator of these different expressions and stages of social complexity seems to be that societies that until recently were considered as separate, or marked by deep internal segregation, are permanently in contact and deeply intertwined.

Field research at Logardan and Girdi Qala has offered much data in this sense but has raised even more questions, the answers to which will only be found through investigating the specific mechanisms of each of these complex forms of social organisation. Especially in Iraqi Kurdistan, long considered as a landlocked and culturally isolated area, an increasing quantity

of evidence for direct, early and physical relations (by a long-lasting road network) with the rest of the Mesopotamian alluvium suggests that one should question the stereotyped partition between North and South.

RÉGIS VALLET

CNRS, IFPO Iraq branch
44001 Erbil, Iraqi Kurdistan – IRAQ
rv.archeo@gmail.com

Johnny Samuele BALDI

CNRS, UMR 5133 Archéorient
Maison de l’Orient et de la Méditerranée
7 rue Raulin, 69000 Lyon – FRANCE
jsb.arch@gmail.com

Melania ZINGARELLO

UMR 7044 ARCHIMEDE
Maison interuniversitaire des sciences de l’homme d’Alsace
5 allée du Général-Rouvillois, 67000 Strasbourg – FRANCE
melaniazingarello@gmail.com

Martin SAUVAGE

Hugo NACCARO

Clélia PALADRE

Claire PADOVANI

UMR 7041 ArScAn-VEPMO
Maison Archéologie et Ethnologie René-Ginouvès
21 allée de l’Université, 92000 Nanterre – FRANCE
martin.sauvage@cnrs.fr
hugo.naccaro@gmail.com
clieliapaladre@hotmail.fr
claire.pado@free.fr

François BRIDEY

Louvre Museum
Department of Near Eastern Antiquities
75001 Paris – FRANCE
francois.bridey@louvre.fr

Kamal RASHEED

Kamal RAEUF

Sulaimaniyah Directorate of Antiquities
Salem Street, 46001 Slemani, Iraqi Kurdistan – IRAQ
kamal_zewe@yahoo.com
kamal.ra.az.ar.84@gmail.com

Qader HALKAWT

Erbil Directorate of Antiquities
44001 Erbil, Iraqi Kurdistan – IRAQ
halkawtqadr416@gmail.com

BIBLIOGRAPHY

- ADAMS, R. McC. and NISSEN, H.
1972 *The Uruk Countryside*. Chicago: University of Chicago.
- AKKERMANS P.M.M.G. and WITTMAN B.
1993 Khirbet esh-Shenef 1991: Eine späthalafzeitliche Siedlung im Balikhthal Nordyrien. *Mitteilungen der Deutschen Orient Gesellschaft* 125: 143-166.
- ALGAZE G.
1993 *The Uruk world system. The dynamics of expansion of Early Mesopotamian civilization*. Chicago: University of Chicago.
- ALIZADEH A.
2008 *Chogha Mish II. The development of a Prehistoric regional center in Lowland Susiana, Southwestern Iran. Final report on the last six seasons, 1972-1978*. Chicago: University of Chicago (Oriental Institute Publications 130).
(ed.) 2014 *Ancient settlement systems and cultures in the Ram Hormuz Plain, Southwestern Iran. Excavations at Tall-e-Geser and regional survey of the Ram Hormuz area*. Chicago: University of Chicago (Oriental Institute Publications 140).
- ALTAWHEEL M., MARSH A., MÜHL S., NIEUWENHUYSE O.P., RADNER K., RASHEED K. and AHMED SABER S.
2012 New investigations in the environment, history and archaeology of the Iraqi Hilly flanks: Shahrizor survey project 2009-2011. *Iraq* 74: 1-35.
- AZZAM A.
2012 Stratégies identitaires et stratégies d'acculturation : deux modèles complémentaires. *Alterstice* 2,2: 103-116.
- BALANDIER G.
1955 *Sociologie actuelle de l'Afrique noire. Dynamiques des changements sociaux en Afrique centrale*. Paris : Presses universitaires de France (Bibliothèque de sociologie contemporaine).
- BALDI J.S.
2013 Anthropological reading of the ceramics and emergence of a profession: A protohistoric North-Mesopotamian view from Tell Feres al-Sharqi. In: GIRÓN L., LAZARICH M. and LOPES M. (eds.), *Actas del I congreso internacional sobre estudios cerámicos, Cádiz, 1 a 5 de noviembre de 2010. Homenaje a la Dra. Mercedes Vegas: 477-504*. Cádiz: Universidad de Cádiz.
2016 Social theories, technical identities, cultural boundaries: A perspective on the Uruk "colonial situation" in the Late Chalcolithic 3-5 Northern Mesopotamia. In: MILEVSKI I. and LEVY T.E. (eds.), *Framing archaeology in the Near East: The application of social theory to fieldwork*: 79-94. Sheffield: Equinox.
- BALDI J.S. and ROUX V.
2016 The innovation of the potter's wheel: A comparative perspective between Mesopotamia and the Southern Levant. *Levant* 48,3: 236-253.
- BEEKMAN C.S. and BADEN W.V.
2005 *Nonlinear models for archaeology and anthropology: Continuing the revolution*. Farnham: Ashgate.
- BERRY J.W.
2003 Conceptual approaches to acculturation. In: CHUN K.M., ORGANISTA P.B. and MARÍN G. (eds.), *Acculturation: Advances in theory, measurement, and applied research*: 17-37. Washington: American Psychological Association.
- BEUGER C.
2008 Pottery from the archaic Ishtar Temples in Assur. In: BIGGS R.D., MYERS J. and ROTH M.T. (eds.), *Proceedings of the 51st rencontre assyriologique internationale held at the Oriental Institute of the University of Chicago, 18th-22nd July 2005*: 351-360. Chicago: University of Chicago (Studies in Ancient Oriental Civilization 62).
2013 *Die Keramik der Älteren Ishtar-Tempel in Assur: von der zweiten Hälfte des 3. Bis zur Mitte des 2. Jahrtausends v. Chr.* Wiesbaden: Harrassowitz Verlag (Wissenschaftliche Veröffentlichungen der Deutschen Orient-Gesellschaft 128).
- BOESE J.
1995 *Ausgrabungen in Tell Sheikh Hassan. Vorläufige Berichte über die Grabungskampagnen 1984-1990 und 1992-1994*. Saarbrücken: Saarbrücker Druckerei und Verlag (Schriften zur vorderasiatischen Archäologie 5).
- BOLGER D. and MAGUIRE L.C.
2010 Introduction. In: BOLGER D. and MAGUIRE L.C. (eds.), *The development of pre-state communities in the ancient Near East. Studies in honour of Edgar Peltenburg*: 1-8. Oxford and Oakville: Oxbow Books (BANE A 2).
- BOURDIEU, P.
1972 *Esquisse d'une théorie de la pratique*. Paris: Éditions du Seuil.
- BRÉNIQUET C.
1991 Un site halafien en Turquie méridionale : Tell Turlu. Rapport sur la campagne de fouilles de 1962. *Akkadica* 71: 1-35.
1996a *La disparition de la culture de Halaf. Les origines de la culture d'Obeid dans le Nord de la Mésopotamie*. Paris: Éditions Recherche sur les Civilisations.
1996b Aperçu de la céramique découverte à Tell el-Oueili en 1987 et 1989 (Obeid 0, 1 et 2). In: HUOT J.-L. (ed.), *Oueili. Travaux de 1987 et 1989* : 163-199. Paris: Éditions Recherche sur les Civilisations (Bibliothèque de la délégation archéologique française en Iraq 8).
- BUTTERLIN P.
2003 *Les temps proto-urbains de Mésopotamie. Contacts et acculturation à l'époque d'Uruk au Moyen-Orient*. Paris: CNRS Éditions.
2018 *Architecture et société au Proche-Orient ancien : les bâtisseurs de mémoire en Mésopotamie (7000-3000 av. J.-C.)*, Paris : Picard (Les manuels d'art et d'archéologie antiques).
- CAMPBELL S. and FLETCHER A.
2010 Questioning the Halaf-Ubaid transition. In: CARTER R.A. and PHILIP G. (eds.), *Beyond the Ubaid. Transformation and integration in the late prehistoric societies of the Middle East*: 69-83. Chicago: University of Chicago (Studies in Ancient Oriental Civilization 63).

- CARTER R.A. and PHILIP G.
2010a *Beyond the Ubaid. Transformation and integration in the late prehistoric societies of the Middle East*. Chicago: University of Chicago (Studies in Ancient Oriental Civilization 63).
2010b Deconstructing the Ubaid. In: CARTER R.A. and PHILIP G. (eds.), *Beyond the Ubaid. Transformation and integration in the late prehistoric societies of the Middle East*: 1-22. Chicago: University of Chicago (Studies in Ancient Oriental Civilization 63).
- COOPER F.
2005 *Colonialism in question. Theory, knowledge, history*. Berkeley: University of California.
- CRUELLS W.
2017 Transitions and their chronologies in the Pottery Neolithic of the Near East. In: CRUELLS W., NIEUWENHUYSE O.P. and MATEICIUCOVÁ I. (eds.), *Painting pots – Painting people. Late Neolithic ceramics in Ancient Mesopotamia*: 11-29. Oxford and Philadelphia: Oxbow Books.
- DYSON, R. H.
1966 *Excavations on the Acropole of Susa and the problems of Susa A, B, and C*. Unpublished PhD thesis. Harvard University.
- EMBERLING G. and MINC L.
2016 Ceramics and long-distance trade in Early Mesopotamian states. *Journal of Archaeological Science: Reports* 7: 819-834.
- EVANS J.M.
2007 The Square Temple at Tell Asmar and the construction of early dynastic Mesopotamia, ca. 2900-2350 B.C.E. *American Journal of Archaeology* 111,4: 599-632.
- FRANCFORT H.-P.
1997 Archaeological interpretation and non-linear dynamic modeling: Between metaphor and simulation. In: MCGLADE J. and VAN DER LEEUW S. (eds.), *Time, process and structured transformation in archaeology*: 151-175. New York: Routledge.
- FRANGIPANE M.
2002 “Non-Uruk” developments and Uruk-linked features. In: POSTGATE J.N. (ed.), *Artefacts of complexity: Tracking the Uruk in the Near East*: 123-148. Warminster: British School of Archaeology in Iraq (Iraq archaeological reports 5).
2009 Non-urban hierarchical patterns of territorial and political organisation in Northern Regions of Greater Mesopotamia: Tepe Gawra and Arslantepe. In: BUTTERLIN P. (ed.), *À propos de Tepe Gawra. Le monde proto-urbain de Mésopotamie*: 133-146. Turnhout: Brepols (Subartu 23).
2010 Different models of power structuring at the rise of hierarchical societies in the Near East: Primary economy versus luxury and defence management. In: BOLGER D. and MAGUIRE L.C. (eds.), *The development of pre-state communities in the ancient Near East. Studies in honour of Edgar Peltenburg*: 79-86. Oxford and Oakville: Oxbow Books (BANE A 2).
- GAVAGNIN K., IAMONI M. and PALERMO R.
2016 The land of Nineveh Archaeological Project: The ceramic repertoire from the Early Pottery Neolithic to the Sasanian period. *BASOR* 375: 119-169.
- GHAZAL R.O., KOUCHOUKOS N., SPEAKMAN R.J., GALSCOCK M.D. and DESCANTES C.
2008 Appendix one. Production zone sourcing and intraregional exchange of ceramics in the fourth-millennium BC Susiana Plain: A case study. In: ALIZADEH A. (ed.), *Choga Mish II. The development of a prehistoric regional center in Lowland Susiana, Southwestern Iran. Final report on the last six Seasons, 1972-1978*: 93-99. Chicago: University of Chicago (Oriental Institute Publications 130).
- GÓMEZ-BACH A.
2017 Investigating painted, incised and impressed ware from the Late Halaf period. In: CRUELLS W., NIEUWENHUYSE O.P. and MATEICIUCOVÁ I. (eds.), *Painting pots – Painting people. Late Neolithic ceramics in Ancient Mesopotamia*: 38-51. Oxford and Philadelphia: Oxbow Books.
- GOSSELAIN O.P.
2011 Fine if I do, fine if I don't. Dynamics of technical knowledge in Sub-Saharan Africa. In: ROBERTS B.W. and VANDER LINDEN M. (eds.), *Investigating archaeological cultures: Material culture, variability and transmission*: 211-227. New York: Springer.
- GUERRAOU I.
2009 De l'acculturation à l'interculturalité : réflexions épistémologiques. *L'Autre* 10: 195-200.
- GUT R.
1995 *Das prähistorische Ninive: Zur relativen Chronologie der frühen Perioden Nordmesopotamiens*. Mainz: Philipp von Zabern (Baghdader Forschungen 19).
2002 The significance of the Uruk sequence at Nineveh. In: POSTGATE J.N. (ed.), *Artefacts of complexity: Tracking the Uruk in the Near East*: 17-48. Warminster: British School of Archaeology in Iraq (Iraq Archaeological Reports 5).
- HALLER A. VON
1932 Die Keramik der archaischen Schichten von Uruk. In: NOLDEKE A., HEINRICH E., LENZEN H. and HALLER A. VON (eds.), *Vierter vorläufiger Bericht über die von der Notgemeinschaft der Deutschen Wissenschaft in Uruk unternommenen Ausgrabungen*: 31-47. Berlin: De Gruyter.
- HANSEN D.P.
1965 The relative chronology of Mesopotamia. Part II. The pottery sequence at Nippur from the Middle Uruk to the end of the Old Babylonian (3400-1600 B.C.). In: EHRICH R.W. (ed.), *Chronologies in Old World archaeology*: 201-213. Chicago: University of Chicago.
- HUOT J.-L.
2004 *Une archéologie des peuples du Proche-Orient. Tome I: Des premiers villageois aux peuples des cités-États (X^e-III^e millénaire av. J.-C.)*. Paris: Errance.
- HUOT J.-L. and VALLET R.
1990 Les habitations à salles hypostyles d'époque Obeid 0 de Tell el'Oueili. *Paléorient* 16,1: 125-130.
- JASIM S. A.
1985 *The 'Ubaid period in Iraq: Recent excavations in the Hamrin region*. Oxford: BAR Publishing (BAR Int. Ser. 267).

- IAMONI M. (ed.)
2016 *Trajectories of complexity. Socio-economic dynamics in Upper Mesopotamia in the Neolithic and Chalcolithic periods.* Wiesbaden: Harrassowitz Verlag (Studia Chaburensia 6).
- KEPINSKI C.
2011 New evidence from Grai Resh, Northern Iraq, the 2001 and 2002 seasons. A pre-Uruk expansion site from the Late Chalcolithic period. *Zeitschrift für Orient-Archäologie* 4: 26-81.
- KRAMER C.
1977 Pots and People. In: LEVINE L.D. and CUYLER YOUNG T. (eds.), *Mountains and lowlands. Essays in the archaeology of Greater Mesopotamia*: 91-112. Malibu: Undena Publications (Bibliotheca Mesopotamica 7).
- LAVE J. and WENGER E.
1991 *Situated learning: Legitimate peripheral participation.* Cambridge: Cambridge University.
- LAYTON R.
1997 *An introduction to theory in anthropology.* Cambridge: Cambridge University.
- LE BRUN A.
1971 Recherches stratigraphiques à l'acropole de Suse (1969-1971). *Cahiers de la Délégation archéologique française en Iran* 1: 163-233.
1978 Suse, chantier "Acropole 1". *Paléorient* 4: 177-192.
- LLOYD S.
1938 Some ancient sites in Sinjar district. *Iraq* 5: 123-142.
1940 Iraq government soundings at Sinjar. *Iraq* 7: 13-21.
- LLOYD S. and SAFAR F.
1943 Tell Uqair. Excavations by the Iraq Government Directorate of Antiquities in 1940 and 1941. *Journal of Near Eastern Studies* 2,2: 131-158.
- MCADAM E. and MYNORS H.S.
1988 Tell Rubeidheh: Pottery from the Uruk Mound. In: KILLICK R.G. (ed.), *Tell Rubeidheh. An Uruk village in the Jebel Hamrin*: 39-76. Warminster: Aris & Phillips (Hamrin Salvage Project Report 7, Iraq Archaeological Reports 2).
- MCMAHON A.
1998 The Kuyunjik Gully sounding, Nineveh, 1989 and 1990 seasons. *Al-Rāfidān* 19: 1-32.
- MARRO C.
2010 Where did Late Chalcolithic chaff-faced ware originate? Cultural dynamics in Anatolia and Transcaucasia at the dawn of the urban civilization (ca. 4500-3500 BC). *Paléorient* 36,2: 35-55.
(ed.) 2012 *After the Ubaid. Interpreting change from the Caucasus to Mesopotamia at the dawn of urban civilization (4500-3500 BC).* Istanbul: Institut français d'Études anatoliennes Georges-Dumézil (Varia Anatolica 27).
- MATTHEWS R.
2003 *Excavations at Tell Brak. Vol. 4: Exploring an Upper Mesopotamian regional centre, 1994-1996.* Cambridge: McDonald Institute for Archaeological Research.
- MOON J.
1982 The distribution of upright-handled jars and stemmed dishes in the Early Dynastic period. *Iraq* 44,1: 39-70.
- MÜHL S. and NIEUWENHUYSE O.P.
2016 Halaf and Ubaid period settlement: A view from the Central Zagros Piedmont. *Studia Chaburensia* 6: 27-56.
- NIEUWENHUYSE O.P.
2018 In the Shahrizor. Reassessing the Halaf ceramic traditions of Iraqi Kurdistan. In: GÓMEZ-BACH A., BECKER J. and MOLIST M. (eds.), *II workshop on Late Neolithic ceramics in Ancient Mesopotamia: Pottery in context*: 45-57. Barcelona: Museu d'Arqueologia de Catalunya (Monografies del MAC 1).
- NISSEN H.
2002 Uruk: Key site of the period and key site of the problem. In: POSTGATE J.N. (ed.), *Artefacts of complexity: Tracking the Uruk in the Near East*: 1-16. Warminster: British School of Archaeology in Iraq (Iraq archaeological reports 5).
- NUMOTO H.
1987 Tell Musharifa. In: FUJII H. (ed.), Working report on the first season of Japanese archaeological excavation in Saddam Dam salvage project. In: State Organization of Antiquities and Heritage (eds.), *Researches on the antiquities of Saddam Dam basin salvage and other researches*: 49-54. Baghdad: State Organisation of Antiquities and Heritage.
1988 Excavations at Tell Fisna. *Al-Rāfidān* 9: 1-72.
- OATES J.
1960a Ur and Eridu, the Prehistory. *Iraq* 22: 32-50.
1960b A radiocarbon date from Choga Mami. *Iraq* 34: 49-53.
1969 Choga Mami, 1967-8: A preliminary report. *Iraq* 31: 115-152.
1985 Tell Brak: Uruk pottery from 1984 season. *Iraq* 47: 175-186.
1986 Tell Brak: The Uruk/Early dynastic sequence. In: FINKBEINER U. and RÖLLIG W. (eds.), *Ĝamdat Nasr. Period or regional style?*: 245-273. Wiesbaden: Ludwig Reichert (Beihefte zum Tübinger Atlas des Vorderen Orients B 62).
1987 A note on the 'Ubaid and Mitanni pottery from Tell Brak. *Iraq* 49: 193-198.
- OATES D and OATES J
1993 Excavations at Tell Brak 1992-1993. *Iraq* 55: 155-199.
- OATES J., MCMAHON A., KARSGAARD P., AL-QUNTAR S. and UR J.
2007 Early Mesopotamian urbanism: A new view from the North. *Antiquity* 81,313: 585-600.
- ÖZBAL R.
2010 *The emergence of Ubaid styles at Tell Kurdu: A local perspective.* In: CARTER R.A. and PHILIP G. (eds.), *Beyond the Ubaid. Transformation and integration in the late prehistoric societies of the Middle East*: 293-310. Chicago: University of Chicago (Studies in Ancient Oriental Civilization 63).
- PARKER B.J. and KENNEDY J.R.
2010 A quantitative attribute analysis of the Ubaid-period ceramic corpus from Kenan Tepe. *BASOR* 358: 1-26.
- PEARCE J.
2000 The Late Chalcolithic sequence at Hacinebi Tepe, Turkey. In: MARRO C. and HAUPTMANN H. (eds.), *Chronologies des pays du Caucase et de l'Euphrate aux IV^e-III^e millénaires*: 115-144. Paris: Éditions De Boccard (Varia Anatolica 11).

- POLLOCK S.
1990 Archaeological investigations on the Uruk Mound, Abu Salabikh, Iraq. *Iraq* 52: 85-93.
- RENETTE S.
2013 The Trans-Tigridian corridor in the early third millennium BC. In: DE GRAEF K. and TAVERNIER J. (eds.), *Susa and Elam. Archaeological, philological, historical and geographical perspectives. Proceedings of the international congress held at Ghent University, 14th-17th December 2009*: 43-50. Leiden and Boston: Brill.
- ROBERTS W.B. and VANDER LINDEN M.
2011 Introduction. In: ROBERTS W.B. and VANDER LINDEN M. (eds.), *Investigating archaeological cultures: Material culture, variability and transmission*: 1-22. New York: Springer.
- ROTHMAN M.S.
2001 *Uruk Mesopotamia and its neighbors. Cross-cultural interactions in the era of state formation*. Santa Fe: School of American Research (Advanced seminar series).
2002 *Tepe Gawra: The evolution of a small prehistoric center in Northern Iraq*. Philadelphia: University of Pennsylvania (Museum Monograph 12).
- ROTHMAN M.S. and BADLER V.R.
2011 Contact and development in Godin Period VI. In: GOPNIK H. and ROTHMAN M.S. (eds.), *On the high road. The history of Godin Tepe, Iran*: 67-137. Toronto: Royal Ontario Museum (Biblioteca Iranica: Art, Archaeology and Architecture Series 1).
- ROTHMAN M.S. and GOPNIK H.
2011 *On the high road. The history of Godin Tepe, Iran*. Toronto: Royal Ontario Museum (Biblioteca Iranica: Art, Archaeology and Architecture Series 1).
- ROUX V.
2019a *Ceramics and society. A technological approach to archaeological assemblages*. New York: Springer.
2019b Modeling the relational structure of ancient societies through the *chaîne opératoire*: The Late Chalcolithic societies of the Southern Levant as a case study. In: SAQALLI M. and VANDER LINDEN M. (eds.), *Integrating qualitative and social science factors in archaeological modelling*: 163-184. New York: Springer.
- ROUX V., BRIL B., CAULIEZ J., GOUJON A.L., LARA C., MANEN C., SAULIEU G. DE and ZANGATO E.
2017 Persisting technological boundaries: Social interactions, cognitive correlations and polarization. *Journal of Anthropological Archaeology* 48: 320-335.
- ROUX V. and COURTY M.-A.
2013 Introduction to discontinuities and continuities: Theories, methods and proxies for a historical and sociological approach to evolution of past societies. *Journal of Archaeological Method and Theory* 20,2: 187-193.
- RUDMIN F.W.
2003 Critical history of the acculturation psychology of assimilation, separation, integration, and marginalization. *Review of General Psychology* 7,1: 3-37.
- SAFAR F., MUSTAFA M.A. and LLOYD S.
1981 *Eridu*. Baghdad: State Organization of Antiquities and Heritage.
- SAM D.L.
2006 Acculturation: conceptual background and core components. In: SAM D.L. and BERRY J.W. (eds.), *The Cambridge handbook of acculturation psychology*: 11-26. New York: Cambridge University.
- SCHWARTZ G.M.
1988 *A ceramic chronology from Tell Leilan: Operation I*. New Haven and London: Yale University (Yale Tell Leilan Research 1).
- SERVICE E.R.
1975 *Origins of the state and civilization: The process of cultural evolution*. New York: Norton.
- SHENNAN S.
2013 Lineages of cultural transmission. In: ROY E., LYCETT S.J. and JOHNS S.E. (eds.), *Understanding cultural transmission in Anthropology. A critical synthesis*: 346-360. New York: Berghahn Books (Methodology and History in Anthropology 26).
- SHENNAN J.S., CREMA E.R., ENRICO R.C. and KERIG T.
2015 Isolation-by-distance, homophily, and “core” vs. “package” cultural evolution models in Neolithic Europe. *Evolution and Human Behavior* 36,2: 103-109.
- STARK M.T., BOWSER B.J. and HORNE L. (eds.)
2008 *Cultural transmission and material culture. Breaking down boundaries*. Tucson: Arizona University.
- STARR R.
1939 *Nuzi, report on the excavations at Yorgan Tapa near Kirkuk, Iraq, 1927-1932*. Cambridge (Mass.): Harvard University.
- STEIN G.J.
2001 Indigenous social complexity at Hacinebi (Turkey) and the organization of Uruk colonial contact. In: ROTHMAN M.S. (ed.), *Uruk Mesopotamia and its neighbors. Cross-cultural interactions in the era of state formation*: 265-306. Santa Fe: School of American Research (Advanced seminar series).
2002 The Uruk expansion in Anatolia: A Mesopotamian colony and its indigenous host community at Hacinebi, Turkey. In: POSTGATE J.N. (ed.), *Artefacts of complexity: Tracking the Uruk in the Near East*: 149-171. Warminster: British School of Archaeology in Iraq (Iraq archaeological reports 5).
2010 Local identities and interaction spheres: Modeling regional variation in the Ubaid Horizon. In: CARTER R.A. and PHILIP G. (eds.), *Beyond the Ubaid. Transformation and integration in the late prehistoric societies of the Middle East*: 23-44. Chicago: University of Chicago (Studies in Ancient Oriental Civilization 63).
2012 The development of indigenous social complexity in Late Chalcolithic Upper Mesopotamia in the 5th-4th millennia BC. An initial assessment. *Origini* XXXIV: 125-151.
- STEIN G.J. and BLACKMAN M.J.
1993 The organizational context of specialized craft production in Early Mesopotamian states. *Research in Economic Anthropology* 14: 29-59.
- STEIN G.J. and ÖZBAL R.
2007 A tale of two *Oikumenai*: Variation in the expansionary dynamics of ‘Ubaid and Uruk Mesopotamia. In: STONE E.C. (ed.), *Settlement and society: Essays dedicated to Robert McCormick*

- Adams: 329-342. Los Angeles and Chicago: Cotsen Institute of Archaeology and University of Chicago.
- STEINKELLER P.
1993 Early political development in Mesopotamia and the origins of the Sargonic empire. In: LIVERANI M. (ed.), *Akkad, the first world empire: Structure, ideology, traditions*: 107-129. Padua: Sargon.
- STROMMINGER E., SÜRENHAGEN D., RITTIG D. and DRIESCH A. VON DEN
2014 *Die Kleinfunde von Habuba Kabira-Süd*. Wiesbaden: Harrassowitz Verlag (Wissenschaftliche Veröffentlichungen der Deutschen Orient-Gesellschaft 141).
- SÜRENHAGEN D.
1979 Ahmad al-Hattu 1978. *Mitteilungen der Deutschen Orient-Gesellschaft* 111: 35-50.
1986 Archaische Keramik aus Uruk-Warka. Erster Teil: Die Keramik der Schichten XVI-VI aus den Sondagen "Tiefschnitt" und "Sagegraben" in Eanna. *Baghdader Mitteilungen* 17: 7-95.
- TENU A., CLANCIER P., MARCHAND F., SARMIENTO-CASTILLO D. and VERDELLET C.,
2018 Kunara. Rapport préliminaire sur la quatrième campagne de fouilles (2016). *Akkadica* 139,1: 1-72.
- THIEL M., KURTHS J., CARMEN ROMANO M., MOURA A. and KÁROLYI G. (eds.)
2010 *Nonlinear dynamics and chaos: Advances and perspectives*. Berlin: Springer Verlag.
- VALLET R.
2016 *Report on the second season of excavations at Girdi Qala and Logardan*. Directorate of Antiquities of Souleymanieh, General Directorate of Antiquities of Kurdistan Regional government.
2018 Tell Feres, a failed pathway towards urbanism in Northern Mesopotamia. *Études mésopotamiennes* 1: 156-172.
- VALLET R. and BALDI J.S.
2016 Tell Feres: New evidences on the development of Proto-Urban societies in Northern Mesopotamia. In: KANJOU Y. and TSUNEMI A. (eds.), *A history of Syria in one hundred sites*: 91-97. Oxford: Archaeopress.
- VALLET R., BALDI J.S., NACCARO H., RASHEED K., SABER S.A. and HAMARASHEED S.J.
2017 New evidence on Uruk expansion in the Central Mesopotamian Zagros Piedmont. *Paléorient* 43,1: 61-87.
- VERHOEVEN M.
2010 Social complexity and archaeology: A contextual approach. In: BOLGER D. and MAGUIRE L.C. (eds.), *The development of pre-state communities in the ancient Near East. Studies in honour of Edgar Peltenburg*: 11-21. Oxford and Oakville: Oxbow Books (BANE 2).
- VIGNOLA C., MARZAIOLI F., BALOSSI RESTELLI F., DI NOCERA G.M., FRANGIPANE M., MASI A., PASSARIELLO I., SADORI L. and TERRASI F.
2019 Changes in the Near Eastern chronology between the 5th and the 3rd millennium BC: New AMS ¹⁴C dates from Arslantepe (Turkey). *Nuclear Instruments and Methods in Physics Research, B: Beam Interactions with Materials and Atoms*, 456, 1-8.
- WELSCH R.L. and TERREL J.E.
1998 Material culture, social fields, and social boundaries on the Sepik Coast of New Guinea. In: STARK M.T. (ed.), *The archaeology of social boundaries*: 50-77. Washington: Smithsonian Institution.
- WENGROW D., CARTER R., BRERETON G., SHEPPERSON M., HAMARASHI S.J., SABER S.A., BEVAN A., FULLER D., HIMMELMAN H., SOSNOWSKA H. and GONZALEZ CARRETERO L.
2016 Gurga Chiya and Tepe Marani: New excavations in the Shahrizor Plain, Iraqi Kurdistan. *Iraq* 78: 253-284
- WOLF E.R.
1982 *Europe and the people without history*. Berkeley: University of California.
- WRIGHT H.T.
1981 *An early town on the Deh Luran plain: Excavations at Tepe Farukhabad*. Ann Arbor: University of Michigan (Memoirs of the Museum of Anthropology 13).
2014 Early Uruk ceramic assemblages: Cultural relations in Greater Mesopotamia during the late fifth and early fourth millennia BC. In: MCMAHON A. and CRAWFORD H. (eds.), *Preludes to urbanism. The Late Chalcolithic of Mesopotamia. In honour of Joan Oates*: 109-125. Cambridge: University of Cambridge (McDonald Institute Monographs).
- WRIGHT H.T., NEELY J.A., JOHNSON G.A. and SPETH J.
1975 Early fourth millennium developments in Southwestern Iran. *Iran* 13,1: 129-147.