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Preliminary Report on the VIIIth And IXth Campaigns at Tell el-‘Uwaili

Regis Vallet, Johnny Baldi, Claire Padovani, Rafat Abd-El-Kadim, Carolyne Douché

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SUMER

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The State Board of Antiquities & Heritage

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FOREWORD

by

Dr. Laith Majeed Hussein

Chairman of the State Board

of Antiquities & Heritage

It is a matter of pride at a moment in time to accompany the celebration of the diamond jubilee of our glorious magazine, and the ICON of our organization, when (75) years has passed since its founding. The early archaeologists had made an unforgettable imprint with what they wrote and presented in (*Sumer*) over the years, in which it remained an important reference for the studies of Mesopotamia in its various aspects, written by different languages, mainly Arabic and English, and French and German to a lesser extent.

During those seventy-five years, Sumer magazine underwent great manifestations, as it was a witness to prominent products and distinguished chapters from the history of the Mesopotamian civilization, and enriched the archaeological library with a rich and original material in various fields of archaeological research.

However, what we regret is that: this exceptional event for us has coincided with the emergence of an epidemic COVID19 that affected the whole world; which forced countries to completely close all life fields, so we missed the opportunity to present an exceptional celebration worthy of

this event. This occasion has coincided with the officiate of the presidency of SBAH, through which we made a commitment to continue to support the scientific activities and scientific publishing.

Despite the short period that elapsed in SBAH, and despite the extent of the difficulties that the country faced as a result of the halt due to the epidemic, we set out with great ambitions to work on several aspects, including completing the work of preserving and maintaining damaged cultural properties by cooperation with several international institutions.

World Heritage was also an active aspect during the partial closure, as more than ten sites were included on the preliminary list of World Heritage, including important archaeological sites such as Naffar and Kirkuk Castle. Some of these sites were on the list of intangible heritage. We also had a diligent follow-up of the maintenance and restoration works that took place in the previously listed sites such as the mixed file sites: (Ur, Eridu, Warka and The Marshes) or individual sites such as: Assyria, Samarra, Hatra and Babylon for the purpose of sustaining the conservation work, which increases the opportunities for investment in tourism.

Another aspect in which we have made a good progress is the cooperation with some foreign institutions for developing the practical aspects in SBAH. Cooperation has also been made with foreign archaeological expeditions to complete their work in the various cities in the north and south of Iraq.

Foreign expeditions have resumed their work in many locations, such as the German in Quenjak, the Italian in Hatra and the Russian missions in Tel Al-Duhaila. The reconstruction and restoration work of the Mosul Museum continued by the Louvre Museum, and the Smithsonian Institution and the International alliance for the Protection of Heritage in Conflict Areas (ALIPH) at Taq Kesra site in Al-Mada'in (Ctesiphon).

In conclusion, we would like to express our happiness as we place in the hands of the honorable reader another volume of Sumer magazine that includes distinguished and original researches in both Arabic and English languages, so that will be a continuation of the efforts that have brought Sumer to us after (75) years.

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Preliminary Report on the VIIIth and IXth Campaigns at Tell el-'Uwaili (2019)

Régis Vallet, Johnny Samuele Baldi, Claire Padovani,
Rafat Abd-el-Kadim and Carolyne Douché

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ABSTRACT

Two short seasons in Tell el-'Uwaili in 2019 allowed opening a new trench in the continuation of the excavations undertaken in the 80s on the northwest flank of the Tell where the Ubaid 0 levels (7th millennium BC) are close to the surface. The objective is to obtain a stratigraphic sequence as complete as possible between the most recent phases (Late Ubaid) at the summit of the mound and the Ubaid 0 levels downwards. 300 square meters were cleared and five architectural levels identified, numbered from 1 to 5 from top to bottom. The structures of level 5 correspond to the last Ubaid 0 level of occupation. The habitat is much denser than expected, and combines housing with small associated storage structures. The extension of the excavations in the next campaigns should bring more insights on the organization of the early Ubaid village.

Introduction *(R. Vallet)*

As has been the case since 1976, fieldworks carried out in Larsa in 2019 were accompanied by operations on the near site of Tell el-'Uwaili, 4.6 km to the southeast. Discovered in 1967 by André Parrot and Robert Mac Adams, the site extends over 4 hectares and rises more than 4m above the surrounding plain, at least for the visible part of the Tell that plunges deeply under the alluvium (Fig. 1). It offers a sequence of occupation covering the entire Ubaid period, including an initial phase predating Eridu, labelled Ubaid 0, discovered in 1983 in a deep sounding (Calvet 1987). The Ubaid 0 phase of the site, with a proven stratigraphic extent of 4.5m, traces the origin of the sedentary occupation of lower Mesopotamia to the middle of the 7th millennium BC (Forest 1996b). In 1987-89, the opening of an extensive trench on the northwest flank of the Tell revealed that the last Ubaid 0 levels, under fragmentary Ubaid 1 remains, were there close to the surface, due to erosion exerted by the prevailing winds. Three houses in particular, buildings 37 and 41 (Ubaid 0) and 90 (Ubaid1), had been cleared, revealing the habitat of this period (Huot and Vallet 1990, Vallet 1996). This shows the scientific importance of 'Uwaili and the imperative to resume work, especially since in May 2019 we had the joy and relief to find our 1989 trench intact. Indeed, despite the ac-

cumulation of a thick layer (20 to 50 cm) of sandy deposits, the structures already brought to light were very well preserved.

In 2019, our program was all mapped out: to extend the ancient excavated areas further south on a surface never previously excavated on the northern slope of the Tell, and to obtain a stratigraphic sequence as complete as possible, from the most recent phases of the Ubaid at the top to the Ubaid 0 levels downwards. For this purpose, we opened an L-shaped trench 10m wide south of our 1989 trench (Ubaid 0) then which turns east to reach the trenches made at the top of the site (Late Ubaid) in the 1970s. Excavations are therefore both stratigraphic and extensive. At the end of two short seasons of three weeks in total[1], approximately 300 square meters were cleared (Fig. 2) and five architectural levels identified, numbered from 1 to 5 from top to bottom. For the moment, the equivalences between the new and the old stratigraphic sequence are not yet all established, which a future campaign should achieve.

At the top of the new trench, fragmentary structures (level 3) that could belong to the Ubaid 3 terrace cleared in the early 1980s (Forest 1987), were recognized, cut by a small Ubaid 4 platform (level 2) and several Ubaid 5 kilns (level 1). The kilns were already known, but on the eastern mound of the site (Calvet 1991) not at its main summit, where probably heavily leveled they have largely disappeared and have gone unnoticed. The Ubaid 4 remains belong to one of the various levels of this phase attested at the top of the site, but we do not yet know which one. In the lower part, several Ubaid 0 buildings (level 5), deeply cut by Ubaid 1 kilns (level 4), have been cleared, five grid-plan granaries and a tripartite dwelling with narrow walls and pillars, of the same type than Building 41 excavated in 1989 (Vallet 1996). Some of the numerous Ubaid 1 kilns of level 4 had already been noticed, but their relations with the habitat, Buildings 90 in particular a little further north, is not yet known. The stratigraphy of the Ubaid 1 levels has always been a difficult question in ‘Uwaili, due to the particularly fragmentary state of the remains of this cultural phase. Level 5, for its part, corresponds well to level I of the Ubaid 0 phase of our previous excavations, which it extends without break south of Building 37/41.

Since the exploration of the site began in 1976, ‘Uwaili ceramics has been the subject of both morpho-stylistic and technological studies (by Liliane Courtois and Bruce Velde). Johnny Samuele Baldi continues this tradition according to current methods of ceramology and the ‘chaine opératoire’ approach in particular. One of the objectives remains the development of a chrono-typology anchored in a reliable stratigraphic sequence, extending to the origins of the Ubaid. It is true that, for the Ubaid 0, the absence of regional parallel (except Eridu XIX, Lebeau 1987) does not facilitate understanding of the specificities of this ceramic, clearly at the origin of the Ubaid 1 but which differs significantly from it on almost every aspect. At the other end of the sequence, the work in progress should also deepen our knowledge on the Ubaid 5 assemblage. It seems to coincide with levels XVI-XIII at Uruk, and sees in particular the appearance of the first ‘proto-BRBs’. Despite its ‘proto-Uruk’ nature, we remain faithful for the moment to the Ubaid 5 label (Forest 1996b: 387), rather than pull back the Uruk in the middle of the fifth millennium or creating an intermediate period.

Finally, Caroline Douché relaunched the paleobotany component of the project, initiated in the 1980s by Reinder Neef, by carrying out a systematic sampling of all

(1) 1-10 June and 21 October-7 November 2019. In addition to the authors of these lines, assisted by two expert topographers in GIS, nine workers worked on the site. For the full team composition and acknowledgments, see our article on Larsa, in this volume.

the layers excavated at both 'Uwaili and Larsa, of which she gives a first overview. We know that plant remains on the two sites are neither abundant nor well preserved, mainly due to extensive irrigation practices, leaving a very damaging gypsum crust everywhere. Despite this, we can hope that the data collected as the excavations progress help us to understand the birth and development of cereal economy in southern Iraq, as well as clear factual indicators on the much debated questions of climate change and in particular the phases of supposed drought, and their possible impact on human societies. The combined study of 'Uwaili and Larsa offers a unique opportunity to study these phenomena over the very long term, no less than six and a half millennia.

1 – Stratigraphic sequence and architectural features (J. S. Baldi, C. Padovani and R. Abd-el-Kadim)

A consistent portion of the Ubaid 0 hypostyle house Building 37 was so exposed once again north of the new trench (Fig. 3), over several square meters, with its perimeter defined by double-row brick walls reinforced with internal pilasters and three internal longitudinal compartments provided with brick piles used to support wooden columns. Four of these brick piles were recognized. In the middle of them, an installation set in the ground and equipped with a large central hole was also brought to light again (Fig. 4). Further east, the large fireplace that heated the eastern wing of Building 41, a reconstruction of the same Ubaid 0 dwelling, was easily re-discovered because of its excellent state of preservation. All internal equipment lies on a very regular hardened clay floor. South-west of Building 37, a narrow street separates it from a granary. Indeed, Building 37 and part of the perimeter wall of Granary 1 had already been identified in the 80s. This allowed us to establish both an ideal and an archaeological continuity with the results of thirty years ago. These structures were in fact our first stratigraphic reference (both Building 37/41 and Granary 1 belong to our 'Level 5', corresponding to Level I of phase Ubaid 0 of the 80s sequence): starting from this level, it was easier to reconstruct the apparently uninterrupted occupation of this sector. Five levels have been identified.

Level 1 is represented by several potter's kilns (1001, 1002, 1003, 1012, 1017, 1018, 1016, 1042, 1029 etc.) cut through the previous Levels 2-3. These poorly preserved firing structures have been identified because of some scattered traces: the bottom of the combustion chambers, mudbrick walls that delimited them and, in most cases, the openings through which the fuel was introduced. All the kilns have medium dimensions and a peculiar pyriform or elongated-ovoid shape, due to small praefurnia (for instance Kiln 1012) that are not documented for the kilns of the previous levels. They all yielded a limited but extremely interesting Ubaid 5 ceramic assemblage (see §2 below).

Level 2 is represented by a mudbrick platform or terrace (1000) identified in the south-western sector of the excavated area on the top of the Tell (Fig.5). This poorly preserved tiled surface was bordered by a band of smaller mudbricks. All the structures associated with this platform have been washed away by the sever weathering on the top of the Tell. Nevertheless, it is certain that the platform-terrace was not associated with the ceramic kilns of Level 1: dimensions of their bricks are different, and the respective rows of bricks never overlap according with some kind of regularity or architectural logic. In addition, some Level 1 kilns have also been identified outside the Level 2 terrace-platform, cut through the previous structures of Level 3 buildings. Furthermore, no firing structure has so far been associated with Level 2, which seems rather to be interpreted as a phase

of domestic or public architecture in the northern sector of the Tell.

The same consideration can be made for Level 3, from which no craft facilities come, but, again, remains of domestic or public buildings. The Level 2 platform-terrace is superimposed on buildings (1010-1111-1007-1014), which were perturbed both by some Level 1 kilns and by erosion due to the slope of the Tell. As a result, Level 3 structures have been identified in the south-eastern portion of the square and close to its south-western limit, in the highest area of the Tell. An analogous structure (probably the remains of a terrace – locus 1048) has been identified in the western corner of the sounding: it is tiled with bricks of the same size, roughly parallel to structures 1013-1010-1007 and disturbed by several Level 1 kilns (1049, 1050 and 1051). Between the vestiges of Level 3 constructions identified on both (eastern and western) sides of the sounding, there are dispersed remains of bricks and tiled surfaces badly perturbed by later kilns and destroyed by weathering. The plan of these structures, probably inherent to buildings respecting a roughly north-south oriented plan, includes an apparently tripartite structure (around Room 1021) with thick walls (two rows of bricks). Portions of three rooms are visible: the narrow and long central room tiled with bricks, while the side ones, with plastered walls, had hardened clay floors.

Levels 2 and 3 seem to be composed of dwellings and domestic buildings, but the presence of brick terraces to support the structures, tiled floors and plastered walls suggests a certain care in planning and construction. Both levels have yielded very few ceramic materials, coming from filling layers too close to the surface to be attributed with certainty to these occupations. However, a chronological attribution of these levels respectively to the Ubaid 4 and 3 phases seems to be plausible.

Level 4 is represented by several potter's kilns (1022, 1036, 1028, 1039, 1033, 1052, 1038, 1061, 40, 42, 76, 84, etc.) identified in the whole trench and belonging to a very large ceramic workshop. Pottery was not only fired, but also manufactured on the spot, as demonstrated by the presence of many potter's tools (stone hammers and scrapers, as well as ceramic fragments reused for modelling, as evidenced by their traces of wear). Medium and large sized pottery kilns were disseminated both in the upper portion of the Tell (under the terrace of Level 3) and at its base. All the firing installations were built directly on the remains of the previous stratum, without leveling the earlier vestiges (mud-bricks platforms and the thin walls of Level 5 granaries). It is possible to observe this stratigraphic overlapping in the northern sector (in Granaries 1 and 2 at the base of the Tell), as well as in the southern square (Kilns 1038, 1032, 1052, 1055 in the central and northern portion of the sounding on the top of the Tell). In the lower (northern) sector of the excavations, some of the cells along the alley separating Building 37 and Granary 1 were used to surround circular firing structures stuck in these quadrangular compartments (Kilns 10, 15, 16). South and east of Granary 1, larger furnaces were built with heating (lower) chambers cut through the vestiges of the previous level. In fact, the alley between Building 37 and Granary 1 was also occupied by kilns, even if they were built according with a completely different method of construction. Rather than filling the alley to level the craft area upon Granary 1, some kilns were built by digging their heating chambers into the floor of the street, at a lower level than the furnaces built above the barn (Fig. 6). A 1,5 x 2 m test-sounding conducted in the eastern portion of the alley in 1989 (and re-brought to light) allows us to observe the brick structure of the stepped furnaces arranged in this area, partly re-

using the bricks of the previous walls on both sides of the alley to isolate the firing chambers of the kilns. It is also possible to observe the huge (about 2.5 m thick) stratification of clay and ashy layers accumulated in this sector. The same kind of construction system and arrangement of kilns has been observed in the east-west oriented alley separating Level 5 buildings B 110 and B 111, in the western sector of the trench. The lower chambers of some potter's kilns were cut through the floor of the alley, using the walls of previous adjacent edifices to isolate the firing structure. Other kilns (for instance Kiln 103, 97 and 98) were cut through the perimeter walls of Building B 111, and the whole alley was progressively filled by a massive amount of ashes.

In the southern sector of the trench towards the upper part of the Tell, all kilns identified in Level 4 were stuck into the cells (1038, 1039, 1033, 1052) or build across the walls of a Level 5 granary (1028, 1061, 1032). The firing structures of the entire workshop were used over a span of time that may not have been very long, as none of them shows clear traces of reconstruction. Especially in the alleys between buildings of Level 5, furnaces and ashes show very thick accumulations, up to 2.2 m. Certainly, all the firing installations were used in an extremely intense way. Clues in this direction are offered not only by the impressive amounts of slags produced by the furnaces, but also by several coats of fire-hardened and burnt clay (applied to restore damages caused by high temperatures) forming the bottoms of the kilns. All these kilns have yielded an Ubaid 1 ceramic assemblage composed of sherds and pots deformed or broken during the firing cycles. Further evidence of the functional connection between firing structures and waste ashes stratified in the pits and alleys of the previous level comes from 18 vessels: some of their fragments were found both inside some furnaces and in the ash. This corroborates the hypothesis that chambers of the kilns were systematically emptied in the surrounding area, offering an additional attestation that the workshop was used for a limited period but in a very intensive way.

The kilns of Level 4 cover or are cut through the cells of Level 5 granaries and warehouses. South-west of the house known as Building 37, a narrow (1.2 to 1.5 m wide) street separates the dwelling B 37 from a granary whose northern limit, known since 1989 (Vallet 1996), was defined by a wall similar to that of the hypostyle room of B 37. The walls delimiting B 37 and the granary were similar both because of their thickness and because of their small regularly spaced buttresses. The edifice close to B 37 seems to be a granary or storehouse mainly because of its internal structure, articulated in an almost modular way by little quadrangular cells (Fig.7). This same type of internal structure has been recognized as typical of granaries basements at several other trenches in the early Ubaid phases of 'Uwaili (Forest 1991, Forest, Vallet and Breniquet 1996). Since the parallel walls and the spaces in between were often irregular and considerably narrow (up to 60 cm), they were most likely covered with wooden planks. Further, the spaces appear to have been empty. This indicates that they were not used to store grains, but rather as a basement. The purpose was to raise the floor of the granary, in order to keep the corn dry and protected from rodents.

The barn and the hypostyle house belong to the same level, not only because their perimeter walls are perfectly aligned, but also because both these perimeter walls lie on the same external floor in the alley that separates them. According with the plan of this level, B 37 and Granary 1 seem to constitute a single integrated unit, despite the alley separating them. All other Level 5 buildings are also contemporary to Granary 1 and B 37, but they were

not built as part of a single complex: they were rather progressively juxtaposed, as demonstrated by the south-western limit of Granary 1, a mud-brick wall parallel to that running along the street next to B 37. In fact, this wall has an irregular profile, thickened by other walls that have been placed next to it and that delimit another storehouse (Granary 2). This one has been built side by side to Granary 1 by thickening their respective adjacent perimeter walls, whose slightly different orientations suggest some kind of separation between Granaries 1 and 2. This does not mean that each of these storehouses has been constructed as a single architectural structure. Indeed, internal thin walls (one row of bricks) partitioning both the warehouses are often characterized by slightly divergent orientations, which suggest different vicissitudes, restorations, repairs and renewals in the internal pigeon-hole structure of the storehouses. Nevertheless, Granaries 1 and 2 represent two coherent buildings. They are distinct, but not separate. Probably, their architectural juxtaposition does not depend just on their shared function to stock cereals and crops.

In fact, it is possible that the southern sector of Granary 2, with platforms (58, 71, and 78) carefully tiled in mudbricks and supporting medium-size tandoors (73, 75) and large size oven (62), allowed a passage between Granaries 1 and 2 and constituted a shared work area to cook foodstuffs. Towards the upper part of the Tell, in the eastern portion of the southern sounding, two platforms and a little oven (1058, 1059) could offer an example of analogous working and cooking areas shared between two warehouses. In any case, the functional juxtaposition and probable operative connection between distinct granaries goes with the association between each storehouse and a specific dwelling. The same kind of correlation observed between B 37 and Granary 1 seems to exist also between Granary 2 and B 110, in the western corner of the lower sector. Building B 110 is a domestic tripartite structure: its internal equipment has been identified without being deep excavated, while its western wing has been partially recognized in the wester limit of the sounding (Fig. 8). Just as an intermediate alley divides Building 37 and Granary 1, a narrow passage separates this dwelling from Granary 2. Likewise, other alleys separate Granary 2 and Building B 110 from Building B 111, another partially excavated storehouse. The internal organization of Building B 110 was delineated by thin walls of one row of mudbricks, whose function was to outline the different rooms. The roof was supported by roughly quadrangular (45x45 cm) mudbricks pilasters arranged in rows close to the thin walls. The rows of pilasters were sometimes interrupted by the presence of domestic installations, as rectangular cubicles (in the north-eastern and south-western wings), or large fireplaces (in the north-eastern wing and central hall, connected by a passage provided with little buttresses). As already observed in Building 41 (a reconstruction of B 37), also provided with single-row brick walls, the supports that actually sustain the roofing of the house are the pillars or columns, while the walls essentially constitute the building perimeter and the divisions between the rooms (Vallet 1996: 114-115, pl. 2 and 6). Although B 110 is a small house, its layout underlines the prominence of the central hall. The walls of the latter were the only ones carefully plastered (on the internal surface) and flanked by pillars arranged at a regular distance from each other. In addition, the access to the central hall was through two doors facing each other. One of these two doors was flanked by two brick half-pillars, which reinforced the thin inner wall, also highlighting the access to the main hall in a tiny but elegant way

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2 – The ceramic materials: towards an anthropological approach to the ceramic assemblages (J. S. Baldi)

Methods and aims

The heterogeneous assemblage collected at Tell el-'Uwaili during the 2019 fieldwork seasons dates from the middle of the 7th millennium BC up to the mid-5th millennium BC, depending on the levels. Current knowledge for these phases in southern Mesopotamia is extremely limited and typological parallels are rare and often from distant sites. As a result, they are sometimes not entirely reliable since geographical distance can be a problem in assessing the simultaneity of typological similarities. On the other hand, internal parallels from stratified contexts excavated at 'Uwaili between the end of the 70s and the 80s are definitely trustworthy, but they may lead to circular arguments, if local data are not validated also at other sites.

This makes it clear that one of the main objectives of the ceramic studies at 'Uwaili is the definition of a sound chrono-typology anchored to stratigraphy, so as to establish which types distinctively characterize the various periods of late prehistory in southern Mesopotamia. On the other hand, since these first campaigns, pottery has been studied according with the chaîne opératoire approach, in order to identify different ways of producing ceramics and their evolution over millennia. Chaînes opératoires – namely the culturally based series of actions transforming raw materials into finished products – are a valuable instrument to recognize the way of doing and thinking of ancient craftspeople. They allow to understand the specific organizational mechanisms and reciprocal interactions of communities of past handicraft workers. The analysis of the distinctive ceramic traditions through a technical study (involving the identification of shaping methods and petrography associated with the various typological solutions adopted for the vessels) appears crucial also because some of the excavated contexts are workshops intended for ceramic production.

Eventually, the choice of conducting technical studies on ceramics was also about being part of a tradition. In fact, unlike almost all the sites in southern Mesopotamia, Tell el-'Uwaili has been the subject of many technological studies on ceramic assemblages (Courtois and Velde 1983, 1984, 1985-1986, 1987, 1991). This bulk of data provides a unique basis for further analysis according to recent methods and questions. For instance, the study of manufacturing techniques was largely neglected thirty years ago, which precluded the analysis of the chaînes opératoires (Roux 2019a, 2019b). However, several observations made at the time may be extremely useful for the study of the materials coming from ongoing excavations (Courtois and Velde 1083: 149). Likewise, although laboratory analyses of the 80s focused mainly on the chemical composition of the materials used for painted decorations (Courtois and Velde 1983: 151-161), microscopic observations on the composition of ceramic pastes are very detailed (Courtois and Velde 1983: 148). The analysis of the ceramic chaînes opératoires in their spatial contexts allows to encompass the stylistic approach in a more comprehensive procedure, aiming at recognizing distinct technical traditions and, therefore, the underlying groups of producers, with their specificities and reciprocal relations.

Therefore, the study of ceramics from Tell el-'Uwaili aims to answer three questions:

1- When were the various assemblages produced? (to be assessed on the basis of a reliable typology verified by intra- and extra-site parallels)

2- How they were produced? (to be studied by identifying the various production techniques)

3- By whom these assemblages were produced? (to be evaluated by reconstructing the distinctive chaînes opératoires of the different groups of producers).

Chrono-typological analysis and morpho-stylistic parallels

Level 1 kilns have yielded an interesting "Ubaid 5" assemblage (north-Mesopotamian LC1, or "Terminal Ubaid" according with the definition of Calvet 1991). Some specimens are deformed by the high temperature of the firing cycles (Fig.9; Pl. I.2).

The simplified Ubaid painted motifs are quite rare and occur along with plain flattened rim bowls and basins (Pl. I.7), flaring rim jars (Pl. I.3), cannon spouts (Pl. I.4), sporadic "proto"-bevelled-rim bowls (Pl. I.8) and dung-tempered wares very similar to the north-Mesopotamian "chaff-faced" wares. Nevertheless, some traces of Ubaid-related material culture (as fragments of mullers) also come from Level 1 kilns, suggesting for these firing structures a date around the middle of the 5th millennium BC (contemporary with Levels C-B of Sounding X 36 carried out at 'Uwaili, Calvet 1991). Whether it is based on intra- or extra-site parallels, the main typological significance of the pottery for this period is about breaks or caesurae in the development of the material culture, be it by the disappearance or by the first appearance of new formal elements. In Lower Mesopotamia, this question has already been asked for this period for the site of Uruk, where some chrono-typological discontinuities (Eanna XIX-XVII as Ubaid 4 and starting from Eanna XII Early Uruk) are consensually accepted (Wright 2014). The assemblage from Level 1 at Tell el-'Uwaili seems to coincide with Levels XVI-XIII at Uruk, on whose attribution a long debate has developed (Haller 1932; Hermansen 1990; Huot 1994; Sürenhagen 1986; Finkbeiner 2001). At Uruk, these levels present the latest fading version of Ubaid traditions. Still, starting from Levels XIV-XIII, the appearance of in-turned rim bowls (with pinched rims and no longer with inward bevelled rims and painted bands, as it was the case for the similar Ubaid type), and carinated bowls with flattened rim (Pl. I.6, 9) creates a clear rupture. Therefore, the presence of these types at 'Uwaili Level 1 seem to be culturally meaningful. Moreover, the first appearance of "proto-bevelled"-rim bowls seems to confirm the "proto-Uruk" nature (according with the terminology developed by Sürenhagen 1986 and Wright 2014 – with the understanding that, here, Uruk elements asserted themselves for the first time) of Level 1 at 'Uwaili. On the other hand, at 'Uwaili, the scarcity of black decorations on buff pastes, the presence of some scattered fragments with extremely simplified red painted motifs, the appearance of types similar to north-Mesopotamian LC2 "cannon-spouts" and double rim jars (Pl. I.1), as well as the absence of distinctive Ubaid types make the terminology of Ubaid 5 phase certainly valid on a chronological plan, but by now not completely justified from a cultural point of view.

Levels 2 and 3, with their poorly preserved structures recognized on an extremely limited stratigraphic thickness, were virtually without ceramic assemblages. On the contrary, the large majority of the sherds collected in 2019 come from Levels 4 and 5.

The ceramic workshop of Level 4 has yielded Ubaid 1 ceramics (Breniquet 1996). Ubaid 1 tradition differs from previous Ubaid 0 by various features and even if some techno-stylistic attributes persists since the Ubaid 0, Ubaid 1 (also known as "Eridu Phase") marks a clear discontinuity. Pastes are generally fine, yellow-beige and hard-fired. Surfaces are frequently decorated by matt black painted motifs. Shapes present a much larger variability than during the Ubaid 0. Dec-

orations are essentially geometric. Compared to the decorations of the Ubaid 0 phase, the Ubaid 1 motifs, are more complex, but also more structured and follow rules that do not seem occasional: a genuine visual grammar seems to appear for the first time. Painted motifs usually underline the general shape of the ceramic containers both on the external and the internal surfaces. There are frequent lines of paint on the lip (Pl. II.1), on the carinations or at the inflection points, designed patterns are common at the centre of the plates (Fig.10) or on the shoulders of the jars, while large single or multiple broken lines are often applied on the outside of the open shapes (Pl. II.3, 4, 8 – Hole 1974: fig. 11.a-I, fig. 12).

Animal motifs are rare and sometimes extremely stylized and simplified (Pl. II.9), but they also appear for the first time. Compared to the previous phase, painted motifs sometimes reproduce vertical or oblique-oriented Samarra-like linear motifs (Pl. I.2 and Fig.11– Ippolitoni 1971). Nevertheless, geometrical patterns are often very dense and complex, with horizontal or concentric strips combining parallel lines, zigzags, triangles, lozenges, or sometimes leaving spaces in reserve and creating checkers (Pl. II.4-6, 8, 10 – Fig. 11).

Cruciform internal motifs (Pl. II.7 – Hole 1974: fig. 13.c) appear for the first time to decorate inner surfaces of some plates and bowls. On the other hand, amongst plain and utilitarian wares, some specimens of vegetal tempered husking trays incised on the interior side (Pl. II.11) have parallels in Northern Mesopotamia. Morpho-stylistic parallels are evident with south-western Iranian sites in Kurdistan, in the Deh Luran and in the Zagros range, as Jaffarabad, Choga Sefid and Tepe Tülâ'ï (Dollfus 1975; Hole et al. 1969; Hole 1974). However, the designation of Ubaid 1 as "Eridu phase" is not accidental: the parallels are numerous and particularly clear with the Ubaid 1 occupation at Eridu (Levels XVIII-XV – Safar, Mustafa and Lloyd 1981; Oates 1960a). Likewise, it is not surprising to observe close similarities with the so-called "Choga Mami Transitional" style, corresponding with the interaction phase between Samarra and Ubaid 1 in Central Iraq (Oates 1960b, 1969). In general, the Ubaid 1 appears to be a phase of considerable formal development (new painted motifs, more and more complex decorations, disappearance of particularly archaic shapes), and at the same time a phase characterized by the stabilization of some properly Ubaid features (wide diffusion of beige and greenish fabrics, tendency to homogenize the dimensions of the various shapes, as well as to thin the walls of fine containers).

Level 5 is characterized by an Ubaid 0 ceramic horizon (Lebeau 1987; Thissen 1992). The most surprising feature of the Ubaid 0 pottery is probably its fabric. If the Ubaid is generally associated with a "black-on-buff painted" ceramic tradition, most of Ubaid 0 pastes are rose, reddish or brownish, and the black painted decoration is applied on a white slip. Fabrics often appear quite porous, fine in texture but irregular. Sandy mineral temper is ubiquitous, but some vegetal inclusions (probably voluntarily added to the paste) are documented in mixed vegetal-mineral pastes. As far as decorations, it is remarkable the absence of incised motifs, attested at contemporary sites in both norther-central Mesopotamia and Susiana (Mesnil du Buisson 1948, Merpert and Munchaev 1973, 1993; Dollfus 1975, 1983). The surfaces of the sherds are frequently covered by a matt paint, which, in some rare cases, is surprisingly red (Fig. 13). Blackish-brown decorations are more frequent, but they tend to flake off and thus disappear gradually, leaving only some traces (unfortunately not very visible) on the surface. The visibility of the decorations is also often disturbed by frequent saline concretions. Therefore,

even if several sherds appear plain, it is advisable to remain cautious in interpreting the proportion between painted and unpainted ceramics. Anyway, painted ceramics with geometric linear or oblique motifs constitute the large majority of the decorations. These patterns clearly represent the precursors of the oblique-lines and geometric designs of the Ubaid 1 repertoire (Pl. III.3, 5, 7-8). Nevertheless, the visual language and semiotic system expressed by Ubaid 0 painted ceramics is much more concise (Fig. 12).

Nothing suggest that this was a matter of skills. Variability in pastes and in associations between fabrics and decorations could rather suggest that Ubaid 0 was a phase of progressive development of a shared figurative language based on divergent symbolic and technical idioms. For the time being, given the scarcity of contemporary ceramic data, it is difficult to assess the reliability of typological parallels. Since there are no well-published contemporary assemblages, the risk is that, looking for particularly close similarities, one ends up emphasizing the differences compared to other sites. Therefore, the consequence would be to surreptitiously outline a unique character that, in reality, the Ubaid 0 phase at ʻUwaili certainly never had. Links existing with ceramics of the Choga Mami Transitional style are indeed quite evident from a morphological and decorative point of view, especially with the early phases analysed by Oates (1969). However, these links do not allow us to consider that the assemblage from Level 5 represents a local variant of Choga Mami Transitional repertoire (Pl. III.1-3). This same observation can be done about comparisons with the Samarra tradition (Mesnil du Buisson 1948; Abu al-Soof 1971): at ʻUwaili, Ubaid 0 decorations are much less sophisticated, less dense, less focused on geometric consistency, but several parallels are clear (Lebeau 1987: 100). An example in this sense is represented by Ubaid 0 footed cups from Level 5, documented both in the Samarra and in the Choga Mami Transitional traditions. On the other hand, typological resemblances exist also with south-western Iranian sites, as Jaffarabad, Choga Sefid and Tepe Tülâʼï (Pl. III.4-5, 7 – Dollfus 1975; Hole et al. 1969; Hole 1974), but they are never decisive, as they are, instead, for later Ubaid 1 ceramics. If shapes are often comparable, decorations obey most of time to different criteria: so, it seems that all these sites are more recent. As far as southern Mesopotamia, it is interesting to observe that relationships between Ubaid 0 ceramics from ʻUwaili Level 5 and the repertoire from the early levels (XVIII-XV) of Eridu are the same as those existing between Ubaid 0 and Ubaid 1 pottery from ʻUwaili itself. This clearly confirms that the so-called "Eridu phase" is later than Ubaid 0. Nevertheless, the majority of the sherds from Eridu Level XIX (unfortunately poorly illustrated – Oates 1960; Safar, Mustafa and Lloyd 1981) seems to belong to a phase earlier than Ubaid 1: their close similarities with Level 5 at ʻUwaili (Pl. III.1, 6, 9) could justify a new dating for Eridu XIX, contemporary with the most recent layers of the Ubaid 0.

Preliminary technical analyses

Technological and petrographic studies carried out during the 80s are all explicitly aimed at improving the understanding of the savoir-faire of late prehistoric craftspeople (Courtois and Velde 1991: 289). Nevertheless, they often underline the substantial homogeneity of the local technical landscape, to the point of expressing some scepticism about the possibility of highlighting technological interactions within the prehistoric community of ʻUwaili, as well as towards other villages or regions (Courtois and Velde 1991: 298). The set of these analyses offers, however, a very detailed picture of the interactions that ceramic production implied with the natural environment in

terms of exploitation of raw materials and their treatment. Current technical studies focus, therefore, on recognizing, within this technical panorama, peculiarities defining specific traditions associated with distinct groups of artisans. For this reason, during the 2019 fieldwork seasons the petrographic features of a large sample of Ubaid 0 and 1 fragments have been classified by analysing them at the Dino-Lite Digital microscope (model AM4113T, with up to 200x magnification). Further microscopic analyses are ongoing and, starting from the next seasons, microscopic observations and thin sections petrographic analyses are also planned in France.

Fabrics have a very homogeneous mineralogical composition and they differ essentially on the base of their granulometry. It is often difficult to establish whether mineral or vegetal non-plastic inclusions are voluntarily added to the fine mass because of the little size of the large majority of these components. Indeed, raw materials for the ceramic pastes come from the area of the site itself. Therefore, Ubaid ceramics are a sort of "marsh pottery" (as often stressed by Courtois and Velde 1987: 129, note 10; 139, Table VIII; 1991: 286, 293). This means that most of mineral inclusions are actually clastic transported from the rivers to southern Iraq, as also demonstrated by recent geological maps (Fouad and Sissaskian 2012). Likewise, fine vegetal inclusions (preserved as pyrobitumens in the ceramic pastes) are generally un-calcined fragments of peat or lignite deposits of former local marshes. However, if the coarsest fraction of these components had not been added voluntarily, it was at least ignored, since there are samples of extremely purified pastes, which demonstrate since the 7th millennium BC the ability of local craftspeople to reach quasi-industrial purification levels by decanting and treating clays. Amongst silicates, it is possible to recognize some dispersed micas (translucid black micas and translucid grey-rose muscovite). Calcium carbonate is not very abundant and often voluntarily added by crushing and grinding shells very finely. The most frequent and recognizable silicate is quartz, with grey-whitish inclusions sometimes reaching 0.5 mm. Magnetite dark (or most of time red after the firing process) ferruginous inclusions are not uncommon. Black manganese rich minerals (generally pyrolusite) are also quite frequent. Since all these compositional characteristics are shared by all pastes, the 4 categories identified (A, B, B.I and C) are based on two additional distinctions: the degree of metamorphism of some minerals (a low degree for A and B pastes, and a high degree for C pastes), and the presence of some plant remains and quantity of quartz for B and B.I. In fact, all ceramics contain fragments of rocks at different stages of metamorphism. Alongside metamorphic rocks, several samples also contain shale. Metamorphic rocks are foliated slate, muscovite phyllite, and muscovite schist. Therefore, a first group (A and B fabrics) was defined based on the presence of low-grade metamorphic rocks as phyllite and slate in addition to shale, while a second category (C fabrics) was recognized on the basis of the presence of medium grade metamorphic rocks, essentially schist. Then a second rather conspicuous distinction appeared within the first macro-group, characterized by components with a low degree of metamorphism: some pastes (A) are only sand-tempered, while others (B and B.I) also contain plant remains. Finally, among the pastes of type B, some have a relatively negligible amount of quartz (and in any case completely comparable to pastes A and C), while others (B.I) have inclusions of quartz of small size, but definitely more abundant than all the other pastes (up to 20%). To summarize, therefore, the assemblage of Levels 5 and 4 at 'Uwaili (Ubaid 0 and 1) is composed

of 4 groups of pastes (Fig. 13):

A – Orange-brownish slightly porous fabrics with a low quantity of carbonate, clastic quartz, magnetite and biotite. The main specificity of this group is the presence of clastic fine inclusions of shale and phyllite (10-15% of the matrix). This one is primarily composed of fine unidentified silt-sized brown/beige foliated minerals, with occurrence of muscovite.

B – Beige-orange moderately porous fabrics with the same basic composition of A pastes (shale and phyllite around 7-10% of the matrix), with scattered quartz and occasional presence of pyrolusite and microscopic crushed shells. The main feature of this group is the presence of vegetal inclusions (3-10% of the matrix).

B.I – Rose-orange moderately porous fabrics sharing the same composition of B pastes (shale and phyllite – 5-20% of the matrix, and vegetal inclusions – 3-7% of the matrix), with quite frequent black and red magnetite inclusions. However, the specificity of this group is the high presence of quartz (10-20% of the matrix).

C – Beige-greenish fabrics with scattered round pores. Despite a mineralogical composition largely shared with the other groups (occasional presence of crushed shells and biotite, low quantities of monocrystalline quartz, magnetite, muscovite and pyrolusite), these pastes do not contain plant remains and are the only group characterized by medium grade metamorphic mineral (essentially schist).

The origin of these mineral components is very difficult to determine, since these fragments were transported along the course of the Euphrates to the vicinity of its mouth. However, the mineral combination found in samples analysed at ‘Uwaili occurs across a wide zone of the arch of the Zagros and Taurus Mountains (Göncüoğlu and Turhan 1984).

Colours of the fabrics range from brownish red, brick red to rose, beige and greenish. This is a result of firing in an oxidizing atmosphere. This deduction is somewhat supported by the high firing temperatures that could be ascertained from some physical features of the analysed samples. Maximum firing temperature was probably around 850-950°C. Clay matrices seem to have lost birefringence (even if thin sections analyses are needed to confirm it), which indicates that the firing temperature did exceed 800-850°C (Quinn 2013: 191). Moreover, samples containing calcite often show an alteration to this mineral, which is a consequence of temperatures having reached at least 900°C. Likewise, several greenish samples in C pastes show traces of incipient vitrification, which occurs once exceeded 900°C.

Shaping methods

Ubaid 0 and 1 ceramics from Levels 5 and 4 were built by two distinct techniques, one of them presenting two variants.

I – Vessels were shaped by hollowing-out a lump of clay, pinching and stretching the walls. Both the internal and external surface of the walls were then scraped by hand to bring the clay upwards, to build the upper part of the container. As far as closed containers with a neck, both the neck and the rim were made up of ring coils of variable width and thickness and horizontal joints, while open shapes had only the mouth made up of a coil, shaped according to the profile to be attributed to the rim. Both interior and exterior surfaces were smoothed horizontally by hand or by means of a shell.

II – The second shaping method was a variant of the first one. The roughout was modelled by hollowing-out a lump, then the walls were built-up by pinching, stretching and scraping the clay and, eventually, one or two thick ring coils were added to shape the rim (for open vessels) or the neck and the rim (for

closed shapes). As was it the case for Group I, the neck and rim coils were arranged horizontally across the wall. However, the surfaces (even the interior one) were roughly hand smoothed without any specific orientation. In fact, the specificity of this shaping method was represented by the careful application of a very fine, thin and regular slip (light in colour or bright white after the firing) on the whole exterior surface. The slip was made of the same clay used for the thin fraction of the fabric, but extremely purified, with a very fine and regular grain size, and was applied on both surfaces by dipping the pot in a liquid preparation.

III – Vessels were built by superposing little 2-2.5 cm thick coils with internally oriented joints starting from a base prepared by pinching and modelling a little quantity of clay. Then, a fine withe slip was applied by the same method used for Group II.

Based on chrono-typological and technical ceramic data, in the coming years, ceramic studies on assemblages from 'Uwaili will focus on offering more precise answers to when and how pottery was produced, but above all on who produced it. These questions will be crucial especially in relation to the contexts that the excavation is bringing to light.

3 – Preliminary archaeobotanical results (C. Douché)

Apart from Eridu (Gillet 1976), little is known about plant economy during the Ubaid period in southern Iraq. Following previous work led by R. Neef (Neef 1991), which joined the excavation team in 1985, the ninth campaign at Tell el-'Uwaili included archaeobotanical investigations. A total of 26 bulk soil samples were collected from various archaeological contexts (mostly granary structures and pottery kilns). Fifteen come from 'Sector 1' (north-west part of the trench) and eleven from 'Sector 2' (south-east square). Samples were processed for charred plant remains, using a machine-assisted flotation system, consisting in three tanks with a closed water system. A 1mm mesh bottom was set up in the first tank and a 0.3mm mesh was set up between tanks 1 and 2. The non-floating material ('heavy fraction') retained in the first mesh and the floats ('light fraction') were both dried in the shade. While heavy fraction will be scanned in the future, 14 light fraction samples were sorted under a low-power microscope (ZEISS Stereo microscope Stemi 305) in parallel to fieldwork. Several floats were exported to France for further analysis. As previously noted by R. Neef, despite intensive efforts to recover macrobotanical remains, samples were poor. Remains were mostly preserved by charring but a few were also mineralised such as fragments of straw.

Based on preliminary analysis, it appears that plant remains recovered at 'Uwaili mostly come from sector 2. Despite the low quantity of caryopsis, cereals (Fig. 14) dominate the plant assemblage. Hulled barley (Hordeum vulgare) – 2 and 6 rows morphotypes – has been identified. Only two wheat grains were recovered but only one was identified as einkorn wheat (Triticum monococcum). However, the assemblage delivered a relative abundant quantity of chaff remains, most of them consisting of remains of glume wheat, T. monococcum/dicoccum (13 glume bases and 119 spikelet bases). Among remains that could be determined to the specie level, einkorn is dominant. These chaff remains mostly come from loci 1025/1036, respectively corresponding to a pottery kiln settled (level 4) in/on a granary (level 5). However, the burnt sediment and charred plant material likely come from the combustion chamber of the kiln. Additionally, the assemblage from 'Uwaili also contains a single lentil seed (Lens sp.), small legumes indeterminate and Poaceae culmnodes. A large proportion of indeterminable remains (very

badly preserved) was recovered, that do not provide information.

Charred plant remains are preserved thanks to voluntary or accidental exposure to fire. Despite the discovery of large granaries from the early occupation of ‘Uwaili, these structures were not burnt and consequently, stored products (likely plants) did not last. Indirect evidence would come from contemporaneous firing structures such as hearths, like in building B110. Samples collected in the ashy layers of a street (Locus 86) will hopefully bring new data about plant economy at the beginning of the Ubaid period.

Chaff remains recovered in the combustion chamber likely reflect the fuel used to feed pottery kilns. This level has been interpreted as a large workshop for the manufacture and firing of ceramics. Despite the presence of shrubs, the surrounding environment is treeless and supports a very poor vegetation, mostly represented by drought-tolerant taxa adapted to soil with a high salinity rate, such as Tamarix sp. and Haloxylon salicornicum. This would have conducted potters to find alternative fuel. In Southwest Asia, the use of dung from sheeps/goats and cows has frequently been mentioned in ethnographic studies (Miller and Smart 1984, Anderson and Ertug-Yaras 1998, Valamoti and Charles 2005, Spengler 2019). Chaff remains - including wheat glume bases - are robust elements that are usually better preserved after the digestive process than other remains such as grains (Charles 1998, Valamoti and Charles 2005). Chaff and small legumes may represent animal fodder or grazed plants. During fieldwork, a Bedouin camp settled next to the archaeological Tell. They let donkeys, sheeps and goats graze chaff, remaining on the ground of harvested fields of barley. They mentioned that hearth was fed with shrubs collected in the landscape, but also with animal dungs (camels and sheeps) and various wastes. Indeed, the presence of chaff and the absence of charcoal may likely be interpreted as the use of dung as fuel by the Ubaid potters.

The presence of glume wheats at ‘Uwaili also raises some questions. Were they cultivated locally or imported? Mean annual rainfall are low (100-150 mm/year) and temperatures are high, meaning that cultivation is not possible without irrigation. Soils around the site are only suitable for the cultivation of barley. Indeed, the low amount of archaeobotanical remains recovered during the campaign is insufficient to define an agricultural model at ‘Uwaili. Previous study (Neef 1991) indicated that the plant assemblage was dominated by the two-rows barley (H. vulgare subsp. distichum). These grains came from a pure find and may not reflect the real importance of this taxa. Thus, one of the main aim of future investigations will consist in defining the economic importance of wheat and barley at ‘Uwaili at one of the earliest settlement in Southern Iraq.

Conclusion (R. Vallet and J. S. Baldi)

The structures brought to light in Levels 4 and 5 are among the most promising results of the 2019 campaigns. The numerous kilns of Level 4 (Ubaid 1) constitute one of the oldest ceramic workshops of the whole Mesopotamia. Workshops dating from 7th and early 6th millennia BC come only from northern and central Mesopotamia. The first up-draught kiln – the type identified in Level 4 at ‘Uwaili – is documented in Level 10 at Yarim Tepe I, in a context characterized by an Archaic Hassuna assemblage (Merpert and Munchaev 1993: 104). Later, in Levels 5 and 4 at Yarim Tepe I, 13 up-draught furnaces occupy the same production area. Probably, they did not work all at the same time, but they appear concentrated in a specific area, within a yard at the periphery of the dwellings (Merpert and Munchaev 1973: 96-97, pl. 36). The three kilns discovered in a courtyard at Tell es-Sawwan Level IIIB and associated with the production

of Samarra pottery (Abu al Soof 1971: 4, pl. 1, 5-7, 12-13) share these features. The same spatial organization can be observed at Tell Abada 3, in a context dating from the Choga Mami Transitional phase, with three firing structures located in open areas near a house (Jasim 1989: 85-86). Did the large workshop of ‘Uwaili Level 4 obey the same criterion of segregation from the inhabited areas of the site? Therefore, in Level 4, are houses, if any, located far from the furnaces? Otherwise, did the open area where the kilns were located have an internal organization somehow corresponding to the layout of the houses? In this case, were dwellings at a short distance and had kilns associated with each of them as it is largely documented for the Ubaid 2-3 period? (Jasim 1985). This raises the question of the stratigraphic relation between our Level 4 and the Ubaid 1 vestiges excavated in the 80’s. Indeed, we know that at least two large tripartite Ubaid 1 houses, Building 90 just above Building 37-41 and Building 34 more to the north-east, existed nearby (Forest, Vallet and Breniquet 1996: 45, pl. 44-45; Vallet 1996: 116-117, pl. 4 and 7). The extension of the trench should allow finding answers. In any case, a careful reconstitution of ceramic techniques and a study of their spatial distribution within the workshop will offer insights on the mechanisms that governed the organization of work.

Another very interesting result is the first perspective on the organization of the Ubaid 0 village. Grill structures with a design somehow similar to those of ‘Uwaili Level 5 date back into the PPNB, with examples at Çayönü radiocarbon dated to the late 9th and 8th millennium BC (Özdoğan 1999: 41; Redman 1983). Even if they are already attested in a Halaf context at Yarim Tepe I (Yoffee and Clarke 1996: 96), these constructions are mostly considered a hallmark of the Ubaid because of their large diffusion starting from the second half of the 6th millennium BC. Therefore, it is not surprising to observe their large occurrence in an Ubaid 0 level, as already stressed in the 80s (Forest 1991: 95-96, 101; Forest, Vallet and Breniquet 1996: 42-44). However, until now there was a tendency to assume that these grill structures, located in the middle of the inhabited area, served as common storage areas (Forest 1996a: 146-147), replaced by smaller granaries attached to specific houses during the Ubaid 1 period (Forest, Vallet and Breniquet 1996: 43). Current results from Level 5 at ‘Uwaili suggest that this trend began earlier than imagined, each (small) barn being already associated to a specific house at the end of the Ubaid 0 period, in a configuration in rupture with the large collective granaries of the previous levels (Level III in particular, Forest, Vallet and Breniquet 1996). The layout of the (late) Ubaid 0 village includes juxtaposed granaries probably connected by shared working areas and, in the same time, belonging to distinct integrated units composed of a dwelling and a storehouse across little alleys. If confirmed in the next campaigns, this type of organization would seem to imply a far from “communal” management of resources and might suggest an incipient complexity based on an emerging social competition between family groups. An evolutionary dynamic therefore seems to be at work since the formative period of the Ubaid. In this case, the combined studies of the architecture and the spatial distribution of ceramic chaînes opératoires could offer a deeper perspective on the ways of segregation, interaction and integration of the various households in the village. Indeed, Level 5 structures are not only much better preserved than expected (even in the upper sector of the Tell), but also relatively easy to reach on a large surface. In the next campaigns, this could allow to excavate a wide portion of the Ubaid 0 village.

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Fig. 1 – Aerial view of Tell el ‘Uwaili, from the northwest (June 2019).

Fig. 2 – Aerial view of the L-shape implantation of the excavation squares.

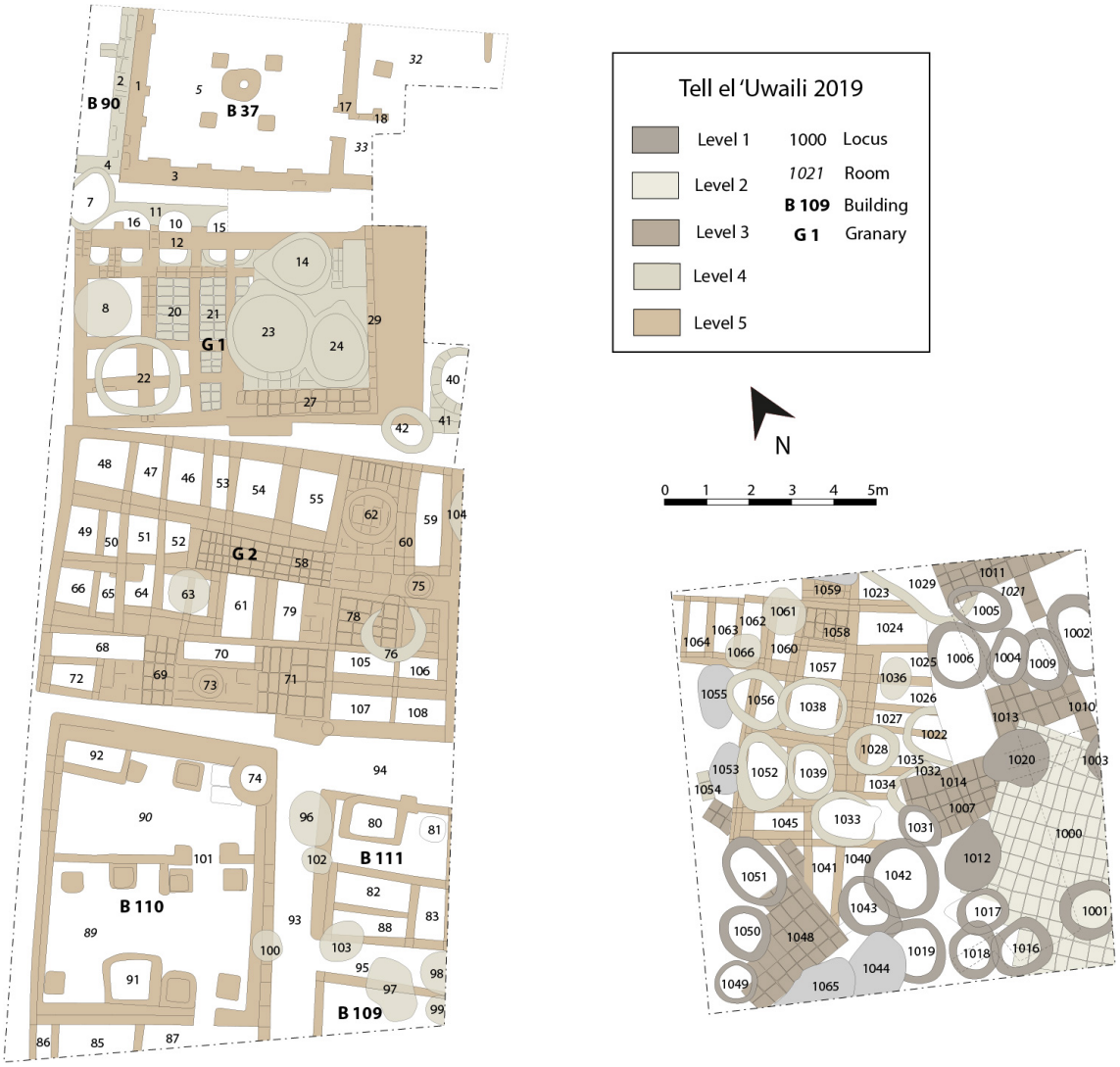


Fig. 3 – Plan of the excavated structures.

Fig. 4 – Piles and pierced platform of Building 37 (2019), from the north.

Fig. 5 – Aerial view of the platform-terrace 1000 on the top of the tell, south-east oriented.

Fig. 6 – Section of Level 4 Kiln 14 in the alley between Building 37 and Granary 1 (2019).

Fig. 7 – Granary 2 with juxtaposed Granary 1 and Building 37 in the background.

Fig. 8 – Aerial view of the central hall and northwestern wing of the domestic building B110.

Fig. 9 – Ceramic sherd TO1019.1.

Fig. 10 – Internal bottom of plate with black painted motifs.

Fig. 11 – Ceramics sherds 1013.3.

Fig. 12 – Ceramic sherd TO64.1.

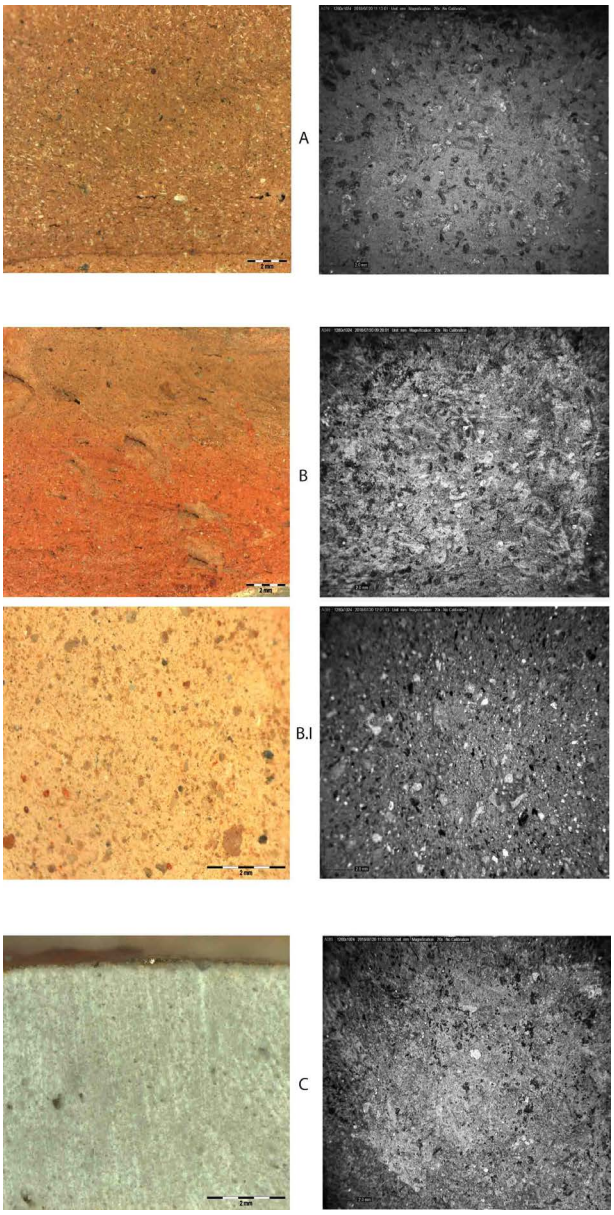
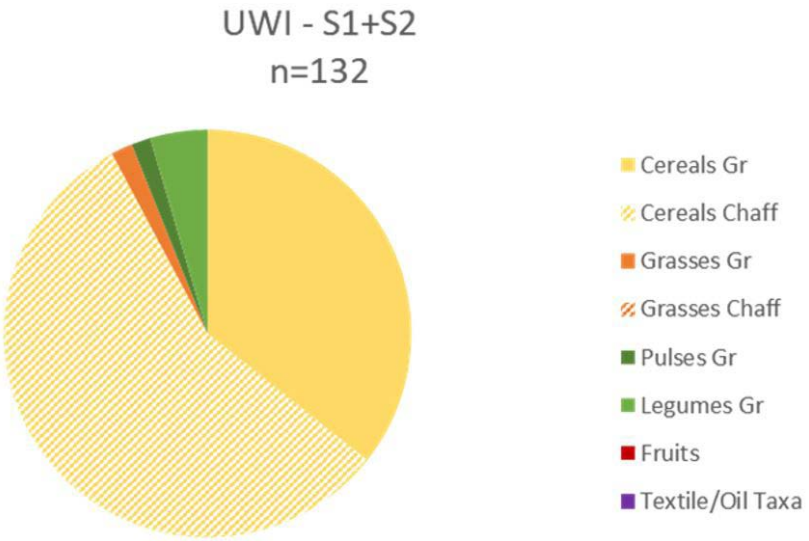


Fig. 13 – Ceramic fabrics observed with digital microscope.

Fig. 14 – General composition of plant assemblage from 'Uwaili. Chaff remains include glume bases and spikelet bases.



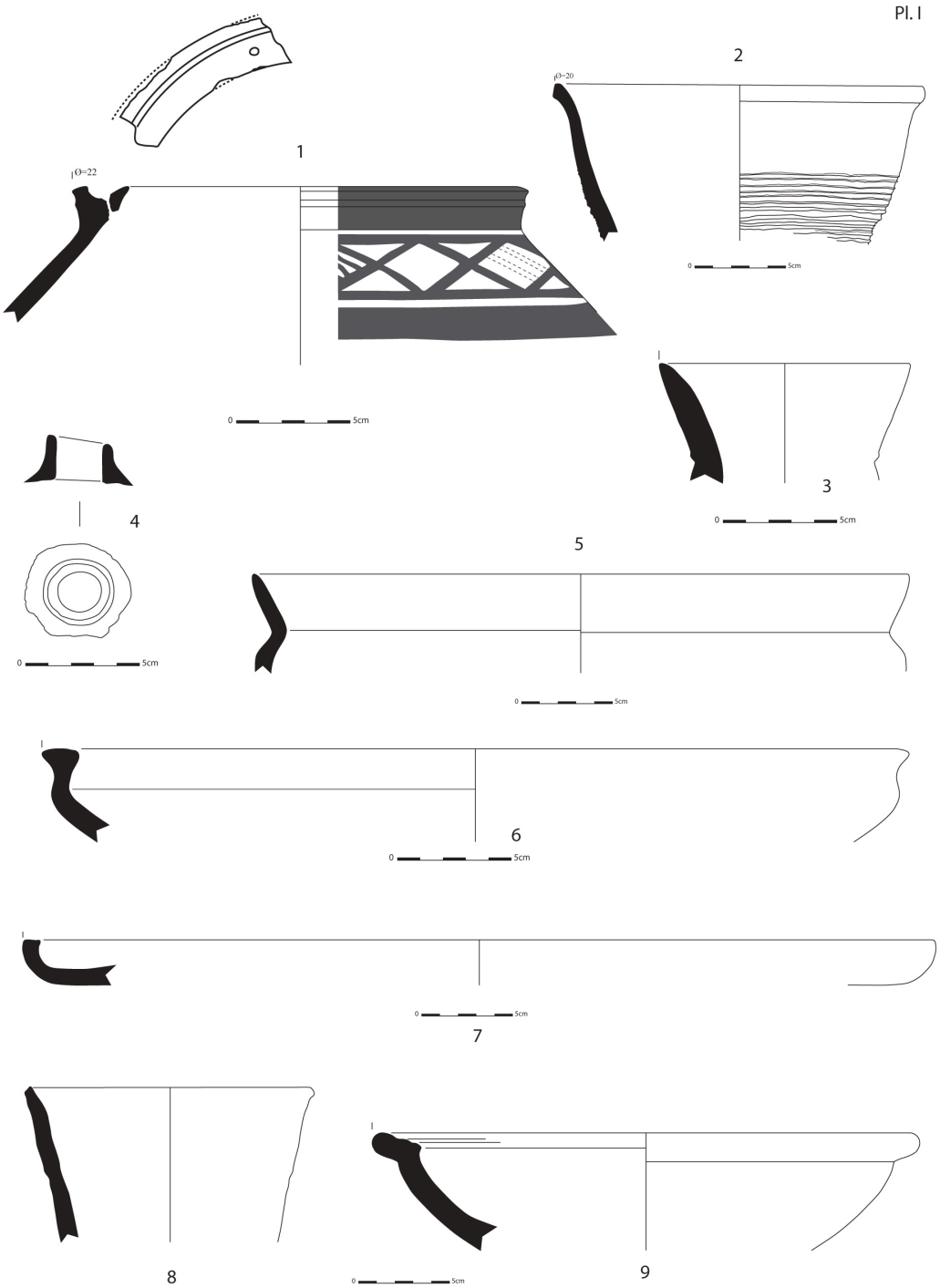


Plate I – Ubaid 5 ceramics.

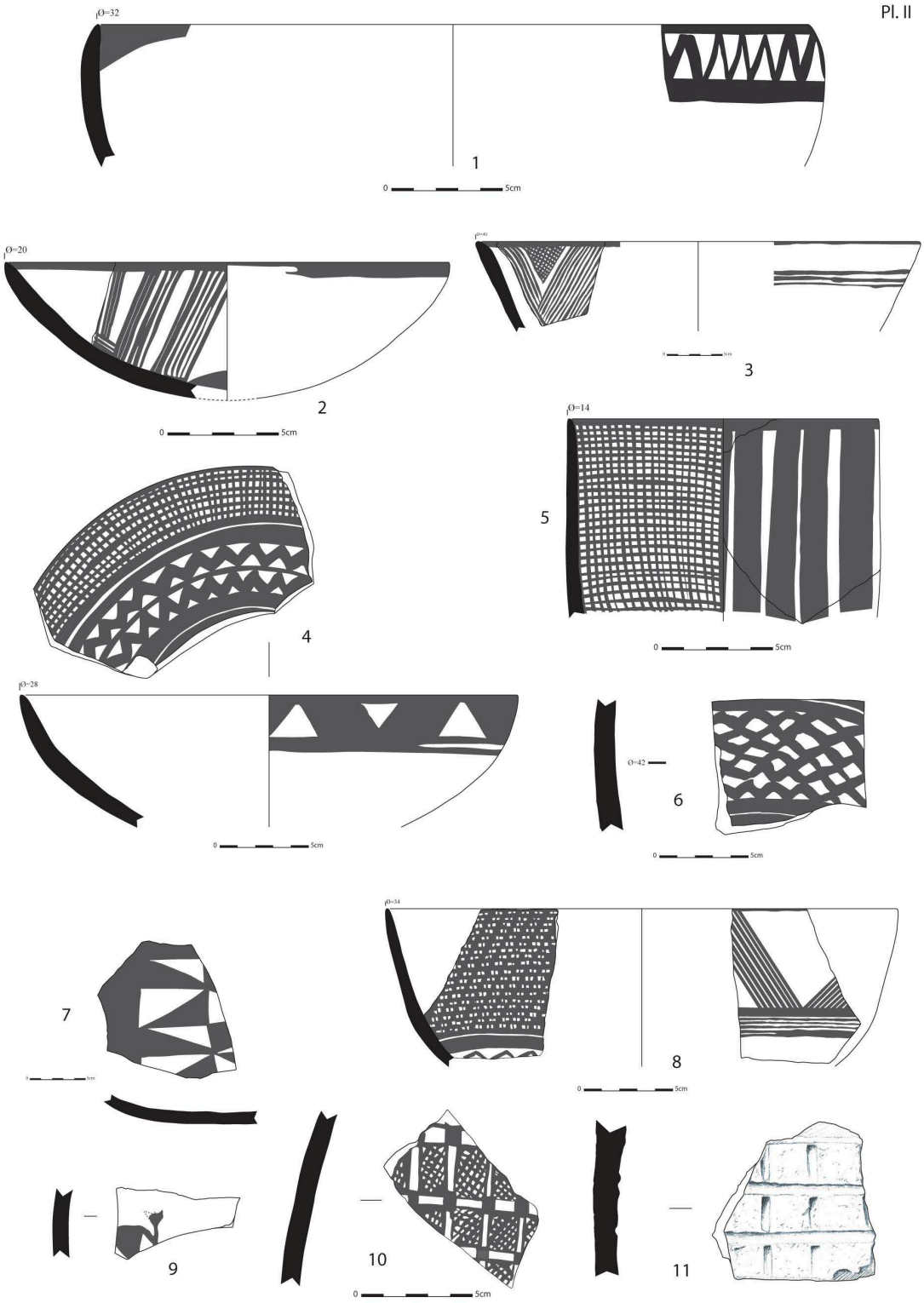


Plate II – Ubaid 1 ceramics.

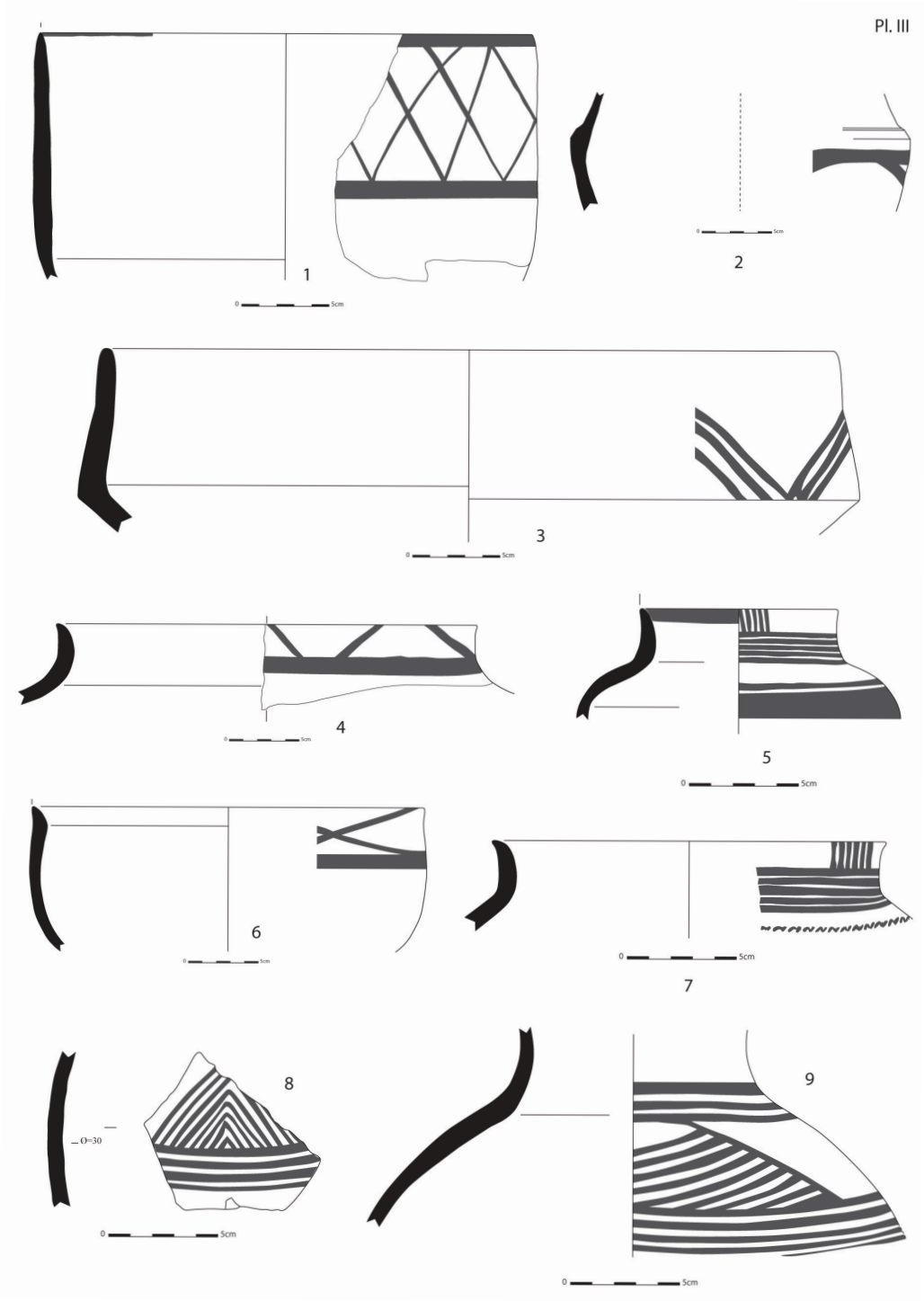


Plate III – Ubaid 0 ceramics.

البناء والترميم لمتحف الموصل من قبل متحف اللوفر. ومؤسسة سميثسونيان و (التحالف الدولي لحماية التراث في مناطق النزاع) في موقع طاق كسرى في المدائن.

وختاماً، نود أن نعرب عن سعادتنا ونحن نضع بين يدي القارئ الكريم مجلداً آخر من مجلة سومر يضم عدداً مميزاً من البحوث الأصيلة وباللغتين العربية والانكليزية لتكون بهذا سفراً آخرَ من أسفار سومر واستمراراً للجهود التي أوصلتها الينا بعد (75) عاماً.

الدكتور
ليث مجيد حسين
رئيس الهيأة العامة
للآثار والتراث

تقديم

انه لمثار فخر ان نواكب في لحظة من الزمن آن فيها الاحتفال باليوبيل الماسي لتاسيس مجلتنا الغراء وايقونة هيئتنا بمرور (75) عاماً على تأسيسها. لقد وضع الاثاريون الاوائل بصمة لا تنسى بما كتبوه وقدموه في سومر على مر السنين، ظلت فيها مرجعاً مهماً لدراسات بلاد الرافدين في مختلف جوانبها وباللغات المختلفة العربية والانكليزية بشكل رئيس والفرنسية والالمانية على نحو أقل.

مرت مجلتنا خلال تلك السنوات الخمس والسبعين بتجليات كبيرة فكانت شاهداً على نتاجات بارزة وفصولاً مميزة من تاريخ حضارة بلاد الرافدين وأثْرت المكتبة الآثارية بمادة غنية واصلية بمختلف مجالات البحث الاثري.

إلا ان ما نأسف عليه ان هذا الحدث الاستثنائي بالنسبة لنا قد زامن ظهور وباء أثر على العالم اجمع وأجبر الدول على الاغلاق التام ولكافة مجالات الحياة، ففاتت علينا فرصة تقديم احتفالية استثنائية تليق بهذا الحدث. ومناسبة ذكرى اليوبيل الماسي كانت متزامنة لتولينا مهام رئاسة الهيئة والتي آلينا على أنفسنا من خلالها الاستمرار بدعم الحركة العلمية ونشاط النشر العلمي.

ورغم قصر المدة التي انقضت في هذه الهيئة، ورغم حجم الصعوبات التي واجهها البلد من جرآء التوقف بسبب الوباء إلا أننا شرعنا وبطموحات كبيرة للعمل على عدة جوانب، منها استكمال أعمال الحفاظ وصيانة الممتلكات الثقافية المخربة وبالتعاون مع عدة مؤسسات دولية بهذا الصدد.

التراث العالمي هو الآخر كان جانباً نشطاً خلال مدة الاغلاق الجزئي، فقد تم إدراج أكثر من عشرة مواقع على اللائحة التمهيدية للتراث العالمي منها مواقع أثرية مهمة مثل نفر وقلعة كركوك، وبعض المدرجات كانت على لائحة التراث غير المادي. كما كانت لنا متابعة دؤوب لأعمال الصيانة والترميم التي جرت في المواقع المدرجة سابقاً كمواقع الملف المختلط (أور–اريدو–الوركاء–الاهوار) أو المواقع المنفردة كآشور وسامراء والحضر وبابل لغرض استدامة أعمال الحفظ مما يزيد من فرص استثمارها سياحياً.

جانب آخر أحرزنا فيه تقدماً واضحاً هو فتح آفاق جديدة من التعاون مع بعض المؤسسات الاجنبية لغرض تطوير جوانب عملية في هيئتنا، كما تم التعاون أيضاً مع البعثات الاثارية الاجنبية لاستكمال اعمالها في العراق وبمختلف مدنه في الشمال والجنوب.

وقد استأنفت البعثات الاجنبية عملها في العديد من المواقع كالبعثة الألمانية في قوينجق والإيطالية في الحضر، والروسية في تل الدحيلة، كما واستمرت أعمال إعادة

المحتويات

تقـــــــــديم 09

11 تلول الهورة:
في ضوء نتائج المسح الاثاري
أ. د. عباس علي الحسيني/ حنين طاهر

39 الطبقات الاثرية في تل دريهم: تقرير في ضوء تنقيبات الموسم الاول 2007
علي عبيد شلغم

53 دراســـــة لأحـجار وزن من مدينـــة أومّا (UMMA)
خـــولة معارج خليل/ حمزة شهد عبد معين

67 نتائج تنقيبات تل ابو عليمة الموسم الاول ٢٠١٣
جبار عبيد عيسى

89 أمتدادات المياه الملحية للخليج العربي وعلاقتها بمدن جنوبي بلاد الرافدين
أدلة جديدة بأستخدام البيانات الفضائية
ايمان محسن جبر/ د. طورهان مظهر المفتي

111 تلول الهيكل (مدينة أيكلاتُم) في ضوء التحري والتنقيب
م. غســان صالح الحميضة
كلية الاثار – جامعة سامراء

129 تل الدِحَيْلة
موقع محتمل لعاصمة سلالة البحر/الهور الأولى (١٧٢٠-١٤٣٠) قبل الميلاد
د. عبدالأمير الحمداني

ضوابط النشر في المجلة

يجب ارسال جميع المساهمات والبحوث والمراجعات النقدية للكتب إلى مدير التحرير. يرجى ارفاق ملف بصيغتينMS Word مع PDF في رسالة بريد إلكتروني إلى مدير التحرير حسب معلومات الاتصال المشار اليها فضلا عن ثلاث نسخ مطبوعة. يمكن كتابة البحوث باللغة العربية أو الإنجليزية أو الفرنسية أو الألمانية. يبلغ الحد الأقصى لطول البحث (10000) كلمة، باستثناء الأشكال والمصادر، حجم الخط (12) للنص و(10) للحاشية (**Simplefied Arabic**). يجب أن يتكون البحث من ملخص ومقدمة واستنتاجات بالإضافة إلى الكلمات المفتاحية. كذلك يجب أن تكون الاشكال والصور مناسبة لطول البحث ولا تتعدى ثلث طول البحث حسب التصميم المعتمد لدينا وبدقة (300dpi) على الاقل. فيما يتعلق بالدراسات المسمارية، يجب تضمين جميع الخطوط المستخدمة للقراءة والترجمة، يرجى استخدام النظام الذي أنشئ من قبل(Rykle Borger) في Assyrisch-babylonische Zeichenliste. يجب تعيين الكلمات السومرية في السياق بحروف كبيرة، ويجب أن تكون الاكدية مائلة حيثما تظهر، يجب ترقيم الحواشي السفلية بشكل متسلسل في نهاية الصفحة.

المختصرات

يجب أن يتبع نظام المختصرات المعتمد في AHw أو CAD أو CDLI، كما يجب شرح أي اختصارات أخرى جديدة في الحاشية الأولى. عند الاستشهاد بنص معين في إصدار ما، يجب أن تكون الاشارة الى مختصر السلسلة (مثل MAD أو MSL أو OIP) مائلًا، يتم تعيين أرقام الاجزاء بالارقام اللاتينية.

المراجع

يجب أن تتضمن المراجع في نهاية البحث جميع المنشورات والمواقع المشار إليها. يمكن استخدام تنسيق العلوم الانسانية

1. المقالات

10. المؤلف، «عنوان المقالة»، اسم المجلة، العدد، السنة، ص.

2. الكتب

11. المؤلف، عنوان الكتاب، (المدينة، السنة)، ص.

3. البحوث المشتركة في كتاب

12. المؤلف، «عنوان البحث ضمن الكتاب»، عنوان الكتاب، (المدينة، السنة)، ص 33-11.

4. الكتب المترجمة

13. المؤلف، عنوان الكتاب، ترجمة: اسم المترجم (المدينة، السنة)، ص.

تقع مسؤولية الآراء المعبر عنها في البحوث على عاتق المؤلف (المؤلفين) وللمجلة الحق في رفض الآراء غير المناسبة أو المنافية للبحث العلمي أو المراد منها استهداف شخصي. يحتفظ المحررون بالحق في اختيار أو رفض البحوث التي لا تتناسب وتوجهات أو ضوابط النشر في المجلة.

حقوق النشر

تمتلك مجلة سومر الحقوق الكاملة لجميع البحوث والمواد الأثرية المنشورة فيها. بمجرد أن يقدم الباحث مقالته للنشر، فهذا يعني أنه يعترف بحقوق سومر الكاملة في ذلك. لا يُسمح بنسخ وإعادة طباعة المواد المطبوعة، حتى بلغة أخرى، دون موافقة خطية من رئيس التحرير أو مدير التحرير.

سومر

مجلة سنوية علمية محكمة
تبحث في آثار وحضارة بلاد الرافدين
المجلد السادس والستون
(2020 م)

جمهورية العراق
وزارة الثقافة والسياحة والآثار
الهيأة العامة للآثار والتراث

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