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Kunara: an Early Bronze Age city in the Zagros foothills. The 2018 and 2019 Seasons of Excavations

Aline Tenu

► **To cite this version:**

Aline Tenu. Kunara: an Early Bronze Age city in the Zagros foothills. The 2018 and 2019 Seasons of Excavations. Proceedings of the 12th International Congress on the Archaeology of the Ancient Near East, 2, Harrassowitz, p. 603-618, 2023, 978-3-447-11873-6. halshs-04325988

HAL Id: halshs-04325988

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Proceedings of the 12th International Congress
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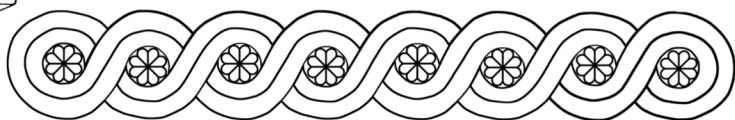
Volume 2

Field Reports

Islamic archaeology



Harrassowitz Verlag



Proceedings
of the 12th International Congress
on the Archaeology
of the Ancient Near East

06-09 April 2021,
Bologna

Edited by
Nicolò Marchetti, Francesca Cavaliere, Enrico Cirelli,
Claudia D'Orazio, Gabriele Giacosa, Mattia Guidetti,
Eleonora Mariani

2023

Harrassowitz Verlag · Wiesbaden

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Cover illustration: © David Hawkins and Giulia Roberto
Typesetting: Federica Proni

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gesamtwerk_1029.ahtml](https://www.harrassowitz-verlag.de/gesamtwerk_1029.ahtml)



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Bibliographic information published by the Deutsche Nationalbibliothek
The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available on the internet at <https://www.dnb.de/>.

For further information about our publishing program consult our website
<https://www.harrassowitz-verlag.de/>

© by the authors, when not credited otherwise.
Published by Otto Harrassowitz GmbH & Co. KG, Wiesbaden 2023
Printed on permanent/durable paper.
Printing and binding: Hubert & Co., Göttingen
Printed in Germany

ISBN 978-3-447-11903-0
Ebook ISBN 978-3-447-39354-6
DOI 10.13173/9783447119030

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Foreword to the Section “Field Reports”

Nicolò Marchetti, Francesca Cavaliere, Claudia D’Orazio, Gabriele Giacosa
and Eleonora Mariani

Field reports generally represent the largest relative share of papers at the ICAANE. Reassessments of old excavations fall in this category as well. In Bologna, 95 papers were presented in four parallel sessions and 49 of them are published here. They have been simply arranged according to the alphabetic order of first authors (with the exception of course of the keynote paper, opening this section). They attest to a diversity of agencies, methods, perspectives and urgencies which represent a singular asset of our field.

While new digital architectures of knowledge are about to deeply transform the ways of our scientific dissemination, these reports do supply in the meanwhile loads of new information on near eastern sites, as well as on neighbouring areas, which are all too often insufficiently considered in our discussions.

Field Reports

Kunara: An Early Bronze Age City in the Zagros Foothills. The 2018 and 2019 Seasons of Excavations

Aline Tenu¹

Abstract

This paper presents the results obtained at Kunara during the 2018 and 2019 excavation campaigns. The three Areas (B, C, and E) opened in the lower town yielded public buildings dated to *ca.* 2200-2100 BCE as well as pottery, lithics, faunal remains, and cuneiform tablets.

Introduction

Kunara is located in Iraqi Kurdistan, in the Zagros foothills. It is situated on the right bank of the Tanjaro River, a perennial stream of the Tigris basin, in a valley about 35 km wide. Further east, the terrain is much steeper, and the valleys are narrower. Kunara is approx. 800 m above sea level. From Kunara, the majestic Peramagron can be clearly observed, which dominates the landscape from a height of 2,611 m asl and inspired the project's name.²

The climate in Kunara is marked by significant temperature differences in winter (Jan: 4 °C on average) and summer (July and August: 32 °C on average, but temperatures often exceed 38 °C), and by its high level of rainfall, approx. 745 mm per year, which is very irregular, with no rain in the summer months. This rainfall pattern led inhabitants in the past to design the urban space to evacuate rainwater and, most likely, to promote agriculture

1 Centre National de la Recherche Scientifique (CNRS), Laboratoire *Archéologies et Sciences de l'Antiquité* (UMR 7041 ArScAn), Équipe *Histoire et Archéologie de l'Orient cunéiforme*, Nanterre.

2 The excavation and study campaigns in 2018 and 2019 received support from several public and private institutions in France and Iraq. We would like to warmly thank the Ministry of Europe and Foreign Affairs, Eveha Archaeological Research and Investigations, the *Histoire et Archéologie de l'orient cunéiforme* team (CNRS), the Khéops Fund for Archaeology and our partners in Kurdistan. We are especially grateful to the Directorate of Antiquities in Suleymaniyah, directed by Kamal Rasheed Rahim Zewe, and to Hashim Hama Abdullah, Director of the Museum of Suleymaniyah, whose help we can always count on. The Kunara team in 2018 and 2019 was composed of Aline Tenu (Director, Archaeologist, CNRS, UMR 7041), Zana Abd el-Kariem (Archaeologist, Directorate of Antiquities), Amanj Hama Ameen (Archaeologist, Directorate of Antiquities), Barbara Chiti (Archaeologist, UMR 7041), Philippe Clancier (Epigraphist, University Paris 1 Panthéon-Sorbonne), Daniel Etienne (Topographer, Eveha), Florine Marchand (Archaeologist, Free University of Brussels), Fairidoune Faïek Mahmoud (Driver, Directorate of Antiquities), Perween Yawer Minda (Archaeologist, Representative, Directorate of Antiquities), Julien Monerie (Epigraphist, University Paris 1 Panthéon-Sorbonne), Pantelitsa Mylona (Geo-archaeologist, Cyprus Institute), Halqawt Qadr (Archaeologist, Representative, Directorate of Antiquities), Louise Quillien (Illustrator), Mohammed Salih (Archaeologist, Representative, Directorate of Antiquities), Michaël Seigle (Archaeozoologist, University of Lyon 2), Cécile Verdellet (Archaeologist and Ceramologist, UMR 7041).

irrigated with water from the Tanjaro and surrounding wadis.³ As a result, the Kunara region is still heavily cultivated today.

Kunara covers a little under 10 ha. The site was excavated as part of the *French Archaeological Project in Peramagron*, which celebrated its tenth anniversary in 2021. We have conducted seven excavation campaigns at Kunara, and this article is devoted to the results of the two most recent excavations in 2018 and 2019.⁴

Since 2015, work has focused on the lower town of Kunara (Fig. 1), where three areas have been excavated. The main occupation of Kunara dates to around 2200-2100 BCE (Period V), but the stratigraphic sequence dates to the mid-3rd millennium BCE (Period VI). Occupations in the first half of the 2nd millennium BCE (Period III) and the beginning of the 1st millennium BCE (Period II) have also now been evidenced (Tenu *et al.* 2021: 184-185).

Area B

Area B was opened under the direction of Aline Tenu during the first campaign in 2012 and has been excavated since then. To date, an area consisting of four buildings (B. 712, B. 713, B. 714, and B. 715) separated by cobbled passages has been discovered. In 2018 and 2019, work was mainly devoted to buildings B. 714, B. 715, and the southern section of B. 712.

Buildings B. 712 and B. 714

The northern facade of B. 714, which has thus far been uncovered over a length of 15 m, shows a recess following the outline of the south-east angle of main building B. 712. Very little is known about it, but a carefully constructed stone drain was uncovered, clearly planned at the time the building was constructed. At the junction with the façade, the large stones of the footing were replaced with pebbles, offering a smoother surface more conducive to drainage. An area of sherds and animal bones scattered across the outer ground shows the direction of water flow from this pipe. The builders anticipated water runoff by replacing Ramp 119 (see below) with two flat stones that made it possible to cross the area without getting wet.

Ramp 119, 1.50 m wide and excavated over a length of 8.30 m, gave access to main building B. 712. A sort of stone pavement protected the eastern facade, accessible via a passage with a monolithic threshold. This is the only access point to the building known to date. The edifice measures 40 m by at least 25 m. It was organized around a courtyard surrounded by a row of rooms. To the east, they were undoubtedly used for craft activities, as polished stone tools, lithic tools (Marchand 2020), copper alloy implements, and molds were found there. Generally speaking, the pottery was poorly preserved, and the high proportion of goblets and carinated bowls reflects consumption and reception activities (Verdellet in press a and b).

Building B. 715

In 2019, we undertook the excavation of building B. 715, the north-east corner of which was uncovered in 2015 (Tenu *et al.* 2016: 123). We have identified a single room, L. 742, which measures 5.3 m by at least 5.4 m; however, the south wall has not yet been exposed (Fig. 2). This room was very carefully filled in with a type of orange and green bricks, similar to those used in the walls of the building itself (157, 160 and 747). The original floor is no

3 Paleochannels have been identified around Kunara by Mark Altaweel; see his contribution in Tenu *et al.* 2016: 136-139.

4 The results of previous campaigns were presented at the ICAANE congresses in Basel (Tenu and Kepinski 2016), Vienna (Tenu 2018b), and Munich (Tenu 2020).

longer identifiable, but the level is marked by a row of stones laid below the lowest point of the north wall (160). The purpose may have been to reinforce the stability of the north wall, which was built a little lower than the neighboring major building B. 712.

The original floor of the room has been completely cleaned, and not a single sherd has been collected. However, we found decorated potsherds from different styles at the top of the filled-in area, likely belonging to two jars. The first one bears a fish, unfortunately incomplete (Fig. 3), snakes, and scorpions. The other jar has registers showing birds, ibexes, and cattle. Anthropomorphic figures depicted at the front complete the decoration (Tenu *et al.* 2021: 140; Verdelle in Tenu *et al.* 2021: 156-157).

These ceramics do not have very satisfactory parallels, but they could date to the first half of the 2nd millennium BCE. Middle Bronze Age sherds were collected during the survey in 2011 before excavations started at Kunara (Tenu 2018a: 97-98), but these jars constitute the first examples of this period in an archaeological context. Excavations have just begun, so it is difficult to interpret thoroughly, but to date, it seems that the building was built around 2200-2100 BCE and reused after the room was intentionally filled in during the early Middle Bronze Age period.

Architectural findings in later levels

Since 2012, we have discovered very eroded remains of stone footings just below the surface of Area B. A floor (US 161) was uncovered in 2015, dating to the very end of the 3rd millennium BCE (Tenu in Tenu *et al.* 2016: 119). Some of these walls have a different orientation and were not built according to the same techniques, meaning they are likely not contemporaneous. Indeed, sherds in the filling material and a pit (US 740) date to the Iron Age (Tenu in Tenu *et al.* 2021: 141, and Verdelle in Tenu *et al.* 2021: 155).

The history of Area B after the end of the 3rd millennium BCE is difficult to establish because of the small number of architectural findings, but further excavations should lead to the discovery of more evidence.

Area C

Area C was opened in 2012 and is excavated since 2018 under the responsibility of Barbara Chiti. In 2015, we discovered an archive of cuneiform tablets badly damaged by fire that dates to end of the 3rd millennium BCE. This archive constituted what Philippe Clancier has called the “flour office” (Clancier and Tenu in Tenu *et al.* 2018: 57-63; Clancier in Tenu *et al.* 2016: 174-180; Clancier, Monerie and Tenu in Tenu *et al.* 2019: 52-67).

The northern buildings and the “plaza”

Most of our work in 2018 and 2019 focused on the level of the flour office to the north and west of Area C (Period V, *ca.* 2200-2100 BCE). To the north, we uncovered a plaza (L. 855) covered in pebbles of a similar size (Fig. 4). Thus far, approx. 40 m² of the plaza has been uncovered, but the northern end has not yet been excavated. The floor has yielded a large number of pottery sherds, as well as a fragmented marble mace head (M. 591) and a marine shell (M. 595), the poor condition of which is certainly due to the fact that it was exploited for nacre (Seigle in Tenu *et al.* 2021: 177). Three buildings with entrances marked by larger pebbles border the plaza.

To the west stood a modest building (B. 861) covering 14 m², comprising only one room. Two circular installations of different sizes and designs were found there, probably ovens. One, which is still being excavated, occupied the whole northern half of the room, and the passage to the plaza should probably be interpreted as the entrance of the oven.

To the west of B. 861 stood another building (B. 862) about which almost nothing is known, but interesting material has been found there: a bead in the process of fabrication, a bronze tool or pin, and a very eroded sealing (M. 1002) (Chiti in Tenu *et al.* 2021: 207, fig. 20) (Fig. 5). It is quite possible that the sealing depicted a mythological scene characteristic of the Akkadian glyptic (Pittman 2019: pl. 10.19:9-11),⁵ and it has preserved the imprint of a canvas. This sealing was the third found in Area C. Two others came from building B. 517, bordering the plaza to the south. One (M. 223) also shows a mythological scene ascribable to the Akkadian glyptic, whereas the other (M. 570) has retained the imprint of the fabric and knotted length of cord to which it was applied (Chiti in Tenu *et al.* 2019: 18, fig. 12). Both of these buildings were covered with a thick layer fire destruction layer, reaching 1.65 m and red in color.

Building B. 517

To the south of the plaza, once again under a thick destruction layer, a building (B. 517) with four rooms and a kind of basin was excavated (Chiti in Tenu *et al.* 2020: 38-46). The basin, made from terracotta slabs, was connected to a drainage network (see below). The building originally consisted of a single long room (L. 516) to which three smaller rooms were later added. The main room had a hardened earthen structure (538) in the center, bordered by pebbles, featuring small cupules. The floor of the room was covered with pottery sherds, under which we identified a layer of land snail shells towards the end of the 2019 campaign.

The cupule structure has excellent parallels in the neighboring building (B. 279), composed of a single room of 91 m², accessible via three doors. The floor was covered with pebbles, and almost no material was found. This characteristic distinguishes it from the rest of Area C, where an abundance of material, especially ceramics, has been found.

Building B. 519 and the drainage system

To the south of this group of buildings and to the west of the half-buried building (B. 519), which housed the so-called flour office, a very carefully constructed stone drain network was uncovered across a small area. The drains were open to the air, except at the point where different segments joined, where a stone cover was built (Chiti in Tenu *et al.* 2020: 47).

A stylized ichthyomorphic vessel (KN 594.014) was found broken in one of the drains (Chiti in Tenu *et al.* 2020: 47; Verdelle in Tenu, Seigle and Verdelle 2020: 166-167, Fig. 49). The imbalanced vessel had two openings, one of which was impractical, under the handle. The handle is also very heavy, and the vessel does not stand upright without support. It does

5 The three cylinder seals come from Tepe Gawra and date to the ETG 7-8 periods (Pittman 2019: 338). See also, for instance, Collon 1987: figs. 38-47; Boehmer 1965: no. 64 (dated to the “*Stufe Akkadisch*” Ia or Ib; i.e., reign of Sargon, Boehmer 1965: 13, 194). For a short synthesis of the evolution of the Akkadian glyptic, see Rakic 2018: 85-87. H. Pittman stressed that in the ETG 7-8 period, sealings were much rarer than actual seals. She mentions the unique case of an impression from Nineveh (Pittman 2019: 301). Since her work was completed, another serpentine cylinder seal, dating to ca. 2250-2100 BCE, was found at Logardan (Paladre 2016: 39-40), and two sealings at Kunara and a cylinder seal (M. 105) have been discovered in Area B (Kepinski *et al.* 2015: 70-72).

not appear to have been used in everyday life and may have been deliberately broken during a ceremony or ritual.

The pottery assemblage

The pottery discovered in Area C is characterized by its diversity and singularity. The assemblage comprises some original forms: spherical pots with huge handles, and internal handled bowls, some of which were decorated with elaborate animal motifs in the form of lions, goats, and bulls, and others with architectural patterns. To date, 14 internal handled bowls have been found at Kunara, all from Area C (Verdellet in Tenu *et al.* 2021: 160-162). Vessels of this type have been found in several sites in Mesopotamia, in various contexts dating from the ED III to the Old Babylonian period (Burger and Miglus 2016: 22, figs. 1-2). Their function is still much debated (see the synthesis by Burger and Miglus 2016: 29), and we hope the Kunara examples will significantly contribute to the discussion.⁶ Indeed, two types of motifs have been evidenced at Kunara only: the architectural patterns and the bull motifs.

Other pots were equipped with spouts in the shape of rams. Large jars were ornamented with geometric designs or modeled scorpions and snakes (Fig. 6). Even though the exact meaning is not yet known,⁷ snake ornamentation was common from the Ubaid period to the Old Babylonian Period (McDonald 1994: 21) in Mesopotamia (Quenet 2014) and also further west, as far as the Southern Levant (Polcaro 2019). More precisely, the applied zoomorphic motifs, especially snakes on the neck of the vessel, are well evidenced in the core TG region and the Central Tigris sub-region, dating to the ETG (6)-7-9 periods (Arrivabeni 2019: 91).

On the contrary, modeled scorpions are rare, even though scorpions, in general, are one of the most represented animals in Mesopotamia (Pizzimenti 2019: 762). A thorough examination is still to be done, but at first glance, few parallels to the Kunara scorpions are known. They come from Tell Asmar, where two jars –one inverted over the other– were decorated with snakes and scorpions (Delougaz 1952: 121).⁸ They are dated to the OM I period in the ARCANÉ chronology, around 2000 BCE (Quenet 2014: 239, no. 37 and table 1). Two others were found in two different locations at Yorgan Tepe (Starr 1937: pl. 60:D, G). The context of the first is unclear, while the second comes from Pavement IV in test trench N120, dating approximately to the Akkadian or the post-Akkadian period (Stein 2001: 642; Renette 2019: 32). Further west, at Tell Taya, in Level VI, a pedestal-vase was found with an elaborate decoration bearing modeled snakes and scorpions, combined with geometric designs (Reade 1968: pl. LXXXVI: 24). Julian Reade considers this vessel to be contemporary with Ištar Temple E at Aššur, i.e., between the Ur III period and the Isin-Larsa period (Reade 1968: 255).⁹

6 A specific programme directed by Cecile Verdellet and funded by the MSH-Mondes (Nanterre) is dedicated to this question (*De l'objet à la pratique. Recherche exploratoire sur les bassins à anses inversées, leur contexte et leur fonction au III^e millénaire av. J.-C. en Mésopotamie*).

7 Snakes are present in many divinatory practices and exorcisms. They are associated with several deities, particularly in eastern Mesopotamia and Elam (see Pientka-Hinz 2009).

8 The building where they were found was identified as a cultic place, named the “Snake shrine” by P. Delougaz, where (he assumes) living snakes were kept (Delougaz 1952: 122).

9 This dating is still accepted (Renette 2019: 30, ETG 9)

Area E

Area E, which has been undergoing excavations since 2015 under the direction of Florine Marchand, has yielded a few tombs in recent times, completely devoid of material and reminiscent of those uncovered in Area B in 2013. The focal point of our discoveries is an architectural level also dating to Period V, around 2200-2100 BCE. It is composed of a small 26 m² house (B. 660) (Marchand in Tenu *et al.* 2018: 4-7, Tenu 2020: 436-437), very carefully built against a much larger public building (B. 659). To the north, another house may have been built. Indeed in 2019, we excavated two stone footings forming a corner similar to the ones that characterize the small house, B. 660.

The entire length of the eastern facade of public building B. 659 has been uncovered across 26 m. Five rooms had been excavated at the time of writing. All of them were small, no more than 12 m² on average. The north, east and south walls of room L. 911, occupying the north-east corner, were different from the rest of the building, even though they were all built at the same time. To the north, the room had an opening 0.90 m wide from the outside, but there was no door leading to the heart of the building. Room L. 911 was thus not the entrance to B. 659, and was more likely a kind of guardroom. To the south of L. 911, room L. 690¹⁰ had a curious layout that resembled a stairwell, but this hypothesis has yet to be confirmed.

Room L. 691 had two entrances, one to the west (682) and one to the south (688). The floor was covered with sherds of atypical shapes, such as jars with pierced bottoms (Verdellet in Tenu, Seigle and Verdellet 2020: 156, fig. 41:f-g, fig. 42). We also found poorly preserved tablets. Thirteen inventory numbers have been attributed, but only two (M. 632 and M. 633) still show legible cuneiform signs (Clancier and Monerie in Tenu *et al.* 2020: 61-65). M. 632 is an administrative text recording the delivery of a product in very large quantities, about 19,000 liters. The name of the product was erased when the tablet broke, but given the quantities involved, it could have been grain. Five new personal names (unfortunately incomplete) were detected: three were probably of local origin, one was in Akkadian, and one was seemingly in Sumerian. The accounting was done in a hitherto unknown unit of measurement, the GUR of Subartu (Clancier and Monerie in Tenu *et al.* 2020: 67-68). The term “Subartu” is well known and refers to “the north” in a broad sense (Michel 2012).¹¹ As far as we know, it has no political meaning, nor does it refer to a precise location, and the main unit of measurement used at that time was the GUR of Akkad. The previously unknown GUR of Subartu was the unit most likely used in Kunara, but we still know almost nothing about it at this point in time.

The same room yielded three clay barrels (M. 647, M. 648, and M. 649) that were likely used to make new tablets, as similar items were found in other contexts (for instance, at Susa, in levels XIV [Ghirshmann 1965: esp. fig. 5] and XIII [Gasche and De Meyer 2006: esp. fig. 4]) dating to the first half of the 2nd millennium BCE (for tablet recycling, see Faivre 1995).

To the south, in another room, L. 692, in 2018 we found the first lion bone to be discovered in Kunara (Fig. 7). The animal was probably captured or killed on the Mesopotamian plain. Since then, we have found another lion bone in Area B. A flight of three terracotta steps led to another room, L. 915, which we excavated in 2019. The floor was very carefully covered with terracotta tiles and half tiles coated with bitumen. This arrangement was usu-

10 For a more precise description of L. 690, L. 691 and L. 692, see Marchand in Tenu *et al.* 2020: 50-56.

11 The name Subir/Subartu is well attested in 3rd millennium BCE textual sources. For complete references, see the index in Sallaberger and Schrakamp 2015: 404.

ally associated with bathrooms, but no drainage system has been found to date (Marchand in Tenu *et al.* 2021: 152-153).

The building was burnt and may have been ransacked prior to this. As is often the case, destruction by fire has paradoxically allowed for a good conservation of the earthen architecture.

Urban town planning and building techniques

Since 2015, excavations have focused on the lower town, where several public buildings stood at the time that corresponds to Period V (*ca.* 2200-2100 BCE). They were part of a major urban planning program that required the leveling of earlier constructions. Public spaces were designed as such, in a coherent manner, in the entire lower town, with the installation of a traffic network covered with pebbles and a drainage system. Furthermore, buildings B. 861, B. 862, and B. 863 in Area C were not built with the same orthogonal layout as the neighboring constructions in Area C. However, they follow the general orientation of the buildings in Area B, further north. Based on this, these buildings could represent the link between the different layouts of the two areas, which may attest to the ability of the builders to adapt to the ancient topography of the site.

The construction methods have raised many questions since the first excavation campaign, during which we observed that mudbrick was not the only technique used in earthen architecture. Indeed, we identified other construction methods that we designated “pisé” (Kepinski *et al.* 2015: 64 [Area C]; 67 [Area B]; 68-69 [Area A]). However, the term “pisé” is actually ambiguous and not completely accurate. Therefore, after a preliminary assessment by Bérengère Perello (Perello in Tenu *et al.* 2016: 139-148), a new program started in 2019. Led by Pantelitsa Mylona, it will combine field observations and lab studies of thin micro-morphological sections under an optical microscope.

Initial results obtained in the lower town confirm the coexistence of different techniques: the superimposition of cob layers, a modular architecture using a kind of earthen “loaves” processed when wet and of an irregular length, and more standardized modules put in place with mortar when they were not completely dry. We also observed that the two sides of a single wall could be different. The eastern face of Wall 813 (Fig. 8) shows irregular layers of cob that more or less followed the shape of the stone footings, whereas the western face was made with regular modules joined with a whitish mortar. This quirk has not yet been fully explained but may be due to the renovation of one of the faces.

Faunal remains

In 2018, the archaeozoological examination of bone remains started under the supervision of Michaël Seigle (see his reports in Tenu, Seigle and Verdellet 2020: 167-186 and in Tenu *et al.* 2021: 164-178; see also M. Seigle in volume 1). Unsurprisingly, domestic species represent more than 90% of the remains. Sheep, goats, cattle, and pigs are present. Donkeys were certainly used for their ability to bear loads. Three domestic species stand out: the horse, whose introduction to Mesopotamia was at that time very recent; chickens, which had also just arrived in Mesopotamia from South-east Asia; and possibly a domestic cat: unfortunately, only a single bone has been found so far, and identification must be confirmed.

The wild fauna found was very diverse, including species living in the steppe, such as lions; in the mountains, such as bears and panthers; or in wooded areas, such as wild boar. In

addition to the *muricidae* shell (M. 595) found in Area C, two other shells from the Persian Gulf, more than 600 km away, have been discovered in Areas B and E (Seigle in Tenu, Seigle and Verdellet 2020: 185-187).

Conclusions

Around 2100 BCE, several buildings were destroyed by fire. Traces of fire can be found in the upper town in Area A, excavated by Christine Kepinski in 2012 and 2013 (Kepinski *et al.* 2015: 67-69, Kepinski and Tenu 2014: 8-10; Tenu and Kepinski 2016: 150-151), and in the lower town in Areas C, E, and B. In the latter, the story appears to be more complex. The red filling we observed in a room (L. 725) obviously attests to a fire, but other areas in the same building, B. 712, were abandoned and sporadically re-occupied, whereas B. 715 was cleared and then filled in. In Area C, the huge layer of fire damage that covers the structures to the north-west may be due to deliberately filling in the area, not simply the result of a layer collapsing due to fire. Something happened around 2100 BCE, and we hope future campaigns will tell us whether it was a dramatic accident, a military attack, or a major city-wide upheaval.

References

- Arrivabeni, M.
2019 Pottery. In: E. Rova (ed.), *Associated Regional Chronologies for the Ancient Near East and the Eastern Mediterranean. Vol. V. Tigridian region*, Turnhout, 45-129.
- Boehmer, R. M.
1965 *Die Entwicklung der Glyptik während der Akkad-Zeit* (Untersuchungen zur Assyriologie und vorderasiatischen Archäologie 4), Berlin.
- Bürger, U. and Miglus, P. A.
2016 Internal-Handled Bowls – Puzzling pots from Bronze Age Mesopotamia. In: B. Perello and A. Tenu (eds.), *Parcours d'Orient. Recueil de textes offert à Christine Kepinski*, Oxford, 21-34.
- Collon, D.
1987 *First impressions: Cylinder seals in the ancient Near East*, London.
- Delougaz, P.
1952 *Pottery from the Diyala Region*, Chicago.
- Faivre, X.
1995 Le recyclage des tablettes cunéiformes. *Revue d'Assyriologie et d'archéologie orientale*, Vol. 89 (1), 57-66.
- Gasche, H. and De Meyer, L.
2006 Lieu d'enseignement ou atelier de recyclage de terre à tablettes? In: P. Butterlin, M. Lebeau, J.-Y. Monchambert, J. L. Montero Fenollós and B. Müller (eds.), *Les espaces Syro-mésopotamiens: Dimensions de l'expérience humaine au Proche-Orient Ancien. Volume d'hommage offert à Jean-Claude Margueron*, Turnhout, 361-373.
- Ghirshman, R.
1965 Suse du temps des *Sukkalmah*. Campagne de fouilles 1963-1964. Rapport préliminaire. *Arts Asiatiques* 11 (2), 3-21.
- Kepinski, C., Tenu, A., Benech, C., Clancier, Ph., Hollemaert, B., Ouraghi, N., and Verdellet, C.
2015 Kunara, petite ville des piedmonts du Zagros à l'âge du Bronze : Rapport préliminaire sur la première campagne de fouilles, 2012 (Kurdistan, Irakien). *Akkadica* 136, 51-88.

Marchand, F.

2020 Kunara Lithic Industry: A Preliminary report. In: A. Otto, M. Herles, K. Kaniuth, L. Korn and A. Heidenreich (eds.), *Proceedings of the 11th International Congress on the Archaeology of the Ancient Near East*, vol. 2, Wiesbaden, 243-252.

McDonald, D. K.

1994 The Serpent as Healer: Theriac and Ancient Near Eastern Pottery. *Source Notes in the History of Art* XIII (4), 21-27.

Michel, C.

2012 Subartu. *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* 13, 225-227.

Paladre, C.

2016 An Akkad Cylinder-Seal from Logardan. In: R. Vallet (ed.), *Report on the Second Season of Excavations at Girdi Qala and Logardan*, Unpublished report, 39-44.

Pientka-Hinz, R.

2009 Schlange. A. In Mesopotamien. *Reallexikon der Assyriologie und vorderasiatischen Archäologie* 12, 202-218.

Pittman, H.

2019 Glyptic Art of the Tigridian Region. In: E. Rova (ed.), *Associated Regional Chronologies for the Ancient Near East and the Eastern Mediterranean. Vol. V. Tigridian region*, Turnhout, 283-348.

Pizzimenti, S.

2019 Fertility from the Sky: The Role of the Scorpion in the Ploughing Scenes on Akkadian Glyptic. In: M. D'Andrea, M. G. Micale, D. Nadali, S. Pizzimenti and A. Vacca (eds.), *Pearls of the Past. Studies on Near Eastern Art and Archaeology in Honour of Frances Pinnock*, Münster, 761-774.

Polcaro, A.

2019 On Pots and Serpents: An Iconographic and Contextual Analysis of the Cultic Vessels with Serpent Figurines in the 4th-3rd Millennium BC Transjordan. In: M. D'Andrea, M. G. Micale, D. Nadali, S. Pizzimenti and A. Vacca (eds.), *Pearls of the Past. Studies on Near Eastern Art and Archaeology in Honour of Frances Pinnock*, Münster, 775-793.

Quenet, P.

2014 Snake Applied Decorations. In: M. Lebeau (ed.), *Arcane: Associated Regional Chronologies for the Ancient Near East and the Eastern Mediterranean Vol. 1 Ceramics*, Turnhout, 253-270.

Rakic, Y.

2018 Sealing Practices in the Akkadian Period. In: S. Scott, S. K. Costello, M. Ameri and G. Jamison (ed.), *Seals and Sealing in the Ancient World: New Approaches to Glyptic Studies*, Cambridge-New York, 81-94.

Reade, J.

1968 Tell Taya (1967): Summary Report. *Iraq* 30, 234-264.

Renette, S.

2019 Stratigraphy. In: E. Rova (ed.), *Associated Regional Chronologies for the Ancient Near East and the Eastern Mediterranean. Vol. V. Tigridian region*, Turnhout, 21-44.

Sallaberger, W. and Schrakamp, I.

2015 *Arcane: Associated Regional Chronologies for the Ancient Near East and the Eastern Mediterranean. Vol. III. History & philology*, Turnhout.

Starr, I.

1937 *Nuzi. Volume II*. London, Oxford.

Stein, D.

2001 Nuzi. B. Archäologisch. *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* 9 (7/8), 639-647.

Tenu, A.

2018a Prospection dans la haute vallée du Tanjaro (Mission archéologique du Peramagron 2011). In: V. Déroche, M. G. Masetti-Rouault and C. Nicolle (eds.), *Études Mésopotamiennes – Mesopotamian Studies* 1, Oxford, 90-109.

2018b Excavations at Kunara (Iraqi Kurdistan): new results. In: B. Horejs, C. Schwall, V. Müller, M. Luciani, M. Ritter, M. Guidetti, R. B. Salisbury, F. Höflmayer and T. Bürge (eds.), *Proceedings of the 10th International Congress on the Archaeology of the Ancient Near East*, vol. 2, Wiesbaden, 653-663.

2020 The 2016-2017 Excavation Seasons in Kunara (Iraqi Kurdistan). *Proceedings of the 11th International Congress on the Archaeology of the Ancient Near East*, vol. 2, 435-444.

Tenu, A., Altaweel, M., Clancier, Ph., Marchand, F., Ouraghi, N., Perello, B., and Verdellet, C.

2016 Kunara, une ville du III^e millénaire dans les piémonts du Zagros. Rapport préliminaire sur la troisième campagne de fouilles (2015). *Akkadica* 137-2, 109-182.

Tenu, A., Clancier, Ph., Marchand, F., Monerie, J., Sarmiento-Castillo, D., and Verdellet, C.

2019 Kunara. Rapport préliminaire sur la cinquième campagne de fouilles (2017). *Akkadica* 140, 5-71.

Tenu, A., Clancier, Ph., Marchand, F., Sarmiento-Castillo, D., and Verdellet, C.

2018 Kunara. Rapport préliminaire sur la quatrième campagne de fouilles (2016). *Akkadica* 139, 1-72.

Tenu, A., Chiti, B., Clancier, Ph., Marchand, F., and Monerie, J.

2020 Kunara. Rapport préliminaire sur la sixième campagne de fouilles (2018). Partie 1. *Akkadica* 141, 25-69.

Tenu A., Chiti, B., Marchand, F., Mylona P., Seigle, M., and Verdellet, C.

2021 Rapport préliminaire sur la septième campagne à Kunara (2019). *Studia Mesopotamica* 5 (1), 133-242

Tenu, A. and Kepinski, C.

2016 Kunara, a Bronze Age City on the Upper Tanjaro (Iraq). In: O. Kaelin and H.-P. Mathys (eds.), *Proceedings of the 9th International Congress on the Archaeology of the Ancient Near East*, Vol. 3, Wiesbaden, 147-159.

Tenu, A., Seigle, M. and Verdellet, C.

2020 Kunara. Rapport préliminaire sur la sixième campagne de fouilles (2018). Partie 2. *Akkadica* 142, 1-52.

Verdellet, C.

in press a Le matériel céramique de Kunara (Kurdistan irakien). Résultats préliminaires. In: L. Marti, O. Rouault and A. Tenu (eds.), *Études Mésopotamiennes – Mesopotamian Studies* 2, Oxford.

in press b What do Archaeological Ceramics Tell Us about Cultural Identity? Examples from Kunara (Kurdistan, Iraq). In: B. Couturaud and J. Giraud (eds.), *Early Bronze Age in Iraqi Kurdistan*, Beirut.

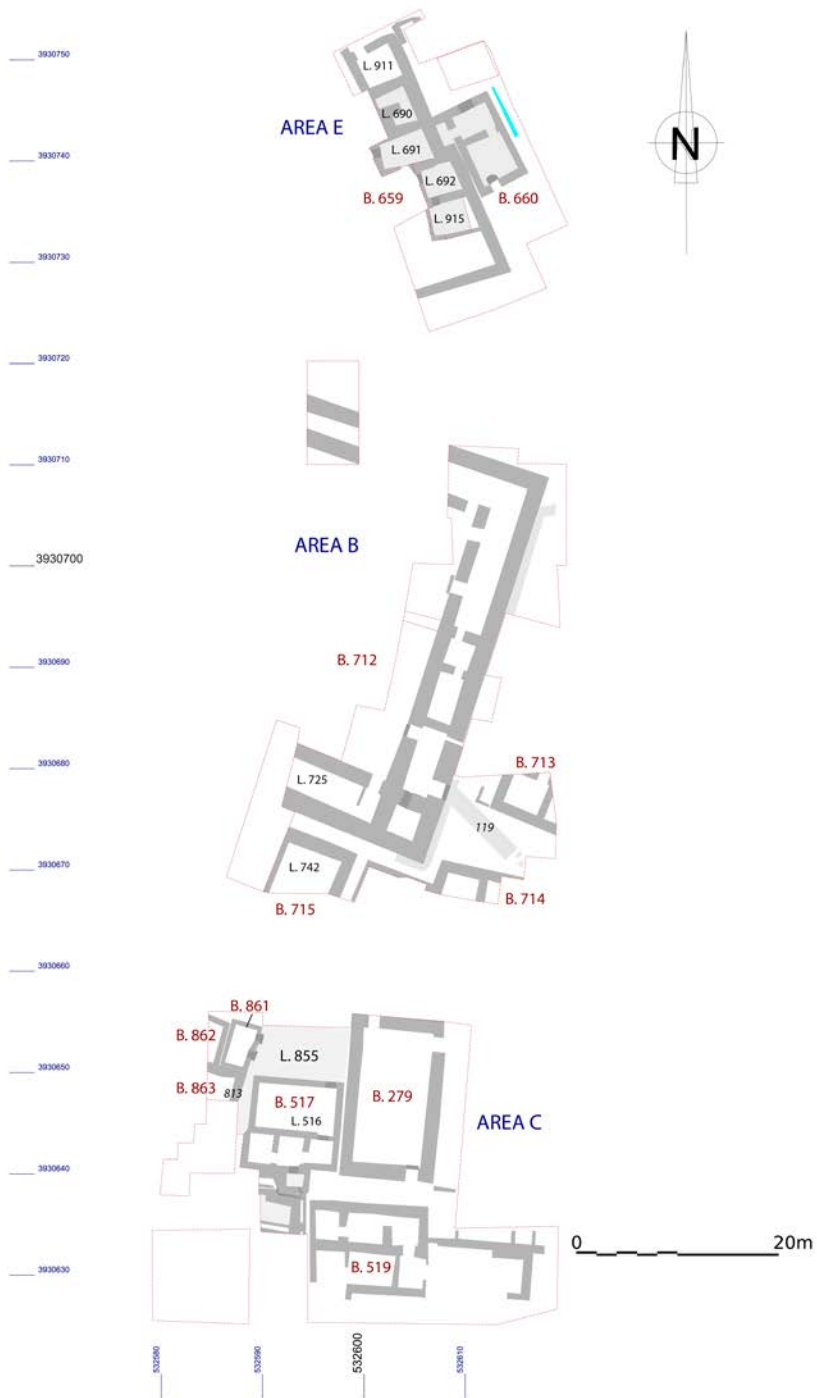


Fig. 1: Schematic plan of the lower town *ca.* 2200-2100 BCE (Eveha international – Mission archéologique française du Peramagon)



Fig. 2: Area B. Room L. 742 from the north-east (Mission archéologique française du Peramagon)



Fig. 3: Area B. Sherd with a modelled fish (Mission archéologique française du Peramagon)



Fig. 4: Northern part of Area C looking south-east (Mission archéologique française du Peramagon)



Fig. 5: Sealing M. 1002 showing a contest scene and the textile imprint (Mission archéologique française du Peramagon)





Fig. 6: Fragmentary jar with modelled snakes and scorpions (Mission archéologique française du Peramagon)



Fig. 7: Area E. Room L. 692 looking south-west. The access to L. 915, not yet excavated, is well visible (Mission archéologique française du Peramagon)



Fig. 8: Area C. Wall 813. On top (a) the eastern face with irregular layers of cob, on the bottom (b) the western face with regular cob modules (Mission archéologique française du Peramagon)

