

he second campaign of the archaeological mission to Girdi Qala and Logardan (fig. 1) lasted from 25 September to 25 October, 2016, through five weeks of fieldwork. The team, under the responsibility of Régis Vallet (CNRS/University of Paris 1), gathered 17 researchers and engineers from France, Belgium, Italy, Syria and Iraq (by alphabetic order):

Rateb al Debs (archaeologist), Adel Hama Amin (Directorate of Antiquities of Souleymanieh, epigrapher and archaeologist), Johnny Samuele Baldi (IFPO, archaeologist and ceramologist),

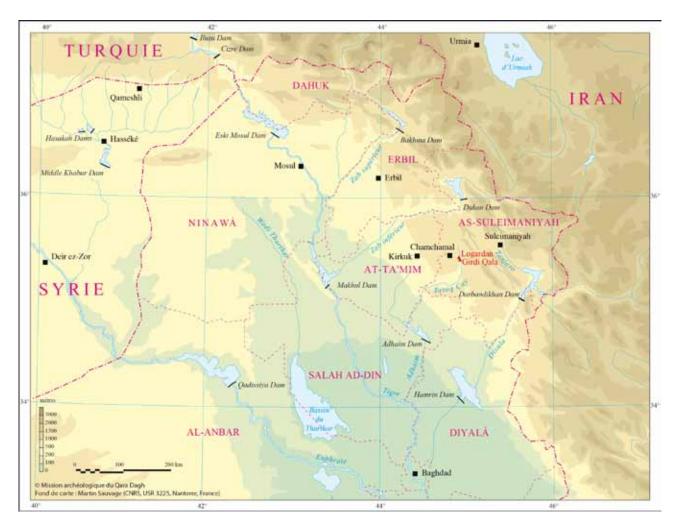


Fig. 1 - Map of Nothern Irak showing the localization of the sites.

Victoria de Casteja (CNRS, database expert), Laurent Colonna d'Istria (University of Liège, epigrapher and archaeologist), Lionel Darras (CNRS, geophysicist), Elise Devidal (drawer), Alisée Devillers (University of Liège, archaeologist), Hawzen Jalaj (Museum of Sulaymaniah, archaeologist), Micheline Kurdy (architect), Hugo Naccaro (University of Paris 1, archaeologist), Clélia Paladre (University of Paris 1, archaeologist), Kamal Rahoof (Directorate of Antiquities of Soulaymaniah, archaeologist), Bahra Salah (Museum of Sulaymaniah, archaeologist), Martin Sauvage (CNRS, archaeologist) and Melania Zingarello (University of Roma La Sapienza/Paris 1, archaeologist and ceramologist) (fig. 2). Mustafa Ahmad (IFPO/



**Fig. 2 -** Part of the team of the 2016 season (from left to right): Régis Vallet, Elise Devidal, Rateb Al-Debs, Bahra Salah, Johhnny Samuele Baldi, Laurent Colonna d'Istria, Alisée Devillers, Mélania Zingarello, Micheline Kurdy, Martin Sauvage, Victoria de Casteja, Clélia Paladre, Hugo Naccaro.

University of Lyon 2, archaeologist and ceramologist) joined us later on for a short study season. The logistic team was composed by Saleh Fatiah (Directorate of Antiquities of Souleymanieh, driver), Hallo Wasie Karim (cook), Faizulla Abdullah Muhammad (driver) and Jamal Jalal Muhammad (sites and storage keeper). The whole team was accommodated in the city of Chamchamal, close to the sites, few kilometers to the south-east (fig. 3).

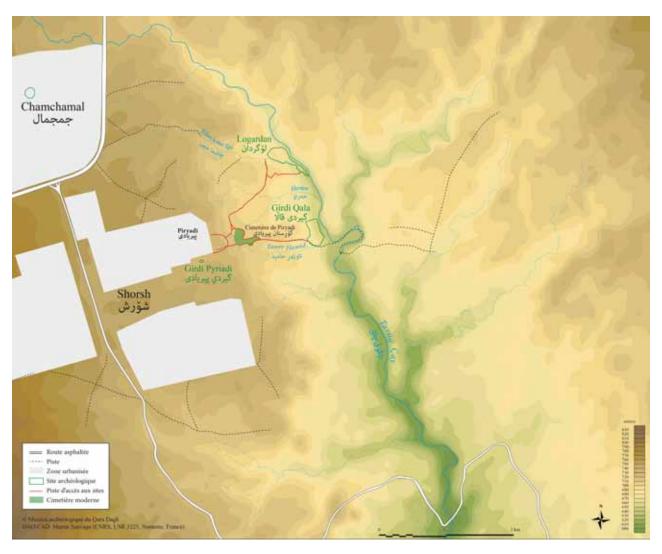


Fig. 3 - Map of the upper Tavuq Cay Valley..

Excavation on the sites of Girdi Qala and Logardan started in fall 2015, after two brief surveys in 2014 and 2015. The scientific purpose of this new project is to study the formation of complex societies, the appearance of territorial polities and long-term intercultural processes. Indeed, despite recent developments (Kopanias and MacGinnis 2016), southern Kurdistan remains poorly documented. The project is more specifically focused on the Chalcolithic, following on from our previous work at both ends of the Fertile Crescent, at Tell el 'Oueili in southern Iraq and Tell Feres in northern Syria, and on the Bronze Age, two periods for which the redefinition of cultures on a regional basis is a major issue¹. The main goal of the first campaigns was to begin to establish the sequence of the sites, by excavating well-preserved in

<sup>1.</sup> For an extensive presentation of the problematics of the project, see our 'scientific proposal'. The project is funded and supported by several institutions. In France, these are mainly the 'Commission des fouilles' (Excavations committee) of the Ministry of Foreign Affairs (MEAE), but also the CNRS, Paris 1 University and the IFPO, and in Belgium the University of Liège. We would like to express our warmest thanks to our Kurdish partners, the DGA in Erbil, above all to Kamal Rasheed and his team at the Directorate of Antiquities of Souleymanieh, whose continuous support was greatly appreciated by all of us. We wish to thank Adel Hama Amin, Kamal Rahoof and Bahra Salah who were precious collaborators at all times. Lastly, we are very grateful to the authorities of Chamchamal and Shorsh for their support, the people of Chamchamal for their friendly welcome and, last but not least, the 15 fine workers that we were able to recruit there.

situ levels. In 2016, at both sites, after a geophysics and archaeological survey, we opened or reopened two trenches<sup>2</sup>.

At Girdi Qala (fig. 4), at the top of the main mound (15m), we abandoned Trench A that gave inconclusive results to concentrate the work on the long-term stratigraphic objectives of Trench B (L. Colonna d'Istria and A. Devillers). Trench B was enlarged over 50 sq. m and

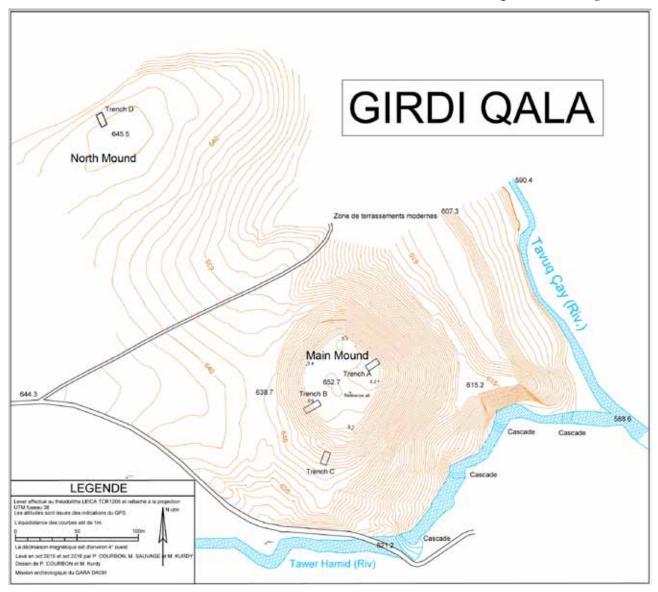


Fig. 4 - Topographical map of Girdi Qala.

excavated to a depth of two meters that delivered six successive Islamic, Sasanian and Hellenistic levels (fig. 5). In particular, Level 5 contained a large mudbrick Sasanian building (with the intrusive tomb of a dog), while the Hellenistic occupation (level 6) dates back to the early phase of the period (late 4th-early 3rd c. BC). The types and fabrics of the pottery indicate that Girdi Qala was an important site in the network of Hellenistic sites in the region (M. Ahmad). The exploration of these late phases of occupation, badly preserved on the peripherry of the high mound but particularly interesting, should continue in the next seasons.

<sup>2.</sup> For a physical description of the sites and their natural settings, see our previous report, Vallet (ed.) 2015.

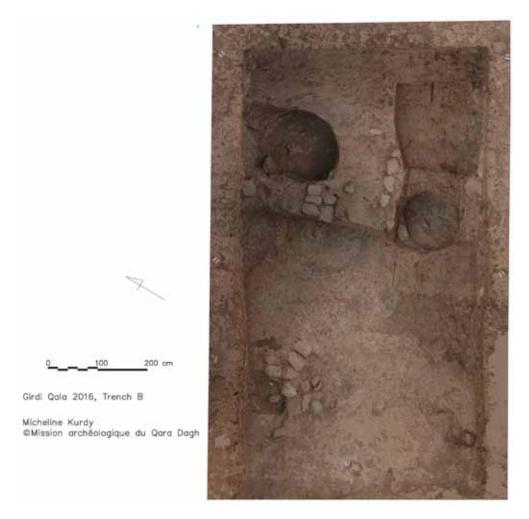


Fig. 5 - Girdi Qala Trench B, orthostatic view, 2016.

At the foot of the Main Mound, we know since 2015 that the southeastern slope was the center of large-scale pottery production during the first half of the fourth millennium BC. The excavation of Trench C had enabled to identify ten well-preserved overlapping layers close to the surface and almost the whole sequence has shown pottery production or firing structures. Although it is likely that the Main Mound of Girdi Qala was an indigenous Late Chalcolithic settlement (LC 2-3) the large majority (70%) of the ceramic assemblage collected in Trench C belongs to South Mesopotamian (Uruk) classical traditions, which shows that Uruk pottery was made on-site by resident craftsmen. Thus, the search for a residential area of the South-Mesopotamian settlers was amongst our main goals, and the settlement located on a secondary North Mound was opened this year.

A comprehensive survey of the site, geophysical (L. Darras and C. Benech) and archaeological (C. Paladre, R. al Debs and A. Hama Amin) was carried out. Its combined results allowed us to identify an Ubaid settlement in the west part of the mound (probably the original village that moved to the main mound during the LC1 period), but also, and more important, the precise limits of an Uruk enclave. It covers the elongated summit and northern slope of this low mound, over less than 1 ha. The geophysical image is very homogenous, and matches perfectly the pottery distribution, but spotted three denser areas, one of which was selected for a first test trench (Trench D), on the north slope of the mound, not far from a (natural?) ramp leading down to the river along the abrupt north flank of the mound.



Fig. 6 - Girdi Qala North Mound, Trench D, from the north.

Trench D (fig. 6) gave five successive levels of middle-Uruk domestic architecture (C. Paladre, R. al Debs, A. H. Amin and R. Vallet), with features such as pottery pipes (level

3, the oldest known of this type<sup>3</sup>, fig. 7) or a carefully pebbled street (level 5), but the sequence continues below. The most significant feature is that any local shapes or wares are virtually absent: the pottery belongs exclusively to Southern Uruk traditions (J. S. Baldi). The domestic areas exposed in Trench D of Girdi Qala northern mound constitute the first evidence of a south-Mesopotamian Middle-Uruk settlement east to the Tigris River and north to the Hamrin basin.



Fig. 7 - Clélia Paladre unblocking the 4th mil. pottery pipes.

<sup>3.</sup> Level 3 produced a C14 dating, consistent with its Middle-Uruk assemblage, see Appendix B.

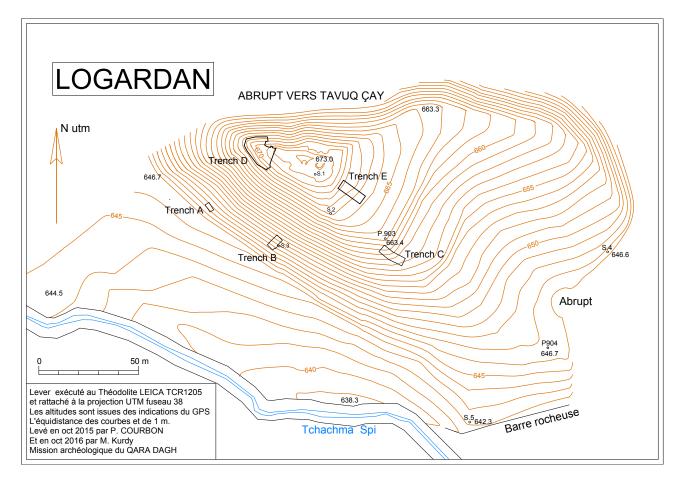


Fig. 8 - Topographical map of Logardan.

At Logardan (fig. 8), the 2015 campaign provided also clear evidences for a very early Uruk presence, with a stone ramp to access the site (Trenches A and B). In 2016, a Trench D opened at the top (30m) excavated on four levels (fig. 9), on a surface of 250 sq. m with a height difference of about 5 m between the surface and the deepest vestiges (J. S. Baldi, H. Naccaro and K. Rahoof). Three Early Bronze Age levels, labeled 1-3 from top to bottom, the last of which divided into three phases (a-c), saw the construction and use of more than 15 pottery kilns, some of them offering a unique perspective on firing technologies that were not documented until now for the 3rd millennium. The pottery assemblage finds the most consistent parallels in the ED IIIb to post-Akkadian phases of the Tigridian Region, with connections with

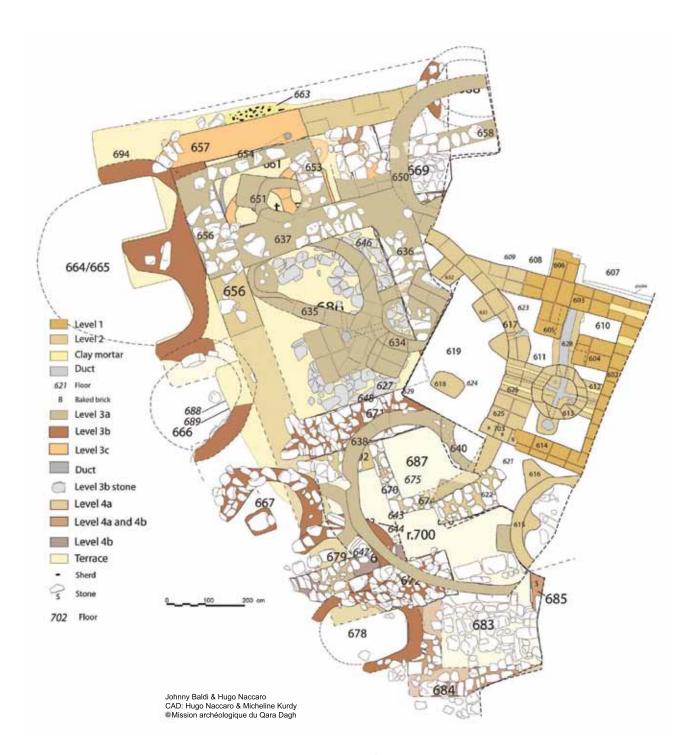


Fig. 9 - Logardan Trench D, composite plan of the successive architectural levels.

the neighboring areas (M. Zingarello). Levels 3a and b provided two C14 dating consistent with their respective assemblage (Appendix B), as well as a cylinder-seal of an Akkad imperial official (C. Paladre), for we know that the site was not restricted to industrial activities (Trench E). The earlier ceramic workshop area was built through Level 4 building, whose ruins were reused and partly adapted: a monumental Early Uruk public building, provided with massive stone foundations resting upon a recessed mudbrick terrace (fig. 10). Moreover, unlike Trench C at Girdi Qala, where a local LC2 tradition was also documented, Level 4 of Logardan Trench D yielded exclusively south-Mesopotamian-related shapes (J. S. Baldi).



Fig. 10 - Logardan Trench D, orthostatic view.

The presence of such early and massive architectures in central-northern Mesopotamia is an unexpected discovery. For the moment, it has no parallel north of Tell Uqair.

In order to obtain more information on the Bronze Age occupation of the site, we launched another operation, on the upper terrace, right next to the hilltop. The survey (M. Sauvage, M. Zingarello and B. Salah) has indicated a probable occupation of the Halaf and Ubaid periods in the northern part of the terrace (and a possible Uruk occupation at the junction of the upper and the median terraces), but the entire central part of the terrace appeared to have been lastly occupied by Bronze Age structures. It was therefore decided to lay a NW/SE Trench E ( $10 \times 5m$ ) from the 'citadel' to a building identified by the geomagnetic survey. Trench E (M.

Sauvage, M. Zingarello and B. Salah) encountered five successive Early Bronze Age levels, at the foot of the retaining wall of the 3rd millennium 'citadel', a massive mudbrick structure with a stone basement and a passageway provided with a set of steps made of rammed earth.

A street, littered with material, accessed it. At the SE of the trench, the corner of a storage yielded seven jars (and three smaller pots), under the remains of the collapsed earthen roof that sealed the room (fig. 11). Several jars have a characteristic appliqué motive of 'snakes', ED III to late third millennium in date (M. Zingarello), but the area disclosed also some Late Bronze Age material whose context is still unclear due to the limited stretch of the excavation (possibly from late pits). However, since Trench C we know that the upper part of the site was occupied and fortified in the Late Bronze age (Vallet ed. 2015).

Therefore, the four trenches conducted in 2016 have produced interesting results and shall be continued and extended next year. The most unexpected discoveries concern the Uruk presence that the excavations are just starting to reveal. Despite longstanding assumptions that the Uruk expansion began during the late LC3 phase, it is now clear



**Fig. 11** - Logardan Trench E, the storage room in excavation, from left to right: Bahra Salah, Mélania Zingarello and Martin Sauvage.

in the Qara Dagh area that contact with Southern Uruk people occurred from a very early period (late LC2). In terms of absolute chronology, the Uruk expansion at Girdi Qala and Logardan does not appear ca 3600 BC, but rather ca 3900 BC. Incidentally, the Qara Dagh seems to represent the limit of this expansion in the late LC2, as there is not (yet) evidence of a Southern Uruk manifestation east of this range before the LC3. Girdi Qala and Logardan have already provided and should continue to provide in coming years startling new archaeological evidence, re-opening the debate on the Uruk expansion and interactions between Southern and Northern Mesopotamia.