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Preliminary Report on the XIVth and XVth Campaigns at Larsa

Regis Vallet, Jamal Abd-El-Ali, Rateb Al-Debs, Luc Bachelot, Dominique Charpin, Lionel Darras, Carolyne Douché, Jessica Giraud, Jean-Jacques Herr, Ibrahim Chamel, et al.

To cite this version:

Regis Vallet, Jamal Abd-El-Ali, Rateb Al-Debs, Luc Bachelot, Dominique Charpin, et al.. Preliminary Report on the XIVth and XVth Campaigns at Larsa. Sumer - Journal of Archaeology of Mesopotamia = : , ,2020 66, pp.133-175. hal-03088166

HAL Id: hal-03088166

https://hal.science/hal-03088166v1

Submitted on 29 Aug 2023

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SUMER

A Journal of Archaeology of Mesopotamia

Issued by State Board of Antiquities and Heritage - Baghdad

Vol. LXVI 2020

سومر

المجلد السادس والستون - 2020م

SUMER VOL. LXVI 2020

SUMER

Journal of Archaeology of Mesopotamia
VOL.LXVI 2020

Republic of Iraq
Ministry of Culture, Tourism & Antiquities
State Board of Antiquities and Heritage

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State Board of Antiquities and Heritage
PO Box: 55009
Baghdad – Iraq
ISSN 0081-9271

The State Board of Antiquities & Hiritage

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1. ARTICLE

10. Author1, A. B., and Author2, A. B.

1999-2000: the Article I Wrote. SUMER 50: 42-59.

2. BOOK

11. Author, A. B.

Year: The Book I Wrote. Series Information. Place: Publisher.

3. COLLECTED PAPERS

12. Author, A. B.

Year: The Paper I Wrote. pp. 42-59. in The Symposium to Which I Contributed, ed. eds. A. B. Author 1 and A. B. Author 2. Series Information. Place: Publisher.

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SUMER
JOURNAL OF ARCHAEOLOGY OF MESOPOTAMIA
Issued by
The State Board of Antiquities & Heritage

Preliminary Report on the XIVth and XVth Campaigns at Larsa (2019)

Régis Vallet, Jamal Abd-el-Ali, Rateb Al-Debs, Luc Bachelot, Dominique Charpin, Lionel Darras, Carolyne Douché, Jessica Giraud, Jean-Jacques Herr, Chamel Ibrahim, Jonathan Lisein, Ali Murad, Mathilde Mura, Sidonia Obreja, Valentina Oselini, Ayar Rasool and Joël Suire

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KEYWORDS:
Larsa,
Tell es Senkarah,
Old Babylonian Period,
Excavations,
Southern Mesopotamia,

ABSTRACT

In 2019, fieldwork resumed at Larsa for two seasons of one month each. Several complementary surveys were undertaken kassite period aken that change our understanding of the site, revealing in particular part of the network of channels supplying the city. The excavations focused on the sector north of the E-Babbar, the temple of the Sun-God Shamash, patron deity of Larsa, whose reoccupation in the Hellenistic period seems more important than expected. Two buildings are being explored, B48 and B50. B48 is a large Hellenistic house (650 sq. m.) part of a well-planned neighborhood. In trench B50, below a very fragmentary Hellenistic temple, lay a major temple of the Old-Babylonian city, that remains to be identified. It is provided with massive mudbrick walls (5.6m wide at most) preserved in height up to the first storey of the building in some rooms (4.5m high). We give here a first brief account of our results, still in processing.

Introduction (R. Vallet)

After a thirty-year hiatus, the French mission in Larsa (Tell es-Senkereh) resumed its fieldwork in 2019 for two seasons of one month each. The XIVth campaign in Larsa lasted from May 25 to June 24, after the director came to Nasriyah on May 1, to install the home of the expedition and manage a preliminary mapping by drone of Larsa. The XVth campaign lasted from October 12 to November 16. The team assembled for the two seasons combined counted 28 researchers and engineers from France, Iraq, Italy, Belgium and Germany(1). The spring season was devoted to different complementary

(1) In addition to the co-signers of this article, the team also included: Rafat Abd-el-Kadim, Tahir Al-Hossany, Fadhil Ali, Johnny Baldi, Firas Farhan, Zahra Hashemi, Laetitia Munduteguy, Ali Othman, Claire Padovani, Panida Pesonel and Marie-Aliette Pot. The logistic team was composed by Raad Abd-el-Nabi, Yasser Abed, Jaffar Nedjem Al-Hussein and Ghani Muhsin Nayis (SBAH drivers), Riad Awad and Ali Musa (cooks), Hessam Hassam Eissa (housekeeper) and Awad Abd-el-Hussein (SBAH sites keeper). The French Ministry of Foreign Affairs funds the project, through the cultural service of the French Embassy in Baghdad (Jean-Noël Baléo) and the department of archaeology and ancient history of the IFPO (Dominique Piéri). See also the acknowledgments at the end of this article.

surveys of Larsa, the fall season to excavations and the continuation of the geophysics program. Apart from the architectural prospections carried out in 1985-87 (Huot, Rougeulle and Suire 1989, Suire 2003), Larsa was never surveyed. The first priority was then to make a new topographical map of the site and create the digital tools required for its study and management, by means of ortho-photo images and photogrammetrically computed relief (A. Rasool, J. Lisein and J. Suire). All the information, new and old (including the aerial views of 1974 that have been extensively used during previous campaigns), were merged into a unique geographic information system (GIS)[(2)].

Surveys

Like many other sites, Larsa has been looted for a very long time, which had motivated the competent authorities of the time, after the First World War, to suggest excavation to the Louvre Museum. We know that the phenomenon has unfortunately reappeared in force following recent conflicts. The condition of the site was therefore one of our major concerns and a specific program is dedicated to it (M. Mura). The site has in fact been heavily looted and there are around 2300 looters› holes on its surface. However, the situation is better than one might have feared. On the one hand, the looting seems concentrated in space, on the northeast residential area of the city, which therefore spared most of the rest of the site; on the other hand, the extent of the lootings has been greatly reduced over the past ten years. A result that we certainly owe to the effective vigilance of our guard, to whom we would like to pay tribute. Furthermore, mechanized looting is almost nonexistent, except a 4m wide notch across the ziggurat.

However, this initial estimate is based on an examination, on the ground, of only half of the site, and will therefore have to be confirmed. The archaeological prospecting with which it was coupled (J. Giraud) could indeed examine only 46% of the surface of Larsa, which extends over a little more than 200ha (according to our new calculations). This result is due to the extremely trying conditions that prevail in June (52 ° Celsius in the shade, but there is no shade), and it was already a small feat to prospect almost a hundred hectares under these conditions.

The method used, extensively tested on other terrains, had to be adapted to a site of the magnitude of Larsa. The operation was therefore also of methodological interest. Its preliminary results, currently being processed and awaiting completion, are promising. 9000 ceramic shards and 306 objects have been collected (Fig. 1), of which 2800 (33%) are currently dated. Without surprise, the majority of the corpus (56%) dates from the beginning of the second millennium BC (V. Oselini and J.-J. Herr).

The geophysical survey gave results that surpassed our expectations (L. Darras and R. Vallet). In four weeks (two in June and two others in October), 18 ha were prospected in total. At the end of these works, the main lines of the hydraulic network that supplied the city are much clearer, some matters discussed for decades found answers while new questions arise. However, as long as excavations are not carried out, interpretations remain hypothetical (and the detected structures undated). That is why we remain cautious and only map for the time being the structures attested by several sources, among which geophysics. Nevertheless, for those solid elements, the imagery is particularly clear and leaves only a limited place for doubt (Fig. 7).

(2) On this occasion we realized that the old topographic plan was imprecise (and the grid of the site badly oriented), which is not a surprise but important to note insofar as previous proposals of reconstruction of the site layout were therefore based on inaccurate data.

City layout

Several parts of the presumed and discussed (Huot, Rougeulle and Suire 1989: 34, Margueron 2013: 140-146) central canal of the city, a pale strip of land 20/22m wide running north-south down to the ziggurat, have been surveyed and the structure recognized as a canal (and not a street) all along its route. Near the ziggurat, in the center of the city, a bridge, revealed by its two large masonry piers, served by a long east-west street (R4), crosses what we will call from now on the 'Grand Canal' of Larsa. A little further south, the Grand Canal turns southeast and its width suddenly decreases. This smaller extension channel seems to run in a straight line towards the northeast of the 'Chameau' ('Tell of the Camel', as nicknamed by the locals since Loftus' visit in 1854), according to micro-topography, where it gets out of the city. To the north, the Grand Canal was followed to the edge of the city, where it is wider, forming a sort of basin, flanked to the west by what seems to be a landing stage, to a bridge which crosses it further north, bridge connected to an important street coming from the East (R2).

The main surprise was to discover that the Grand Canal was directly connected to another, of equal importance, surrounding the city but still inside it, the city walls being beyond this peripheral channel. The latter canal was followed westwards, where it flows into a very large basin, perhaps a port or reservoir, bounded to the north and east by enormous mudbrick dykes, and eastward (where it had been seen previously but interpreted as the city wall or a street), where it extends at least all along the northeast quarter of the city. At the eastern tip of the city perimeter, another narrow canal, derived from the Grand Canal north of the ziggurat, joined it, before it turns east, probably to connect to the regional water supply network. Indeed, we know that in historical times, a canal coming from Bad Tibira, in the northeast, and perhaps, to a lesser extent, a canal coming from the west (Uruk) supplied the city. To the southwest, precisely, another large canal crossed the city. We spotted it in the southeast where it leaves the city, across the rampart, between two large rectangular masonry piles, certainly towers, protecting the wall itself, very similar to a configuration attested in Uruk (van Ess and Fassbinder 2005, 2019).

Regarding the ramparts, the results are less important since they were not the subject of current work, apart from a short section of the west wall. This will be one of the objectives of our next survey season. Nevertheless, the progress made on the network of canals and the general layout of the city allows us to propose a preliminary reconstruction of their route. In the north and northeast in particular, it probably corresponds to several bands of land clearly visible on aerial imagery. Certain sections, made of mud bricks (Z27, Z10), have indeed been known for a long time and suspected of being part of the wall (Huot, Rougeulle and Suire 1989: 40). Finally, many streets and buildings could also be added to the city map. In total, we are able to produce a revised plan of the city of Larsa, which the coming seasons should help to correct and complete (Fig. 2).

Excavations

The excavations at Larsa focused on two large buildings in the western sector of the site, known from the 1985-87 field surveys and re-examined during the spring 2019 surveys. These investigations revealed the existence north of the E-Babbar, of a large rectangular building of 110 x 60 m, of which the highest part only, forming a small Tell, was known as building B50. It seems that the entrance to this vast complex (6,600 sq. m.) was to the south, where a recessed facade is visible geomagnetically, followed by a courtyard and the core building of the compound to the north. Further north,

Buildings B48-49 are two large nearby housing complexes, made of fired bricks, the plan of which was partly drawn in the 1980s. However, the sand dunes that covered it have since disappeared, giving wider access to these constructions.

Thus, the sector makes it possible to study both residential housing and the monumental religious heart of the city. Another advantage of this zone is that it is contiguous to other topographical sectors of the site, i. e. other terraces (lower), to the west and north. Excavation trenches in this area could provide valuable information on the buildings themselves but also on the surrounding areas. According to the material collected during the prospecting, we expected an occupation of the second millennium on the surface (probably covering levels of the third millennium). It turned out that the entire area was rebuilt during the Hellenistic period, just above the Old-Babylonian ruins.

In Trench B48 (L. Bachelot, D. Charpin, A. Murad and J. Abd-el-Ali), the plan of Building B48 could be fully cleared (650 sq. m.). The associated material (V. Oselini and J.-J. Herr) gives a dating around the beginning of the Hellenistic period. However, the assemblage collected so far in situ is heterogeneous, containing earlier vessels probably recovered from lower levels during the rebuilding of the neighborhood. Indeed, we were able to observe that the basements of B48 were built on top of older mud brick buildings, which produced Old-Babylonian material. In Trench B50 (S. Obreja, R. al Debs, R. Vallet and C. Ibrahim), a surface of 625 sq. m. was exposed. Two superposed buildings have been recognized. A very poorly preserved Hellenistic building, with thin walls made of reused baked bricks (recovered from the E-Babbar), is set on top of a monumental construction dating to the Old-Babylonian period, according to the associated material (V. Oselini), including a tablet. Given the characteristics of the construction, with massive walls entirely made of mudbrick (up to 5.6 m wide, preserved on 4.5 m high in some rooms, up to the first floor), we interpret it as one of the main temple of the city, which we hope to identify in the coming seasons. For similar reasons, the location, size and shape of the building as well as the presence of altars in its courtyard, the late building probably also had a religious function.

In any case, excavations this year demonstrate that Larsa in the Hellenistic era, although a second-tier site at that time, satellite of Uruk, was occupied more widely than previously thought. North of the E-Babbar, still in operation (Lecomte 1987, 1993), all the land, left in ruins since the second millennium BC, has been reconstructed over at least 400m in length. A new temple and further north a housing estate were built; the latter comprising at least one strip of large rectangular plots, flanked on either side by streets and perhaps associated, if contemporaneous, to irrigated fields and gardens to the west.

1 – Erosive Phenomena and Looting (M. Mura)

The study of the erosive phenomena (gullies, wadis, sediment cones and dunes) in Larsa was carried out by remote sensing, on the one hand, and recorded by survey on the other. For the remote sensing, two supports were used: a Geoeye image from December 2010 and a rectified mosaic captured by a drone flight. By remote sensing 40 major wadis were traced, 546 main gullies (53 of which ended in sediment cones) and 252 dunes identified. The field survey showed that in terms of erosion, gullies, produced by a combination of chemical (water) and mechanical (wind) erosion, originate from the elevated elements. Dunes are also common at the site and adhere to the small relief elements. Around the sites, they form on the bushy shrubs. Whereas on site it can be seen that the main adherent elements

for the dunes are the looting pits. South of the ziggurat, an intensively looted area detected in 2010 images is thus covered by the dunes in 2019.

As for the erosion, the analysis of the looting is conducted both remotely and in the field. The remote sensing analysis reports 1841 visible pits in 2010 and 2298 in 2019, showing a continuity of the looting. To complete the traditional remote sensing method, a ground count per surveyed square was carried out in order to compare the data. A total of 1404 pits were detected over the surveyed area (representing roughly half of the site). Their description includes (1) their amount, (2) their attribution to a morphological type (3) the observed spatial distribution by square. Four morphological types of looting have been identified: shallow individual manual pits (DMnInd1), deep individual manual pits (DMnInd2), manual depression in large pits, performed by a group of individuals (DMnFS) and mechanical cuts (DMc). We detected a large majority of DMnInd1 type pits. The larger manual types (DMnInd2 and DMnFS) are concentrated in the area northeast of the ziggurat, which also includes a particular form: looting pits in a square or rectangular shape delimited by the rooms of a building. Mainly a notch on the ziggurat made using a 4m wide bucket characterizes mechanized (DMc) looting. Few other notches, smaller in size were made with a 2m wide bucket, often over a distance of about 10m. Three types of spatial distribution's related to looting have also been identified: (1) isolated looting, (2) targeted looting: grouped pits carried out side by side, and (3) intense looting: grouped and overlapping pits. It appears that the looters› priority was to excavate the visible buildings. The 2010 image shows effective, relentless and concentrated looting in densely built areas. When targeted, it corresponds to a large, clearly identifiable building. Comparing looting carried out before 2010 and between 2010 and 2019, there is a decrease in activity yet a continued interest in the elite housing area combined with isolated looting in areas previously left intact (Fig. 3). The distribution reflects unsuccessful looting in the west and the discovery of new artefact-rich buildings in the east.

An overlap of the map of erosive stigmas with the survey maps makes it possible to explain some high concentrations at the bottom of the slopes. The small quantity of material found in the buildings themselves when they are implanted on a small hill can be explained by both the facts they were emptied by looters and that discarded artefacts are then drained down the hill by chemical and mechanical erosion, creating a bias of high concentration at the bottom of the slopes.

The continued survey and counting of depressions linked to ground looting should produce an original study of the surface of an archaeological site of this size. However, it can already be pointed out that looting (unlike erosion) does not seem to produce a bias in the volume of ceramics or objects collected during the survey. The distribution map shows no direct correlation between looting and the quantity of material found on the surface. In few cases only a lower density of diagnostic ceramics were kept in the looted areas. As the archaeological survey do not particularly need complete pottery to determine typology or chronology and looters are looking for complete objects in order to sell them, the size of the characteristic assemblages do not seem to be affected by clandestine excavations.

2 – Geophysical survey (L. Darras and R. Vallet)

In June and October 2019, geophysical surveys were carried out at Larsa for a total of four weeks. The geophysical method used is magnetic prospecting which is a fast and effective method for a first approach of an archaeological site. The principle of the magnetic method is

to measure local variations in the Earth's magnetic field due to the presence of iron oxides in soil and archaeological structures (Aspinall, Gaffney and Schmidt 2008). Magnetic survey was carried out with a G858 caesium vapour gradiometer (Geometrics Inc) on six areas totaling 18ha (Fig. 4), distributed with squares of 50m x 50m and a survey following profiles spaced 1 meter apart and measurements every 10 cm along the profiles. The measurements were then interpolated to 50 cm. These first geophysical prospections on the site had two objectives: (a) to make a magnetic map of a large area north-west of the E-Babbar prior to excavations, (b) to get information on the route of suspected canals crossing the site.

Prospecting north-west of the E-Babbar

On the magnetic map obtained (Fig. 5), three areas with magnetic anomalies are particularly interesting.

To the north, buildings B48 and B49 are clearly visible through many wide (2m) linear positive magnetic anomalies of high intensity (30 to 100 nT). The perfect correlation of the magnetic map with an aerial view of the excavation at the end of the campaign confirmed the interpretation of the magnetic traces detected, mainly walls of a width of 1m consisting of four rows of baked bricks.

To the southeast, the gradient magnetic map revealed that B50, already referenced but on a very limited area, was part of a huge compound of 110m by 60m, invisible on the surface. The plan contains a recessed façade to the southeast, several front rooms, a very large courtyard and the main building of the compound to the north. In this latter part, several elements were visible prior to the excavations, including: (a) walls of baked brick, well identified and characterized by positive linear magnetic anomalies of high intensity (30 to 100 nT and 2m wide); (b) other densely built areas corresponding to massive mudbrick walls; (c) at least one very magnetically homogeneous area of 30 x 30m, which corresponds to one of the courtyards found later in the excavations. Other alignments of the massive mudbrick building excavated (probably an Old-Babylonian temple, see §7) can now be guessed on the geomagnetic map, in particular two parallel backrooms to the north-west, that appears in the form of two thin lines.

West of compound B50, magnetic anomalies are visible that probably correspond to agricultural plots, extending on a surface of at least 150 x 60m. To the north, this sector seems to be delimited by a 2-meter-wide 'wall' made of 4 rows of baked bricks, partly visible on the surface and magnetically visible over at least 20m long (high intensity, between 30 and 100 nT). Rather than a wall, totally isolated, we interpret this structure as a raised pavement crossing the surrounding fields. South of this road, linear anomalies of varying thickness and intensity surround homogeneous spaces, none of these structures being visible on surface. They probably correspond to the ditches of small irrigation canals and delimit cultivated plots or gardens. The plots seems to be organized in a NW/SE row, parallel to buildings B48-49 to the northeast. A street (excavated in trench B48), separates the two sectors. If contemporary, they seem to be part of a large planned neighborhood, with homes to the east and gardens to the west.

Finally, 150 m west of the plots area, a limited magnetic prospection tried to find a trace of the western rampart of the city. On the surface, a 20m wide strip was indeed visible. The geomagnetic survey confirms that the structure has some deepness and could very well correspond to the city wall, its magnetic signature being similar to the southern section of the rampart.

Prospecting on canal routings

According to the aerial view of the site, a long strip of homogeneous colour and a

width of about 20m is visible crossing the city from north to south, down to the ziggurat. For long archaeologists were wondering if the structure could correspond to an ancient canal (Huot, Rougeulle and Suire 1989: 34). Geophysical surveys were therefore planned in order to confirm this interpretation and better characterize the possible canal(s) crossing the city. A first survey area was positioned in the middle section of this long strip, at a location where its limits where particularly clear (Fig. 6). A second area was positioned to the north, at the entry of the strip into the city (Fig. 7), especially to clear its relation with another pale wide strip of land along the northeast edge of the city (therefore interpreted until now as a trace of the town wall). A third section of the strip was surveyed further south, at the centre of the site, where it seemed to disappear on the aerial view (Fig. 8). Finally, a fourth area was surveyed at the southern end of the city, where another strip at the bottom of a topographic depression, that could have been another important canal, enters the site (Fig. 9).

In the middle of the visible central strip, a place where vast amount of ceramics had been found by the archaeological survey, an area of less than one hectare was thus surveyed (Fig. 6). The raw magnetic map reveals that, as in the other areas, it is definitely possible to visualize a 20m wide canal (hereinafter 'Grand Canal'). However, in the centre of this short section, it is deflected and shrinks, to come back 15m further south to its initial width and direction. This could correspond to a water lock. Two areas of high anomalies, with a diameter of approximately 10m, surround the narrow portion of the channel and could correspond to control towers (or bridge piers, but see below for clearer bridge vestiges). In the northeast part of the area, building B28 is clearly visible, provided with walls of a thickness of four baked bricks. Did this very important building had any functional relation with the possible nearby lock? Only excavation would make it possible to identify the function of the detected structures.

The second area surveyed, north of the city, covers 5.5 ha. The magnetic image shows the junction of the Grand Canal with a peripheral canal (Fig. 7). The map makes it possible to visualize very interesting details. First, one can see that the Grand Canal is an extension of the Peripheral Canal and enters the city under a bridge. Wide magnetic anomalies (intensity between 30 and 50 nT) of a diameter of about 5m correspond to its pillars (already identified as structure B25). The canal also appears to have a westward diversion before it entered the city, to supply a large body of water more to the west that could correspond to a harbor or reservoir (not yet surveyed but visible on the aerial views). On the west side of the Grand Canal, strong positive magnetic anomalies (intensity between 70 and 100 nT) of a thickness of 3.5m and more, could correspond to dykes, giving way to a landing zone south of the bridge. On the other side of the canal, several buildings (most of them already identified as B33, B26 and B27) are visible. Between these buildings, a long magnetically homogeneous east-west strip of a width of about 10m correspond to a road, already partly known (R2), crossing the bridge and going south along the wall delimiting the landing stage.

East of the Ziggurat, a third area of 3.75 ha was surveyed, at a location where the traces of the canal are visible but disappear to the south. The magnetic map (Fig. 8) clearly shows the route of the canal that passes under a bridge, marked by two well-circumscribed magnetic anomalies, 4m wide and 6m apart (of an intensity greater than 50nT). To the south, the Grand Canal turns to the east. On the eastern side of the canal, north of the bridge, the start of a narrow secondary canal (reused by a modern wadi) can be

seen, through a densely occupied area.

Finally, at the extreme south of the city, another magnetic survey was carried out for about 1ha (Fig. 9). Its aim was to characterize the articulation between a probable canal coming out of the city and the city wall. The magnetic map obtained provides valuable information: a canal coming out of the city and wide of 10m is actually visible. It crosses a peripheral structure 25m wide. At the connection between the two are two large magnetic anomalies of a size of 10 x 25m, 10m apart, of an intensity greater than 30nT. This peripheral structure, already referenced (structure B17), is certainly not a junction between two canals but corresponds probably to the city wall crossed by a canal (hereinafter the 'South Canal'), very similar to a 'floodgate' attested in Uruk (van Ess and Fassbinder 2005, 2019). This seems all the more likely since immediately to the north, a land gate across the rampart had already been identified since 1985 (structure B36). However, it is necessary to carry out more geophysical survey on the city walls, to obtain information on the variability of their magnetic signature, all around the site.

Conclusion

The geophysical maps obtained from the prospections carried out in 2019 provide a lot of information and combined with others maps allow to deeply renewing the plan of the city (Fig. 10, see also Fig. 2). In the areas north of the E-Babbar, they have uncovered regular house plots (B48-49) possibly associated to agricultural plots nearby, while building B50 appears to be a major temple of the city. Concerning the hydraulic urban network, huge progress in our knowledge have been done in few weeks thanks to geophysics, if one compares with the previous situation when the mere existence of canals was discussed for decades – and without any factual evidence. Nevertheless, this is just the beginning of a new field program. Only 18ha out of 200ha have been surveyed and most of the canal system, including its connection to the regional network supplying the city, remains to be discovered. A specific attention to the city walls (around the 'Parrot' and the north-west city gates in particular) and their relations with the canal system would also be essential to understand the structure of the site.

3 – Intra-Site Archaeological Survey (J. Giraud)

The current survey has two main objectives: to capture the site as a whole in order to help define its internal structure; and to understand the evolution of this structure over time. A mission of one month in June 2019 allowed a first insight into the global organization of the site and its periodization.

The relatively smooth topography of Larsa, its large size (about 200 ha) and the very abundant material on the surface led us to establish a specific methodology by which we cross-referenced data from a remote sensing analysis of aerial and satellite imageries (Corona, Worldview, etc) with data collected in the field. All the data were analysed using a geographic information system. The photo-interpretation allowed us to obtain a first map combining the geographical elements composing the site (dunes area, mounded area, flat area, wadi channel) with the archaeological remains visible on the surface, for example, buildings, canals and streets. This enabled us to study the taphonomy of the site (see §1) and its structural layout. In the field, the survey is based on a collection unit derived from the intersection of two different grids: a morphological grid and a metric grid. The morphological grid corresponds to the micro topography associated with the soil types we could identify, and was created partly by remote sensing and partly by trusting in the ground. The metric grid was set up to divide the site systematically and ho-

mogeneously into 50 x 50 m squares. Our collection units were established by the intersection of these two grids, resulting in 2,094 units.

Considering the density of the material, we decided to collect only the diagnostic sherds that could be dated. Simultaneously, all other items that were present in smaller quantities were collected extensively: metal objects, lithics, production waste, exogenous raw materials and shells. Once all the material had been collected, an initial processing of the data was performed on site. The sorting, followed by a quick recording, was carried out in the form of presence/absence of the different categories with a first counting and weighing. After the traditional treatment of the material (washing, cleaning, recording, drawing and photography), ceramologists dated the ceramics (see §4).

The first mission explored, studied and mapped most of the northern half of the site, which represented precisely 46% of the site (795 collection units/394 squares), and material was amassed throughout. Thousands of artefacts and ecofacts, including 306 objects, were collected, as were 9,000 ceramic sherds. The quantity of material meant that only 33% of it could be dated during the campaign.

At this intermediate stage of the survey process, the analysis of satellite images, the confirmation of certain elements in the field by field survey and the analysis of the artefact collection (density, location, dating) allow a more comprehensive and global picture of the general layout of the site to emerge.

The town is sub-circular in shape, and is surrounded by a wall coupled with an inner and, probably, outer canal (Fig. 11). The inner channel is visible on most corona images and has now been attested by a geophysical survey (see §2). This canal would have run along an enclosing wall that is only visible on located segments but can be spotted in the field by reading the topographic features. The outer channel remains a photo-interpretation: the large smooth grey areas visible on the corona photography may account for its presence.

Inside the city, other hydrological signatures are visible on the imagery. A north-eastern channel lies within the continuance of the inside enclosure channel and runs down to the south of the ziggurat. The existence of this channel has been attested by a geophysical survey (the 'Grand Canal', §2) and by a study of the collected material. Indeed, artefact and ecofact densities are striking at this level, with a higher density of shells and few ceramics (Fig. 12d and a). To the north of the ziggurat, as shown by the imagery, another hydrological signature located to the west of it, which originates from a vast flat area, seems to join the Grand Canal. The imagery signature of this smooth grey flat space suggests that it can be considered as a series of large water reservoir connected to the inner canal to the northeast. The southern end of the main canal has not yet been surveyed in the field.

Three areas of the urban network are particularly obvious when correlating the imagery analyses with the density of the artefacts.

(1) The north-eastern corner of the site is composed of a very dense architecture of rectangular buildings, and even segments of streets are visible by remote sensing. The morphological grid roughly follows these rectangular structures as they form low mounds. The down slopes of the mounds present the highest density of artefacts (Fig. 12a and c) and almost all models of wheels and cartwheels found during the survey. This area corresponds to a rich habitat, which the excavations have confirmed (Thalmann 2003, Calvet 2003b). The ongoing dating shows that most of the ceramic sherds date back to the Isin–Larsa period, but some sherds attest both an earlier and a later phase of occupation, from the third millennium to the Seleucian.

(2) In the western district, on the other hand, larger and wider buildings, some of which have been excavated extensively over the years (Margueron 1971, Huot 2014), are visible on the imagery. This less densely built-up area has yielded a high density of artefacts including sherds, semi-precious raw material and metallic finds (Fig. 12a and b), as well as a larger quantity of beads and rings than the other surveyed areas. The present excavations, the geophysical survey and the survey have permitted a more accurate study of three buildings: B48, B49 and B50. This area shows a clear predominance of the Isin–Larsa period with regard to B50, with occurrences of third millennium sherds. B48 has a high percentage of both third millennium and Isin–Larsa ceramics, whereas B49 has a more complex surface collection with mixed third millennium, Isin–Larsa and Kassite occupation. Furthermore, the Kassite material is the most represented in between buildings (B49 and B50). These sectors were occupied over a long period and excavation should allow clarification with regard to their sequence and character. The Old Babylonian occupations are already confirmed (see §5 and 7) and probably cover deeper third millennium levels but, remarkably, the Hellenistic occupations found by the excavations on the surface of both areas were completely invisible in the surface collection of B48 and attested by very little material in B50. This area had an important role, with different functions such as religious (E-Babbar, B50), administrative and palatial (Nur-Adad).

(3) The southern part of the site shows some large buildings but in a lower density, at least on the surface. The future survey should give us a better understanding of the function of this area.

This remotely sensed data shows us a picture of the city of Larsa over a condensed timescale. The dating of the collected ceramics should facilitate a better identification of the structure of Larsa for more precise periods (Fig. 12e and f) and this will later enable us to understand better the evolution of the structure of the city. The fourth millennium and the Uruk and Djemdet Nasr periods are poorly represented in the northern part of the site, and no Ubaid was found. The third millennium is a little better represented, particularly in the central western part. The Isin–Larsa period is the most represented, especially in the eastern part of the site. The Kassite period is represented in the western part of the site and to the south of the surveyed area. The Neo-Babylonian and Seleucian periods are represented to the west of the site and to the south of the surveyed area.

4 – The pottery from the archaeological survey (V. Oselini and J.-J. Herr)

The survey collection consists of a selection of the diagnostic sherds, which have been primary sampled directly on the field. The total amount of ceramics collected during the survey in June 2019 consists of about 9000 potsherds. 2800 sherds have been dated and recorded. The 8 % of the 2800 sherds analyzed remains undetermined so far due to the lack of comparisons in the excavated levels at Larsa or in other sites of the region. In the following sections, we are presenting the diagnostic types according to their chronological attribution, following the usual southern Mesopotamian periodization. We present the different types dated from the 2nd Millennium BC to the end of the 1st millennium BC. Concerning the material identified for the earlier periods (Uruk-Djemdet Nasr), few potsherds (1%) have been recovered during the survey, while the 3rd millennium BC materials (ca. 10%) have been identified thanks to the comparisons with the vessels excavated in the northeastern part of the residential area at Larsa (Thalmann 2003).[3]

(3) We thank J. Baldi and M. Zingarello, who developed the preliminary evaluations respectively on 4th and 3rd millennium potterys.

Isin-Larsa and Old Babylonian pottery

Many hallmarks dating to the first half of the 2nd millennium BC have been identified in the survey (56%). They fit perfectly to the assemblage of pottery recovered from the Old-Babylonian houses (B27, B54 and B59, see Calvet 2003b) and in the sounding JVIII at Larsa (see Calvet, Huot, Minsaer, 2003).

The open vessels consist of wide platters with inwardly bevelled, thickened rim (Fig. 13: 1), conical bowls with inward rim (Fig. 13: 2) or profiled rim (Fig. 13: 3) and wide trays with low vertical sides and rounded rim (Fig. 13: 5). One of the most diagnostic types of early 2nd millennium southern Mesopotamian ceramic assemblage is also the deep bowl with a low carination and steeply inclined sides (Fig. 13: 4). Many potsherds of casseroles or bowls with straight sides, thickened, protruding rims are frequent within the collection (Fig. 13: 6) and various exemplars of deep vats with thickened and outwardly bevelled rims have been also found (Fig. 13: 15). Moreover, the goblets with sinuous profile and ring base (Fig. 13: 7-8) or convex base (Fig. 13: 9) are the most usual and representative shapes dating to the 18th century BC, very common in the Isin-Larsa contexts previously excavated at the site. Among the closed shapes, the small and medium size jars with ovoid body and flaring rim are very frequent (Fig. 13: 10-11), and the black painted decoration on the neck with short segments on the shoulder is distinctive of the period (Fig. 13: 12). Necked jars with thickened elongated rim (Fig. 13: 13) are typical of the Larsa repertoire dating to the second half of the 19th to the beginning of the 17th century BC (Calvet 2003b and Calvet, Huot, Minsaer, 2003). Globular pots with vertical, rounded rim (Fig. 13: 14) and big vessels with thick walls, protruding applied rims are frequent (Fig. 13: 16). They are usually dating to the end of the Isin-Larsa, beginning of the Old Babylonian period. The bulk of the vessels is characterized by a compact matrix made of levigated clay and sand with organic inclusions, which can be both very fine and rare or fine and abundant. In many cases, we also identified small clay and mineral clasts. The range of colours is between pale yellow (Munsell Chart of Color code: 5Y7/3), pale brown (2.5Y7/3) and pink (5YR7/4).

Kassite pottery

Pottery dated to the Kassite period (second half of the 2nd millennium BC) is widely represented within the repertoire collected during the survey at Larsa (17%). We found very good comparisons with the materials excavated at the site in 1967 (Sounding HXI, Parrot 1968). We identified many diagnostic types paralleling vessels recovered at Nippur (Area WC, Levels I-III, Zettler 1993), in the recent excavation at Tell Khaiber (Campbell et al. 2017), at Isin (Kaniuth 2017) as well as in many other regional collections found in Mesopotamia and documented in the referential typology of the 2nd millennium (Armstrong and Gasche 2014).

The most representative shapes dated to this period consist of wide conical bowls with thick base (Fig. 14: 1), carinated bowls (Fig. 14: 2-3), typical "Kassite goblets" (Fig. 14: 4), ovoid and globular goblets with narrow base (Fig. 14: 5-7), necked jars with thickened rim (Fig. 14: 8), wide vats with thickened rim (Fig. 14: 9) and biconical stands (Fig. 14: 10). Our macroscopic observation of the traces left by the potters on the surface of the vessels before firing provides some preliminary conclusions on the manufacturing technique. The containers may have been shaped with the wheel-coiling technique. The fabric is generally organic tempered with tiny mineral inclusions and the colour ranges between pale yellow (5Y7/3), pale brown (2.5Y7/3) to pink (5YR7/4).

1st millennium BC pottery

Few potsherds (7%) have been dated to the 1st millennium BC. They mainly con-

sists of well-known shapes with good parallels excavated in 1983 in the E-Babbar of Larsa (Lecompte 1989; Huot 1989). Only 1% of the sherds have been dated to the Neo-Babylonian and Achaemenian period. The pottery tradition for this period is not well known in southern Mesopotamia (see in Ur: Woolley 1962; Nippur: MacCown, Haines and Hansen 1967; the North Akkad Project: Druc 1989; Uruk: Salje 1992). However, the majority of the potsherds has been ascribed to the end of the 1st millennium BC, namely the Seleucid-Parthian period.

The survey has recovered stamped decorations (Fig. 14: 17) which can be also associated to the end of the Neo Babylonian period (for the stamped tool made in ceramic used for decorating the pottery, see Warburton and Warburton 1991). Incised, combed and roulette decorations, usually marking the neck of the jars (Fig. 14: 15, 18-19) are also diagnostic of the pottery dated to the Seleucid period at Larsa. We found also typical button base jars with bitumen inside (Fig. 14: 16). Among the other types of closed shaped we have found the jars with globular body and the flat base (Fig. 14: 13). For the open shapes, we found the typical carinated bowls with thickened rim on the outside (Fig. 14: 14) and the "fish-plate type" coated with green glaze dated to the 2nd century BC (Fig. 14: 12a-b). Bowls with rounded rim with remains of white slip inside have also been associated to the Seleucid and Parthian period (Fig. 14: 11). A ring made with a coil with triangular profile characterizes the majority of the bases dated to the Seleucid period. Cylindrical jugs with such a base have been also dated to the Seleucid period, by comparisons published in Lecomte 1983. For the fabric, we have found very few organic materials in the temper. It consists mainly of small minerals and levigated clay, with a range of colours between pale brown (2.5Y7/3) and pink (5YR7/4). The vessels might have been manufactured with coils and on a potter›s wheel.

5 – The excavations of Trench B48 (L. Bachelot, D. Charpin, A. Murad and J. Abd-el-Ali)

During the spring of 2019, surveying revealed an area with a significant amount of Old-Babylonian material located approximately 400m north of the E-Babbar. Furthermore, the limits of a large house (B48) had been partly identified in this area in the 1980s (Huot, Rougeulle and Suire 1989: 44). It was therefore decided to carry out an excavation in this area to get as complete a picture as possible of Larsa in the Old-Babylonian period.

After the removal of 20 to 50 cm of the surface layer, we could clear the complete plan of this large house (B48) due to the well-preserved cooked brick basement of its walls (Fig. 15). This house spread an area of at least 650 square meters (32.50 x 21m). It comprises twenty rooms distributed around a courtyard (1548) of 60 sq. m. (8 x 7.50m). The main room (1517) of 47.25 sq. m. (10.5 x 4.5m) is in the north-eastern part of the building. The entrance to the house, of which no trace remains due to the erosion of the north-western end of the building, must have been near the west corner of the house, most probably through room 1534 on the south-west façade bordered by a street, but alternative locations are possible (through rooms 1549 or 1550). It is worthy to note the contrast between the big dimensions of this house, as well as the very elaborate feature of its plan, and the very sloppy implementation of the construction. In fact, the brickwork is very irregular and often only fragments of brick were used and sometimes even over-fired, almost melted bricks. For economic reasons, no doubt, the recycled bricks are laid on clay beds sometimes almost as thick as the bricks themselves. Obviously, this construction was carried

out with little means.

The dating of B48

To get elements for dating the building, a complete excavation (down to the level of the occupation floor) was carried out in a room (1515), located near the western corner of the house and leading into the main room (1517). At 0.80m below the present surface, approximately at the level of the first course of backed bricks, the floor of the room was reached and explored over three quarters of its surface, the rest having disappeared during the lootings of the 20th century. The ceramic material collected, (many coarse and storage ceramics and several "fish plates"), among many pieces of charcoal clearly indicates a space intended for cooking. If the "fish-plates" date back to the first millennium (the most frequent attestations are from the Hellenistic period, see §6 below) the coarser crockery could be much older. Similar shapes are even commonly attested to the Old Babylonian period.

The relative similarity of the plan of B48 and that of the Old Babylonian houses in the northeast sector of the site naturally would lead us to date it to the same period. However, if the plans of all these buildings are more or less comparable, the materials used are not. The Old Babylonian houses excavated in 1987 and 1989 (Calvet 2003b, Charpin 2003) have been dated to a period from the middle of the reign of Rîm-Sîn (1822-1763 BC) to that of Samsu-Iluna (1749-1712 BC). The baked bricks used for the basement of these large houses are rectangular (27 x 17 or 18.5 cm). Those of B48 are also rectangular, but different in size: 30 x 20 x 6/8 cm. In Larsa, this brick format is feature of Nûr-Adad's (1865-1850) only palace.

While excavating this monument in 1969 and 1970, Jean-Claude Margueron stressed (1970: 270) that its bricks had been removed in an orderly and systematic manner. After the work carried out during this campaign of 2019, we know that this recovery was used for the construction of B48. Recovering material from an ancient monument clearly indicates a low cost strategy. At the time of building B48, there was probably no longer the means to manufacture, as in the past, the necessary quantity of fired bricks. Because the amount of second millennium ceramic material collected here, it would be tempting to envisage a first construction during this period (but only when the prosperity under the reigns of Rîm Sîn and Hammurabi was replaced to a period of great difficulty, after the destruction of the city in 1738). But the limited assemblage collected in situ so far is definitely heterogeneous and contains late shapes, i.e. first millennium material and in particular several Hellenistic (possibly Achaemenid at the earliest) "fish plates". So for now and pending more evidence from future excavations, a dating of B48 and its associate level to the 4th c. BC seems the more reasonable, but containing earlier material possibly recovered from lower levels during the rebuilding of the neighbourhood.

Indeed, we were able to observe that the exposed baked brick basements of B48 were built on top of an older mud brick building. In order to determine the plan of this old building, which served as a foundation for B48, all the basement of B48 would have had to be removed, which was not possible. The dating of this old building is probably from the Old-Babylonian period, as can be seen from the sounding carried out in the southern corner, below the level of the fired brick foundations of B48.

Small sounding south of B48

Outside the south corner of B48, a sounding (approximately 12 sq. m) was therefore carried out to a depth of 1m. Below a very evanescent floor near the surface, associated to B48, two mud-brick walls passing under the fired brick basement of B48 delimit a part of the room in the filling of which was found Old-Bab-

ylonian material, including a fragmentary cylinder seal impression displaying a presentation scene (Fig. 16). It shows a deity seated on her throne, facing left, before whom a small figure is kneeling. Behind the deity, a fragmentary three-line inscription is still legible.

Occupation northeast of B48

In the opposite sector, outside the northeast facade of B48, a series of small rooms (1544, 1545, 1546, and 1547) was superficially cleared (Fig. 15). These rooms were delimited by thin mud-brick walls, preserved on only a few courses. There, we found remains of domestic ovens (tannur type) with relatively abundant storage material and plates, which are clearly Hellenistic, but here again, mixed with second millennium material. To the north, the storage building passed under the baked brick basement of B48, showing that only part of it could have been contemporaneous with B48, clearly built later. The slope of the land caused by erosion favoured the rapid access to another level, composed by a row of fragmentary mud bricks small rooms, which yielded exclusively Old-Babylonian pottery. Thus, the presence in this sector of an important Old-Babylonian occupation is well documented, even if the work carried out during this campaign allowed only very limited exploration.

Between B48 and B49

Southeast of the large house B48, an area (about 375 sq. m.) spreads, apparently without construction and strongly disturbed by numerous looting holes. The ceramic material found in this area reveal a high proportion of shards from recent periods (Hellenistic). Only a few fragments of baked brick elements were visible on the surface or subsurface, in particular a facade to the northeast, in continuation of that of B48. Southeast of this space, another large dwelling (B49) laid down, provided with similar fired brick basements as B48. Only a few rooms of this house, with comparable (possibly larger) proportions to those of B48, have been demarcated.

To the northeast, a 2m wide lane characterized by a series of very ashy floors, at least 30cm thick but continuing further down flanked B49. On the other side of this alley, the same storage building (mud brick) that flanked B48 laid out, bypassing B49 so that the two were clearly contemporary. Between B48 and B49, a small sounding revealed that the highest ashy soils of the alley, abutting B49, covered the facade of the 'intermediate' construction, while deeper floors were associated to it and even deeper floors passed below. In addition, the 'intermediate' construction clearly reused the facades of B48 and B49 for its own use, showing that it was built later (and prematurely destroyed). Overall, the observations done show that the Hellenistic reoccupation of the area, sealing the underlying Old-Babylonian levels, displays at least four successive phases (from earliest to latest):

I: construction of building B49 and the northeast storage building

II: construction of building B48 and modification of the storage building; B49 continues

III: addition of the 'intermediate' building (probably a smaller house) between B48 and B49

IV: destruction of the 'intermediate' building

Finally, the results of this season match well with those of the 80's campaigns (Huot 2003 and 2014). To the extent of the great works carried out by the Babylonian kings (Rîm Sîn especially then Hammurabi) followed periods of repairs, reoccupations, until the Hellenistic period, always in a more modest way. The textual documentation largely testifies to this.

6 – The pottery from Trench B48 (V. Oselini and J.-J. Herr)

The collections of potsherds and complete profiles found in B48 have been

studied mainly according to morphological criteria and occasionally to the identification of the type of fabric when observations were possible on the photos.(4) Data from B48 consists of the photos of the sherd collections coming from room 1515, locus 1545, locus 1547, LTC 1570.1 (burnt ashy soil). They have been recorded by using the n.v. ("numéro vert") 1018, 1017, 1021, 1022, 1023, 1024, 1025, 1026, 1027, 1028, 1029 and 1030.

In the following sections, we present only the types of vessels for which we were able to find comparisons. The first section (V. Oselini) lists and assesses the different ceramic items dated to the early 2nd millennium BC, whereas the second section (J.-J. Herr) deals with the material dated to the 2nd half of the 1st millennium BC.

Early 2nd millennium BC pottery

The first analysis on pottery materials from the excavation carried out in trench B48 reveals that many deposits have yielded potsherds dated to the early 2nd millennium BC.(5) The bulk of shapes come from floor 1027 in room 1515, while other typical Isin-Larsa materials were found in "Numéro vert" 1001, 1014, 1024, 1025, 1026, 1027, 1028, 1029 and in loci 1537 (n. v. 1030), 1545 and 1547.(6)

Part of the pottery on the floor 1027 of room 1515 is typical early 2nd millennium BC (the rest being much later, see below), dating from the 19th to the mid-late 18th centuries BC (Isin-Larsa period). The conical bowls with profiled rim are usually dating since the end of the 3rd millennium BC to the mid-18th century BC. Parallels for the three exemplars from 1027 (Fig. 18: 4-6) can be found at Lagash, Nippur Uruk and Tell ed Der (Armstrong and Gasche 2014, pl. 33: 40, pl. 34: 20, 28, pl. 40: 27; Van Ess 1988, Abb 3: 35, 39). Bowls with straight sides and outwardly bevelled rim (Fig. 18: 7) is similar to the type of bowls found in levels 3 and 2 of the sounding JVIII at Larsa (Calvet, Huot, Minsaer, 2003, fig. 7: a, l) and is also typical, but not very frequent, of many other contexts dating from the early Isin-Larsa period, i.e. Tell ed Der, Nippur and Uruk (Armstrong and Gasche 2014, Pl. 18: 1, 4, 9). The deep bowl with curved sides and outwardly bevelled rim found on floor 1027 (Fig. 18: 8) is similar to the type of deep bowls with curved sides mainly spread in central Mesopotamia usually covering a time-span including the Isin-Larsa and Old Babylonian periods (see Armstrong and Gashe 2014 type 15H2, pl. 27: 2, 3, 6; pl. 28: 2, 3). This type of bowls is also well represented in levels 2 and 3 of sounding JVIII (Calvet, Huot, Minsaer, 2003, fig. 9: c; fig. 10: b, d, e, and j). The fragment of jar with narrow shoulder, short conical neck and thickened rim (Fig. 18: 9) is also usually related to the Isin-Larsa period. Comparisons can be found in level 3 of the sounding JVIII at Larsa, dating from the mid-19th to the 18th centuries BC (Calvet, Huot, Minsaer, 2003, fig. 9: c; fig. 10: b, d, e, j), at Uruk (Van Ess 1988, Abb 16) and in many other context of the southern Mesopotamia, i.e. Tell ed Der, Lagash, Nippur (Armstrong and Gasche 2014, pl. 68). Finally, a small fragments of necked jar with triangular outwardly bevelled rim (Fig. 18.10) was discovered on floor 1027 and is dating to the beginning of the 2nd millennium BC according to the comparisons from the level 3 of sounding JVIII (Calvet, Huot, Minsaer, 2003, fig. 28: e, f, i, l).

Other contexts, namely n.v. 1001 and 1041, yielded compelling materials dating to the Isin-Larsa period, including the typical conical bowls with profiled rims

(4) Having not participated to the fall 2019 excavation campaign, R. Vallet and L. Bachelot, to whom we are grateful, shared with us photos and drawings of the ceramic materials.

(5) Dating references are belonging to the 'Middle Chronology'.

(6) Assessment made by photos and not from drawings.

discussed above (Fig. 17: 1, 5, 8).[7] The necked jars with thickened, elongated or triangular rim from 1014 (Fig. 17: 7) fit well with the exemplars found very frequently at Larsa in sounding JVIII (levels 3-1; see Calvet, Huot, Minsaer, 2003, figs 29, 30) and in house B27 (Calvet 2003, fig. 53:27.128; fig.55: 27.510) and are very typical of the southern Mesopotamian repertoire dating to the 19th-mid 18th centuries BC. Further comparisons can be found at Uruk (Van Ess 1988, Abb 21: 148, 152), at Tell ed Der and Nippur (Armstrong and Gasche 2014, pl. 111). A small fragment of thickened and outwardly rim have been found in n.v. 1014 (Fig. 17: 9), it can be possibly related to a typical very early 2nd millennium BC shape found at Nippur (Armstrong and Gasche 2014, pl. 109: 7, 9). Finally, the singular and nearly entire shape of tall ovoid bottle with narrow neck and ring base found in n. v. 1001 (Fig. 17: 2) finds a perfect comparison with an exemplar from Larsa, excavated by Parrot in 1933 (Armstrong and Gasche, 2014, pl. 104: 10).

Late 1st millennium BC pottery

Beside the 2nd millennium shapes described above, the pottery found in B48 in room 1515 may be ascribed to a time-span ranging from the 4th century BC up to the 2nd century AD, namely the Seleuco-Parthian period. The previous work at Larsa, in the E-Babbar area, have provided valuable referential collection of pottery for dating to this period (Lecomte 1983 and Bachelot et Lecomte 1984).

The diagnostic shape for the 4th century BC-2nd century AD consists with the so-called "fishplates" (Fig. 17: 11-12 and Fig. 2: 2-3) found in the floor 1017 (Fig.17: 11-12) and in floor 1027 (Fig: 18: 2-3). These plates are opened conical shapes with a thin round rim marked by one or two thin grooves functioning as lid-seat on the inside. The base is convex (Fig. 17: 11) or concave (Fig. 17: 12, lower plate) and stands on a thin ring (Fig. 18: 3). This type is broadly spread in lower and upper Mesopotamia during the Seleucid period (Katzy 2015, Strommenger 1967, Debevoise 1934, Jackson and Tidmarsh 2011 Pl. 12 fig 18.15). Found also in the room 1515, in the floor 1027, the sherd of a conical bowl marked on its lower part by an undulated profile (Fig.18.1) could be related to a collection of opened shapes so-called "eggshell ware". This sherd with a straight wall could be dated to late Seleucid-Parthian period[8]. Parallels have been found in the different areas of the E-Babbar dated to the 2nd century BC (Lecomte 1987, Pl. 4, Pl. 17, 9-10; Pl. 20, 15-16; Pl. 29, 3-7; see also Bachelot and Lecomte 1984, p. 14, p. 18 fig.2.16) as well as at Nippur (Penn Museum, number B5773, MacCown and Haines 1967, Pl. 103.13), Seleucia on the Tigris (Debevoise 1934, p. 43, 2, 3 and 5) and in the Parthian cemetery at Susa (Haerinck and Boucharlat 2011, Pl. 7 GS-603h).

The excavation has also recovered in room 1515 sherds of cylindrical beaker (Fig.17.10) and S-shaped beaker/small jar (Fig. 17: 3). The cylindrical beaker has parallels in Nippur (McCown and Haines 1967, Pl.103.24 from TA 14 II) and might be attested in the Neo-Babylonian period. A similar "convex base" has also been noticed at Uruk, perhaps dating to the Achamaenian period (Strommenger 1967, Taf. 14, Abb. 10). Few sherds of closed vessels have been found but two sherds of short necked jars (Fig. 17: 6; Fig. 2: 10) have been recovered in the room 1515, floor 1027. The triangular profile, the dimension of the opening ranging around 13-14 cm and concave neck are common features recovered with the jars since the beginning of the 2nd millennium BC, the Neo-Assyrian period up to the Seleucid period (Katzy

(7) The comparisons found for the conical bowls with profiled rim found in room 1515 fit well also for the exemplars from n.v.1014 and 1001.

(8) Haerinck stated that they are diagnostics for the late Parthian period. Haerinck and Boucharlat 2011: 69.

2015, Taf. 41-42). Finally the large vat or pot decorated with undulations (Fig. 17: 4, 13) found morphological comparisons in early 2nd millennium BC as well as during the the 8th-6th centuries BC in the middle and lower Euphrates valley (Tell Sheikh Hamad, Fundbereich 4, Kreppner 2006 Taf 36.3 and Taf 37.1-8, Tell ed Der and Nippur: Armstrong and Gasche 2014: pl. 122; Van Ess 1988, Abb 7; Tell Asmar and Tell Yelkhi: Delougaz 1952, D.044.510; Gabutti 2002-2003, tavv 46, 47, 50; Oselini 2019, p. 700, fig. 4: 13).

Conclusion

The deposits n.v.1001, 1014, 1027, 1024 and 1030 have yielded potsherds dated to the Isin Larsa period and n.v 1010, 1017 and 1027 contain potsherds and complete vessels dated to the second half and to the end of the 1st millennium BC. We still doubt about a univocal dating for the potsherds found in n.v. 1013. The "fishplates" are the main diagnostic shapes that give a hint to hypothesize the occupation of the room 1515 (floors 1017 and 1027) to a terminus post quem to the Seleucid period.

7 – The excavations of building B50 (S. Obreja, R. Vallet, R. al-Debs and C. Ibrahim)

The 2019 spring geo-physical survey have revealed the existence north of the E-Babbar of a large rectangular building, 110 m x 60 m, whose perceptible part, forming a small tell, was known as B50. Inscriptions found during previous campaigns on the site (Arnaud 1976: 78) suggest the presence of other important sanctuaries near the E-Babbar, among them the temple of Nergal a little further north (Huot and Naccaro 2019: 78-79). B50 building may also have had a religious character.

For the investigation of the sector, due to the large scale of the construction detectable on the surveys, we choose not to open crosswise trenches, but to start by clearing the main structures visible in the highest part of the compound. Next step was to clear the spaces between them, while progressively extending the area being excavated to expose as much as possible of the plan of the building. By the end of the season, a surface of about 625 sq. m. was exposed and a sequence of two superposed buildings has been recognized (Fig. 19). Both buildings were greatly damaged by ancient and modern large pits and considerable parts of them, especially of the later building, were eroded away (Fig. 20).

The more recent building had narrow walls made of only one or two rows of badly preserved baked bricks, associated with red mudbricks placed on top of a reed bedding in what seems to be a large courtyard in the centre. Remains of what may have been other rooms were discovered to the northeast. It soon became clear that the square baked bricks used for the walls and tiled floors were not intended for this edifice (many bricks show inconsistent traces of bitumen), but were instead recuperated from older structures still visible on the site at that time. Their dimensions, 34-36 x 34-36 x 7-9 cm, correspond to those of baked bricks employed in the constructions of the beginning of the second millennium B.C., like the Nur-Adad Palace, or in some of the rooms of E-Babbar or the Ziggurat (Sauvage 1998, Huot 1985, Huot et al. 1978). The late building did not provide any in situ materials, its few tiled floor vestiges being immediately under the present-day surface of the site. A fragmentary reused baked brick, inscribed with a text of Adad-Apla-Iddina (1067-1046 B.C.) of the IInd dynasty of Isin was found in the western sector (a duplicate of that published by Lecompte and Vallet 2019) and gives a terminus post quem for the construction of the building in the 11th century B.C. The most likely hypothesis, nevertheless, is that this edifice was a late first millennium construction, part of the Hellenistic reoccupation of the neighbourhood. Apparently, trench

B50 presents a similar sequence as that of the nearby B48-49 sector, where poorly constructed though important Hellenistic buildings immediately cover the Old-Babylonian levels of the site. This dating is also in accordance with the material found in the surveying of B50 and its surroundings.

Of this Late building, which lay just under the sand of the surface, only the eastern part was partly preserved. A large courtyard paved with red mudbricks, approximately 28 meters long and 14 meters wide, occupies the centre of the building. Of its internal organization, only isolated stretches of baked brick pavements and walls appear in the southern and north-eastern areas of the compound. The fragment of a tiled floor, a parvis 3014, precedes a 3 m recessed entrance in the south-eastern part of the building, giving access to the courtyard and to what might have been a podium or altar in the middle. The red mud-brick floor 3052, set on a reed bedding, now forming a dark-ashy layer, probably covered the entire courtyard, but was destroyed by large pits, or completely eroded away. A backed brick tiled small room, 3004, with two walls crossed by bitumen canalizations was exposed in the north-eastern part. A small baked brick area, 3.5 m to the north, may indicate the existence of another small room, 3051, with its southern wall 3011. Another poorly preserved small backed brick space, 3010, is the only surviving part of the wall delimiting the courtyard to the north-west. To the east, the façade is almost entirely preserved for a distance of about 20 meters. In the northern part of the compound, the later building is posed directly on the mudbrick walls of the earlier one, or intruding in the filling of one of its rooms, 3033. However, the entrance and the eastern façade are not superposed on the walls of the earlier building but are set one meter away to the south-east.

Underneath the first millennium building, the earlier building is a more massive construction that develops on a more extended area. The pottery and small artefacts retrieved inside, as well as the format of the mudbricks 34-36 x 34-36 x 7-8 cm, indicate an Isin-Larsa, Old Babylonian date for the edifice. Entirely made of mudbrick, this building had inner walls more than 2.3 m wide and 5.6 m at its maximum for the façade, to the south. Six rooms and two courtyards are known for the moment. We suppose that, considering the great extent of the edifice, we have outlined only a fraction, approximately 10% of the entire building, in the north-western part of the compound. For now, we do not know the complete layout of the building, but by the massive south-eastern wall it seems that it may have been facing south, to the E-Babbar. A deep sounding in the corner of a room (Fig. 21) revealed that at least some parts of the building are preserved to a height of 4.5 m. No passageway between the rooms of the earlier building was yet discovered. Indeed, we were clearing the first storey of the building, above the floor level but below the threshold of the first floor. A shift in the masonry of the walls, a little bit thinner at the first storey, marks the level of the first floor. Needless to say that the floors proper had completely collapsed. However, we did not yet find their remains -the large wooden beams being certainly recovered when the building was abandoned- because of the vast amount of filling that needed removing.

A massive mudbrick wall (3044) provided with a buttressed façade represents the south-eastern boundary of the Old-Babylonia building. Three rectangular rooms, a bigger one in the middle (3032) flanked by two smaller ones to the northeast (3033) and southwest (3041), run along the interior of the façade. Walls 3009 and 3038, more than 2 m thick, separate the two smaller rooms from the bigger one. Of the south-western room 3041, only the eastern part was cleared. It represents a narrow space, less than 2.5 m wide, de-

limited by massive mudbrick walls. Its counterpart to the north, 3033, for which we were able to trace the whole perimeter, is also a narrow, long space, 7.35 m x 2.10 m. Several large pits have disturbed the massive walls to the east, north and west of the room. In the heart of the excavated area lies the biggest room, 3032, exposed during this year's campaign, 12.3 m long and 3.9 m wide. The large modern pit 3021, that has destroyed parts of the tiled floor and platform of the later building, has also cut deep inside its filling and across almost all the length of its western wall. A sounding was made in its northern corner to a depth of almost 3 m deep, but no floors were reached.

More to the northwest, the remaining excavated area is constituted by a room 3019, parallel to 3032, followed to the west by two perpendicular narrow rooms, 3027 and 3029. These two partially excavated rooms, only 2.15 m wide, are flanked by two large areas to the northeast and southwest, loci 3039 and 3040 that may correspond to two large courtyards. Another deep sounding was done inside the room 3019, which reached the foundations of the building in its north-eastern corner, at a depth of 4.5 m from the top of the walls (Fig. 21). No elaborate tiled or plastered floor was found, only what appeared to be a rudimentary clay floor, adjoining a 30 cm high mudbrick 'plinths' along the walls of the room.

The filling of this room, as that of the bigger one 3032, was composed of layers of packed earth alternating with layers of broken mudbricks, coming from the destruction and levelling of the remains of the walls and floors of the first storey of the building. However, the filling of room 3019 was particular because of the presence in its upper part of what looked like two fallen mudbrick walls, or collapsed piles of bricks, aligned with the north-eastern and south-eastern walls of the room (Fig. 22). These structures point towards different phases in the filling of the building, or maybe some secondary occupation of parts of the edifice, after an initial period of abandonment. In addition, next to the north-western wall and at a somewhat deeper level than the collapsed mudbrick structures, we found in the filling two fragments of an Old-Babylonian economic tablet (Fig. 23). The ceramic material retrieved from the ancient building dates to the first tier of the second millennium, which may indicate that the destruction and (partial) levelling of the edifice date equally to the Old-Babylonian period.

8 – The pottery from Trench B50 (V. Oselini)

The preliminary evaluation on pottery from B50 has been realized principally by observing the morphological criteria from the available drawings and by verifying the type of fabrics on photos. Moreover, most of the shapes excavated in B50 were potsherds and not entire vessels. The assemblage from B50 consists of materials from loci 3019, 3032, 3035, 3034, 3037, 3033, 3040, 3021, 3039 recording by using the "numéro vert" (n.v.) 2000-2099; 3000-3022. A selection of the diagnostic sherds, for which was possible to find precise comparisons and to evaluate a chronological attribution is presented in the following section. As a preliminary evaluation, all of them can be related to the early second millennium BC, covering a timespan from the 20th to the end of the 18th centuries BC (Isin-Larsa and Old Babylonian periods).

Several potsherds of the typical so called "Larsa Goblet" have been discovered within n.v. 2000, 2019, 2022, 2040, 2000, 2030 and 3007. The goblets with sinuous profile and ring base, convex base or button base are the most common and representative shapes dating from the mid/late 19th to the 18th centuries BC in southern Mesopotamian contexts (Fig. 24: 11-19). Parallels can be found at Larsa in B27 and B59 (1987-89), in sound-

ings JVIII (1970) and HXI (1967).

The platters found in n.v. 2042 are low and wide open vessels with flat base, inwardly bevelled and thickened rim (Fig. 24: 1-3) and they are very similar to the exemplars previously found in the houses B27, B59 and in level 2 of the sounding JVIII (Calvet 2003, fig. 48: 27.109; fig. 52: 27.277; fig.56: 27.556; fig.63: 59.28; fig. 69: 59.64; Calvet, Huot, Minsaer 2003, fig. 5: a, c, d). According to Armstrong and Gasche, this shape was most widely spread in the entire Mesopotamian area during the late Isin-Larsa and, mainly, during the Old Babylonian period (Armstrong and Gasche 2014: 16).

The two fragmented cups found in n.v. 2024 and 2032 (Fig. 24: 9, 10) are characterized by cylindrical body, short everted rim set off from the body by a thin horizontal groove. The vessel from the excavations carried out in 1967 (Calvet, Huot, Minsaer 2003, fig. 31, j) and the potsherds from levels 1-2 of sounding JVIII (Calvet, Huot, Minsaer 2003, fig. 17: a, c, e) can be considered as the best comparisons. Similar shapes have been found also at Nippur and Isin (Armstrong and Gasche 2014, pl. 57: 8, 11). The mentioned references for these two potsherds are dating to the late Isin-Larsa and Old Babylonian periods.

Small globular jars with short conical or cylindrical neck and rounded or outwardly profiled rim are usually quite rare in the southern Mesopotamian assemblages, so far. They have been recovered in n.v. 2019 and 2000 (Fig. 25: 1, 2) and are similar to the small globular jar found in B27 (Calvet 2003, fig. 46: 27.51). More precise comparisons for the two potsherds from B50 can be found within the central Mesopotamian contexts: i.e. at Tell Yelkhi in the Hamrin (Gabutti 2002-2003, tavv 72, 90; Oselini 2019, fig. 3: 6), and in the Middle Euphrates, at Haradum (Armstrong and Gasche 2014, pl. 82: 3, 4). Here, this type is usually dating to the 19th and 18th centuries BC, corresponding to the Isin-Larsa and early Old Babylonian period.

The necked jars with thickened elongated or triangular rim (Fig. 25: 3, 4) are very typical of the southern Mesopotamian repertoire dating to the 19th-mid 18th centuries BC. They have been found in n.v. 2017 and on the sub-surface in B50, and in B48 (see §6). They are very frequent in sounding JVIII (levels 3-1; see Calvet, Huot, Minsaer 2003, figs 29, 30) and in the house B27 (Calvet 2003, fig. 53:27.128; fig.55: 27.510). Comparisons can be found at Uruk (Van Ess 1988, Abb 21: 148, 152), at Tell ed Der and Nippur (Armstrong and Gasche 2014, pl. 111).

Jars with short conical neck and outwardly thickened and rounded rim are quite common within the early second millennium BC repertoire from Larsa. They have been found during the excavations of sounding JVIII, level 2 (Calvet, Huot, Minsaer 2003, fig. 25: h-m). Two potsherds belonging to this shape were discovered on the surface of locus 3000 and in the n.v. 2030 (Fig. 25: 5, 6).

N.v. 2042 and 2034 yielded two potsherds belonging to the type of pots with curved sides and thickened, outwardly bevelled rim (Fig. 25: 7, 8). Other exemplars were found in levels 1-3 of sounding JVIII, covering a timespan between the mid-19th to the late 18th century BC. (Calvet, Huot, Minsaer 2003, fig. 25: b, d, e, h, i).

Some of the shapes discovered during the 2019 excavation might be also related to earlier periods. In fact, conical bowls with simple or profiled rim can be dated to the second half of the third millennium BC as well (Fig. 24: 4-8). The two potsherds from n.v. 2023 and 2031, of the same size (Fig. 24: 4, 5), can be compared to the exemplars found at Larsa in B27, B59 and in level 2 of the sounding JVIII, which are dating to the 18th century BC (Calvet 2003, fig. 52: 27.276; fig. 54: 27.30; fig. 63: 59.27; fig. 56: 59.79; fig.66: 59.53; Calvet, Huot, Minsaer

2003, fig. 6: j). Conical bowls with profiled rim and simple rounded lip (Fig. 24: 6-8) are usually dating since the end of the third millennium BC to the mid-18th century BC from the southern and central Mesopotamia. The same shape has been found also in B48 (see §6). The three potsherds found in n.v. 2000, 2014 and 2023 (Fig. 24: 6-8) are related to the same type and find comparisons in levels 2 and 1 of sounding JVIII excavated in 1970 (Calvet, Huot, Minsaer 2003, fig. 11), dating to the 18th century BC.

Conclusion

The bulk of pottery materials from B50 finds strict comparisons with types dating to the first centuries of the 2nd millennium BC. The occurrence of "Larsa Goblets", of platters with inwardly bevelled and thickened rim, of the tall cups with everted rim, of necked jars with elongated or thickened, rounded rim is significate for the attribution of this assemblage to the Isin-Larsa and early Old Babylonian periods. However, some conical bowls with simple or profiled rim are longue durée types, well known in the Mesopotamian area since the second half of the third millennium BC.

9 – Preliminary archaeobotanical results (C. Douché)

In trenches B48 and B50, a total of 23 bulk soil samples were collected from secure deposits and burnt layers (kiln, tannur and internal fill of building). Samples were processed for charred plant remains, according to the same methodology implemented at 'Uwaili (see Vallet et al., this volume). Seventeen light fractions were completely sorted in parallel to fieldwork and the rest was exported to France.

The scarcity and the bad preservation of plant remains may result of gypsum and/or of the nature of excavated layers. While residential areas usually produce large amount of charred remains due to domestic activities, public buildings are often very clean and consequently unfavourable for the conservation of archaeobotanical remains. Meanwhile, archaeobotanical assemblages from both sectors are dominated by cereals, mostly barley (Hordeum vulgare), hulled and possible naked (H. vulgare var. nudum) types (Fig. 26 and 27). Glume wheat (emmer, Triticum turgidum subsp. dicoccum) and possible hard wheat type (T. cf. durum) are also present but in low quantity. Pulses are only represented by lentil (Lens sp.), that is attested in both sectors. Whole and fragments of date stones (Phoenix dactylifera) were also recovered. The wild/weed taxa are represented by small grasses such as Bromus and Phalaris sp. (likely P. paradoxa as it has previously been identified by R. Neef 1989), small legumes (Trifolium sp.), Apiaceae, Brassicaceae, Chenopodiaceae (including Salsola sp.) and Scirpus sp.. Additionally, samples delivered numerous floral parts, mostly wild grasses and reed culm nodes and stems fragments.

The crop package recovered at Larsa is similar to other sites in southern Mesopotamia such as Eridu, Ur, Kish, Jemdet Nasr and Nimrud (Gillet 1976; Ellison et al. 1978; Field 1932; Helbaek 1966). Date stones (Phoenix dactylifera) were already found in the Hellenistic/Parthian levels of Larsa (Neef 1989). While DNA analysis suggest Mesopotamia as the origin of date-palm domestication (Abbo et al. 2008), surprisingly, very few archaeobotanical remains (wood charcoal and fruit) were retrieved in the region. The earliest attestation of domestic dates comes from the Ubaid site of Eridu, located c. 54 km further south of Larsa; 'buckets of date stones' were uncovered, indicating its importance in the local economy (Gillet 1976). Wood charcoals were also identified at 'Uwaili (Neef 1991). Later, the presence of date palm is evidenced at Ur and Nimrud by the recovery of stones (Ellison et al. 1978; Helbaek 1966). Textual sources also provide evidences of the presence and use of date palm; trees were

planted together with other fruit trees in orchards (ex. Nimrud, on the 'Banquet Stele') and wood was used in boat building (Wiseman 1952; van de Mieroop 1992).

The identification of club-rushes (Scirpus sp.) and reeds (Phragmites sp.) is consistent with previous archaeobotanical studies (Neef 1989) that reported achenes of Scirpus maritimus and stems impressions of common reed (Phragmites australis) in the Hellenistic occupation at Larsa. The presence of these taxa, characteristic of wetland environments likely indicates the proximity and the exploitation of the marshy/riparian vegetation. The extension of the Persian Gulf towards the north during the 4th millennium BC and the presence of marshland close to Larsa are well documented (Pournelle 2003; Benati 2015; al-Hamdani 2015; Thesiger 2007) and would easily explain the presence of hygrophilous taxa on the site. However, their presence can also be more 'local' and related to the presence of a wide north-south channel ('Grand Canal'), revealed by geophysical surveys during new fieldworks at Larsa. Common reeds were widespread in southern Iraq and were intensively exploited (Thesiger 2007; Hepper 1992; Bor and Guest 1968). Reeds were (and are still) used in many ways, mostly as building material for houses and boat building, for matting and basketry, writing on clay tablets, as fibres and even as fodder for sheep (Ilvessalo-Pfäffli 2011: 314; Borojević and Mountain 2013; Moorey 1999: 361; Ochenschlager 1992; Waetzoldt 1992; Goetze 1948). Similarly, club-rushes can be used for craft activities such as basketry, fruits and tubers are also edible and used for human consumption (Wright 1992; Wollstonecroft et al. 2008; Wollstonecroft 2009; Arranz-Otaegui et al. 2018), or as fodder and thus preserved in dung (Fuller et al. 2014). Moreover, Cyperaceae can grow as arable weeds and might reflect agricultural practices such as the irrigation of fields. Due to low precipitation (<250 mm/year), cultivation in southern Mesopotamia required irrigation, that is well attested in the 3rd millennium BC (Charles 1989; Schrakamp 2018) and probably since the 7th millennium BC ('Uwaili, Choga Mami). Further archaeobotanical investigations, especially on weed ecology, combined with textual evidence would help to determine how crops were growing at Larsa.

Acknowledgements

The mission received a warm welcome and was greatly helped by all our Iraqi colleagues. We would like to express our deepest thanks to Dr Abdulameer Al-Hamdani (Minister of Culture and Chairman of the SBAH), Dr Qais Rasheed (Chairman of the SBAH) and to Mrs Saba Al-Omari (SBAH) and Luma Joda (SBAH) in Baghdad, to Tahir Al-Hossani (SBAH) and Ali Ghanim (SBAH) in Nasriyah. We wish to address a special thanks to Dr Adil Alkenzawi, Honorary Consul of France in Nasriyah. He and Marwan Alkenzawi (secretary of the French Consulate in Nasriyah) were a constant and efficient support for all of us. We would like also to thank the president of Thi Qar University, Dr Yahya A. Abbas who signed with us a memorandum of scientific collaboration and training. We hope that Larsa will become in the coming years a familiar place for the students as well as our colleagues of Thi Qar University, who visited the site on 20 June 2019. May all of them here be thanked, as well as the thirty workers who joined us and without whom nothing would be possible.

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Fig. 1 – Second millennium terra-cotta ex-votos collected on the surface of Larsa.

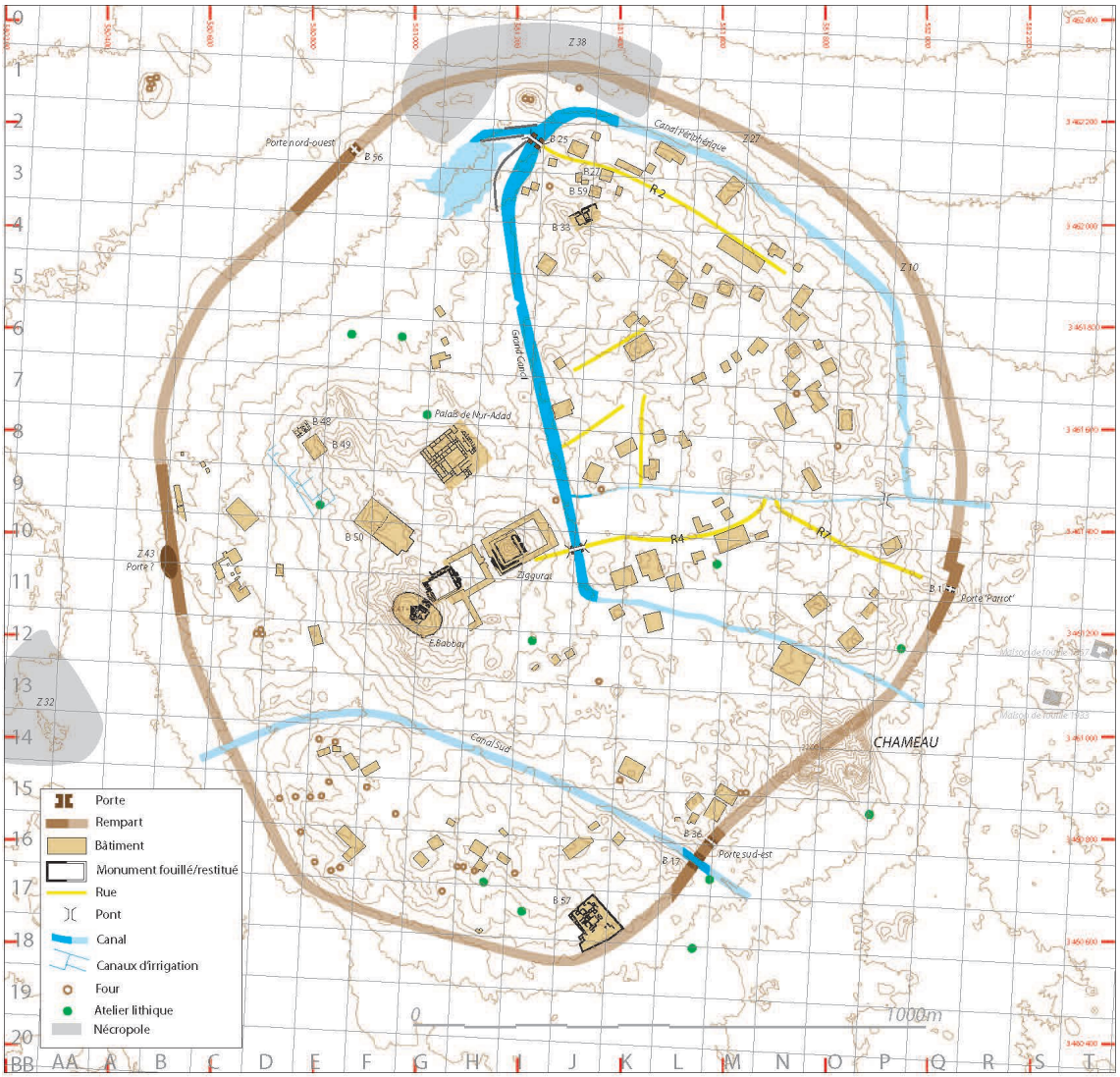

Fig. 2 – Map of Larsa (J. Suire and R. Vallet, 2020).

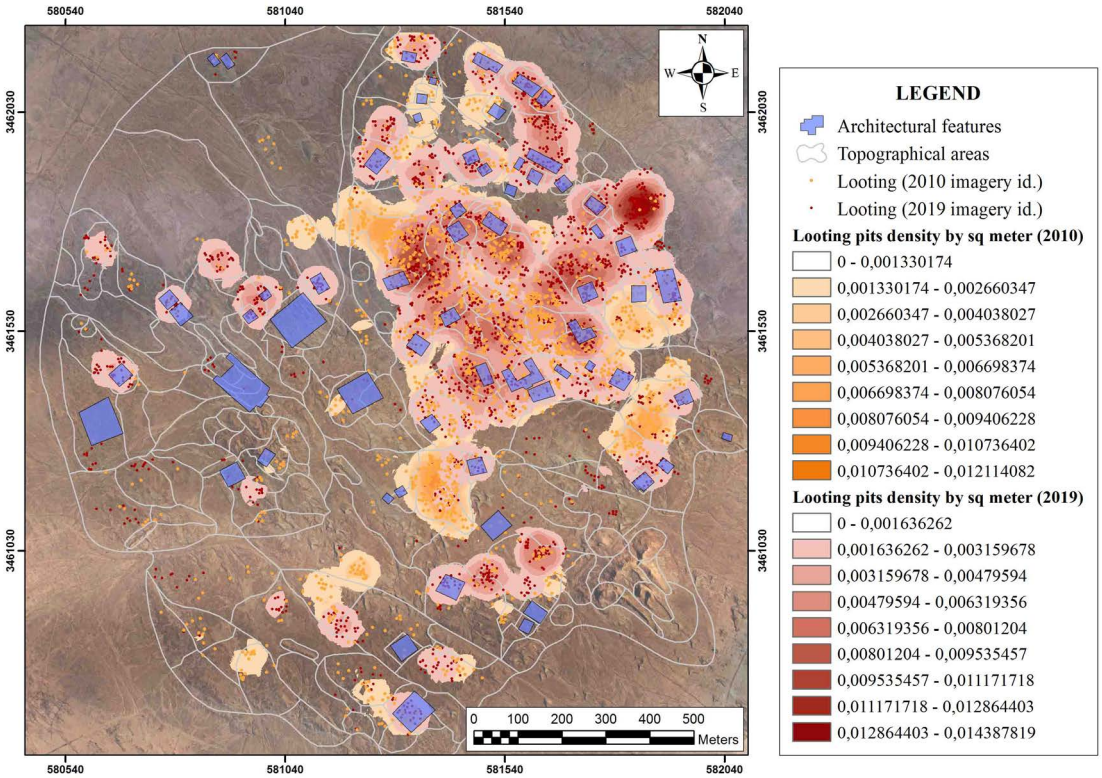

Fig. 3 – Overlapping map of the remote sensing of looting pits visible in 2010 and 2019 ©Mathilde Mura (Archaïos).

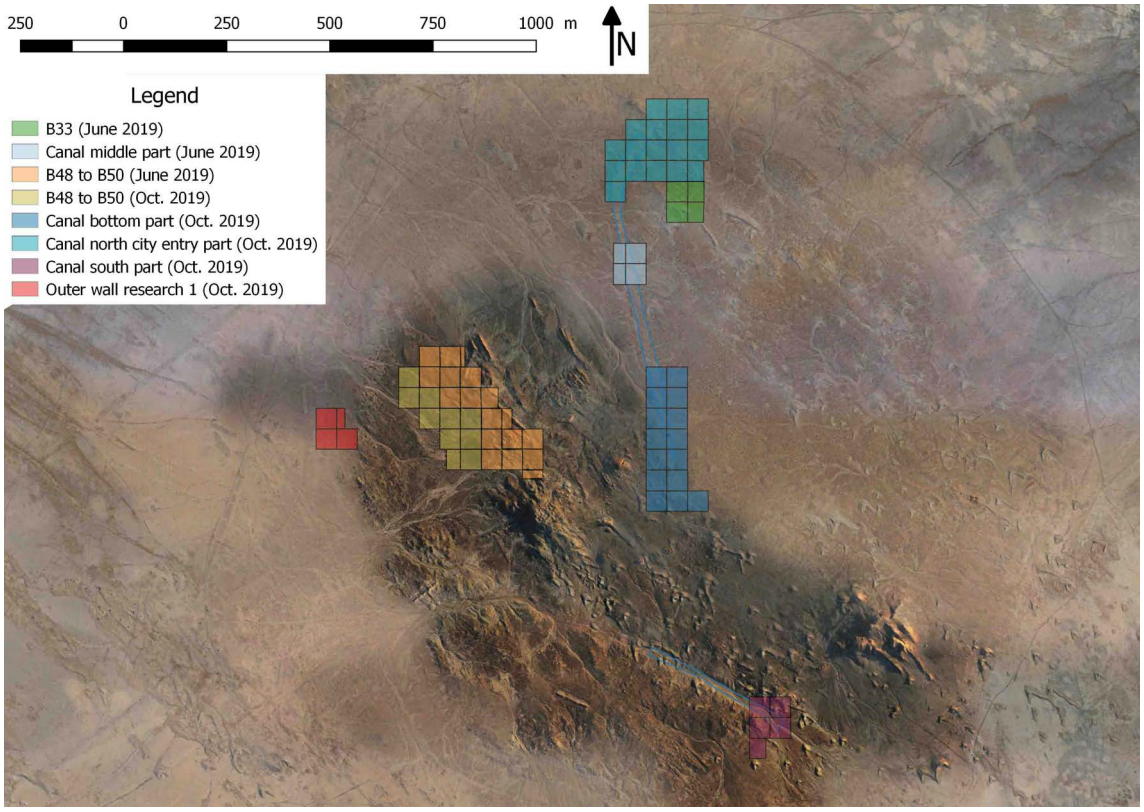

Fig. 4 – 2019 magnetic prospection areas.

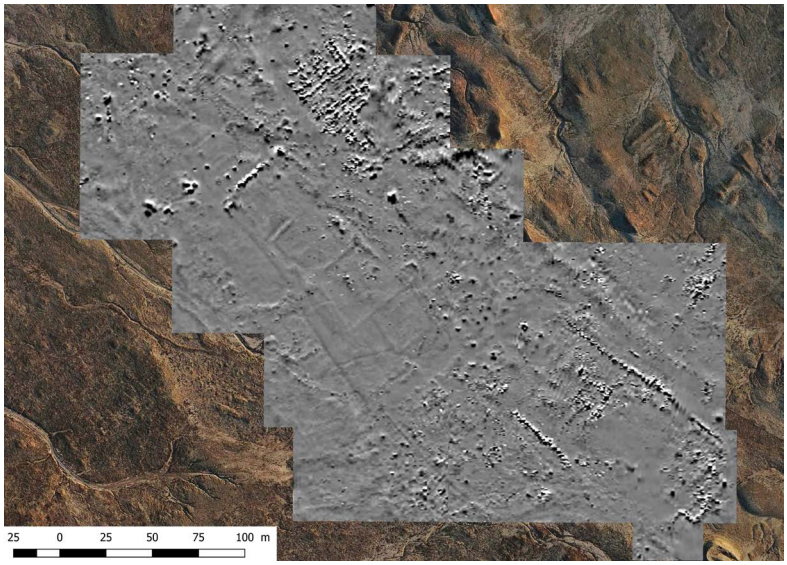

Fig. 5 – B48 to B50 buildings raw gradient map (-20nT/+20nT) georeferenced.

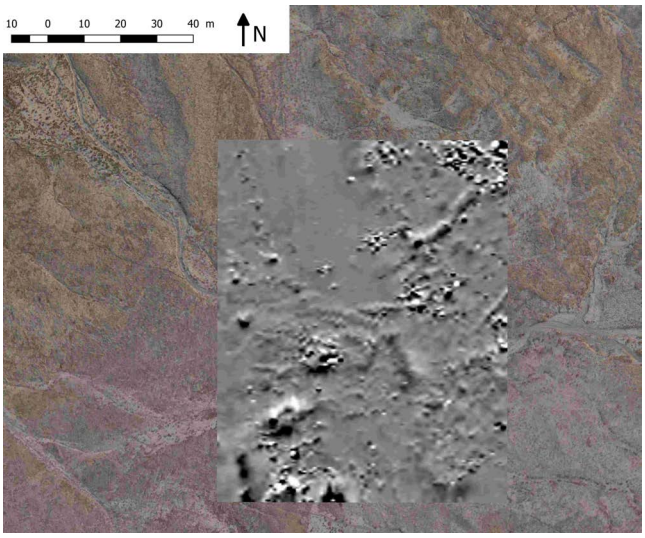

Fig. 6 – Middle part of the Grand Canal raw magnetic map (-20/+20nT) georeferenced.

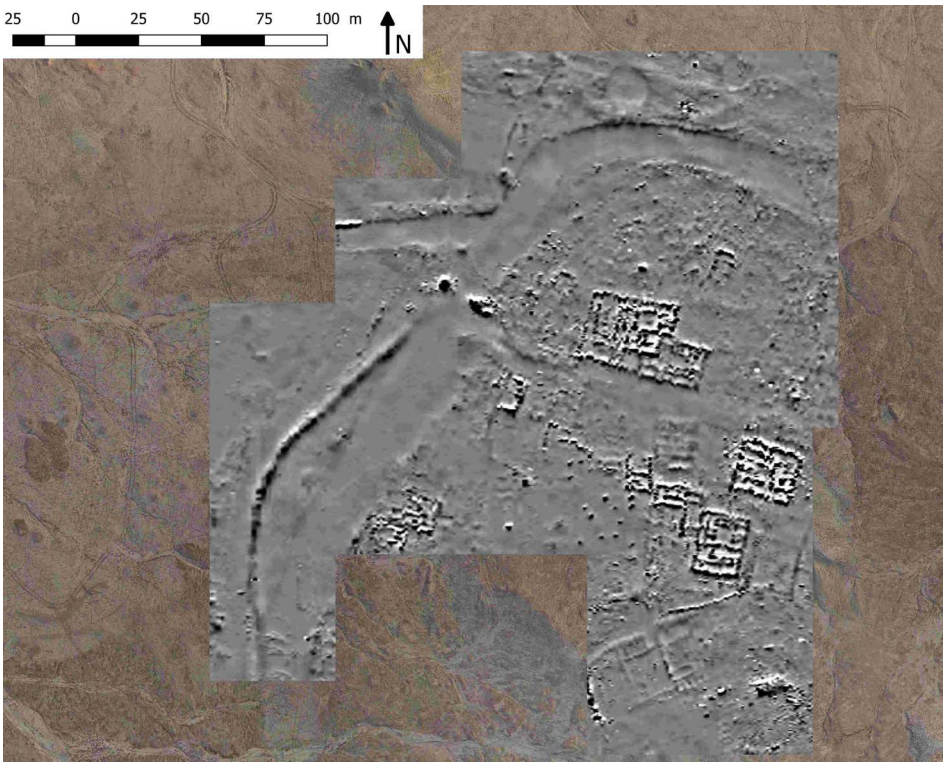

Fig. 7 – Raw magnetic map (-20/+20nT) georeferenced north of Larsa showing the junction of major canals.

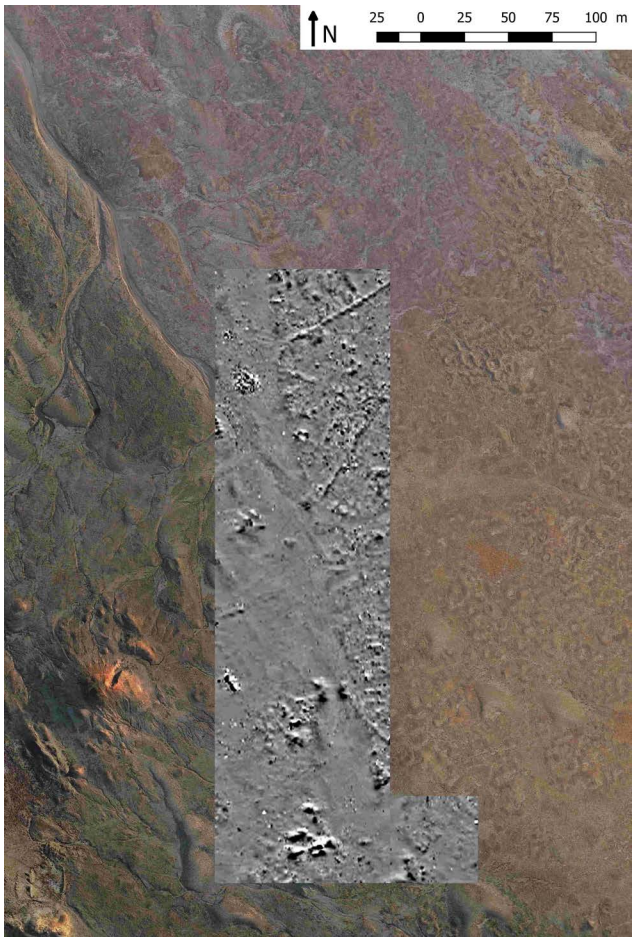

Fig. 8 – Lower part of the Grand Canal raw magnetic map (-20/+20nT) georeferenced.

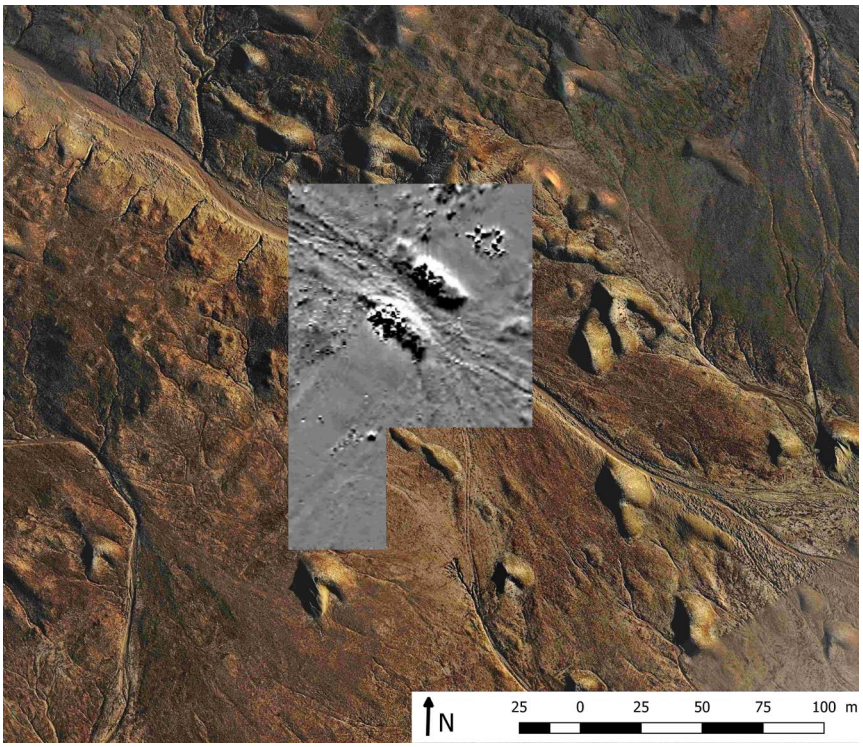

Fig. 9 – South canal raw magnetic map (-20/+20nT) georeferenced.

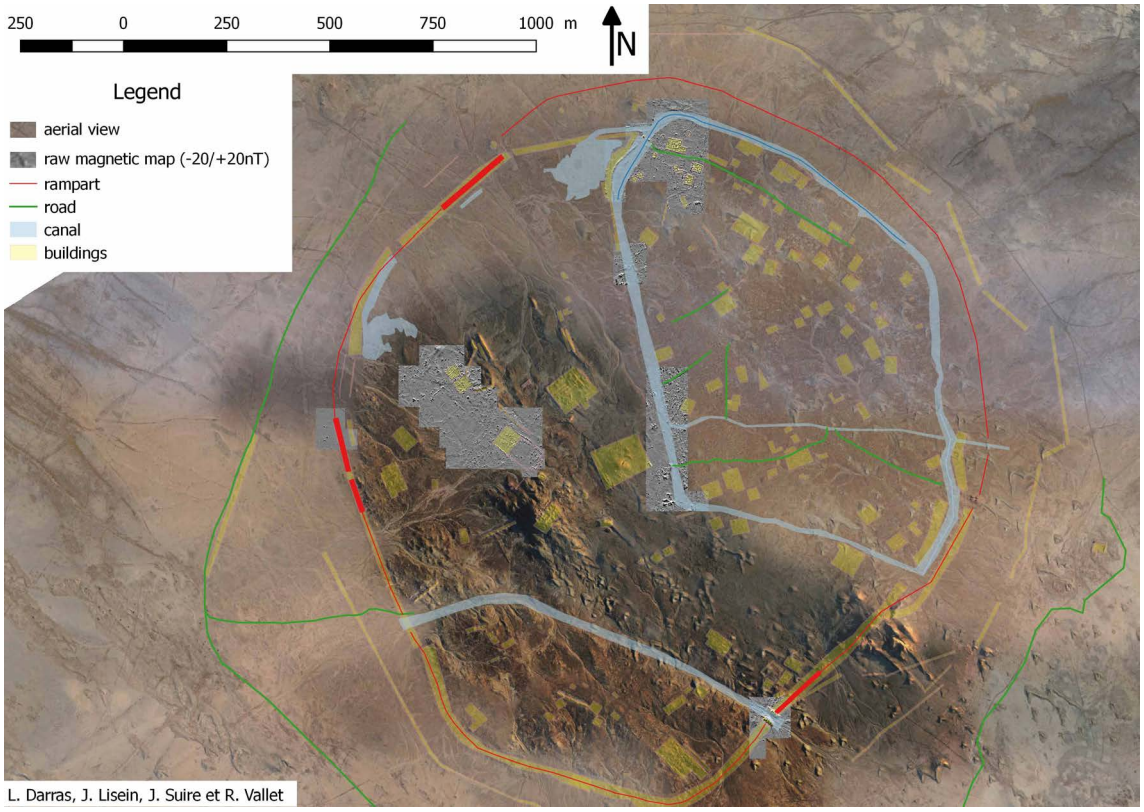

Fig. 10 – Sketch map of Larsa with 2019 raw gradient map (-20nT/+20nT).

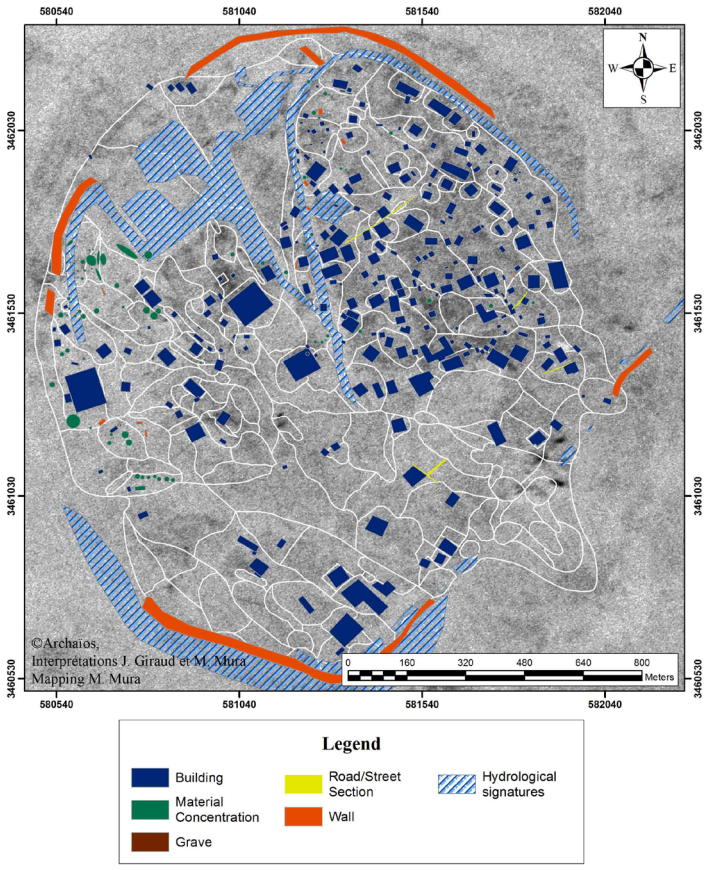

Fig.11 – Archaeological and geographical remote sensed map of Larsa ©Mathilde Mura (Archaïos).

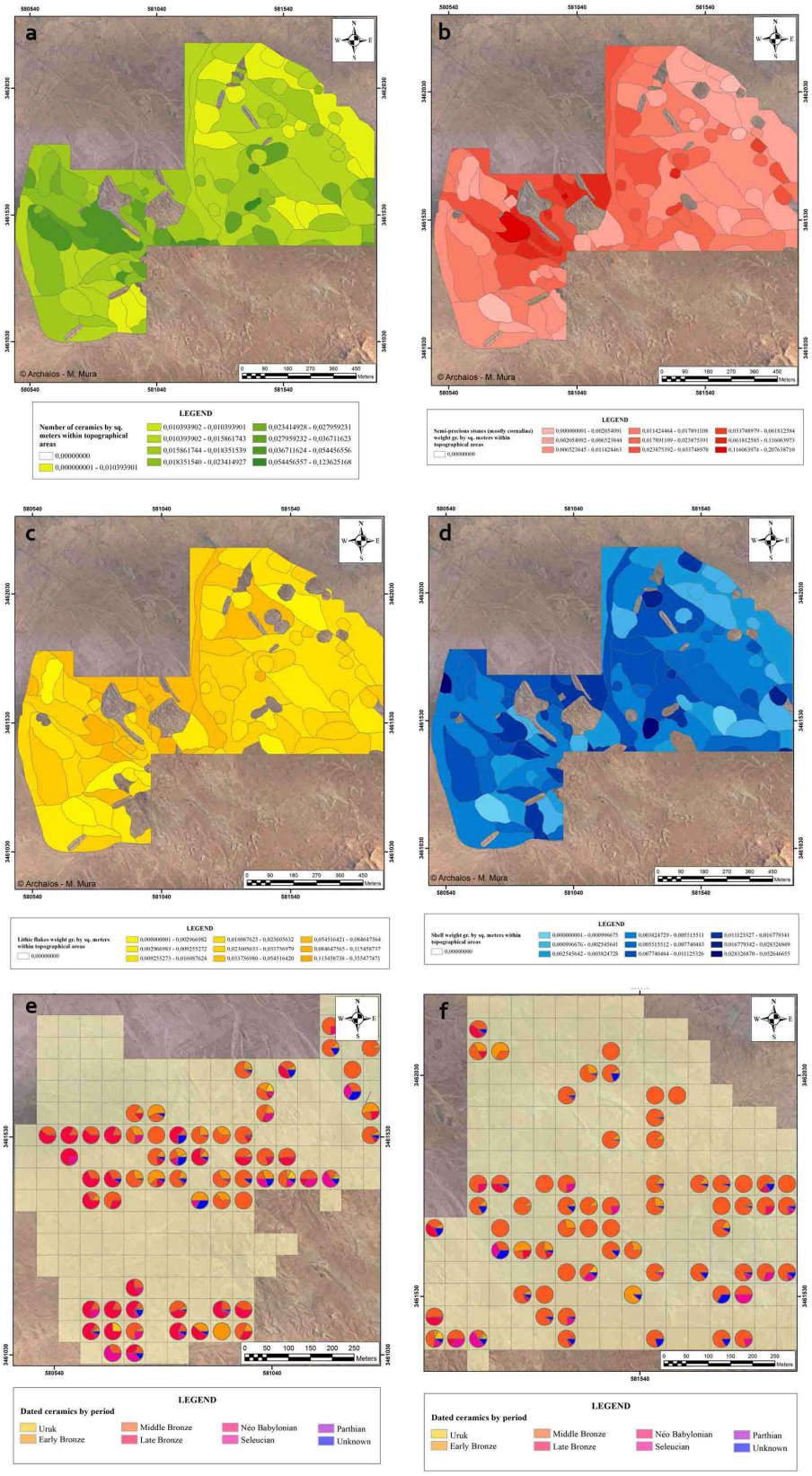

Fig. 12 – a (top left): visualization of the number of ceramic collected by sq. m. according to the morphological grid; b (top right): distribution of semi-precious raw material by morphological area; c (centre left): distribution of lithic flakes by morphological area; d (centre right): distribution of shell by morphological area; e (bottom left): distribution of the different datation on Larsa - West Part; f (bottom right): distribution of the different datation on Larsa – East part ©Mathilde Mura (Archaïos).

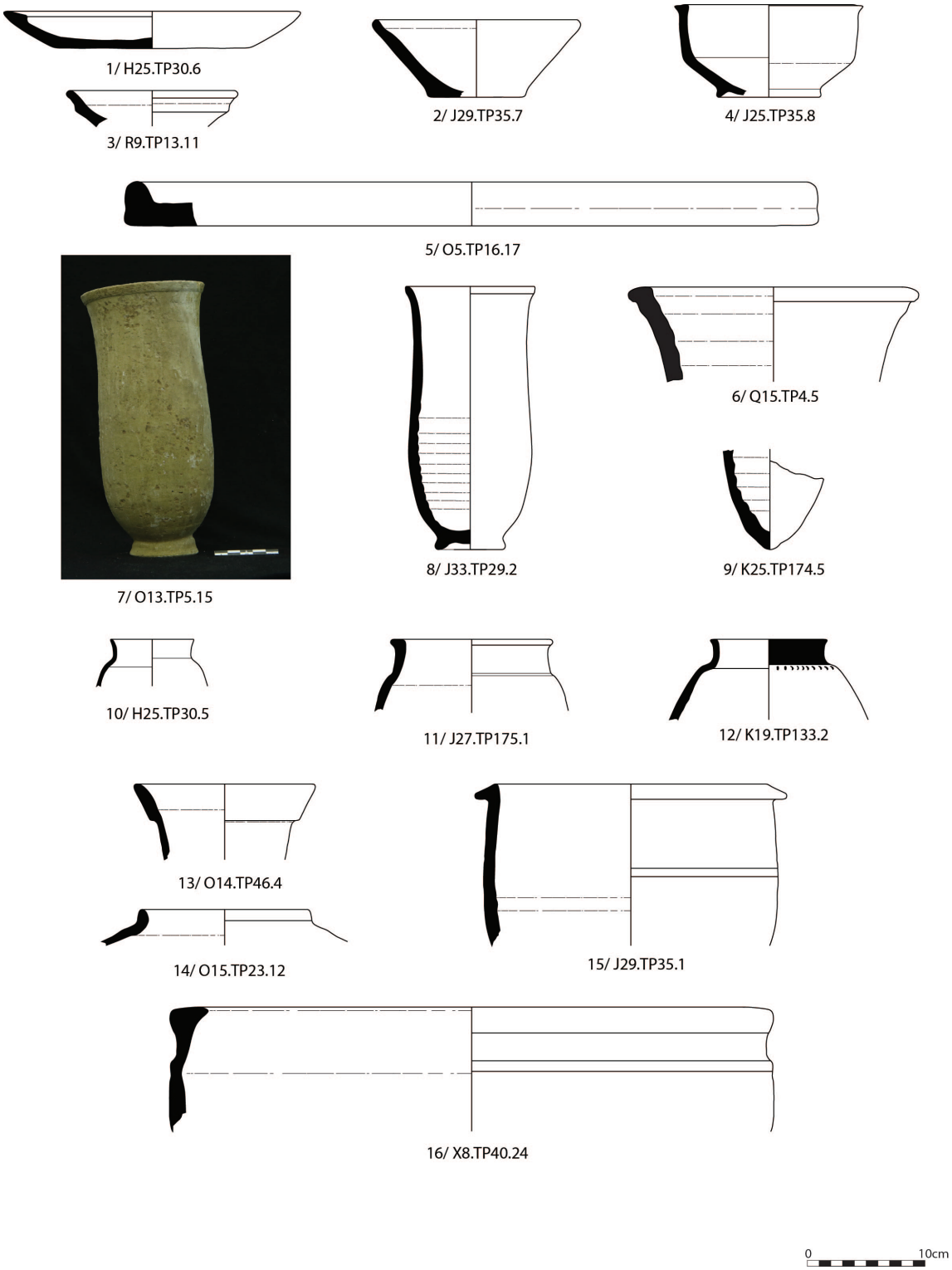

Fig. 13 – The Isin Larsa and Old Babylonian pottery from the survey of Larsa.

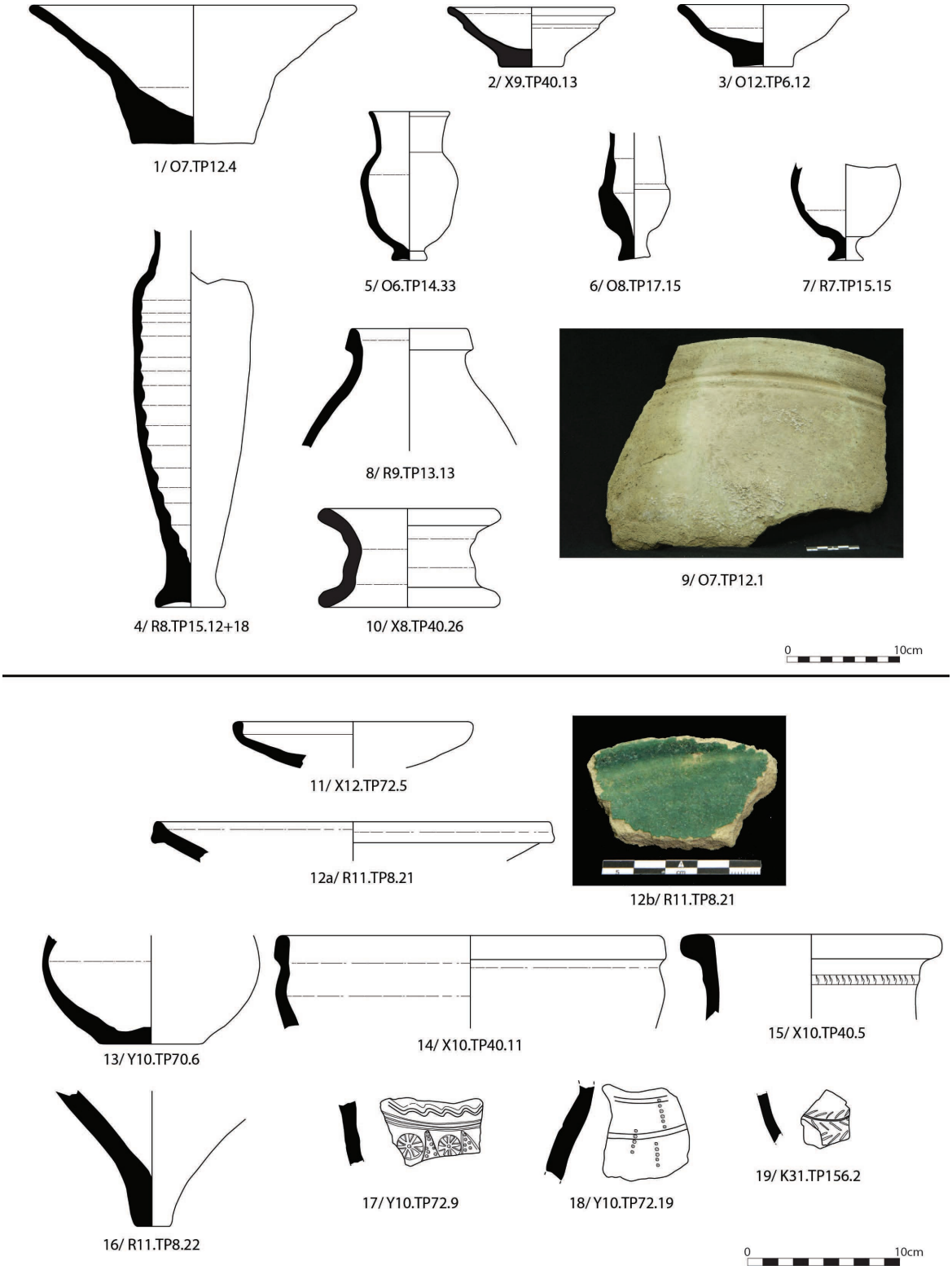

Fig. 14 – The Kassite (1-10) and the Seleucid-Parthian (11-19) pottery from the survey of Larsa.

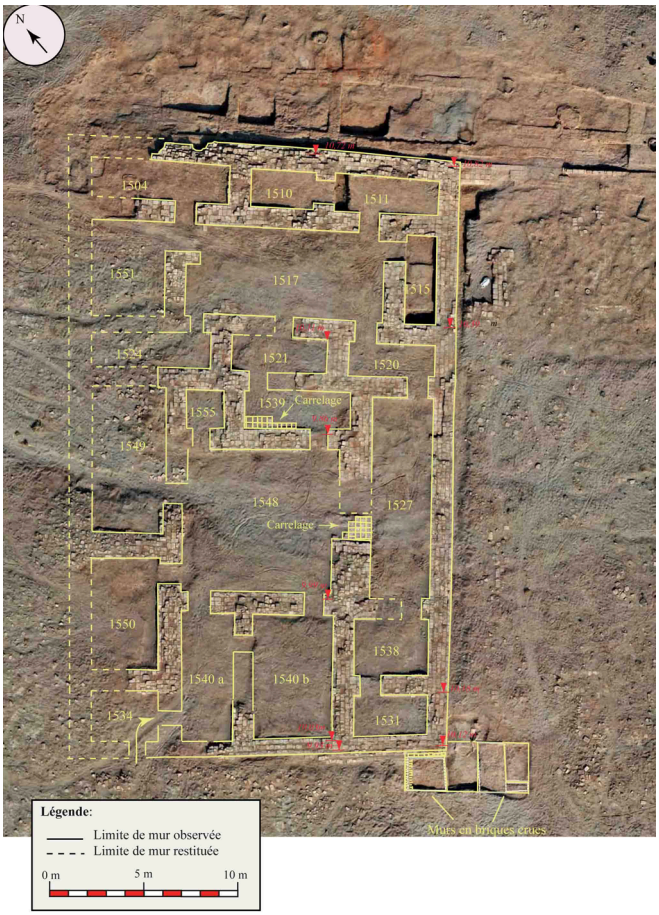

Fig. 15 – Preliminary sketch plan of Building B48, with a proposal of entrance through room 1534.

Fig. 16 – Seal impression from the Old-Babylonian level below B48.

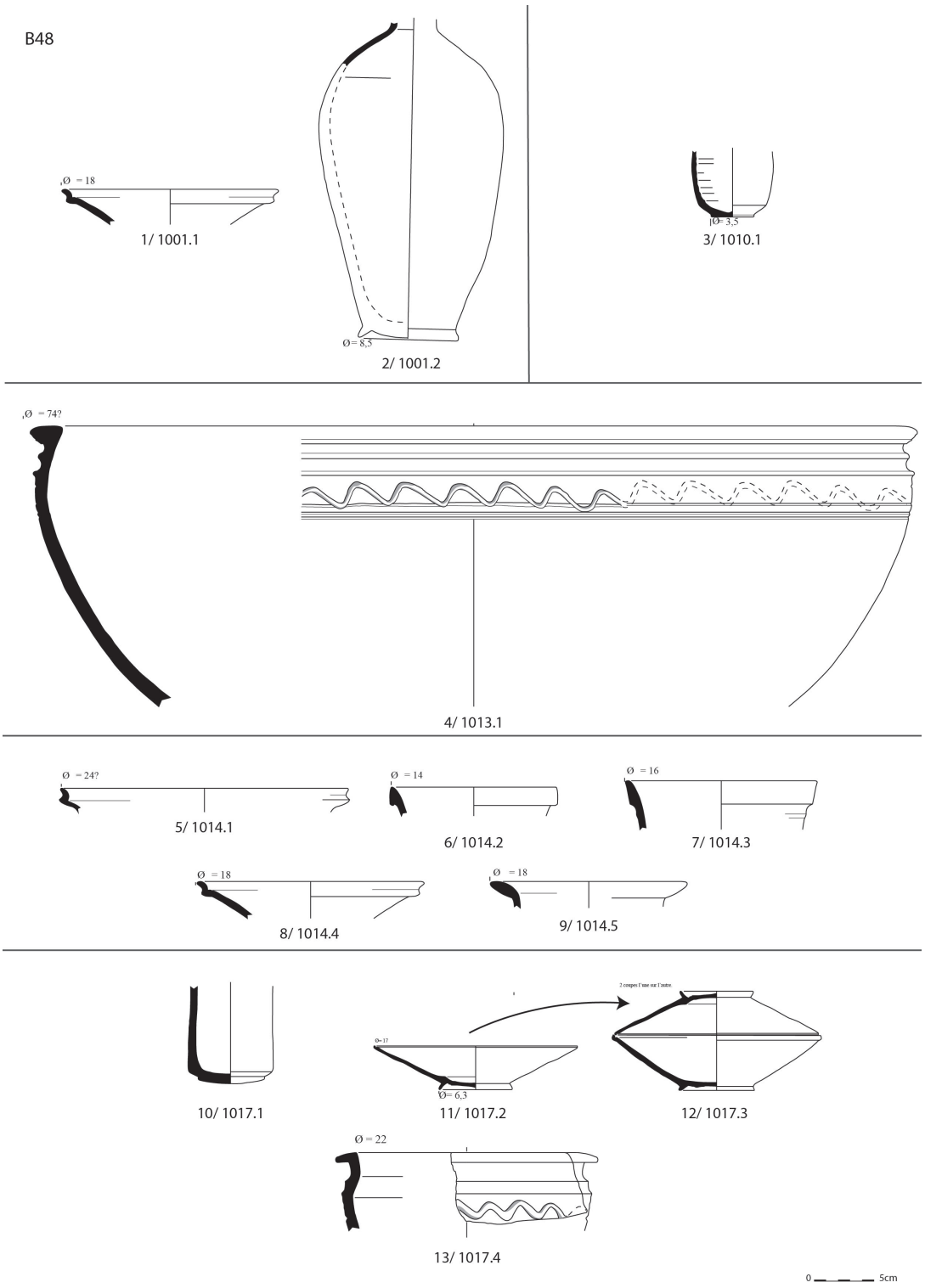

Fig. 17 – The pottery from B48 (n.v. 1001, 1010, 1013, 1014, 1017).

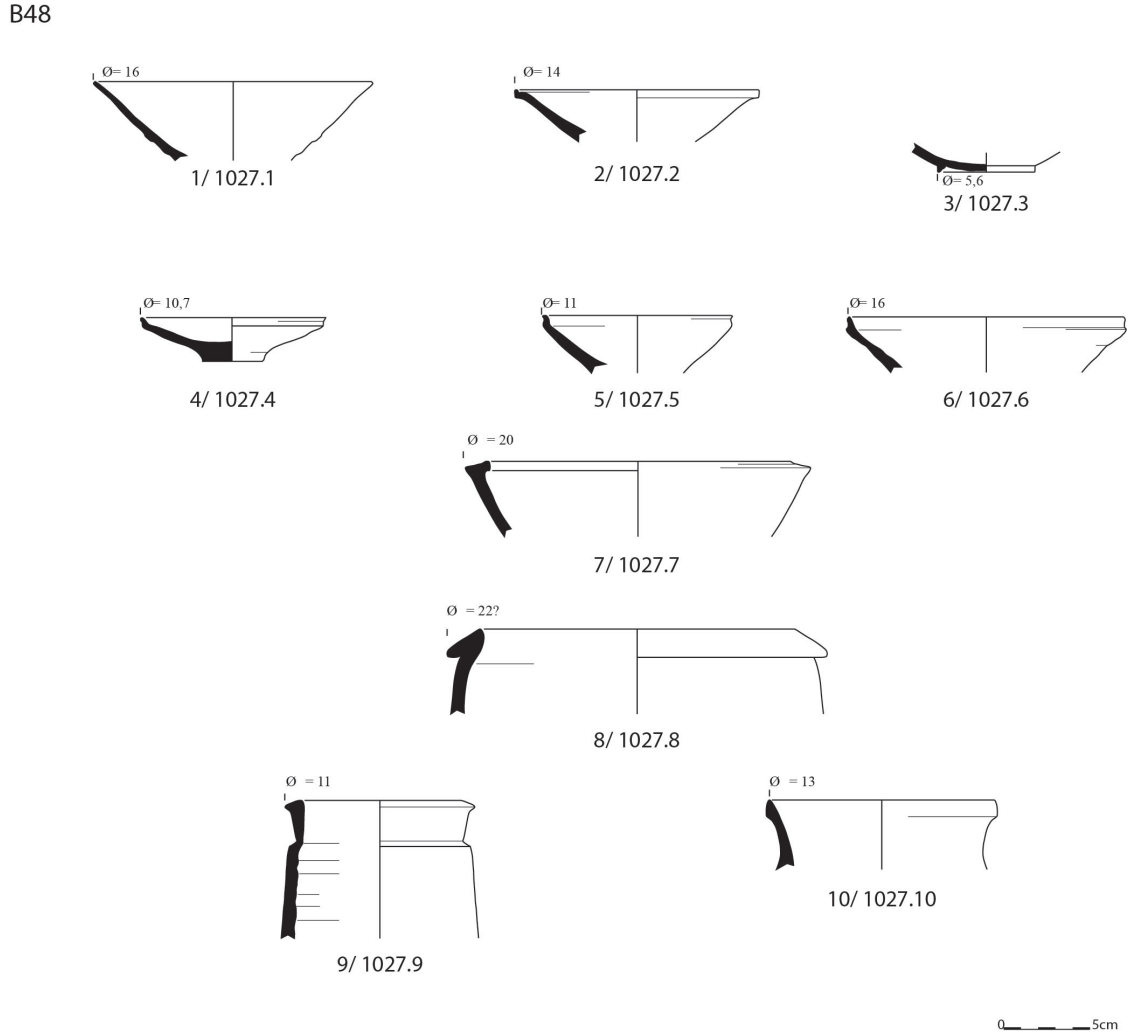

Fig. 18 – The pottery from floor 1027 in B48.

Fig. 19 – Aerial view of the excavated area of B50, from the southeast.

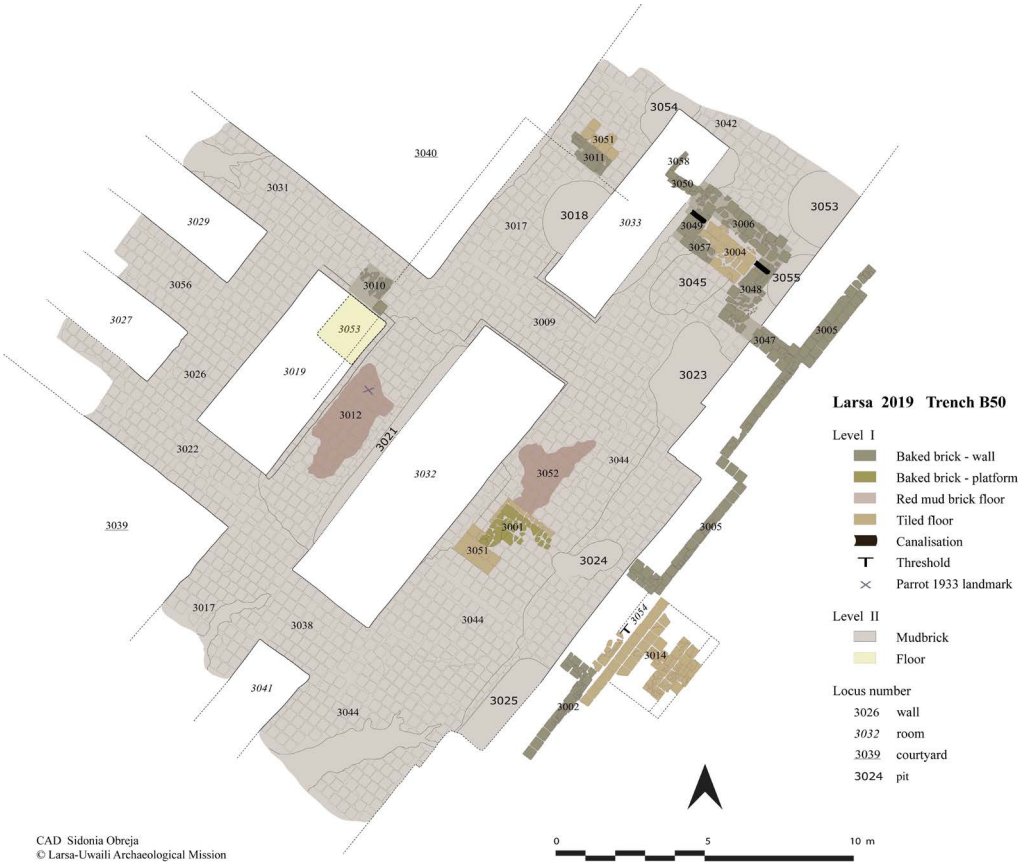

Fig. 20 – Plans the Earlier and Later Buildings in B50.

Fig. 21 – Deep sounding in room 3019 of the ancient building, seen from the west.

Fig. 22 – Collapsed mud-brick masonry in the filling of room 3019. At the top left, the horizontal baked brick foundations of wall 3010 of the recent building.

Fig. 23 – B50: Old Babylonian tablet coming from the filling of Room 3019.

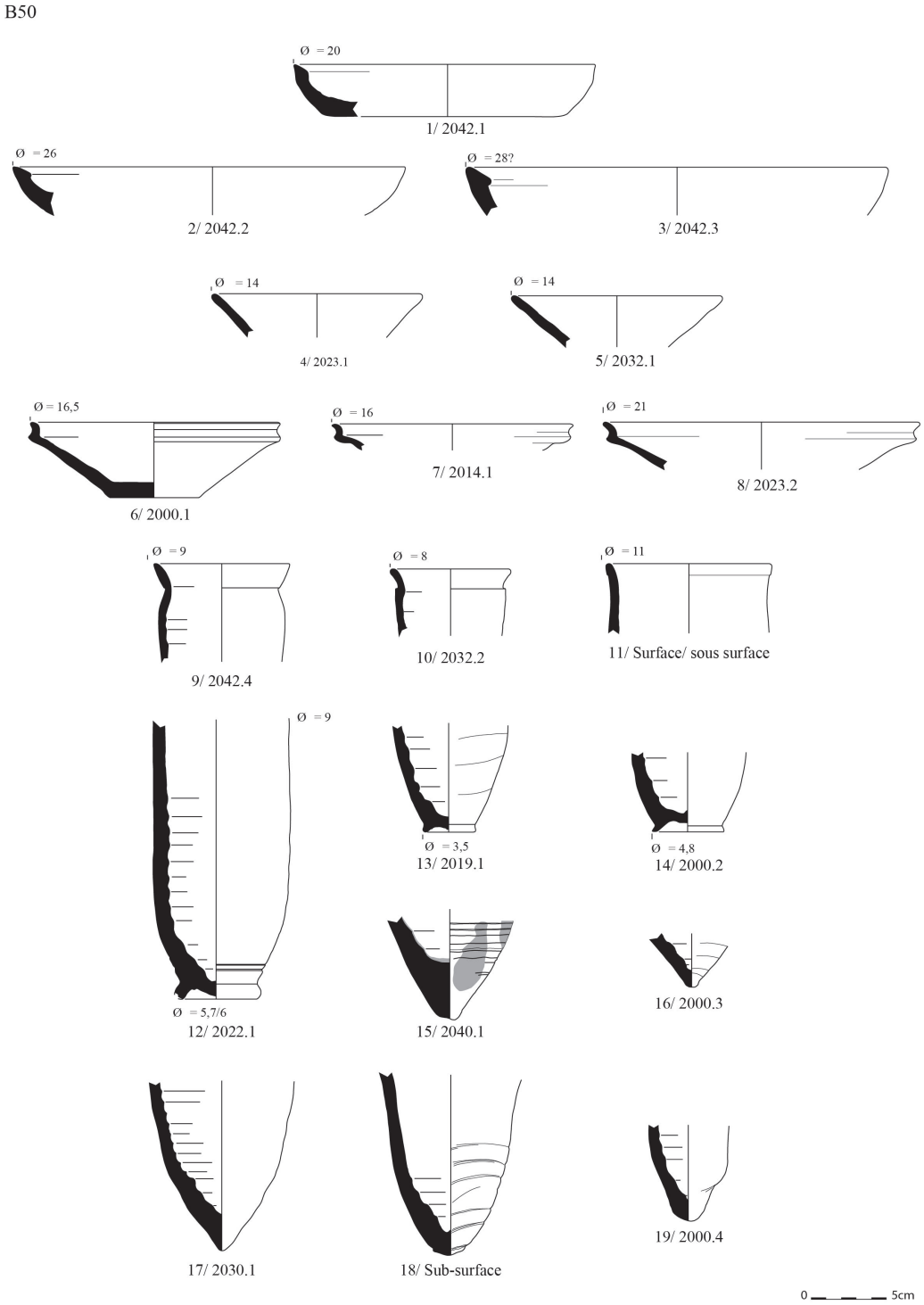

Fig. 24 – The pottery from B50: tableware and drinking vessels.

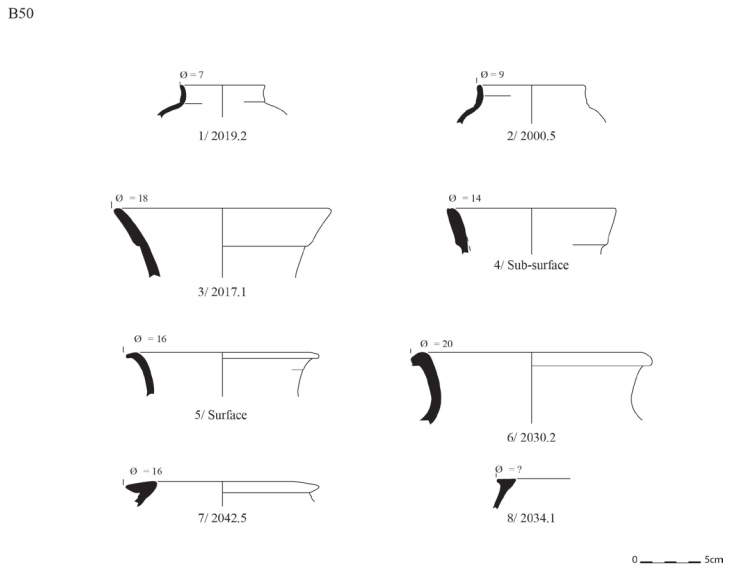

Fig. 25 – The pottery from B50: closed shapes.

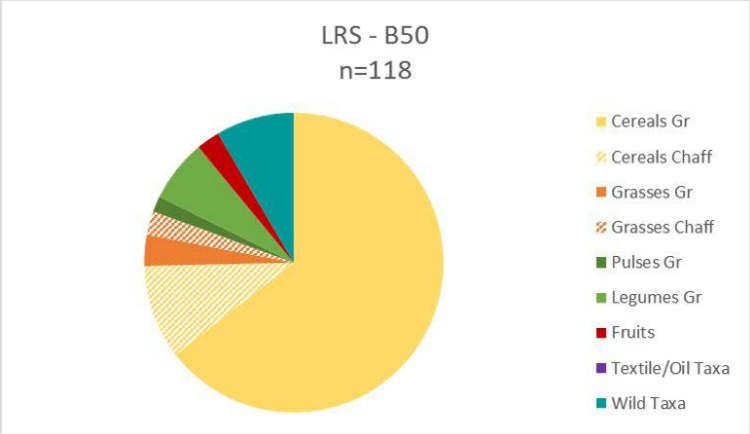

Fig. 26 – Graph presenting the preliminary archaeobotanical results from Larsa, sector B50.

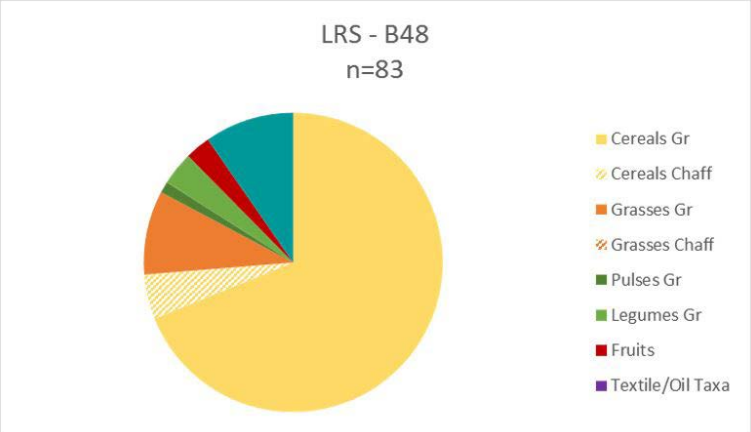

Fig. 27 – Graph presenting the preliminary archaeobotanical results from Larsa, sector B48.

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

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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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التصميم والتنفيذ/ كرم الله شغيت مفتن
التصحيح اللغوي – عربي/ هبه سلمان
تصحيح اللغوي – إنكليزي/ زهور عباس الفتلاوي

ص ب (55009) بغداد
بغداد / جمهورية العراق
الهيأة العامة للآثار والتراث – بغداد
مسجلة بالشركة العامة للاتصالات والبريد برقم (9)
رقم الايداع بدار الكتب والوثائق ببغداد 58 لسنة 2004
رقم الاعتماد في نقابة الصحفيين العراقيين (266)
الرقم الدولي:
ISSN 0081-9271

الهيأة العامة للآثار والتراث

ترسل البحوث والمقالات مطبوعة على نسختين: ورقية وقرص CD بصيغتين (word) و (pdf) الى كلا البريدين الالكترونيين:
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سومر

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المجلد السادس والستون 2020 م

سومر

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تصدرها الهيأة العامة للآثار والتراث- بغداد

المجلد السادس والستون – 2020