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A ‘communal’ building of the beginning of the Early Bronze Age at Arslantepe-Malatya. Spatio-functional analysis and interpretation of the archaeological context.

Giulio Palumbi, Corrado Alvaro, Clara Grifoni, Marcella Frangipane,
Cristiano Vignola, Filippo Terrasi

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Maquette : Bleu T | Arslantepe-Malatya (Turkey), Building 36. Reconstruction of the architecture emphasizing the roof timber frame of the building (© Missione Archeologica Italiana in Anatolia orientale).

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A 'COMMUNAL' BUILDING OF THE BEGINNING OF THE EARLY BRONZE AGE AT ARSLANTEPE-MALATYA (TURKEY). SPATIO-FUNCTIONAL ANALYSIS AND INTERPRETATION OF THE ARCHAEOLOGICAL CONTEXT

G. PALUMBI, C. ALVARO, C. GRIFONI and M. FRANGIPANE with contributions by C. VIGNOLA and F. TERRASI*

Abstract: *At Arslantepe towards the end of the 4th millennium BC, after the destruction of the palatial complex of period VIA, the following period VIB1 witnesses the flimsy architectural remains of wattle and daub huts associated with a ceramic culture clearly recalling the contemporary Kura-Araxes traditions of Eastern Anatolia and of the Southern Caucasus. The combination of architectural and zooarchaeological data suggests that period VIB1 represented the occupation by one or more specialised pastoral communities. Recent excavations at Arslantepe have brought to light an imposing mud-brick building (Building 36) dating to period VIB1. Building 36 rested on top of a large courtyard and of a monumental hall dating to the period VIA of the palace complex, thus highlighting a strong sense of continuity in terms of monumental architecture between periods VIA and VIB1. It was destroyed by a violent fire, burying a huge amount of materials in situ (83 ceramic vessels, metals and stone tools). A detailed reconstruction of the material assemblages and a thorough analysis of the functions of the building will constitute the main focus of this paper. This will ultimately shed light on the functions and political significance of this special building in the VIB1 settlement in the frame of ceremonial feasting that may have represented the new strategies enacted by the new Kura-Araxes oriented elites that emerged in the Malatya region, following the collapse of the Uruk-related centralised system.*

Résumé: *Vers la fin du 4^e millénaire av. J.-C., après la destruction du complexe palatial d'Arslantepe de la période VIA, on observe sur le site, dans la période qui suit (VIB1), les vestiges de huttes en torchis, associés à une culture céramique qui rappelle des traditions contemporaines du Kura-Araxe de l'Anatolie orientale et du Sud du Caucase. La combinaison des données architecturales et fauniques suggère que la période VIB1 d'Arslantepe pourrait être l'occupation d'une ou plusieurs communautés pastorales. Les fouilles récentes effectuées à Arslantepe ont mis au jour un grand bâtiment en brique crue (Bâtiment 36) datant de cette période. Ce bâtiment repose directement sur une grande cour et une salle monumentale du complexe palatial de la période VIA; il souligne une continuité très soutenue dans l'architecture monumentale entre les deux périodes. Ce bâtiment fut détruit par un violent incendie qui a entraîné l'enfouissement d'une quantité considérable de mobilier in situ (83 vases en céramique, métaux et outils en pierre). Cet article met l'accent sur une reconstitution détaillée de tous les assemblages recueillis et sur une analyse de la fonction du bâtiment. Cette reconstitution a pour but de faire la lumière sur le rôle social et politique de ce bâtiment spécial dans le cadre de cérémonies et de repas collectifs qui ont pu représenter les stratégies politiques mises en place par les nouvelles élites influencées par le monde Kura-Araxe, élites qui « émergent » dans la région de Malatya à la suite de l'effondrement d'un système centralisé, dérivé du monde urukéen.*

Keywords: *Arslantepe; Eastern Anatolia; Kura-Araxes; Uruk; Pottery; Architecture; Public feasting.*

Mots-clés: *Arslantepe; Anatolie orientale; Kura-Araxe; Uruk; Céramique; Architecture; Banquets.*

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INTRODUCTION. THE DISCOVERY OF AN IMPOSING MUD-BRICK BUILDING IN THE HUT SETTLEMENT OF PERIOD VIB1 (M.F.)

The recent discovery at Arslantepe of a large building dating to the end of the 4th millennium BC has changed the perspectives on the dynamics operating at the site, and probably in the Upper Euphrates Valley, at the very beginning of the Early Bronze Age. In this article, we would like to present a detailed analysis of the newly discovered Building 36 and of all related *in situ* materials. This will ultimately shed light on the significance of this special building within the new ‘feasting’ politics of the late-4th millennium emerging elites and within the territorial and political organization of the communities in the Malatya region in the period immediately following the collapse of a centralised political and economic system. This system had emerged at the site around the mid-4th millennium in connection with similar developments in Mesopotamia and in the ‘Uruk’ world. While this article is as in depth analysis of Building 36, a detailed contextualisation of periods VIA and VIB1 at Arslantepe, historically coterminous with the so-called Uruk and Kura-Araxes ‘expansions’, is broadly dealt with in the cited references.¹

At the end of the 4th millennium BC, the palatial complex of period VIA, which had marked the climax of an extraordinary growth process towards a centralised political and economic system, was destroyed by a fire that marked the definitive collapse of the related power system (Frangipane 2012b and 2014). The impressive ruins of the monumental buildings that preserved their walls to a remarkable height, left an irregularly shaped surface made of prominent points and depressions (fig. 1A). After what was probably a short period of abandonment, during which the ruins were widely quarried and damaged, perhaps like a sort of *damnatio memoriae*, a new flimsy occupation of scattered wattle and daub huts, corresponding to the beginning of period VIB1, was built directly on top of the palace ruins that had been only roughly levelled by the period VIB1 settlers, without any serious building effort (fig. 1B).

THE EARLY PERIOD VIB1 SEQUENCE AND THE CONSTRUCTION OF BUILDING 36

The VIB1 occupation, which has been brought to light over a large area of the mound, covering the whole surface occupied by the period VIA palace (fig. 2B) consisted of various strati-

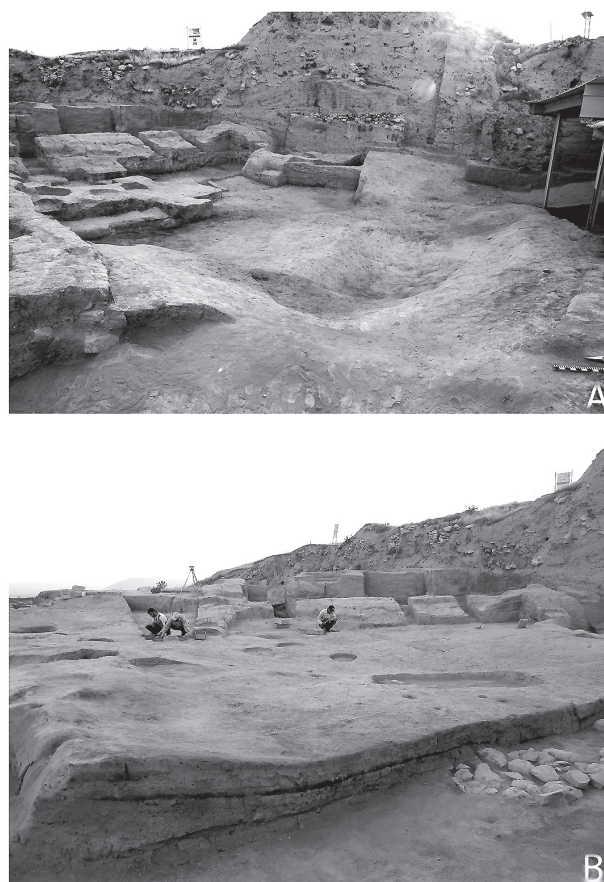


Fig. 1 – A) Irregularly shaped surface resulting from the collapse of the monumental mud-brick buildings of period VIA; **B)** uneven surface levelled by the earliest settlers of period VIB1.

fied levels. While the thorough study of the sequence of VIB1 occupation is still in progress, no less than five sub-phases have already been identified. The two earliest levels consisted mainly of large spaces, probably for animals, and possibly tents, as the thick deposit of organic material accumulated on the surface (Palmieri and Cellai 1983) and the large number of post-holes and pits suggest. This evidence therefore points to ephemeral possibly temporary occupations in the first phases. The third level shows the construction of an imposing mud-brick hall (the first phase of Building 36) on the upper part of the mound (Frangipane 2014: 173-175, fig. 1), together with what was possibly an extension of the hut occupation along the slope. This building significantly rested on top of the ruins of an earlier monumental building (Building 37) belonging to the period VIA palace complex, which has been recently

1. See also Rothman 2001; Chataigner and Palumbi 2014.

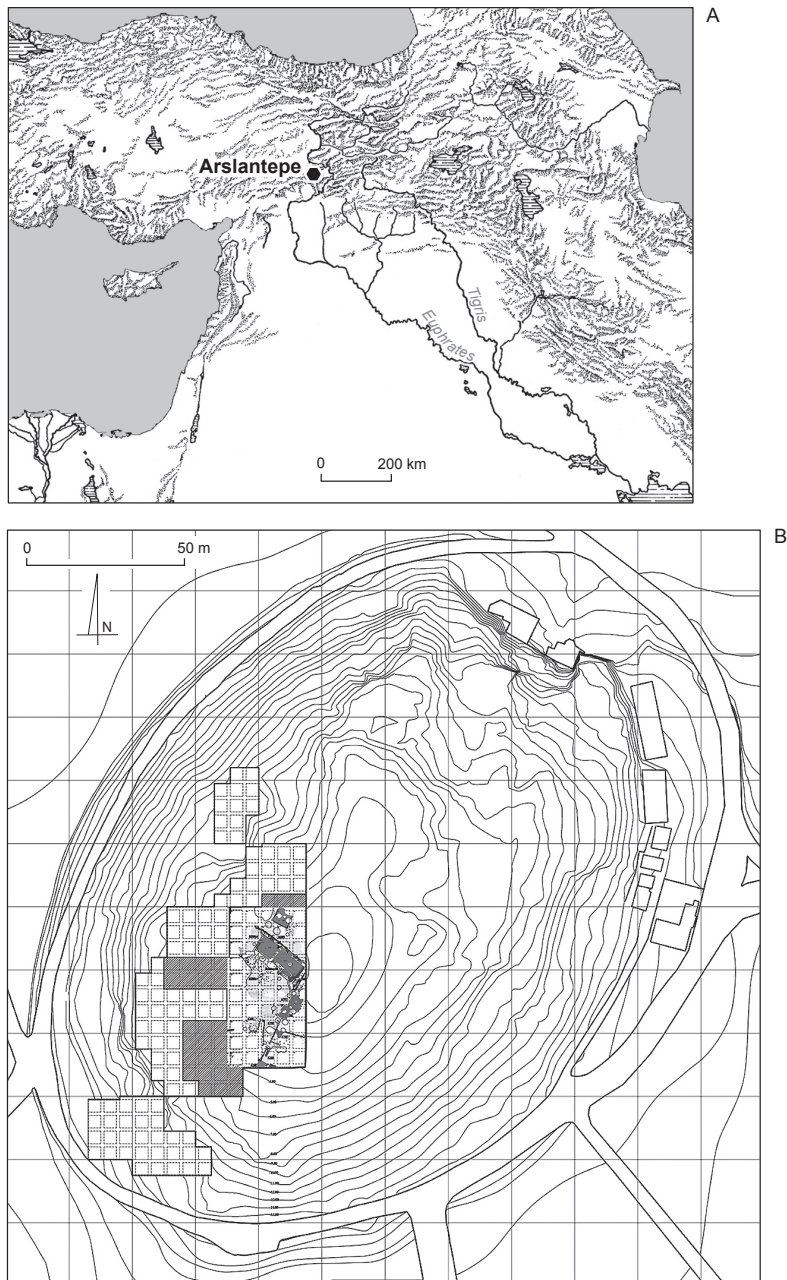


Fig. 2 – A) Location of Arslantepe in Turkey; **B)** plan of Arslantepe with the south-western excavation area and localization of the remains of period VIB1.

discovered at the northern edge of a very large courtyard; a courtyard into which the main corridor led from the entrance, and which represented the political heart of the Palace, where people may have gathered to be received by the paramount

leader (Frangipane 2016). In this earliest phase, the large hall (A1000) was the only room of Building 36; it was already equipped with a very large central circular fireplace, and had two entrances opening southwards onto an open space,

symmetrically placed at both sides of a protruding wing (A1374) (Frangipane 2014: 175). Since its earliest phase, this building would have stood out in terms of its dimensions, architectural features and building techniques, above the nearby smaller wooden and wattle and daub huts.

In a second construction phase, a quadrangular room (A1369) was added to A1000 on its western side and contained a large number of vessels as well as two copper spearheads (Frangipane 2014). In this phase, in addition to being larger and more complex, the building probably acquired heightened political significance. At the same time, the settlement itself seems to have also expanded with the construction of new huts scattered along the slopes (fig. 3).

Building 36 was destroyed by a violent fire, burying a huge amount of materials *in situ* on the floors and in the collapse layers. A detailed reconstruction of the material assemblages and a thorough analysis of the function of the building, by reconstructing the activities performed there, will constitute the main focus of this paper.

BUILDING 36 IN THE CONTEXT OF PERIOD VIB1 OCCUPATION

The rear northern wall of Building 36 abutted against an imposing palisade running in an E-W direction, probably as early as the first construction phase (Frangipane 2014: 173). This palisade consisted of two rows of robust wooden posts plastered with clay, equipped with double-buttressed reinforcements on both sides and probably reinforced several times. The palisade separated or protected a northern upper area, where one single hut, also rebuilt several times, stood out from the rest of the huts in the settlement on account of its larger size, and was interpreted by M. Frangipane (2014: 174) as the residence of the community “chief”. Just north of Building 36 is an open area between this hut and the palisade that yielded thousands of animal bones, mostly the meat richest parts of sheep and goat (Siracusano and Bartosiewicz 2012). This anomalous concentration of ‘selected’ animal bones has been interpreted as the left-overs of communal meals consumed in the context of feasting practices (Siracusano and Palumbi 2014).

South of Building 36, long fences of post-holes divided the occupied area into large spaces with mud surfaces covered by organic material, which were very probably used to house the flocks, and into a few scattered wattle and daub huts (fig. 3), sometimes equipped with circular fireplaces (Palmieri 1981; Frangipane and Palmieri 1983b). In the area close to the south-eastern corner of Building 36 a number of special features

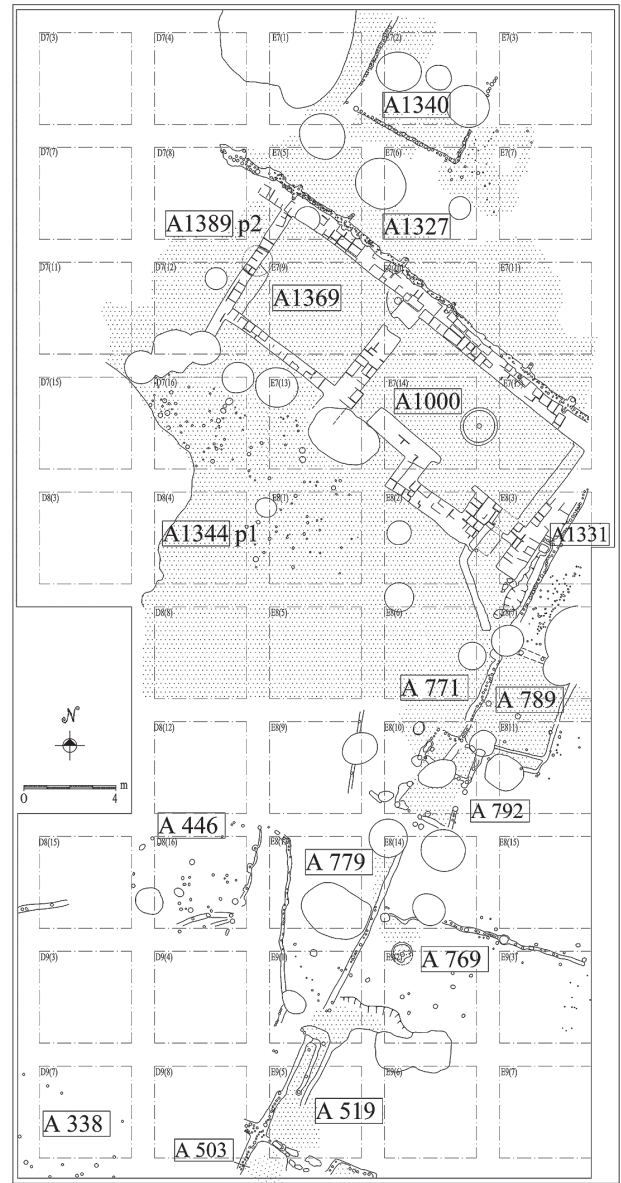


Fig. 3 – Plan of the settlement of period VIB1 contemporary with the second phase of construction of Building 36.

have been found, probably connected with ritual/ceremonial activities: a peculiar space with an elongated basin lined with wood, and a hut (A789) where six unusual ovoid spouted vessels with pedestals in the shape of human feet and a miniaturistic jarlet on the top (see below fig. 12) were probably “*rytha*” being used for the consumption of special kinds of liquids (Frangipane 2012b and 2014).

It has already been emphasised that the connection between wooden or wattle and daub architecture, characteristic of the occupation in period VIB1, as well as the specialised husbandry strategies focused on caprines recorded at Arslantepe in this period (Siracusano and Bartosiewicz 2012) suggest that the site was occupied by mobile communities founded on a specialised pastoral economy (Frangipane *et al.* 2005; Frangipane and Palumbi 2007; Palumbi 2012). The discovery of Building 36 introduces new perspectives for interpreting the nature of the occupation in period VIB1 (Frangipane 2014). The presence of this building points to the fact that even after the collapse of the centralised power system at the end of the Late Chalcolithic 5 (period VIA), Arslantepe continued to play an important role in the social dynamics of the Upper Euphrates region, not only as a “memorial” place staging wealthy funerary ceremonies, as has been suggested for the Arslantepe “royal” Tomb (Palumbi 2007-2008; 2008 and 2011) but also as a political centre that may have stood as a landmark for the pastoralist peoples moving around the area, and as the object of continuous negotiation between different communities contending for the site as the place of power, real and symbolic.

DATA RECORDING FOR THE RECONSTRUCTION OF AN ARCHAEOLOGICAL CONTEXT

The analysis of the material assemblages found *in situ* in Building 36 has made it possible to thoroughly reconstruct the features, activities and social functions of the building. The results we are going to present are the outcome of excavation and documentation methodologies and strategies designed jointly with Alba Palmieri many decades ago, applied for a long time at Arslantepe, and refined in the course of many years.

The positioning of the individual vessels and objects in their possible original spots is the result of rigorous stratigraphic procedures, carefully distinguishing between the *in situ* material deposit, collapse events (including collapsed upper storeys), and layers filling the rooms that can be ascribed to later episodes following the life and the destruction of the buildings. The *in situ* finds are left on the floors until the excavation of the room is completed; then they are surveyed, positioned and drawn in the plans, marking each individual sherd or object with a number. More than one plan is drawn if the finds are numerous and dispersed in a deep deposit at various heights (fig. 4).

Once these materials are taken to the restoration area, professional restorers work to match and glue the sherds together

by also analysing them jointly with the total amount of pieces collected in the layers. This is a hard and time-consuming work, but, through the patient checking of both the position of all the numbered sherds on the floors and the location in the layers of other fragments making up the recomposed containers, it allows to plausibly relocate each vessel in its original position in the room, also identifying possible items fallen down from an upper storey. This protracted and painstaking reconstruction process is the result of the close collaboration between archaeologists, topographers and restorers.

ARCHITECTURE, BUILDING TECHNIQUES AND MATERIALS (C.A.)

In its second construction phase, Building 36 consisted of two communicating rooms forming an elongated rectangle (17.70 x 7.50 m) oriented northwest/southeast, with a covered surface of 120 m² (fig. 5). The two rooms consisted of a large elongated hall (A1000) and a smaller square room (A1369) adjacent to its western side. Two entries lead both to the main hall A1000, while a window in the smaller room A1369 provided lighting and air. Middle/large sized stone foundations were employed for A1000-A1374, while small sized stones were used in A1369, which belongs to a second building phase. The northern side of the structure leans on the palisade (M223) and was built above and against on a drop in elevation of the surface, so that the foundations of this northern side are only half width than the other sides. The eastern wall was also built along a palisade and a short stone drain was built towards the south along the wall, which flows into an ovoid basin (A1339), possibly covered with wood (Frangipane 2012b: Fig. 3b). The upper parts of the walls of this structure were built with mud-bricks and preserved on *ca* 0.60 m (fig. 5A). Single lined stone foundations were 0.25 m under the ground (fig. 5B). Roof beams made of poplar and alder were perfectly visible and well preserved (fig. 6). The thickness of the walls ranged from 1 m in A1000 to 0.50 m in A1369 with consequences in the size of the mud-bricks, which are large (0.50 by 0.35 m) and arranged in two regular rows in A1000-A1374, and consist of two smaller mud-brick rows with a single row of larger ones in room A1369.

The large room A1000 (40 m² floor area) is a rectangle of 9.35 x 4.10 m, and it is the result of a precise and definite architectural project. The room had a bench (0.30 m high x 0.50 m wide) along its shorter eastern side. An unusually large fireplace, 1.60 m in diameter, was located in the middle of the

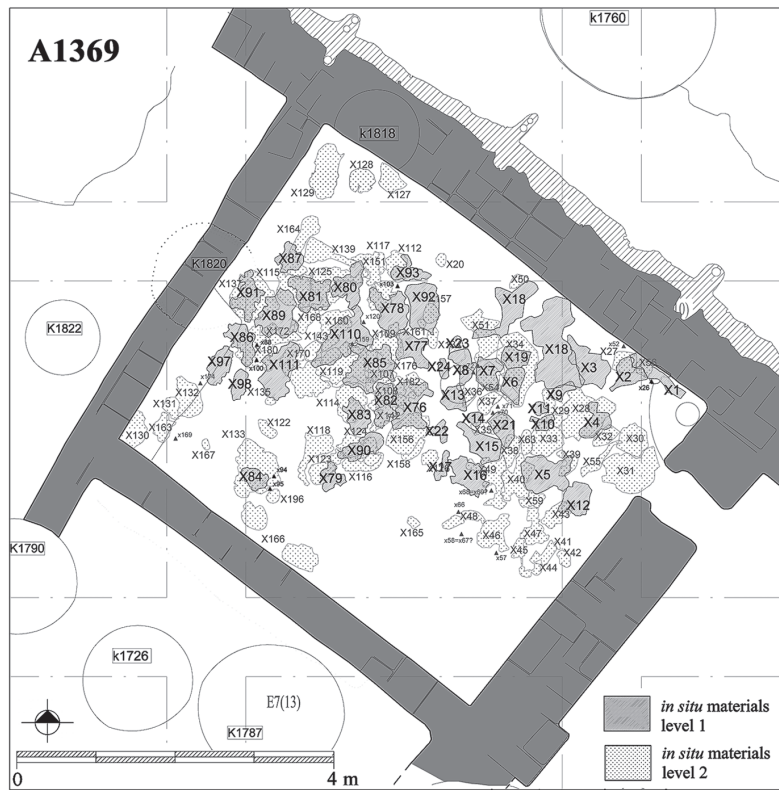


Fig. 4 – A) Plan of in situ pottery sherds in room A1369; **B)** in situ pottery sherds in room A1374.



Fig. 5 – Building 36. A) The mud brick walls; B) the stone foundations.

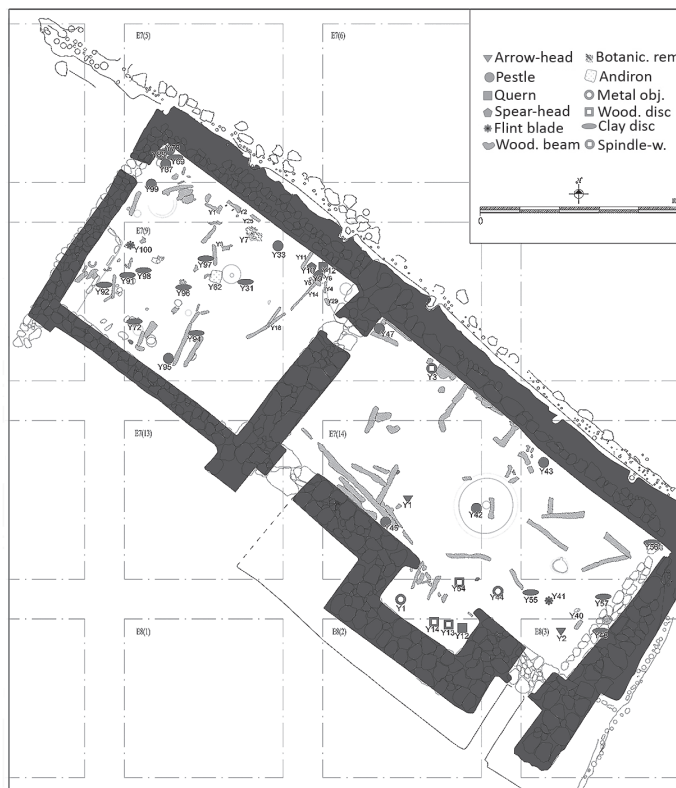


Fig. 6 – Plan of Building 36 with in situ materials.

room, slightly displaced towards the west along the long axis of the room, and in front of the entrance to A1374. This small space (2.40 x 1.17 m) is connected to A1000 through a large opening. A low platform along the protruding part of the building, corresponding to A1374, was raised outside against the southern wall, between the two openings leading to the hall. A third opening located on the western wall of A1000, which had led outside in the first building phase, gave access to room A1369.

Room A1369, that measured 5.80 x 4.80 m and hosted a small fireplace (diameter 0.50 m), was located slightly offset to the north. A low (0.10 m above the floor) curvy bench closed off the north-eastern corner of the room near the entrance. What seems to be the preserved part of a window was located near the north-western corner, at approximately 0.50 m from the floor.

CRITERIA AND METHODS FOR THE RECONSTRUCTION OF THE BUILDING

The criteria employed in architectural virtual reconstruction are based, especially in prehistoric architecture, on direct archaeological observations and comparisons, on indirect ethnographic parallels, on contextual analyses and on the consideration of universally valid structural and statics rules (Yakar 2000; Takaoğlu 2005). From this point of view, the analysis of the building layout is the starting point for virtual reconstruction; the thickness of the walls in relation to the extent and width of the rooms determines ceiling height. The volumes of the reconstructions are always hypothetical but they are in a range of possibilities, determined by several factors additional to the above-mentioned measurements. Ethnographic surveys on traditional architecture, which still exists in Anatolia, are crucial to virtually reconstruct ancient architecture (Yalman 2013). These surveys allow to verify the dead load resistance of mud-bricks on modern structures which have dimensions and

features very similar to the ancient ones; interaction between earth and stone, wall elevations, connections and cohesion between wooden roofs and other materials are the only available comparison. Therefore, the proposed virtual reconstruction also includes elements which were not found during the excavations: for example, chimneys which are well known in villages in the region, such as the half-abandoned village at Erenli, 30 km east of Malatya; or structural details, such as the roof construction or the connection between the roof beams and the top of the walls. These are not visible in the archaeological record but have been hypothesized in this reconstruction.

The decision to represent rooms A1000 and A1369 with different ceiling heights in the reconstruction is due to their wall thickness and the fact that the earlier room (A1000) is abutted by the more recent one (A1369) (fig. 7). A higher ceiling is also related to the interpretation of the possible function of room A1000 which has led to suggest a height greater than the usual three meters, which is the standard height that has been conversely attributed to room A1369.

The central fireplace of A1000 and the related entrance to A1374, the one in front of the other, represent the central focus of the large room, which influences the whole internal arrangement of the spaces. The collapse dynamics brought to light during the excavations allowed the reconstruction of the original location of the pots in the rooms based on the position of the fragments. The fragments scattered on the small surface of room A1374 (fig. 8) show two main patterns of collapse. The first group of sherds composing vessels W2, W1, W9, W3 were found directly above the floor and were located inside the limits of the room; the second group of

sherds, belonging to vessels W11, W6, W4, W8, W10, W5, W7 were found dispersed over a much larger area than the first group suggesting that they fell and tumbled down from the upper shelves. For this reason and due to the presence of charred wood remains covering the first group of vessels it seems likely that the space was shelved, and that the vessels were stored on two levels (on the ground and on a wooden shelf) (fig. 9).

The two openings of A1000 to the external area, similar in height, symmetrically frame the room, as do two symmetrically buttresses on their external sides east and west of A1000 (fig. 10). The top of the roof was most probably used for activities as seen in modern contexts: the ladder shown as leaning in the background represents this hypothesis.

Room A1000 opens to the south in an external space where numerous post-holes were identified. Some of the post-holes with a larger diameter and a supporting function were attributed to the phase presented here. The reconstruction of the external area takes into account this evidence and reproduces, based on the location of these larger post-holes, a porch protruding from the southern wall line of A1000 and A1369.

ANALYSIS OF THE *IN SITU* MATERIALS (C.G., G.P.)

POTTERY AND OTHER CLAY OBJECTS

Eighty-three ceramic vessels were among the *in situ* materials from Building 36 (fig. 11 and table 1). These vases

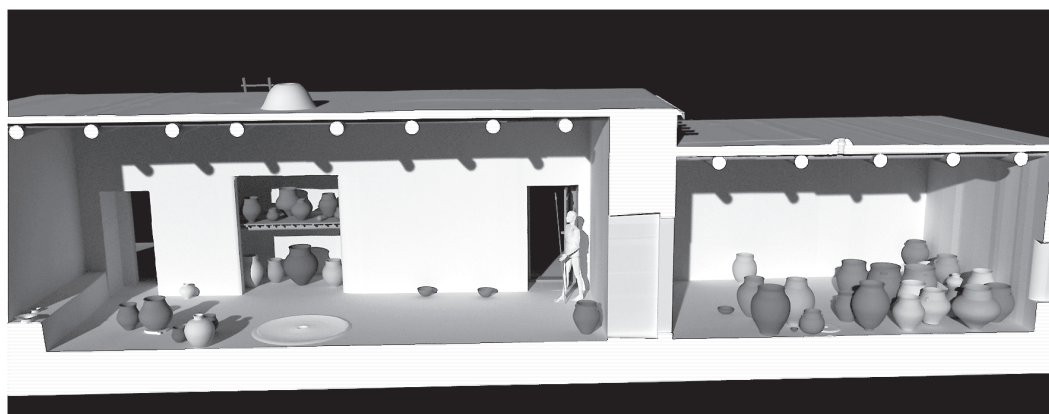


Fig. 7 – Building 36, east-west section looking to the south.
Reconstruction of the architecture and internal arrangements.

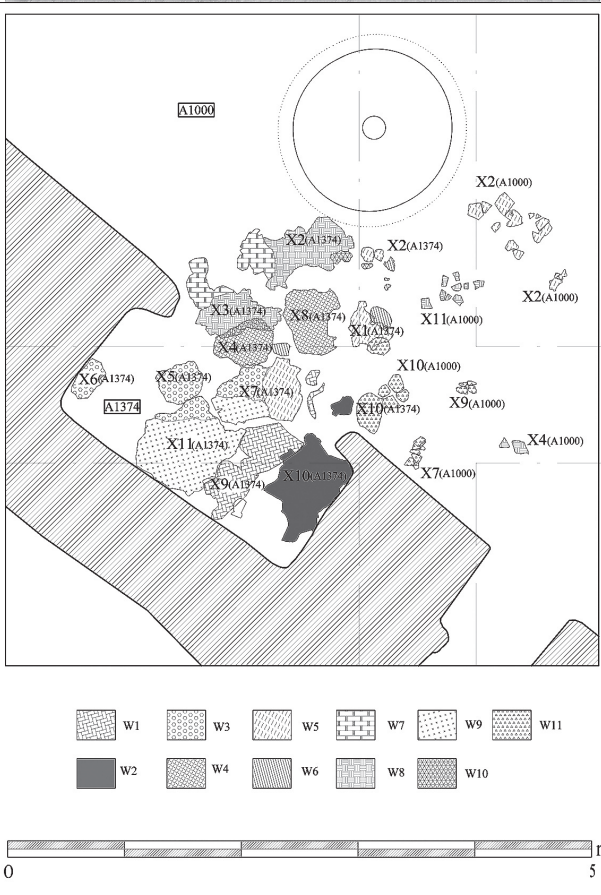


Fig. 8 – Room A1374, photo and plan of with scatters of ceramics in situ that were grouped according to their find spots.



Fig. 9 – Reconstruction prospect of the vessels' position in room A1374.

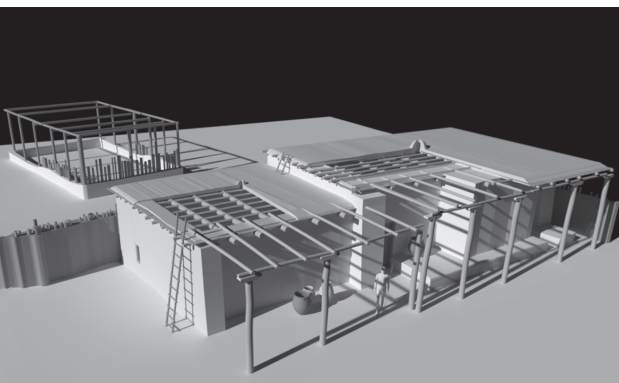


Fig. 10 – Building 36 and its external area, looking north. Reconstruction of the architecture emphasizing the roof timber frame of the building; in the background the hut of the 'chief' A1045.

belong to distinct ceramic traditions: hand-made Red-Black and Monochrome burnished wares and wheel-made Plain Simple and Late Reserved Slip Wares (hereafter respectively PSW and LRSW). Even though all the rooms in

Building 36 were both spatially and functionally interrelated, the pottery analysis that follows addresses each room inventory separately.

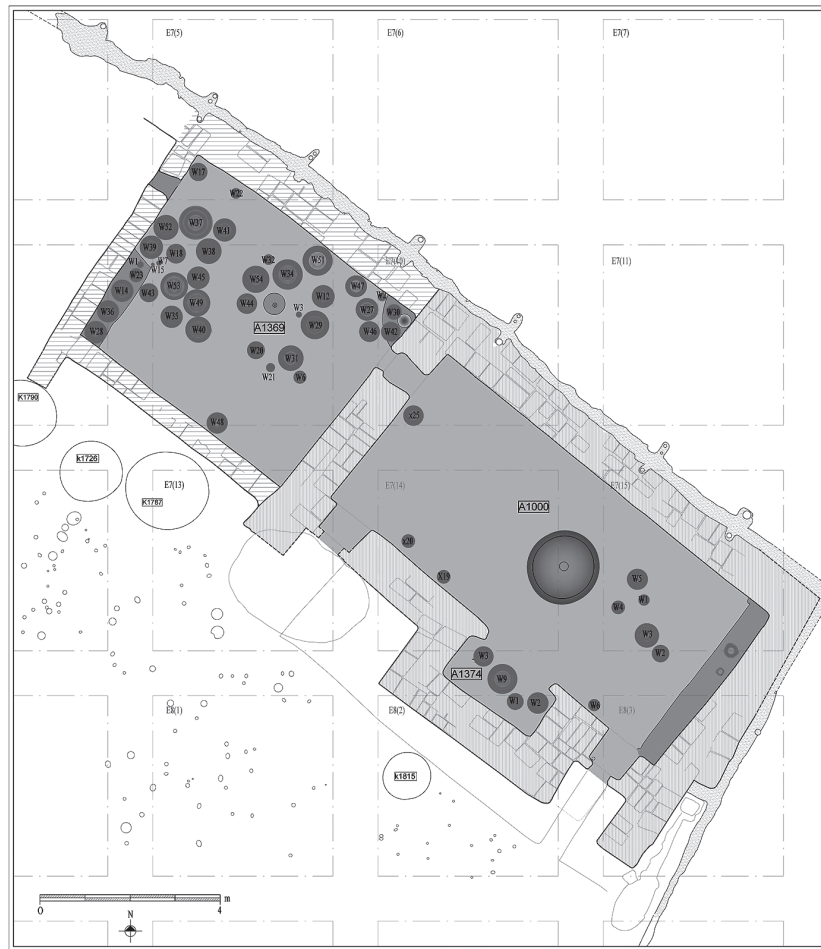


Fig. 11 – Building 36, plan showing the position of the ceramic containers at the moment of the destruction of the building.

Room A1000

The inventory of this large room includes eleven ceramic vessels (fig. 12), seven of which in Red-Black Burnished Ware and four in LRSW. The red-black repertoire includes two large hemispherical bowls (W10 and W9), two small handled jars with short neck and high shoulder (W1 and W4), one biconical necked jar (W2) with two symmetrical knobs at the maximum expansion, a large jar with truncated-conical neck (W11), and finally a very large jar/pithos (W3) with truncated conical neck and globular body featuring a relief decoration ‘imitating’ the frontal depiction of a handle. Of the two LRSW jars (W5 and W6), only one (W5) could be

fully reconstructed; it had an ovoid body, short cylindrical neck and a typical radial reserved slip surface treatment. Two half preserved LRSW jars W7 and W8 were also identified, the fact that they were found upside-down on the eastern bench of the room and that their fracture was old, suggest a secondary use of these vessels as pot-stands. Noteworthy is the zigzag post-firing incision running on the external rim of jar W8. The total volume of the closed shapes found in A1000 amounts to at least 220 litres.² In A1000, four flat circular

2. The volumes of the ceramic containers were calculated by means of the standalone software Pot_Utility 1.05 (© J.-P. Thalmann and ARCANE, 2006).

Table 1 – The ceramic containers found in Building 36 (RBB = Red-Black Burnished Ware; MB = Monochrome Burnished Ware; WM = Wheel-Made Plain Simple or Reserved Slip Ware).

W	Ware group	Shape	Status of preservation
A1369W1	RBB	Jarlet	Complete
A1369W2	MB	Jarlet	Complete
A1369W3	WM	Bowl	Complete
A1369W4	MB	Bottle	Complete
A1369W5	MB	Bottle	Partial
A1369W6	WM	Bowl	Partial
A1369W7	RBB	Bowl	Complete
A1369W8	MB	Shot glass	Partial
A1369W9	MB	Shot glass	Complete
A1369W10	MB	Shot glass	Complete
A1369W11	MB	Shot glass	Complete
A1369W12	RBB	Basin	Complete
A1369W13	RBB	Jar	Partial
A1369W14	RBB	Jar	Complete
A1369W15	MB	Shot glass	Complete
A1369W16	RBB	Jar	Complete
A1369W17	RBB	Jar	Complete
A1369W18	RBB	Jar	Complete
A1369W19	MB	Beaker	Complete
A1369W20	WM	Jar	Complete
A1369W21	MB	Bottle	Partial
A1369W22	RBB	Jarlet	Partial
A1369W23	WM	Jar	Complete
A1369W24	RBB	Bowl	Complete
A1369W25	RBB	Bowl	Partial
A1369W26	WM	Bowl	Partial
A1369W27	RBB	Jar	Complete
A1369W28	RBB	Jar	Complete
A1369W29	RBB	Very Large Jar/Pithos	Complete
A1369W30	RBB	Jar	Complete
A1369W31	RBB	Jar	Complete
A1369W32	WM	Jarlet	Complete
A1369W33	MB	Jarlet	Partial
A1369W34	MB	Very Large Jar/Pithos	Complete
A1369W35	RBB	Jar	Partial
A1369W36	WM	Bowl	Complete
A1369W37	MB	Very Large Jar/Pithos	Complete
A1369W38	MB	Jar	Complete
A1369W39	MB	Very Large Jar/Pithos	Partial
A1369W40	RBB	Very Large Jar/Pithos	Complete
A1369W41	MB	Jar	Partial
A1369W42	RBB	Jar	Partial

W	Ware group	Shape	Status of preservation
A1369W43	MB	Jar	Partial
A1369W44	RBB	Jar	Partial
A1369W45	MB	Jar	Complete
A1369W46	RBB	Jar	Partial
A1369W47	RBB	Jar	Partial
A1369W48	MB	Jar	Partial
A1369W49	RBB	Very Large Jar/Pithos	Partial
A1369W50	MB	Very Large Jar/Pithos	Partial
A1369W51	RBB	Very Large Jar/Pithos	Partial
A1369W52	RBB	Jar	Partial
A1369W53	RBB	Very Large Jar/Pithos	Partial
A1369W54	RBB	Very Large Jar/Pithos	Partial
A1369W55	RBB	Bowl	Partial
A1369W56	RBB	Bowl	Partial
A1369W57	WM	Jar	Partial
A1369W58	WM	Jar	Partial
A1369W59	WM	Jar	Partial
A1374W1	MB	Jar	Complete
A1374W2	MB	Jar	Complete
A1374W3	MB	Jar	Complete
A1374W4	RBB	Jar	Complete
A1374W5	RBB	Jar	Complete
A1374W6	RBB	Jarlet	Complete
A1374W7	RBB	Jar	Partial
A1374W8	RBB	Jar	Complete
A1374W9	RBB	Very Large Jar/Pithos	Complete
A1374W10	MB	Jarlet	Complete
A1374W11	RBB	Jar	Partial
A1374W12	RBB	Bowl	Complete
A1374W13	RBB	Bowl	Partial
A1000W1	RBB	Jarlet	Partial
A1000W2	RBB	Jar	Complete
A1000W3	RBB	Jar	Complete
A1000W4	RBB	Jar	Complete
A1000W5	WM	Jar	Complete
A1000W6	WM	Jar	Partial
A1000W7	WM	Jar	Partial
A1000W8	WM	Jar	Partial
A1000W9	RBB	Bowl	Partial
A1000W10	RBB	Bowl	Partial
A1000W11	RBB	Very Large Jar/Pithos	Partial

objects in fired clay were also found that we interpreted as lids.

Room A1374

In total, 13 ceramic containers were reconstructed, 9 of which were red-black and 4 monochrome burnished ware. In

A1374 (fig. 8), the only open shapes comprised a single red-black hemispherical bowl (W13) and a miniature red-black cup (W12). As concerns the closed shapes, the assemblage includes eight medium to large jars and of one very large jar (fig. 13). Some of these jars feature a set of common morphological and typological traits, such as the two medium sized jars (W3 monochrome and W8 red-black) with cylindrical

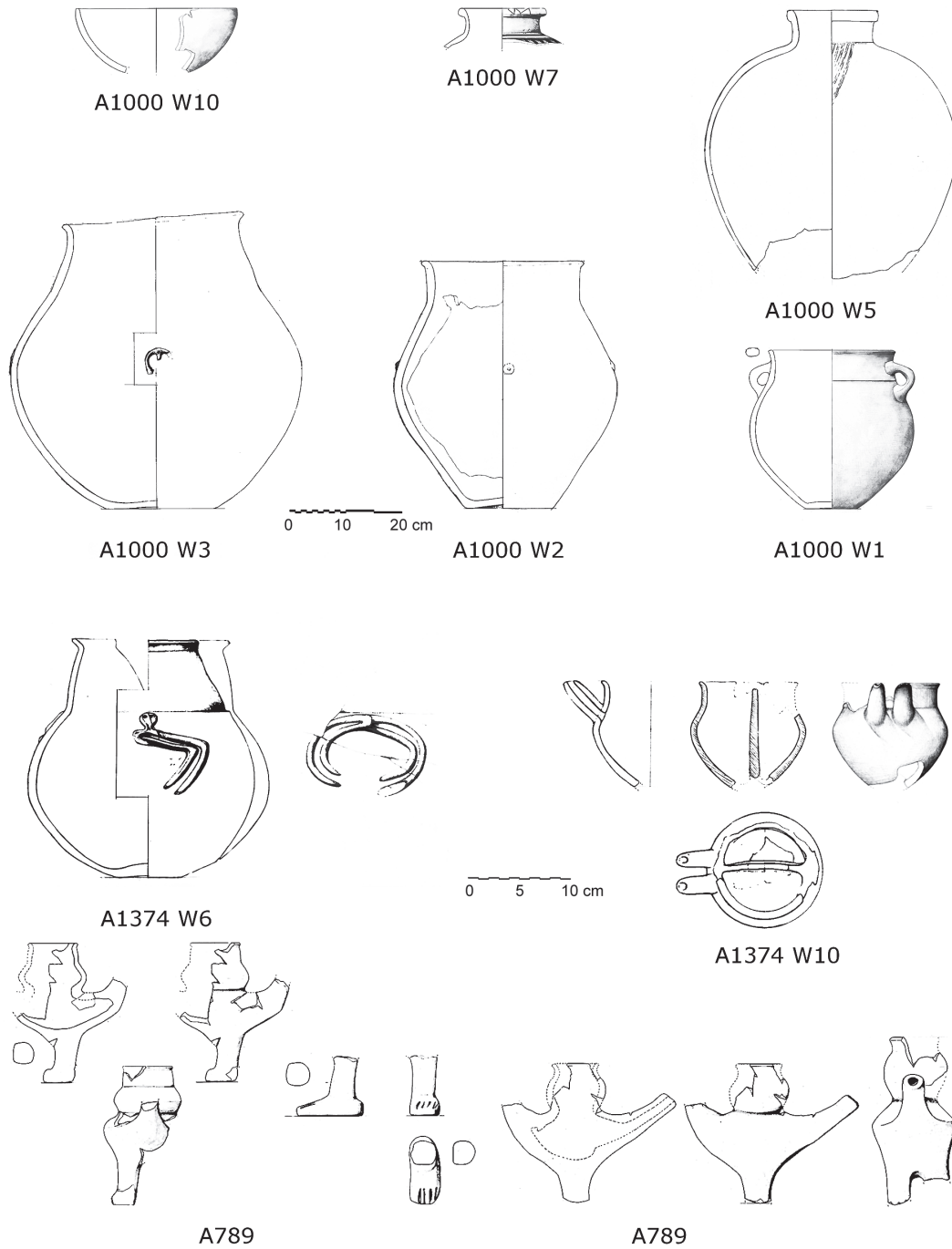


Fig. 12 – Ceramic vessels from rooms A1000, A1374 and the zoomorphic rytha from room A789.

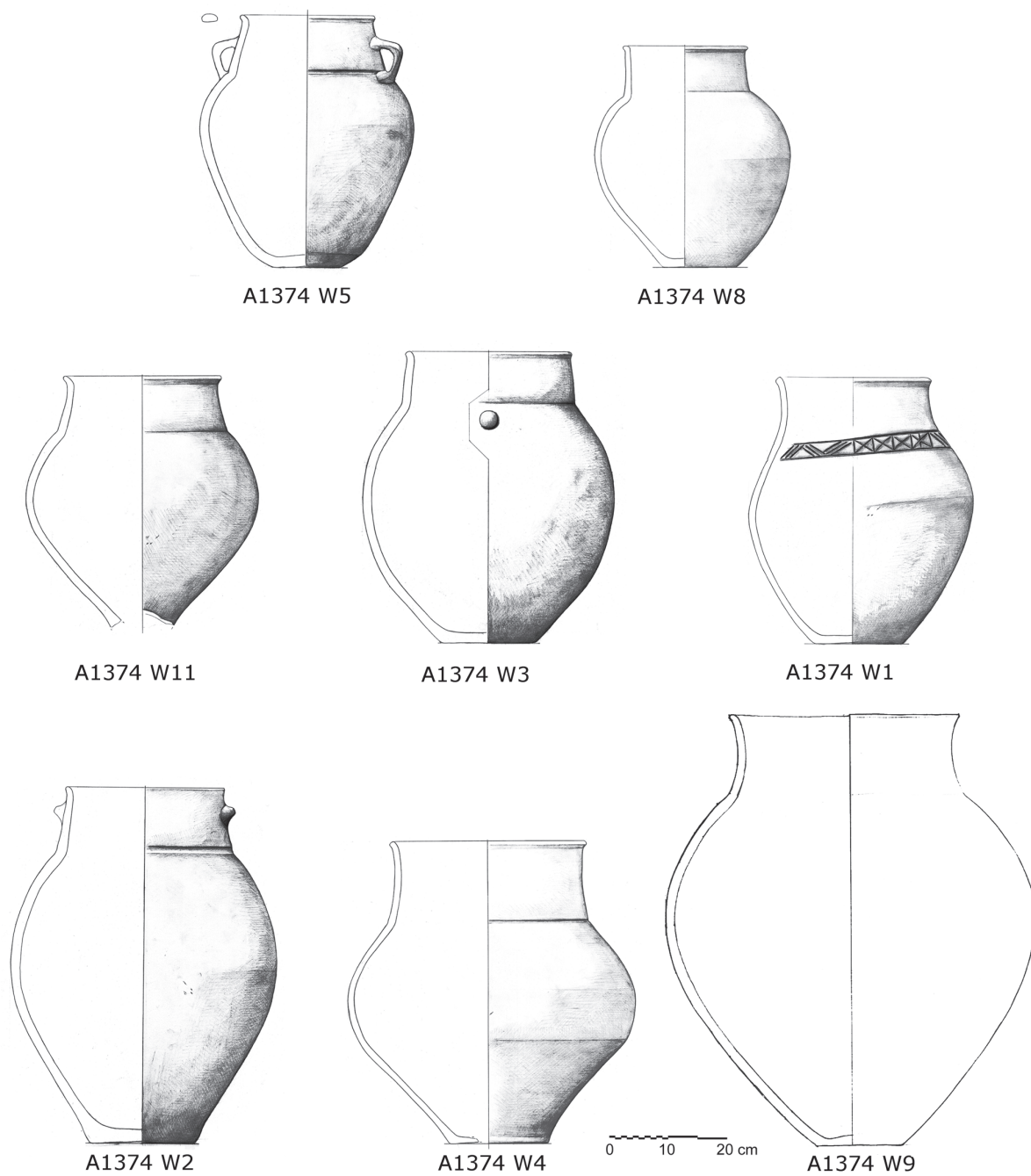


Fig. 13 – Ceramic vessels from room A1374.

neck, high shoulder and a large flat base. The second morphological group includes two large-mouthed and 'heart-shaped' red-black jars (W4 and W11) with flaring neck. W5 is a large red-black jar with truncated-conical neck, high shoulder and large flat base and was equipped with two handles. W1 is a 'bag-shaped' large-mouthed monochrome jar with flaring neck featuring an incised decoration filled with white paste along the lower part of the neck. This decorated band is subdivided into four cross-hatched quadrangles and a sequence of oblique parallel lines. W2 is a large monochrome jar, narrow-mouthed, with short truncated-conical neck and elongated curvilinear body. Finally, W9 is a very large red-black jar/*pithos* with flaring neck and ovoid body. Unique figurative decorations were applied to a red-black jarlet (W6) (fig. 12). It is a swollen-neck jarlet with a highly polished jet-black external surface featuring two different figures in relief: one a pair of crescent-shaped horns and the second has been interpreted as a snake (Frangipane 2014) or human face with a very stylised body. Finally, the last vessel from A1374 is a very peculiar double spouted jarlet (W10) internally subdivided into two non-communicating spaces, each of which is externally equipped with a spout (fig. 12). This ingenious solution would have allowed two different liquids to be poured at the same time.

Unless other containers in perishable material were used, the functional repertoire of the containers found in A1000 and A1347 is clearly oriented towards the closed shapes. With this in mind it is likely that not all the jars in A1000 and A1374 performed the same function. Apart from the double spouted jarlet that was clearly connected to a very specialised pouring function, the presence/absence of handles could have also represented another trait of functional differentiation. Finally, looking at the volumetric data the overall potential capacity of the fully and partially reconstructed closed shapes in room A1374 amounts to about 420 litres. However, the direct spatial relationship between rooms A1000 and A1374 should be taken into account and the total volume of the closed shapes found in both rooms amounts to *ca* 640 litres. Looking more analytically at the capacity of each container (fig. 14) there seems to be a continuum stretching from 0.5 (A1374 W10) to 75 litres (A1000 W3) with one single peak corresponding to 155 litres (A1374 W9). This pattern denies the identification of clear volumetric clusters and, by highlighting different storage functions, it points to a variegated set of activities to be performed by the jars in this context.

Room A1369

The back room of Building 36 contained an impressive concentration of ceramic containers, totalling 59 vessels, 40 of which were closed shapes (jars of different size) while the remaining ones were open shapes (fig. 15). Also in room A1369, vessels belonging to hand-made Red-Black and Monochrome wares as well as to PSW and LRSW were used at the same time.

Wheel-made ceramics are represented in almost equal measure by closed and open shapes (fig. 16). The former consist of four PSW necked jars of small (W32, W57) and medium (W20, W59) size and of one small LRSW jar (W23). The latter is marked with two horizontal and five strikethrough oblique lines incised on the shoulder and by a strikethrough triangular incision on the neck, possibly the sign for a specific capacity or content. Finally, the neck of a large PSW jar (W58) that was fractured in antiquity suggests, like in room A1000, a secondary use as a pot-stand. The open shapes consist of two bowls with triangular thickened rims (W3 and W36), one rim-beaded cup (W26) and a large shallow bowl or basin (W6) with a hammer-shaped rim decorated with crossed and parallel lines incised on the lip.

Hand-made Red-Black and Monochrome ceramics are the most prominent ware groups in terms of number, size and capacity. Open shapes are fewer (fig. 17) and consist of five red-black bowls (3 hemispherical: W7, W24, W25 and 2 shallow bowls: W55, W56). A drinking set composed of five very small, almost miniature, monochrome 'shot glasses' (W8, W9, W10, W11, W15) and one monochrome two-handled beaker (W19). An unusually large hemispherical basin (W12) in Red-Black Burnished Ware equipped with two lugs is also included in the open shapes repertoire. The capacity of this basin is 31.8 litres, and the presence on the lower external base of a large re-oxidised area is evidence that it was used for cooking.

The closed shapes assemblage includes small and large sized containers, the latter predominating. Among the smaller vessels (fig. 18), a fine grit-tempered red-black jarlet (W1) embellished by an accurate polishing of the black external surface and equipped with an unusual 'spouted handle' is clearly linked to pouring or serving of liquids. The other smaller vessels include a red-black jarlet with a 'squat' profile and truncated-conical neck (W2); an accurately burnished small double-handled red-black jar (W22) with truncated-conical neck and squat body; and, finally, a monochrome cooking pot (W33) equipped with two lugs.

The repertoire of the small sized containers also includes three narrow-necked bottles (W4, W5 and W21) that are

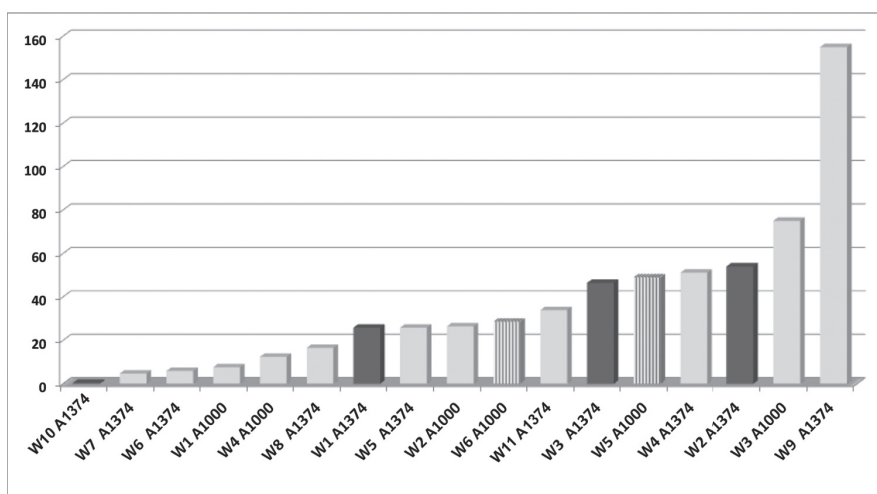


Fig. 14 – Capacity (in litres) of the closed shapes found in rooms A1000 and A1374 (light-grey = red-black; dark-grey = monochrome; vertical stripes = wheel-made ware).

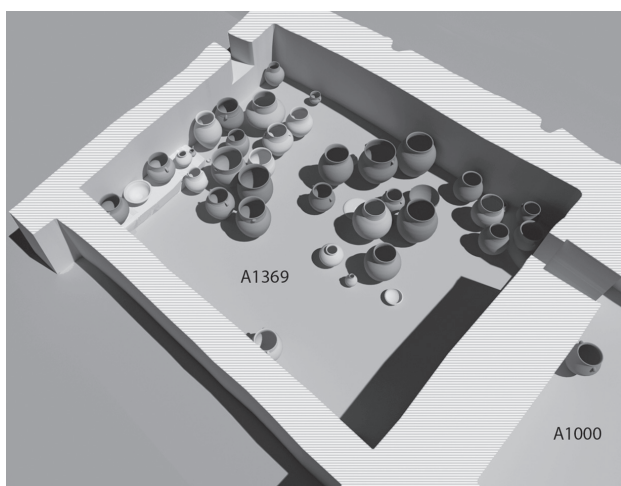


Fig. 15 – Reconstruction of room A1369 with in situ ceramic containers.

typologically very unusual when considering the ceramic repertoires of this period (Frangipane 2014) (fig. 18).

Large jars are prominent in the assemblage of A1369, which comprises 35 medium, large and very large jars/pithoi. Medium and large jars can be subdivided into five morpho-functional groups that can be summarised as follows. The first group (fig. 19) is composed of five large-mouthed jars with short truncated-conical necks, high-shoulders, 'squat' bodies

and flat bases. Jars from this group, are both red-black (W14, W28, W52) and monochrome (W41, W38) and most have two symmetrical handles. In this group two almost identical red-black jars (W14 and W28) feature a distinctive relief decoration consisting of crescent-shaped horn-like projections at the lower end of both handles (figs. 19 and 20). A second group (fig. 19) comprises two very large red-black jars (W29 and W40) and one monochrome jar (W34) featuring short truncated-conical necks and elongated ovoid bodies. A third group (fig. 21) contains three red-black (W17, W18, W27) and two (W50 and W43) monochrome narrow mouthed jars, with short truncated-conical necks and elongated curvilinear bodies. In this group only jar W43 has two conical lugs. The fourth group (fig. 21) comprises one monochrome (W45) and four red-black (W30, W35, W42, W44) elongated handled jars all with collared necks and narrow flat bases. The fifth group (fig. 21) stands out due to the large size of the vessels: two red-black (W31 and W54) and one monochrome (W39) very large jars/pithoi with flaring necks and elongated bodies. The repertoire of A1369 also includes (fig. 22) a very large monochrome 'heart-shaped' jar with narrow base and truncated-conical neck and out-turning rim (W37), a 'bag-shaped' red-black jar (W49) with a collared flaring neck equipped with two conical lugs and a double handled globular jar (W16) with truncated conical neck. On the external base of the latter, signs of re-oxidation suggest that this may have been a cooking pot.

Worth mentioning is the large variability in size in all the morphological groups, thus stressing how the same

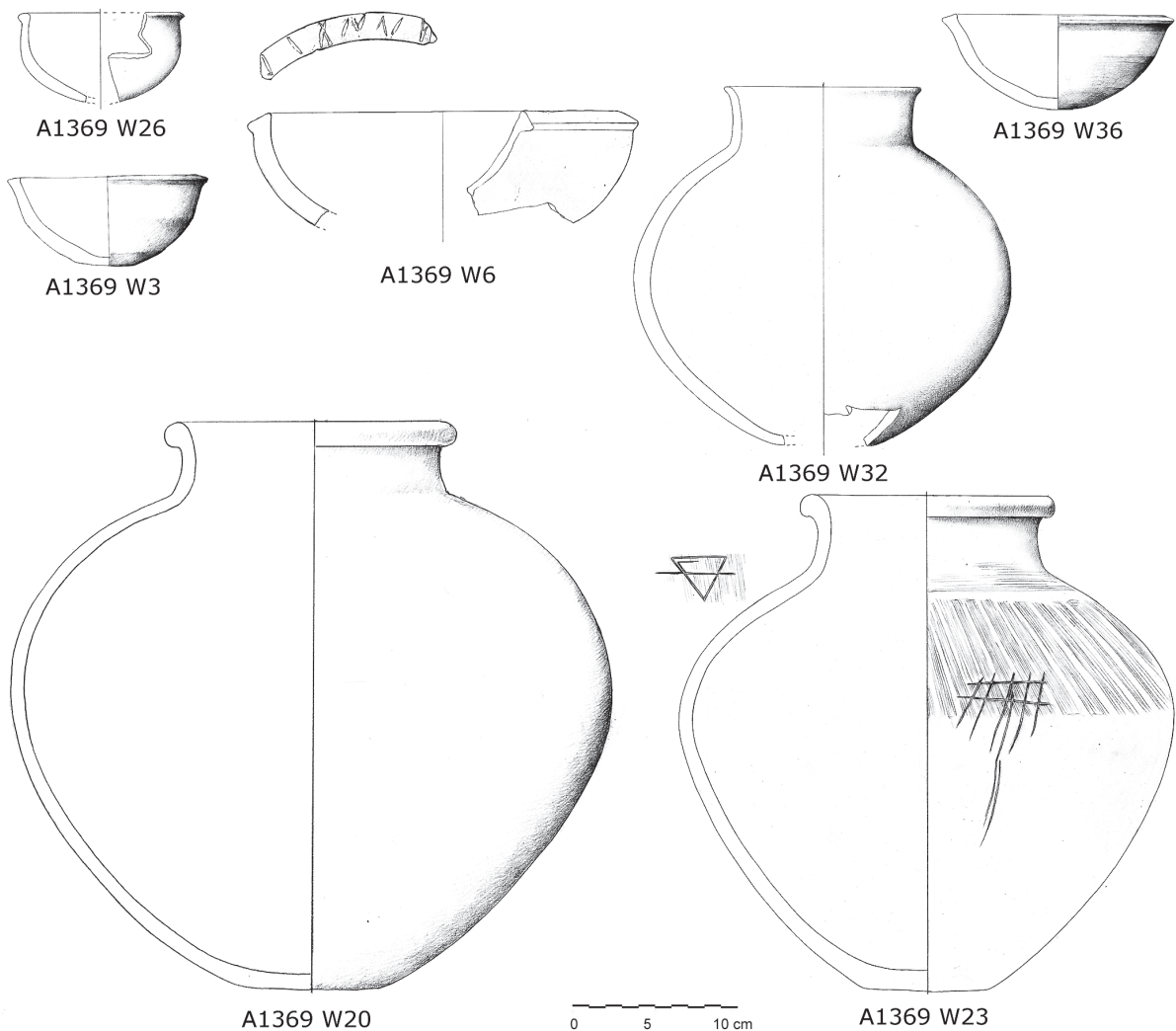


Fig. 16 – Wheel-made ceramics from room A1369.

morphological ‘model’ was used for different dimensional criteria and possibly different functions. For these reasons, it is difficult to infer a precise functional identification between these vessels even within the same morphological group, other than their functions as being generically linked to the storage of variable quantities of food or liquids for variable periods of time. The dimensional and volumetric analyses of the medium and large jars (fig. 23) show that the overall potential capacity is *ca* 2000 litres. As it was observed for A1000-A1374, there is a volumetric continuum stretching between 22.8 and 154 litres, that does not point to any precise capacity clusters.

In A1369, together with a clay conical jar-stopper, 19 fired-clay disc-shaped lids were also found. Near a small fireplace, two mud-bricks (Y62-Y63) were used as andirons.

THE FUNCTIONAL AND CULTURAL CONNOTATION OF THE CERAMIC TRADITIONS FROM BUILDING 36

The Red-Black and Monochrome (brown or buff) burnished vessels that were in use in Building 36 show significant

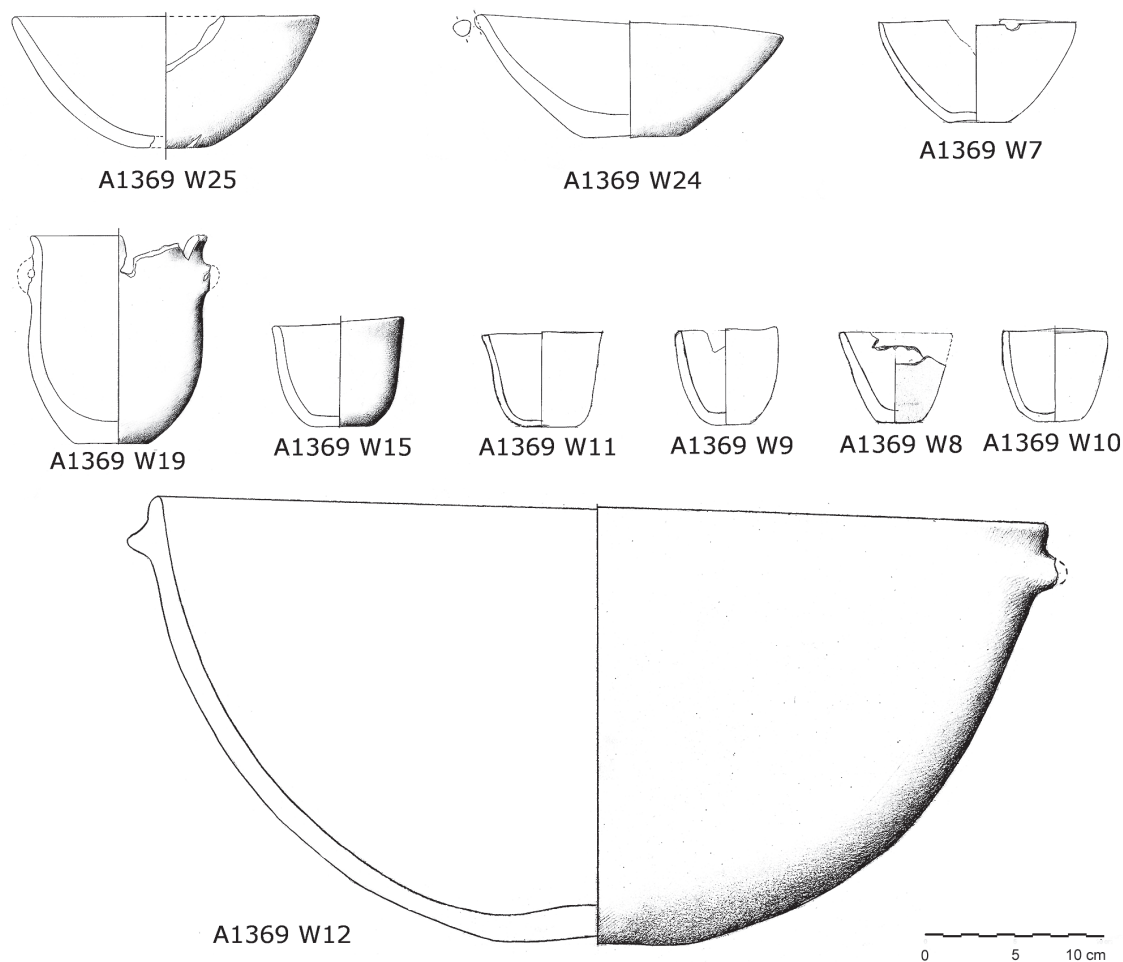


Fig. 17 – Red-black and monochrome open shapes from room A1369.

degrees of technical and morphological similarities with the ceramics found in the wattle and daub huts of period VIB1 at Arslantepe. Previous works (Frangipane and Palumbi 2007; Palumbi 2008 and 2012) have already emphasised that the ceramics of period VIB1 mingle local technical traditions (the red-black alternate effect) with new exogenous “Kura-Araxes” repertoires. However, the vessels repertoire of Building 36 shows important quantitative and qualitative differences to that most commonly found in the wattle and daub huts of period VIB1 that usually includes hemispherical bowls, jarlets and medium large-mouthed double-handled jars with cylindrical or truncated-conical necks and, only rarely, *pithoi* (Palumbi 2008: 226-233). Conversely, Building 36 had an impressive concentration of large and very large jars not seen in any other

context of period VIB1, pointing strongly to the use of this building for storage. Yet its repertoire includes a broader range of jars—varying in size and shape—than usually found in the huts. This large variability of closed shapes suggests that the ceramic repertoire from Building 36 was produced and conceived for a broader range of functions and activities than those in the domestic huts.

In terms of morphology, the ceramic assemblage of Building 36 is clearly Kura-Araxes in ‘taste’, yet it also has original traits, suggesting that there existed a capacity to reinterpret and re-adapt the Kura-Araxes repertoires to specific functional needs. The most direct link with the Kura-Araxes traditions is the large mouthed-jars with cylindrical or truncated-conical necks, high-shoulders and squat or ovoid bodies

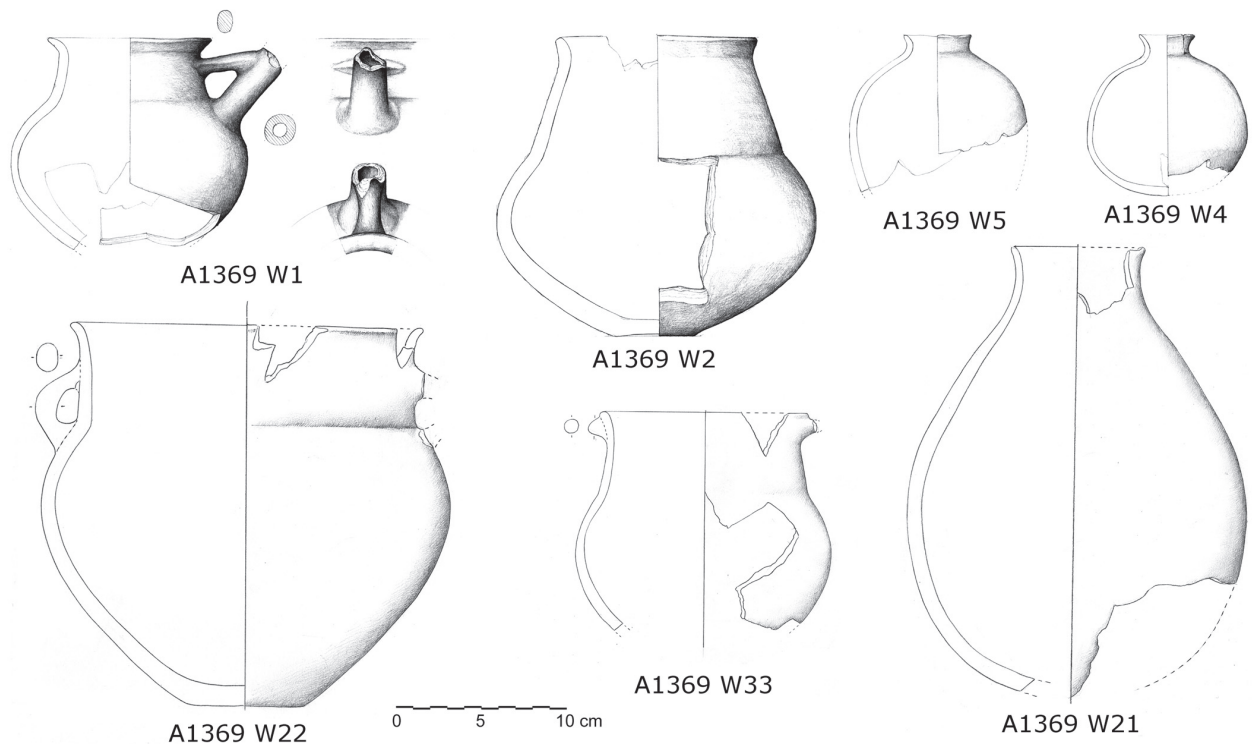


Fig. 18 – Red-black and monochrome small-sized jars from room A1369.

that clearly recall the ‘early’ Kura-Araxes repertoires from North-Eastern Anatolia and the Southern Caucasus. According to R. Badalyan (2014) such jars are among those types showing a high trans-regional comparability which is a feature characterising phase Kura-Araxes I (to be dated to between 3500-2900 BC). The fact that Building 36 and period VIB1 are coterminous with the final moments of phase Kura-Araxes I further confirms the trans-regional comparability of the early Kura-Araxes ceramics. The recurring presence of handled vessels recorded in Building 36 can be considered a Kura-Araxes ‘signature’ as well as the “swollen-necked” jar W6 found in A1374, showing close similarities with the swollen-necked jars of period VA at Sos Höyük in North-Eastern Anatolia (Sagona and Sagona 2000: Fig. 6, 3-6).

It is probably not a coincidence that there is a higher incidence of decorated vessels in Building 36 than for the whole period VIB1 at Arslantepe. Some iconographic motifs show parallels with the Kura-Araxes traditions, such as the relief animal horns found on jars W14 and W28 in A1369 and on jarlet W6 in A1374 all recalling examples from period VA at

Sos Höyük (Sagona and Sagona 2000: Fig. 8, 1-2) and from Nachivchavebi in Southern Georgia (Chikovani *et al.* 2010: Pl. V, 9). Some close parallels to the incised geometric decorations applied on jar W1 found in A1374 can be found again in Southern Georgia (Sagona 1984: Figs. 115-116).

However, it should be pointed out that the cultural ‘connotation’ of the ceramics from Building 36 was not exclusively Kura-Araxes-oriented. The significant concentration of PSW and LRSW, only sporadically found in the wattle and daub huts of period VIB1, suggests that the assemblage in Building 36 expressed a multi-cultural ‘environment’ that might have mirrored the cultural complexity of the Upper Euphrates Valley at the very end of the 4th millennium BC. These ceramics were the most direct heritage of the Late Uruk ceramic traditions and, at the end of the 4th millennium BC, they were part of a homogeneously spread ceramic horizon marking the ‘post-Uruk’ communities living along the Anatolian and northern Syrian Euphrates River Valley as far west as the ‘Amuq plain (phase H) (Palmieri 1985; Lupton 1996: 73-98). These communities, such as the one identified at

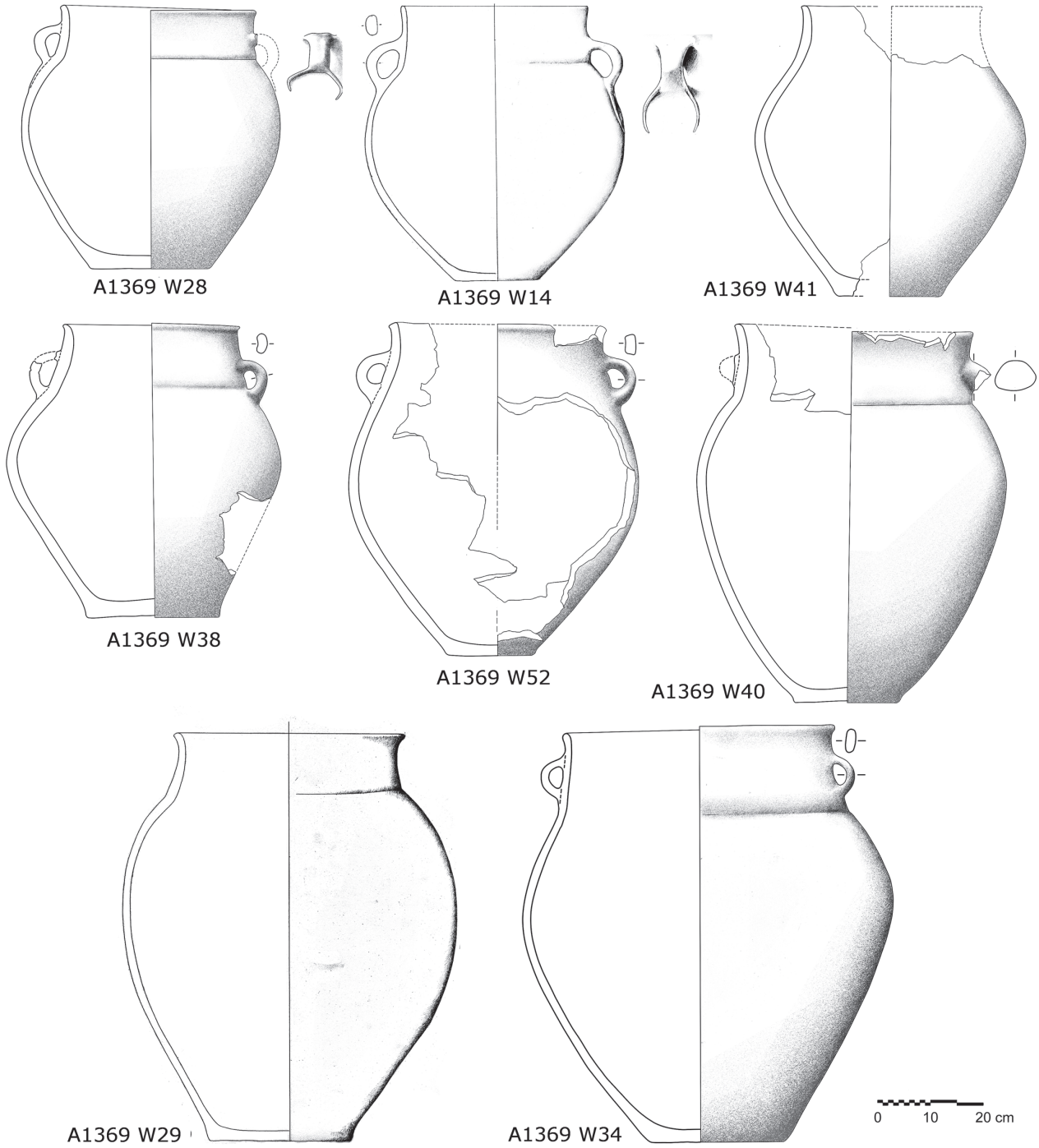


Fig. 19 – Red-black and monochrome jars from room A1369.



Fig. 20 – Two jars from room A1369 with distinctive horn-shaped decorations.

Arslantepe during period VIB2, that immediately followed period VIB1, lived in small villages with rectangular, mud-brick architecture, probably practiced a largely sedentary life-style and were founded on an agricultural economy (Lupton 1996; Palumbi 2008; Frangipane 2015).

In terms of shapes, the PSW and LRSW jars found in Building 36 had ovoid and globular bodies recalling both the earlier VIA and later VIB2 ceramic repertoires. Similar ‘transitional’ morphological traits have also been noted at the “royal” Tomb at Arslantepe (Frangipane *et al.* 2001: 113). As a whole, the Arslantepe “royal” Tomb is the only context

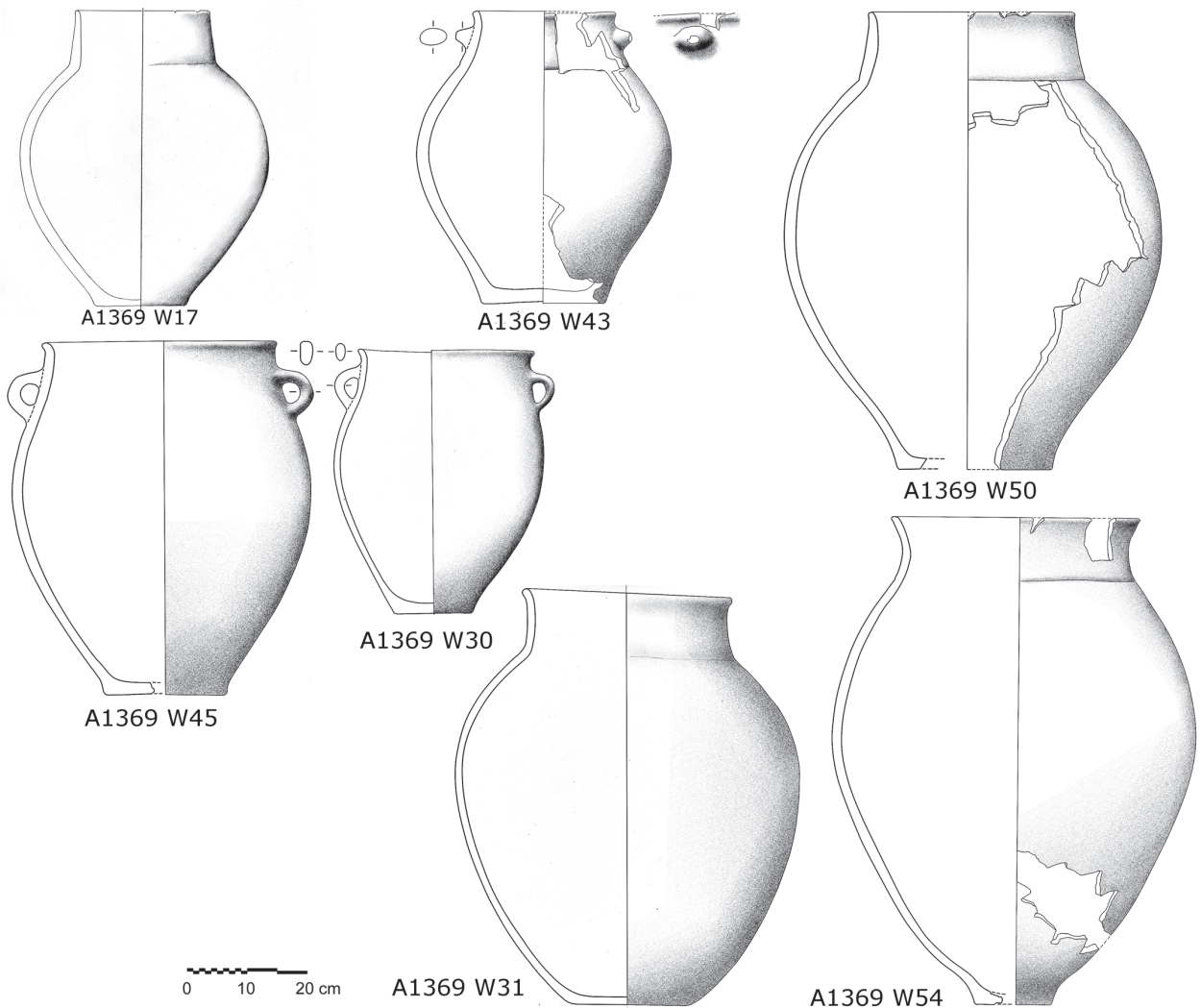


Fig. 21 – Red-black and monochrome large jars and pithoi from room A1369.

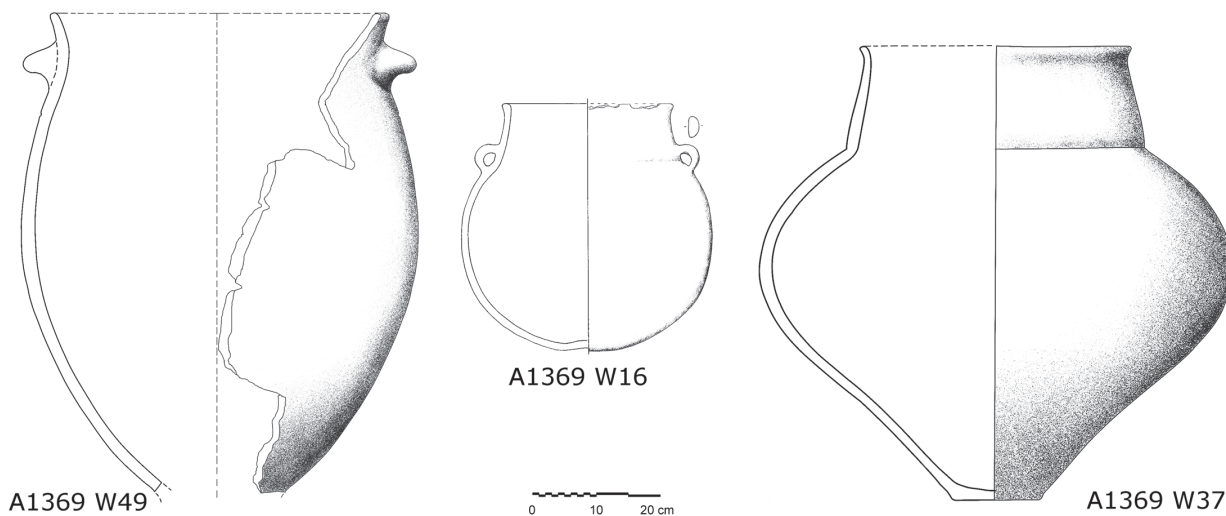


Fig. 22 – Red-black and monochrome large jars and cooking pot from room A1369.

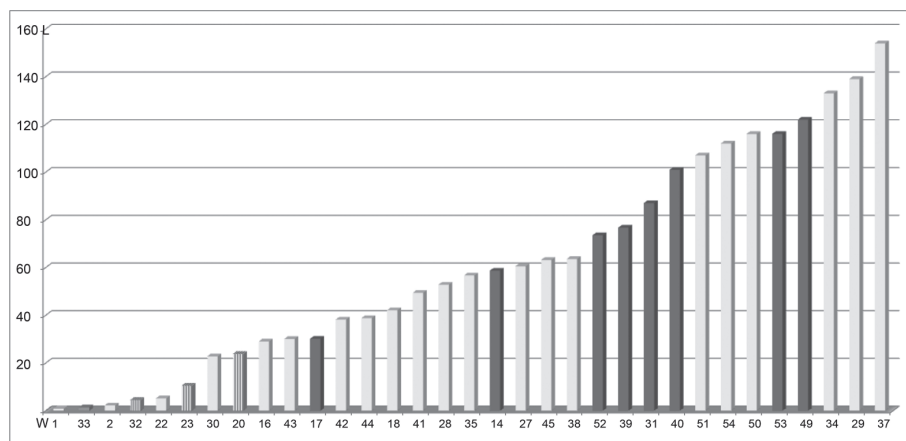


Fig. 23 – Capacity (L) of the closed shapes found in room A1369 (light-grey = red-black; dark-grey = monochrome; vertical stripes = wheel-made ware).

dated to period VIB1 that can be comparable with Building 36 due to the large amounts of PSW and LRSW vessels found therein. The connection between the high concentration of wheel-made ceramics and the ceremonial nature of this funerary context should be considered as a symbolic, meaningful act. Likewise, the concentration of PSW and LRSW ceramics in Building 36 probably was not accidental. As has been suggested (Palumbi 2008; Frangipane 2015), the presence of wheel-made pottery, probably produced by sedentary and

farming-based communities that were radically different in cultural terms from the pastoral community of period VIB1 at Arslantepe that produced hand-made red-black/monochrome Kura-Araxes ceramics, could be in itself an evidence for intercultural or interethnic contacts that took place in and through Building 36.

STONE TOOLS AND LITHICS

As to the remaining materials, of note is the abundance of heavy-duty stone tools, especially in room A1369 (fig. 24). A large basalt grinding stone (Y12), oval in shape was found nearby the curvilinear bench in the NE corner of the room and 19 stone tools (Y22, Y26, Y71, Y73 Y13, Y15, Y16, Y43, Y65, Y66, Y67, Y70, Y87, Y95, Y99, RI9 and Y64, Y88) can be preliminarily interpreted as pestles and grinders. Apart from Y64, made out of basalt, all the tools were made of different types of hard-stones. The spatial proximity between these tools and the grinding stone in A1369 suggests that food processing took place in this room. Chipped-stone tools are very rare and consist of three flint blades (Y20, Y34, Y100) and one obsidian arrow-head (Y24).

On the floor of room A1000, five stone tools (Y42, Y43, Y45, YY47, RI2) were also found and they too can be functionally interpreted as pestles and grinders. Lithics in A1000 also include two flint arrow-heads (Y1 and Y2) and one fragmentary flint blade (Y41). Finally, a very small, truncated-conical stone spindle-whorl (Y3) was also found, possibly suggesting that spinning activities were also carried out in Building 36. The small dimensions of this spindle-whorl are in line with a trend already identified in analyses of textile production at Arslantepe during the Early Bronze Age I (Frangipane *et al.* 2009).

METALS

Building 36 stands out due to the presence of metal objects (Frangipane 2014), which, apart from the “royal” Tomb, are rare in period VIB1. Two copper awls were found respectively in A1000 (Y44) and in A1374 (R12) and in this latter space,



Fig. 24 – Quern and stone pestles from room A1369.

four rings made of copper sheets (Y1, RI1, RI6 and RI11) were also found. All of them were pierced and in two cases they had rivets. It seems likely that these small metal straps were used to fasten the wooden handle of some type of tool or maybe the shaft of a weapon, such as a spear. This last possibility could be confirmed by the extraordinary finding of two butted spear-heads Y9 and Y10 (fig. 25) on the floor of room A1369 near the north-east corner that do not show any residual traces of a shaft. As Frangipane (2014: 178) already observed, these spear-heads have precise parallels in the metallurgical traditions of Arslantepe: on the one hand they recall the spear-heads of the ‘hoard’ from the palace of period VIA (Frangipane, Palmieri 1983a), but on the other, they are also clearly comparable to those found in the “royal” Tomb (Frangipane *et al.* 2001: Fig. 18). Finally, a fragment of a copper double spiral pin was found during the removal of the floor of A1369 (Frangipane 2014: Fig. 10c). However, considering its provenance, it is not clear whether this object, that certainly dates to period VIB1, was actually in context.

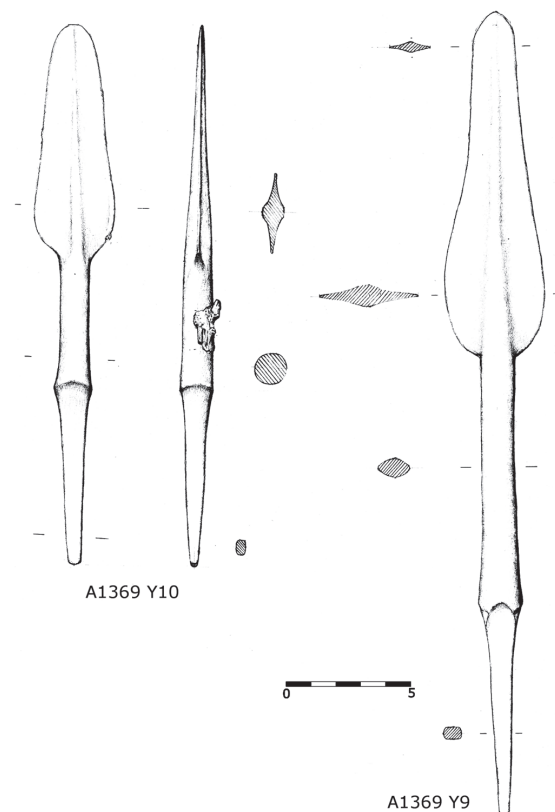


Fig. 25 – The two bronze spear-heads from room A1369.

PRELIMINARY BOTANICAL ANALYSIS FROM BUILDING 36 (C.V.)

MATERIALS AND METHODS

The charred botanical remains were collected from different contexts inside the building. Soil samples were taken from the fill and on the floor of the rooms. As charred seeds and fruits had already been identified within the collapsed vessels during excavation, the sediments were recovered and submitted for dry separation. Arslantepe soils cannot be studied through flotation as water dissolves charred plant remains (Wright 2005). All the samples were sieved on site using several meshes (6, 3, 1 and 0.5 mm) and botanical materials were picked out separately. Most of the charcoals were hand-picked and sampled on site. Plant remains were analysed using the light microscopy facilities at the Laboratory of Palynology and Palaeobotany of Sapienza University of Rome. Charcoal analysis is still in progress and its results have not been included in this paper.³

RESULTS

All of the identified taxa of seeds and fruits come from rooms A1369 and A1374. Litres of sediment and total counts of botanical remains for samples in each context are given in Table 2. Density values (n/l) are also calculated. The highest concentrations of plant materials were found inside vessels. The relative density of A1369 floor samples is influenced by an unusual pile of seeds recovered in the western part of the room.

The identified taxa are listed in Table 3. Crop plants are present in negligible quantities: grains and chaff of *Triticum* species (emmer, *T. dicoccon*: 1; wheat, *T. aestivum/durum*: 1; unspecified *Triticum*: 6) and of barley (*Hordeum vulgare*: 4) were recognised in room A1369. Also crop weeds are testified by cleavers (*Galium*: 2) and wild barley (cf. *Hordeum spontaneum*: 1) remains. By contrast wild plants represent most of the identified taxa. In room A1369, thousands of Lamiaceae dry fruits (bugle, *Ajuga*: 2873) were found on the floor next to the stored vessels, together with other herbs seeds (mallow, *Malva*: 1; Cyperaceae: 1). Stones of Rosaceae fruits (e.g., almond,

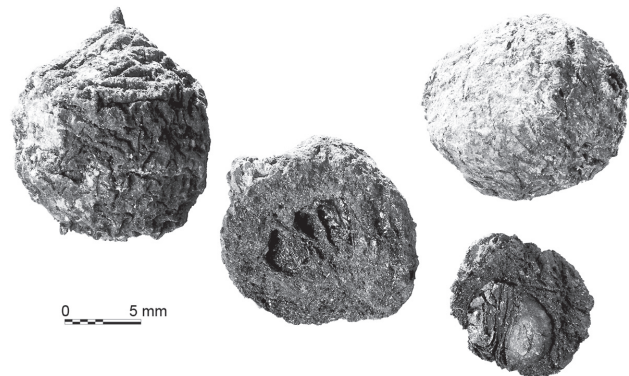


Fig. 26 – Charred fleshy fruits of *Sorbus cf. umbellata* from room A1369.

Prunus dulcis: 1) are also present. Remains of an even greater quantity of Maloideae fleshy fruits were found in jars stored in the building. Hundreds of rowan berries (fig. 26) (*Sorbus cf. umbellata*: 195) were recovered in direct connection with vessels placed in the north-eastern corner of room A1369, while small pomes of *Cotoneaster cf. integerrimus* (226 fruits and 1978 seeds) were identified in the jar W2 of the closet-room A1374.

Table 2 – Building 36, Arslantepe period VIB1. Litres of analysed sediment and total count of identified botanical remains for samples in each context. Density values (n/l) are also shown.

Seeds / Fruits	Room A1369		Room A1374
	Floor	Within vessel	Within vessel
Total remains (n)	2893	195	2221
Soil samples (l)	21.7	1.7	1.2
Density (n/l)	133.3	114.7	1850.8

DISCUSSION

The second occupation phase of Building 36 is rich in palaeobotanical data providing new indicators concerning the dietary habits of the Arslantepe VIB1 community. Evidence of subsistence farming is limited to some rare crops remains in room A1369 where foodstuff was stored. In contrast, most of the findings suggest that the exploitation of wild plants played a significant role in this building. Evidence of edible fruits are widespread in the Kura-Araxes sites of the Southern Caucasus and Eastern Turkey (Hovsepian 2015). This contrasts with

3. Botanical nomenclature for seeds and fruits follows Anderberg (1994), Davis (1965-1985), Jacomet (2006), Jacquat (1988), Neef *et al.* (2012), Zohary and Hopf (2000) and the APG III update from the Euro+Med PlantBase (<http://www.emplantbase.org/home.html>). Distinction between Rosaceae and Maloideae fruits follows Rohrer *et al.* (1991).

Table 3 – Building 36, Arslantepe period VIB1. List of the identified taxa from seeds and fruits remains.

Taxon	Remain	Category	Room A1369		Room A1374	Total
			Floor	Within vessel	Within vessel	
<i>Hordeum vulgare</i>	grain	crop	4			4
<i>Triticum dicoccon</i>	grain	crop	1			1
<i>Triticum aestivum/durum</i>	grain	crop	1			1
<i>Triticum</i> sp.	grain	crop	4			4
	glume base	crop	2			2
cf. <i>Hordeum spontaneum</i>	grain	weed	1			1
<i>Galium</i> sp.	seed	weed	2			2
Asteraceae	achene	wild plant			11	11
<i>Juniperus foetidissima/sabina</i>	cone	wild plant			1	1
Cyperaceae	achene	wild plant	1			1
<i>Ajuga</i> sp.	achene	wild plant	2873			2873
<i>Malva</i> sp.	seed	wild plant	1			1
<i>Cotoneaster</i> cf. <i>integerrimus</i>	fleshy fruit	wild plant			226	226
	pyrene	wild plant	1		1978	1979
<i>Crataegus</i> sp.	stone	wild plant			3	3
cf. <i>Filipendula</i> sp.	follicle	wild plant			2	2
<i>Prunus dulcis</i>	stone	wild plant	1			1
Rosaceae	stone	wild plant	1			1
<i>Sorbus</i> cf. <i>umbellata</i>	fleshy fruit	wild plant		195		195
Total			2893	195	2221	5309

data from the public complex of the Late Chalcolithic period, where remains of wild plants are limited (Balossi Restelli *et al.* 2010). At the same time, Building 36 shows striking parallels with the VIA palace in terms of timber use (Alvaro *et al.* 2010): preliminary results of charcoal analysis shows that the same tree taxa (*e.g.*, alder and poplar) were used for the ceiling of rooms A1000 and A1369 in contrast with timber remains found in the huts of period VIB1.⁴ The re-use of timber from earlier buildings cannot be excluded but functional choices are to be considered. Thus, anthracological analyses suggest that there were shared technological choices during the Arslantepe periods VIA and VIB1, pointing to cultural links despite different socio-economic background.

One exceptional finding is that of the bugle remains, the first conspicuous evidence of the use of wild herbs in the Ancient Near East (Riehl 2006). The pile indicates that the plants were kept in baskets, with fragments of weaved elements retrieved from the same sample. In ethnographic contexts bugle, as with many Lamiaceae species, is considered a healing herb (Ertuğ 2000; Etkin 1994). It can be also used for

seasoning purposes. It is likely that it was gathered in the summer when this perennial plant bears fruit, likewise the other herb taxa identified in the sample. Also wild fruits like rowan berries and cotoneaster were stored in the building when it was destroyed by fire. Wild shrubs and trees of the Maloideae sub-family are still widespread in the Malatya plain today (Davis 1965-1985). Charcoal remains of Rosaceae wood have been found in contexts spanning all of Arslantepe periods.⁵ These pomes ripen at the end of the summer and can be preserved only for a short period of time. They can be cooked for making juices, sauces and cakes (Ertuğ 2009; Pieroni 2005). The bigger rowan berries in particular are also consumed after they have fermented, a process that lessens the sour taste of the fresh fruits (Ertuğ 2000). The surface of the rowan remains in room A1369 could indicate they were partially desiccated (Helbæk 1952) (fig. 26). Virgil (*Georgics*, III, 380) wrote that in the Black Sea region these fruits were left to ferment with grains in order to obtain an alcoholic beverage similar to cider. A berry-wine from *Sorbus* fruits is also mentioned in ethnobotanical studies of ancient European societies (Tardío *et al.* 2006). It is tempting to hypothesise a connection between fermented beverages made with such berries and the activities that took place in Building 36. *Cotoneaster* pomes could be

4. Masi A., Balossi Restelli F., Sabato D., Vignola C., Sador L., "Timber exploitation during the 5th-3rd millennia BCE at Arslantepe (Malatya, Turkey): environmental constraints and cultural choices." *Archaeological and Anthropological Sciences* (submitted).

5. See note 4.

used in processed foods because they are smaller, with a thin edible mesocarp and usually unpalatable (Kuhnlein and Turner 1991). The presence of this large quantity of berries suggests that Building 36 was probably destroyed in autumn.

FUNCTIONAL RECONSTRUCTION OF THE ARCHITECTURAL CONTEXTS (G.P., C.A., C.G.)

How can the archaeological evidence help us to define the functions of Building 36? It seems likely that the three rooms were not isolated spaces but presumably they must have been in daily communication each with the other through a circulation of people, ceramic containers and various other types of items from one space to the other. Certainly, some architectural and physical restrictions, such as the span of the passages or the size and weight of the vessels, must have limited the movement of the largest or heaviest items. Despite the broad morphological diversity of the ceramic containers as well as their large dimensional variability, we believe that the number and volume of the vessels that were contained in each room, the presence of distinctive shapes to be related to specific functions, use-wear traces and, finally, the meanings that may have been attached to the decorated vessels, provide important information concerning the functional reconstruction of rooms A1000, A1374 and A1369.

Room A1369 contained the largest amount of medium, large jars as well as *pthoi* totalling an impressive quantity of 2000 litres of foodstuff or liquids that could have potentially been stored in the room. The hypothesis that this room was used for storage is further confirmed by the large number of clay lids whose dimensions fit precisely the mouth diameter of most of the containers found in this room (fig. 27).

As for the nature of foodstuff or liquids stored in A1369, the question remains unanswered. Despite the fact that the building was destroyed by a fire, and all the materials were *in situ*, only few remains of cereal grains were found. The almost complete absence of cereals in A1369 suggests that grains, under the form of 'raw' dry food, were not kept in this room. This evidence finds close analogies with what was recorded in period VIA public complex store-rooms and where an absence of cereal grains has been explained by the theory that the store-rooms may have contained processed foodstuffs (Balossi *et al.* 2010) or different varieties of liquids (D'Anna 2010: 177-181). Likewise, the lack of grains in A1369 suggests that already-processed cereal-derived dry foodstuff (such as flour) or cereal-derived liquids (such as beer) were stored instead.

However, we cannot exclude that other types of foodstuffs and liquids, other than cereal-derived products, were stored in this room: dairy products may be one possibility, yet botanical evidence of bugle seeds, rowan and cotoneaster berries may indicate that wild plants were kept, processed and consumed in room A1369 and more generally in Building 36. As a matter of fact, the working-benches, the quern, pestels, grinders and the small fireplace found in A1369 certainly point to activities connected to the processing of plants and grains, to their transformation into edible food and finally to the preparation of meals. Cooking activities are suggested by the oxidised fire-stains on the external surfaces of the large basin W12 and of jar W16 as well as by the presence of the cooking-pot W33.

However, an additional functional interpretation should take into account the drinking-set which included the numerous 'shot glasses' and the spouted jar W1. The function of this room may not only relate to foodstuff but also the storage and serving of liquids that might have been consumed elsewhere. Finally, the presence of the two metal spear-heads reminds us that the function of A1369 was not only limited to foodstuff and liquids. There is no clear or final proof that the two spear-heads were hafted at the moment of the destruction of Building 36. However, their location in the north-eastern corner of the room and the fact that the four riveted copper rings found in A1374 were not in connection with the weapons are elements suggesting that the spear-heads were not hafted. It is difficult to establish if these spear-heads were kept in A1369 as prestige goods ready to be displayed at the next social event and/or if they had been stored there as 'gifts' that had been received or were ready to be given in the frame of exchange transactions. As a whole, the range and variety of materials and related activities hosted in A1369 suggest that this was a multifunctional space, where not only food and liquids were stored, processed, cooked and served, but also precious and/or prestige goods may have been carefully kept and secured.

Considering that almost only ceramics were found inside the smaller room A1374, it seems likely that this was a functionally specialised space used for storing ceramic containers. The architectural reconstruction presented in this paper proposes that this closet was vertically divided: the floor had the largest ceramic containers, while the small and medium vessels were positioned on the upper shelf. Considering its spatial proximity with the fireplace in room A1000 it is tempting to suggest that this closet must have stored the vessels used in this latter room. While the majority of these vessels, such as the largest jars, probably contained 'ordinary' foodstuff or liquids, other types of vessels, such as those highly characterised in functional or symbolic terms, could have been related to spe-

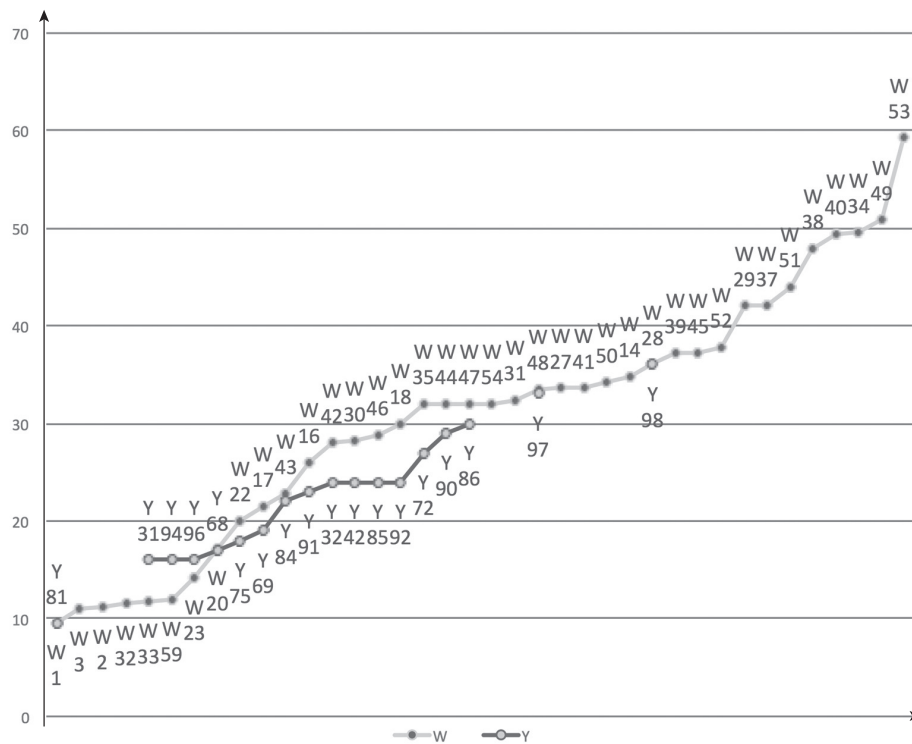


Fig. 27 – Dimensional comparison between the rim diameters of the jars (W) and the diameters of the clay-lids (Y).

cific uses (e.g., the artistically decorated red-black jar W6) and to specific contents (e.g., the double-spouted jarlet W10) to be consumed in connection to the activities that took place on and around the large fireplace.

Room A1000 was the largest of Building 36 and played a central role. Despite its large size, this room contained the smallest number of vessels (eleven containers, only two of them were large vessels) in the building. As to the remaining materials, the repertoire is limited to five stone tools, some lithic artefacts and two metal tools. It seems that, unlike A1374 and A1369, A1000 was effectively empty at the moment of its destruction.

Although this scarcity of *in situ* materials may hinder the functional characterisation of room A1000, the large circular fireplace located at the centre of the room strongly distinguishes this space. Small circular fireplaces with a central circular depression are also found in the wattle and daub huts surrounding Building 36. It is worth stressing that this type of fireplace was in use at Arslantepe since the Chalcolithic period (Balossi Restelli 2015: 130-131). In this period, small circular fireplaces with a central navel were only found in the domestic structures (*Ibid.*: Table 1). The circular hearth that ‘dominates’

room A1000 continues a domestic tradition rooted in the earlier periods VII and VIA at Arslantepe. Such circular fireplaces were absent in the Chalcolithic ceremonial buildings, *i.e.* the large tripartite Temple C of period VII and Temple B of period VIA (*Ibid.*: 138).

If we take into account these data, how should we interpret the meaning and function of the large fireplace in room A1000 that mingles ‘domestic’ connotations with monumental and possibly ‘ceremonial’ dimensions? We have already emphasised that the majority of the vessels found in Building 36 clearly recalls the Kura-Araxes ceramic traditions. From a historical-cultural point of view, the end of the 4th millennium BC records the spread of the Kura-Araxes traditions from the Southern Caucasus and Eastern Anatolia to the surrounding regions in the frame of a complex process that is also known as the Kura-Araxes “expansion” (Palumbi and Chataigner 2014).

Yet, the Kura-Araxes cultural identity was not only based on, or expressed by the ceramic traditions and, as A. Smith (2015: 110-121) has recently suggested, the house sphere played a central role in the reproduction of the Kura-Araxes “civilisation”. Several authors have also pointed out that the Kura-

Araxes fireplaces beyond cooking also played a symbolic role as the *foci* of domestic rituals (Sagona 1998; Sagona and Sagona 2009; Simonyan and Rothman 2015; Smith 2015). It is probably in connection with these rituals, that the symbolic centrality of the Kura-Araxes fireplaces is often emphasized by various decorations and also by the horseshoe shaped andirons featuring zoomorphic or anthropomorphic projections (Smogorzewska 2004). Considering that the Kura-Araxes settlements have not yet provided any clear evidence for monumental ritual buildings (Sagona and Sagona 2009: 537), the presence of these highly symbolic fire-features in domestic buildings may indicate that the Kura-Araxes house was a place where both daily/profane and ceremonial/religious activities were performed (Sagona 1998) and was the space for the daily reproduction of the social and cultural order (Smith 2015; Palumbi 2016).

Despite the fact that the monumental circular fireplace from A1000 does not feature any of the typical Kura-Araxes decorations, it is however undeniable that this large fireplace did not only play a functional but also a symbolic role in this large room which probably was the hub of the activities taking place in Building 36. This centrality is reminiscent of the ritual fireplaces in the Kura-Araxes domestic buildings. It is also the absence of a clear separation between 'sacred' and 'profane' activities that recalls the analogous functional hybridity of the Kura-Araxes house (Sagona and Sagona 2009). As in the Kura-Araxes houses, Building 36 was the scene for activities related to the processing, transformation and cooking of food. And it is possibly in relation to these 'domestic' activities that this monumental fireplace recalls the shape of domestic fireplaces.

However, there are several reasons to think that Building 36 was not 'simply' or only a 'large' domestic building. Its dimensions, the building materials, its plan, the quantity, quality and value of the objects found in its interior and finally its enormous storage potential is evidence that this building was conceived for special purposes.

But what special purposes? The functions of some vessels point to consumption of liquids. Botanical analysis of the rowan berries found in A1369 may suggest that these fruits, rather than being consumed as 'food', could have been fermented to produce alcoholic beverages.⁶ These berries were found in direct connection with jar W34, one of the largest vessels in A1369 with a capacity of *ca* 133 litres. If this jar was filled to the top, it would have contained a substantial quantity of an alcoholic liquid perhaps drunk during massive and/or

collective 'consumption' events. The large room A1000, void of materials, could have been the space hosting these social events: a meeting hall for ceremonies or rituals where drinking may have represented an important medium for interpersonal or inter-group relations.⁷

The strong symbolic emphasis placed on drinking can also be seen in the four anthropomorphic *rytha* found in the nearby hut A789 (Frangipane 2012b and 2014: Fig. 12) and their unusual shape may stress the 'ritual' importance of the consumption of special liquids, possibly alcoholic beverages, during ceremonies that may have taken place close to Building 36.⁸

However, although the archaeological evidence from and around of Building 36 reminds us of the importance of alcoholic beverages in the frame of the ceremonial events taking place in the meeting hall A1000, these events were not only 'fuelled' by alcoholic drinks. The cooking and consumption of foodstuff may have also played a significant role in these gatherings. This is, for instance, demonstrated by the three cooking vessels found in A1369 and by the fact that the volumes of two of them (W12: 31.8 L; W16: 29 L) exceed the average volumes of the cooking pots found in the domestic contexts of the period VIB1.⁹ The large quantities of food that were presumably prepared in A1369 could provide for large banquets held in the hall A1000. However, few animal bones were found in Building 36. Not a single bone was retrieved in A1000 and the number of bone fragments found in A1369 was less than 25 (NISP) (G. Siracusano, personal comm.). This may suggest that meat was not stored in Building 36 and if any was consumed there, all the remains were carefully removed and discarded elsewhere. The dump of several thousands of animal

6. There is widespread evidence of the use of pome fruits for the production of wine or spirits with high alcoholic content in North America and Northern Europe still today (Kosseva *et al.* 2016).

7. The consumption of large amounts of alcoholic beverages to reach states of drunkenness and inebriation could have also been accompanied by the consumption of psychotropic substances to reach altered states of consciousness. Sagona and Sagona (2009) have suggested the role that psychotropic mushrooms, such as *Amanita muscaria*, could have played in Kura-Araxes rituals. These mushrooms can also be consumed in a fluid form once they are mixed with milk or honey (*Ibid.*) and we cannot exclude that the small double spouted jarlet A1374W10 was used for these purposes.

8. These *rytha* also show analogies with the 'ritual' vessels that have been recently discovered at the site of Aradeti Orgora in Shida Kartli (Gagoshidze I., Rova E., 2013-2015 Activities of Georgian-Italian Shida Kartli Archaeological Project at Aradeti Orgora [Georgia]. In: *Proceedings of the 10th ICAANE*. Wiesbaden: Harrassowitz – forthcoming) in a level dating to the Kura-Araxes period and the fact that one of these vessels contained pollen of *Vitis vinifera* strengthens the relation between these peculiar ceramic shapes and drinking practices performed under the form of ritual libations.

9. Balossi Restelli F., D'Anna M.B., Piccione P., "Guess who's coming to dinner? Cooking practises at Arslantepe from 4200 to 2000 BC", communication at the *European Association in Archaeology, 20th Annual Meeting*, Istanbul, 2014.

bones found just behind the rear wall of the building (Siracusano and Palumbi 2014; Siracusano and Bartosiewicz 2012) may well be evidence for repeated large scale communal events including meat consumption, that perhaps took place near or inside the ceremonial building itself.

CONTINUITY IN MONUMENTAL ARCHITECTURE DURING PERIODS VIA, VIB1 AND VIB2 AT ARSLANTEPE (C.A.)

More than forty years of excavations in the same area of the mound provide us with an enormous amount of detailed architectural evidence in levels VIA-VIB1-VIB2. This allows us to identify, despite the radical changes that each phase has represented in the history of the site, a set of continuities concerning the monumental architecture. The connections between level VIA and subsequent periods were felt on a morphological level, as the collapsed thick mud-brick walls of the period VIA palatial complex produced such an enormous amount of earth that occupation at the site was affected for many years to come. There were echoes of this ‘material’ legacy during the earliest occupation of period VIB1. Several floors of an open area had a clear concave shape mirroring the underlying courtyard located in front of the “meeting-ceremonial hall” A1358 (fig. 1). There are further, striking elements of continuity between the various phases of occupation at the site in terms of layout, orientation and functional organization of the areas occupied during periods VIA, VIB1 and VIB2 (fig. 28). The newly discovered “audience hall” belonging to Building 37 that was part of the palace of period VIA and the large courtyard just south of it emphasise the bipolar composition of the public complex: a southern ‘external’ sector, which was devoted to communal activities (storage, redistribution and ritual activities) and a northern ‘internal’ sector consisting of ‘private’ residences. The junction point between these two sectors—Building 37 and its courtyard—probably fulfilled more ‘political’ purposes, as they were devoted to gatherings and social events linked to the epiphany of power; the courtyard in particular acted as a junction point between the northern-internal and southern-external sections, and as the place where the long corridor originating from the southern gate led to, and simultaneously the place where the “audience hall” opened out (Frangipane 2016).

After its destruction, the palatial complex was never rebuilt. However, the same basic topographic and functional layout of the settlement was retained in the following period VIB1. The recent excavations have shown that the lay-

out of period VIB1 not only mirrors the previous spatial and functional layout, but also that Building 36 belongs in topographic and possibly also in functional terms to a semantic sphere which directly stems from its architectural predecessors. It is important to note that the topographic (horizontal and vertical) position of Building 36 was immediately above the “audience hall” A1358 (Building 37) of period VIA and seems to perpetuate its function in terms of the general organization of the inhabited space. The layout of the occupation in this level of period VIB1 shows how the relationships between the different functional spaces mirror those already observed in the previous period VIA: the northern sector, delimited and secluded by a palisade, was occupied by a large hut (A1045), interpreted as a residence of the community leader (Frangipane 2014) (fig. 28). This contrasts with the southern sector of the settlement, mainly occupied by domestic huts and fences. In this general spatial arrangement, A1000 seems to fulfil the same function as that of the “audience” Building 37 in the previous period VIA. The addition of room A1369 sums up, even if on a smaller scale, some of the main functions that were also fulfilled by the palace: representative and ceremonial (the central hall A1000), and storage of goods (A1369).

Therefore, even if there are different dimensional and building parameters, the settlement layout of period VIB1 shows a similar dichotomy between external-public and internal-private spaces as already existed in period VIA. In this context, Building 36 seems to act as an interface area between spaces of different nature and function as well as between two different parts of the settlement (an elevated and secluded sector opposed to an open and lower sector), similar to the case of Building 37 that represented the hub of the palatial complex of period VIA.

In the frame of these aspects of continuity of the monumental architecture at Arslantepe, it is worth mentioning that an imposing wall (M120) dated to the following period VIB2 was constructed in the same area (fig. 29). This five meters wide wall, built with mud-bricks on stone foundations, was constructed at the beginning of period VIB2 and clearly fulfilled a defensive function. Also in this case, this monumental structure separated an internal and secluded space, unfortunately poorly preserved, from an external area to the south hosting sparse domestic structures. This is to say that the defence wall of period VIB2 was a ‘strong’ architectural element that, by fencing and separating an internal space of the mound from an external space, perpetuates, and monumentally enhances, the same inside/outside dichotomy observed in period VIA (inside-private/outside-public) and in period VIB1 (the ‘hut of the leader’/external village).



Fig. 28 – Plan showing the overlapping of monumental architecture during periods VIA (light grey), VIB1 (black) and VIB2 (grey).

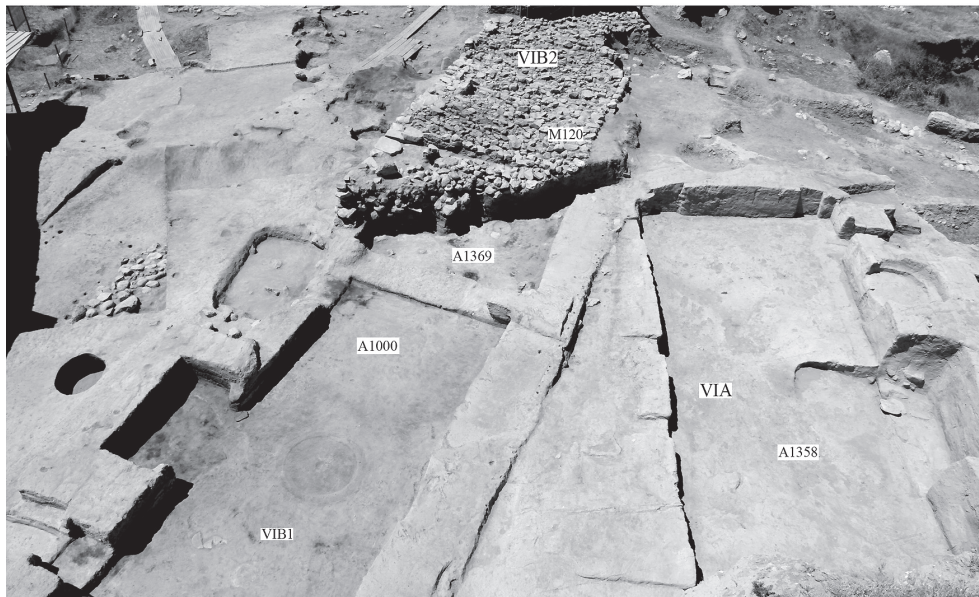


Fig. 29 – The direct vertical stratigraphic sequence linking room A1358 (Building 37, period VIA), Building 36 (period VIB1) and the stone foundations of wall M120 (period VIB2).

NEW ABSOLUTE DATES FROM BUILDING 36 (C.V., FT.)

It has been inferred from past radiocarbon dates that the period VIB1 at Arslantepe spanned approximately the first century of the 3rd millennium BC (Di Nocera 2000; Frangipane 2014). The large amount of charred plant remains recovered in Building 36 allows us to date its main construction phases and to build a new chronology for the period.

Radiocarbon analyses have been carried out in the CIRCE (Centre for Isotopic Research on the Cultural and Environmental heritage) Laboratory of Second University of Naples (Caserta, IT) (Terrasi *et al.* 2008). Three AMS dates of charcoals and fruits have been provided (table 4) with the confidence interval range between 20 and 30 years. Radiocarbon dating on a charred fruit from room A1369 was also undertaken by CEDAD of University of Salento (Lecce, IT). All the selected specimens are short-lived plant remains (branches and seasonal fruits). The ¹⁴C dates are consistent and suggest a sequence of short phases of use. Thus the ‘life’ of the building seems to be limited to a short timespan. The probability distribution of calibrated ages (*ref. OxCal*) are reported in Figure 30 together with the 2 σ confidence intervals: oscillations in the calibration curve for this period (Reimer *et al.* 2013) cause

Table 4 – AMS samples from Building 36, Arslantepe period VIB1.

Archaeological phase at Arslantepe	Context	Sample no.	Laboratory no.	Plant remain	Age BP (uncal.)	
VI B 1	Middle	A1369	703/12	D28/15-DSH7047_C	Wild fruit	4600 ± 33
		A1369	703/12	LTL16295A	Wild fruit	4428 ± 45
		M223	550/12	D28/15-DSH7015_C	Charcoal	4559 ± 21
	Late	A1336	334/12	D28/15-DSH7017_C	Charcoal	4552 ± 21

wide intervals of calendar years. For this reason it is not possible to identify the succession of the occupational phases within the building sequence. However, it is likely that the use of Building 36 falls into the last centuries of the 4th millennium BC, a result that slightly differs from the picture provided by previous ¹⁴C data (Di Nocera 2000). By comparing the building chronology with the ¹⁴C dates recently obtained from Building 37 and Temple B (period VIA) (fig. 30), it is clear that Building 36 is in direct chronological continuity with the period VIA palace.

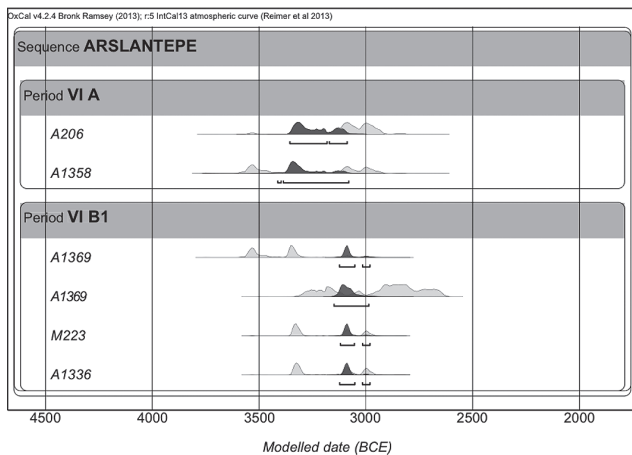


Fig. 30 – Calibrated AMS dates from Arslantepe periods VIA and VIB1.

CONCLUSIONS. BUILDING 36 AND ITS IMPLICATIONS: CONTINUITY AND CHANGES AT THE END OF THE 4TH MILLENNIUM

Building 36 provides us with a great deal of useful information when considering the transformations taking place at the site and most probably in the whole Upper Euphrates region few decades after the destruction of the “palatial” complex of period VIA and the collapse of the local centralised political and economic institutions of power. Previous works dealing with the Arslantepe “royal” Tomb have already emphasised the emergence, after this collapse of ‘new’ powers that were different in nature from the ‘old’ centralising powers of the Late Uruk period (Frangipane *et al.* 2001; Frangipane 2001). There is no doubt that the “royal” Tomb, with its emphasis on metals (Palumbi 2007-2008 and 2008), does not only mark a change in the way power was displayed in funerary contexts, but most probably indicates a radical change towards a wealth-based “political economy” (Frangipane 2010).¹⁰ However, new data from period VIB1, particularly from Building 36, provide insight as to how power was negotiated by the new elites: their practices and ‘epiphany’ were not only limited to the display of

10. Also Frangipane M., The Role of Metallurgy in Different Types of Early Hierarchical Societies in Mesopotamia and Eastern Anatolia. The Case of Eastern Anatolia between 4th and Early 3rd Millennium BC. In: MARAN J. and STOCKHAMMER P. (eds.), *Appropriating Innovations. Entangled Knowledge in Eurasia, 5000-1500 BCE*. Oxford: Oxbow Books (forthcoming).

prestige goods in funerary ceremonies, but were also enacted in and through other types of ceremonial events.

Building 36, dating to *ca* 3100 cal. BC, that is slightly earlier than the “royal” Tomb, is remarkable for its monumental dimensions, its storage potential, as well as for its ceremonial features and attests to the authorities’ power to store and mobilise large amounts of food and liquids (these latter probably under the form of alcoholic beverages). It also clearly shows their political will to consume these goods in the frame of collective ceremonial events. However, the wide ranging information drawn together in this article also allows to highlight that the changes taking place at the end of the 4th millennium BC were also rooted in the past. This is confirmed by two sets of evidence: first, the fact that Building 36 is reminiscent of some fundamental activities that were performed in the public complex of the earlier period VIA (storage, collective consumption, display of prestige goods, public meetings, ceremonial and ritual events); and, second, the fact that both the neatly structured spatial planning of the VIB1 settlement and the meaningful topographic position of Building 36, just on top of the previous “audience building”, appear as a direct reference to the architectural planning and spatial order previously created by the palace of period VIA. These elements of continuity in occupation, architecture and use of the same area suggest the existence of links and connections between the ‘new’ and ‘old’ powers resulting in the persistent role of Arslantepe as a prominent political centre in the Malatya region over a long time-span stretching from the mid-4th to the early-3rd millennium BC.

For these reasons, the evidence recently uncovered in Building 36 may change our understanding of the nature of the occupation of period VIB1 at Arslantepe. If we are to take wattle and daub architecture and specialised husbandry strategies focused on caprines as markers of pastoralism, these need to be considered in the context of the well-defined layout of the settlement, the imposing architectural evidence of the building and the long-term functional centrality that it played during period VIB1, all of which show that the nature of the occupation was more substantial than that hypothesised so-far. However, it is at the moment still very difficult to establish if during period VIB1 Arslantepe was permanently occupied by a transhumant community that split off periodically (with some sectors of the population moving during the seasonal transhumance and other sectors residing more permanently at the site), or eventually if Arslantepe was a special site hosting a ‘communal’ building where ceremonial events were periodically organised in order to build and strengthen social and political ties between different communities. What is more, it is likely that these communities

were not exclusively the 'pastoral' ones, and the presence of wheel-made ceramics in Building 36 points to constant interaction, possibly through these ceremonial events, with the farming and more sedentary communities living in the Upper Euphrates region in this same period. It is probably not by chance that immediately after period VIB1, it is one of these farming communities that occupied the settlement of Arslantepe with a monumental defence wall that obliterated Building 36, thus stressing an impressive vertical dialogue between monumental architecture that may well have resulted from an uninterrupted human interaction at and through the site between different types of communities.

In spite of the important traits of continuity, meaningful changes are also clearly visible and it would be misleading to fully assimilate the old institutions of period VIA with those of the following period VIB1 in terms of political power, economic control and finally politics and practices of food consumption. For instance, in the public building of period VIA evidence of high quantities of administrative material and mass-produced bowls indicates that redistribution and consumption activities were being carried out probably on a daily basis under the control of a bureaucratic apparatus which probably also implied a vertically structured social distance between foodstuff giver and consumer.¹¹ Even if the storing potential of Building 36, calculated on the basis of the volumes of the *in situ* containers, seems roughly equivalent to the potential of the storage-rooms of the public complex of period VIA (D'Anna 2010: 180), Building 36 has a distinct lack of any evidence of administrative material and this, considered together with a low incidence of bowls may indicate that food consumption did not take place on a daily basis and probably was not conducted as economically relevant operation in the policy of the leaders.

According to the criteria proposed by Hayden (2001), data from and around Building 36 meet a large number of the criteria developed in order to identify feasting events and behaviour in the archaeological record. Special 'recreational food' (alcohol), highly ritualised vessels for alcohol consumption (the zoomorphic *rytha*), highly decorated and specially finished pottery, unusual large size and large number of vessels, unusual size of facilities (the circular fireplace), bone dumps and associated prestige items (the spearheads) are elements that, combined, strongly support the hypothesis that this large building hosted, presumably on a periodic basis, feasting events.

In place of the vertically structured daily distribution of foodstuff, feasts, intended as forms of periodic ritual activities

centred around the communal consumption of food and drink, could have emerged at Arslantepe at the end of the 4th millennium BC as new strategies for negotiating social relationships, alliances, economic and political goals, competition for power and authority (Hayden 2001; Dietler 2001). It is possible that these feasting events were organised and sponsored by those elites that emerged after the collapse of the centralised redistribution model. However, at the end of the 4th millennium not only did the rhythms and scale of storage and consumption change from daily to periodical and from individual to collective; but also it is quite possible that there was a new emphasis on the senses, organisation and direction of commensality that replaced the former hierarchized modalities of food-consumption with new socialised practices of food-sharing founded on conviviality.

On a broader regional scale, Building 36 at Arslantepe may not have been an unique case documenting new collective practices of food-consumption that emerged at the very beginning of the Early Bronze Age in regions formerly linked to the so-called Uruk phenomenon. Data from Bauschicht 4 at Hassek Höyük (Behm-Blancke 1981: 18-21) and from phase IV.1 at Godin Tepe (Rothman 2011: 184) strengthen this hypothesis by documenting large, possibly ceremonial, buildings characterised by very specific architectural features and that hosted feasting activities focused on the large-scale consumption of meat.

Returning to Arslantepe, it is likely that these feasting activities still were in the 'hands' of an elite, but the fact that they were hosted in Building 36, which expresses a completely new concept of monumental architecture and was marked by strong Kura-Araxes influences especially visible in the ceramic culture, is another sign of the changes taking place in the region at the end of the 4th millennium BC. The fact that such a 'hybrid' building, that mingled communal and domestic functions, represented the new setting for feasting events suggests that, like in the Kura-Araxes communities, the 'house' as a symbolic and practical institution may have played a new and central role in organising and negotiating the social and political relationships in the Upper Euphrates region at the end of the 4th millennium.

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11. See also B. Helwing (2003) for a different perspective on feasting and food politics in period VIA at Arslantepe.

ticular, I would like to address my heartfelt thanks to the restorers Lucia Ghedin (Istituto Nazionale per la Grafica) and Roberta Bollati (Istituto Superiore per la Conservazione e il Restauro) and to their students and assistants for the very patient restoration work that they carried out on this huge amount of pottery materials during three entire field campaigns. Without their contribution this work would not have been possible.

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BIBLIOGRAPHY

- ALVARO C., SADORI L., MASI A., SUSANNA F.
2010 Timber use at the end of the 4th millennium BC at Arslantepe. *In: FRANGIPANE M. (ed):* 81-93.
- ANDERBERG A.-L.
1994 *Atlas of seeds. Part 4: Resedaceae-Umbelliferae.* Stockholm: Swedish Museum of Natural History.
- BALOSI RESTELLI F., SADORI L., MASI A.
2010 Agriculture at Arslantepe at the end of the IV millennium BC. Did the centralised political institutions have an influence on farming practices? *In: FRANGIPANE M. (ed):* 103-117.
- BALOSI RESTELLI F.
2015 Hearth and home. Interpreting fire installations at Arslantepe, Eastern Turkey, from the fourth to the beginning of the second millennium BCE. *Paléorient* 41,1: 127-151.
- BADALYAN R.S.
2014 New data on the periodization and chronology of the Kura-Araxes culture in Armenia. *Paléorient* 40,2: 71-92.
- BEHM-BLANKE M.
1981 Hassek Höyük. Vorläufiger Bericht über die Ausgrabungen der Jahre 1978-1980. *Istanbuler Mitteilungen* 31: 5-93.
- CHATAIGNER C. and PALUMBI G. (eds.)
2014 "The Kura-Araxes Culture from the Caucasus to Iran, Anatolia and the Levant: Between unity and diversity", thematic issue of *Paléorient* 40,2.
- CHIKOVANI G., SHATBERASHVILI Z., GOGOCHURI G.
2010 A new site of the Eneolithic-Early Bronze Age from Tetriskaro. *Rescue Archaeology in Georgia: Baku-Tbilisi-Ceyhan South Caucasian pipelines: 95-109.* Tbilisi: Georgian National Museum.
- D'ANNA M.B.
2010 The ceramic containers of the period VIA. Food control at the time of centralisation. *In: FRANGIPANE M. (ed):* 167-191.
- DAVIS P.H.
1965-1985 *Flora of Turkey and the East Aegean Islands, vol. 1-9.* Edinburgh: Edinburgh University Press.
- DIETLER M.
2001 Theorizing the feast: rituals of consumption, commensal politics and power in African contexts. *In: DIETLER M. and HAYDEN B. (eds.), Feasts: archaeological and ethnographic perspectives on food, politics and power: 65-114.* Washington, DC: Smithsonian Institution Press.
- DI NOCERA G.M.
2000 C-14 Datings at Arslantepe and Bronze Age chronology in the upper and middle Euphrates. *In: MATTHIAE P., ENEA A., PEYRONEL L., PINNOCK F. (eds.), Proceedings of the First International Congress on the Archaeology of the Ancient Near East: 333-348.* Oxford (BAR Int. Ser. 1063).
- ERTUĞ F.
2000 An Ethnobotanical Study in Central Anatolia (Turkey). *Economic Botany* 54,2: 155-182.

- 2009 Wild plant foods: routine dietary supplements or famine foods? In: FAIRBAIRN A.S., WEISS E. (eds.), *From Foragers to Farmers: Papers in honour of Gordon C. Hillman*: 64-70. Oxford: Oxbow Books.
- ETKIN N.L.
1994 The cull of the wild. In: ETKIN N.L. (ed.), *Eating on the Wild Side: The Pharmacologic, Ecologic and Social Implications of Using Noncultigens*: 1-21. Tucson: The University of Arizona Press.
- FRANGIPANE M.
2001 The transition between two opposing forms of power at Arslantepe (Malatya) at the end of the 3rd millennium BCE. *Tüba-Ar 4*: 1-24.
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., MAGUIRE L. (eds.), *Development of Pre-state Communities in the Ancient Near East: Studies in Honour of Edgar Peltenburg*: 79-86. Oxford: Oxbow Books.
2012a Fourth millennium Arslantepe: the development of a centralised society without urbanization. *Origini XXXIV*: 19-40.
2012b The collapse of the 4th millennium centralised system at Arslantepe and the far-reaching changes in 3rd millennium societies". *Origini XXXIV*: 237-260.
2014 After collapse: Continuity and Disruption in the settlement by Kura-Araxes-linked pastoral groups at Arslantepe-Malatya (Turkey). New data. *Paléorient* 40,2: 169-182.
2015 Different types of multiethnic societies and different patterns of development and change in the prehistoric Near East. In: MANZANILLA L.R. (ed.), *Proceedings of the National Academy of Sciences* 112: 9182-9189.
2016 The development of centralised societies in Greater Mesopotamia and the foundation of economic inequality. In: MELLER H., HAHN H.P., JUNG R., RISCH R. (eds.), *Rich and Poor – Competing for Resources in Prehistoric Societies*. 14/II: 469-489. Halle: Tagungen des Landes Museums für Vorgeschichte.
- FRANGIPANE M. (ed.)
2010 *Economic Centralisation in Formative States. The Archaeological Reconstruction of the Economic System in 4th Millennium Arslantepe*. Roma: Sapienza Università di Roma, Dip. di Scienze Storiche Archeologiche e Antropologiche dell'Antichità (*Studi di Preistoria Orientale* 3).
- FRANGIPANE M., PALMIERI A.
1983a A protourban centre of the Late Uruk Period. *Origini XII*,2: 287-454.
1983b Cultural developments at Arslantepe at the beginning of the third millennium BCE. *Origini XII*,2: 523-574.
- FRANGIPANE M., PALUMBI G.
2007 "Red-Black Ware": Pastoralism, Trade, and Anatolian-Transcaucasian Interactions in the 4th-3rd Millennium BC. In: LYONNET B. (éd.), *Les cultures du Caucase (VI-III^e millénaires avant notre ère). Leurs relations avec le Proche-Orient*: 232-255. Paris: CNRS Éditions, ERC.
- FRANGIPANE M., DI NOCERA G.M., PALUMBI G.
2005 Le interazioni tra due universi socio-culturali nella Piana di Malatya (Turchia) tra IV e III millennio: dati archeologici e riconoscimento di identità. *Origini XXVII*: 123-170.
- FRANGIPANE M., DI NOCERA G.M., HAUPTMANN A., MORBIDELLI P., PALMIERI A., SADORI L., SCHULTZ M. AND SCHMIDT-SCHULTZ T.
2001 New Symbols of a New Power in a "Royal" Tomb from 3000 BC Arslantepe, Malatya (Turkey). *Paléorient* 27,2: 105-139.
- HAYDEN B.
2001 Fabulous feasts: a prolegomenon to the importance of feasting. In: DIETLER M. and HAYDEN B. (eds.), *Feasts: archaeological and ethnographic perspectives on food, politics and power*: 23-64. Washington, DC: Smithsonian Institution Press.
- HELBÆK H.
1952 Preserved apples and panicum in the prehistoric site at Nørre Sandegaard in Bornholm. *Acta Archaeologica* 23: 107-115.
- HELWING B.
2003 Feasts as a social dynamic in Prehistoric Western Asia – three case studies from Syria and Anatolia. *Paléorient* 29,2: 63-85.
- HOVSEPYAN R.
2015 On the agriculture and vegetal food economy of Kura-Araxes culture in the South Caucasus. *Paléorient* 41,1: 69-82.
- JACOMET S.
2006 *Identification of cereal remains from archaeological sites* (2nd ed.). Basel: IPAS, Basel University.
- JACQUAT C.
1988 *Les plantes de l'âge du Bronze. Catalogue des fruits et graines*. Saint-Blaise (Suisse): éd. du Ruau (*Hauterive-Champréveyres* 1; *Archéologie neuchâteloise* 7).
- KOSSEVA M.R., JOSHI V.K., PANESAR P.S.
2016 *Science and Technology of Fruit Wine Production*. London, San Diego: Academic Press.
- KUHNLEIN H.V. and TURNER N.J.
1991 *Traditional Plant Foods of Canadian Indigenous Peoples. Nutrition, Botany and Use*. Philadelphia: Gordon & Breach.
- LUPTON A.
1996 *Stability and change. Socio-political developments in North Mesopotamia and South East Anatolia 4000-2700 BCE*. Oxford (*BAR Int. Ser.* 627; *Tempus Reparatum*).
- NEEF R., CAPPERS R.T.J., BEEKER M.
2012 *Digital Atlas of Economic Plants in Archaeology*. Groningen: Barkhuis - Eelde/Groningen University Library (*Groningen Archaeological Studies* 17).
- PALMIERI A.
1981 Excavations at Arslantepe (Malatya). *Anatolian Studies XXXI*: 101-119.
1985 Eastern Anatolia and Early Mesopotamia urbanisation: remarks on changing relations. In: LIVERANI M., PALMIERI A., PERONI R. (a cura di), *Studi di Paleontologia in onore di Salvatore M. Puglisi*: 191-213. Roma: Università "La Sapienza".
- PALMIERI A.M., CELLAI L.
1983 Sedimentological data for a history of a tell. *Origini XII*,2: 629-636.
- PALUMBI G.
2007-2008 From collective burials to symbols of power. The translation of role and meanings of the stone-lined cist burial tradition from

- Southern Caucasus to the Euphrates Valley. *Scienze dell'Antichità* 14: 17-44.
- 2008 *The Red and Black. Social and Cultural Interaction between the Upper Euphrates and Southern Caucasus Communities in the fourth and third Millennium BC.* Roma: Università "La Sapienza" (*Studi di Preistoria Orientale* 2).
- 2011 The Arslantepe Royal Tomb and the "Manipulation" of the Kurgan Ideology in Eastern Anatolia at the beginning of the third millennium. In: BORGNA E. and MULLER CELKA S. (eds.), *Ancestral landscapes. Burial mounds in the Copper and Bronze ages (Central and Eastern Europe – Balkans – Adriatic – Aegean, 4th-2nd millennium B.C.)*: 47-60. Lyon: Maison de l'Orient et de la Méditerranée (*TMO* 58).
- 2012 Bridging the frontiers. Pastoral groups in the Upper Euphrates region in the early third millennium BCE. *Origini* XXXIV: 261-278.
- 2016 *The Early Bronze Age of the Southern Caucasus.* Oxford: Oxford University Press (*Oxford Handbook Online*).
- PALUMBI G. and CHATAIGNER C.
- 2014 The Kura-Araxes culture from the Caucasus to Iran, Anatolia and the Levant: Between unity and diversity. A synthesis. *Paléorient* 40,2: 247-260.
- PIERONI A.
- 2005 Gathering food from the wild. In: PRANCE G., NESBITT M. (eds.), *The Cultural History of Plants*: 29-43. New York: Routledge.
- REIMER P.J., BARD E., BAYLISS A., BECK J.W. *et al.*
- 2013 IntCal13 and Marine13 Radiocarbon Age Calibration Curves 0–50,000 years cal BP. *Radiocarbon* 55,4: 1869-1887.
- RIEHL S.
- 2006 Nomadism, Pastoralism and Transhumance in the Archaeobotanical Record – Examples and Methodological Problems. In: HAUSER S.R. (Hrsg.), *Die Sichtbarkeit von Nomaden und saisonaler Besiedlung in der Archäologie. Multidisziplinäre Annäherungen an ein methodisches Problem*: 105-125. Halle: Orientwissenschaftliches Zentrum (*Orientwissenschaftliche Hefte* 21; *Mitteilungen des SFB, Differenz und Integration* 9).
- ROHRER J.R., ROBERTSON K.R., PHIBBS J.B.
- 1991 Variation in structure among fruits of Maloideae (Rosaceae). *American Journal of Botany* 78,12: 1617-1635.
- ROTHMAN M.S.
- 2011 Migration and resettlement: Godin period IV. In: GOPHNIK H., ROTHMAN S. (eds.), *The high road: the history of Godin Tepe, Iran*: 139-206. Toronto: Royal Ontario Museum Press.
- ROTHMAN M.S. (ed.)
- 2001 *Uruk Mesopotamia and its Neighbours.* Santa Fe: SAR Press (*SAR Advanced Seminar Series*).
- SAGONA A.
- 1984 *The Transcaucasian region in the Early Bronze Age.* Oxford (*BAR Int. Ser.* 214).
- 1998 Social identity and religious ritual in the Kura-Araxes cultural complex: Some observations from Sos Höyük. *Mediterranean Archaeology* 11: 13-25.
- SAGONA A. and SAGONA C.
- 2000 Excavations at Sos Höyük, 1998 to 2000: Fifth Preliminary Report. *Ancient Near Eastern Studies* 37: 56-127.
- 2009 Encounters with the Divine in Late Prehistoric Eastern Anatolia and Southern Caucasus. In: SAĞLAMTIMUR H., ABAY E., DERIN Z., ERDEMETH A., BATMAZ A., DEDEOĞLU F., ERDALKIRAN M., BAŞTÜRK M., KONAÇI E. (eds.), *Studies in Honour of Altan Çilingiroğlu, a Life Dedicated to Urartu*: 537-563. Istanbul: Arkeoloji ve Sanat Yayınları.
- SIMONYAN H., ROTHMANN M.S.
- 2015 Regarding ritual behaviour at Shengavit, Armenia. *Ancient Near Eastern Studies* 52: 1-46.
- SIRACUSANO G., BARTOSIEWICZ L.
- 2012 Meat consumption and sheep/goat exploitation in centralised and non-centralised economies at Arslantepe, Anatolia. *Origini* XXXIV: 111-123.
- SIRACUSANO G., PALUMBI G.
- 2014 Who'd be happy, let him be so: Nothing's sure about tomorrow. Discarded Bones in an Early Bronze I Elite Area at Arslantepe (Malatya-Turkey): Remains of Banquets? In: BIELIŃSKI P., GAWLIKOWSKI M., KOLIŃSKI R. *et al.* (eds.), *Proceedings of the 8th International Congress on the Archaeology of the Ancient Near East, Warsaw, 30th April-4th May 2012*, vol. III: 351-368. Wiesbaden: Harrassowitz.
- SMITH A.
- 2015 *The political machine: assembling sovereignty in the Bronze Age Caucasus.* Princeton: Princeton University Press.
- SMOGORZEWSKA A.
- 2004 Andirons and their role in the Early Transcaucasian culture. *Antologica* XXX: 151-177.
- TAKAOĞLU T.
- 2005 *Ethnoarchaeological investigation in rural Anatolia, vol. 1-2.* Istanbul: Ege Yayınları.
- TARDÍO J., PARDO-DE SANTAYANA M., MORALES R.
- 2006 Ethnobotanical review of wild edible plants in Spain. *Botanical Journal of the Linnean Society* 152: 27-71.
- TERRASI F., DE CESARE N., D'ONOFRIO A., LUBRITTO C., MARZAIOLI F., PASSARIELLO I., ROGALLA D., SABBARESE C., BORRIELLO G., CASA G., PALMIERI A.
- 2008 High precision ¹⁴C AMS at CIRCE. *Nuclear Instruments and Methods in Physics Research B* 266,10: 2221-2224.
- WRIGHT P.J.
- 2005 Flotation samples and some paleoethnobotanical implications. *Journal of Archaeological Sciences* 32: 19-26.
- YAKAR J.
- 2000 *Ethnoarchaeology of Anatolia: rural socio-economy in the Bronze and Iron Age.* Tel Aviv (*Tel Aviv University Monograph Series* 17).
- YALMAN N.
- 2013 Evaluating and Establishing Ethnoarchaeological Theory for Anatolia. In: MARCINIAK A., YALMAN N. (eds.), *Contesting Ethnoarchaeologies. Traditions, Theories, Prospects*: 125-143. New York: Springer.
- ZOHARY D., HOPF M.
- 2000 *Domestication of plants in the old world. The origin and spread of cultivated plants in West Asia, Europe and the Nile Valley* (3rd ed.). Oxford: Oxford University Press.