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The New Spanish-Italian Expedition to the EB I site of Jebel al-Mutawwaq, Middle Wadi az- Zarqa, Jordan: Preliminary Results of the 2012–2013 Campaigns

The paper summarizes the main results of the 2012–2013 Spanish-Italian archaeological excavations to the site of Jebel al-Mutawwaq, located on the top of a mountain along the Middle Wadi az-Zarqa, Jordan. The site is characterized by an Early Bronze Age I settlement of about 13 hectares and by a large dolmen field.

1. Introduction to the Site¹

Jebel al-Mutawwaq is a site located on the Middle Wadi Zarqa, 11 km South from Jerash, at the confluence between Wadi az-Zarqa and Wadi Hmeid, near the spring of Qreisan, actually in the modern village of Quneye. It was first surveyed by Hanbury-Tenison (1986; 1989a), which first identify, along the southern cliff of the mountain, a village of the beginning of the Early Bronze Age of about 13 hectares encircled by a stone settlement wall and characterized by houses of apsidal shape.² He noted also the presence of hundreds of dolmens around the village and scattered all over the mountain. From 1989, for more than twenty years the site was excavated by a Spanish mission leaded by the late professor Juan Antonio Fernandez-Tresguerres Velasco. Two main important discoveries were done by Tresguerres excavating the village of Mutawwaq.

¹ By Andrea Polcaro, Juan Muñiz, Valentín Alvarez.
² The problem about the terminology of the EB I house architecture was deeply investigated by E. Braun (1989).
First, he excavated about 5% of the 300 houses, identifying the principal architectonical features of domestic buildings: the east-west orientation following the slope of the mountain, the entrance made of megalithic stones, the hearth of the house located on one limit.

The second main discovery was a cultic complex denominated «Temple of the Serpents». The main building of the sanctuary is House 76. Inside this complex cultic vessels decorated with snakes, similar to that discovered in later Early Bronze Age II–III sites like Khirbet ez-Zeraqon or Khirbet al-Batrawy were also discovered in the main building. Also flint blades and tubular scrapers was discovered in the minor House 75 and in the small rooms near altar probably used for animal sacrifices and for processing the food, perhaps during important festivities of the community (see Fernandez-Tresguerres 2008 and Polcaro et al. 2014). All the pottery recovered by Fernandez-Tresguerres was assimilated to the first part of the Early Bronze Age, and in different articles he spoke about the similarities with some Ghassulian vessels, enforcing the hypothesis of dating the village to the EB IA (see Fernandez-Tresguerres 2005). The only C14 data available from the House 76 in the cultic complex point to a period between the 3300 and the 3200 BC. The Spanish excavation stops in 2011 after the death of Fernandez-Tresguerres.

2. The New Campaigns of Excavations

In 2012 the Perugia University, together with the Pontificia Facultad San Esteban of Salamanca, restarted a Spanish-Italian archeological excavation to this site, now co-directed between Juan Muñiz and Andrea Polcaro. In the 2012–2013 campaigns six dolmens located in the area of the megalithic necropolis were excavated (fig. 1), just outside the eastern village border (Area B). Another area along the eastern side of the settlement wall was opened, near the southeastern door of the village, leading to the necropolis (Area A).

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3 Only for 182 houses it was possible to recognize the plan; the Spanish expedition recognized three main sector in which the settlement was divided along the East-West axis: The Western Sector, with 84 houses, the Central Sector, with 71 houses and the Eastern Sector, with 22 houses (see Muñiz et al. 2013).
4 The houses have the base of the walls made of large stone blocks, located directly on the bedrock (see Muñiz et al. 2013).
6 C14 analysis was performed on animal bones discovered inside a pit in the northern part of the sacred building. The results are 5290–5040 BP = 3340–3090 B.C.E. (Beta Analytic 194526) and 5270–5170 BP = 3320–3220 B.C.E. (Beta Analytic 194527).
7 By Andrea Polcaro, Juan Muñiz.
The first objective of the excavations was to clarify the chronological relationship between the sectors of the EB I village, the stone settlement wall, the Temple of the Serpents and the dolmen field. In the 2012 excavation campaign, a first result concerning the original aspect and the construction technique of the megalithic structures was achieved. Looking at the hundred of dolmens it seems that they did not have originally any covering tumulus, but only circle of stones, sometime called «fence». However, the archaeological sections of the first dolmens excavated, nos. 228, 232 and 318, proved that there was in origin a stone layer filling the space between the external stone circle and the lateral slabs of the dolmen (fig. 2). The circular stone fence was thus the retaining wall of a tumulus, originally covering all the structure till the covering slab, the last stone posed (Alvarez et al. i. p.). The 2013 excavation to two well preserved dolmens, dolmen no. 317 and dolmen no. 321, definitively proved this interpretation (fig. 3). These two dolmens were recovered perfectly intact with the tumulus covering all the structure till the capstone. Looking at dolmen no. 317 it is clear that there was a typical shape of the retaining wall, with the left wall straight and the right wall curve, assuming an apsidal shape perhaps functional to the erection of the covering tumulus (Polcaro et al. 2014).

This kind of feature was observed in many other dolmen fields in Jordan (see Polcaro 2013).
The excavations of the six dolmens in these two first campaigns identified also a difference in the entrance architecture of the megalithic tombs: some of them had in fact a *dromos* entrance, obtained with three steps made of large flat stones (Polcaro et al. 2014: fig. 11). These feature seems to be not related to the dimension of the dolmens, but to their topographical position, in particular when the structure, oriented toward north, was built between two different levels, following the natural slope of the bedrock.

A second result achieved in the 2013 excavation campaign concerns the connection of the dolmen field with the settlement. In Area A (fig. 4a), between the eastern wall of the village and the nearby dolmen area, a street was discovered clearly in connection with a south-eastern door of the EB I settlement (fig. 4b). This street, called L. 5, was made of two lines of large stones and a filling inner layer of pebbles and compact earth. It connected the eastern sector of the village with the necropolis, as it is shown by the other part of the same street, called here L. 21, discovered in Area B in stratigraphical connection with some of the excavated dolmens (Polcaro et al. 2014: figs. 8–9). In fact, the excavation of Area B had shown that first, connected with the southern dolmen no. 316, there was the street L. 21, than dolmen no. 317 was built in a crossroad between L. 21 and another street running from south...
to north, called L. 22, and finally dolmen no. 321 was erected cutting the street L. 21, clearly no more in use. This indicates perhaps the continuity of the use of the necropolis also after the abandonment of the village. In particular, the construction of the last dolmen, suggests that the stratigraphy of the relationship between the necropolis and the village could be more complicated and that in the long period of the Early Bronze Age I there were different phases of use of the dolmens by the permanent settlers of the village and the seasonal shepherds, occasionally using the same area.

The investigation of Area A was useful also to achieve another objective, the better understanding of the nature of the settlement wall. The preparation of the wall construction was obtained by leveling the natural slope of the bedrock with layers of small stone and pebbles. Then large flat stones were posed vertically one against the other above the foundation, apparently without any kind of superimposing structure (fig. 5). The high of the wall did not reach probably more than 1.50 meter and in the south-eastern corner of the fence there are no signs of towers or defensive features. It is thus possible that the settlement wall had no military function⁹, but could had an ideological meaning of separate the land of the living

from the land of the dead. Comparing the part of the settlement wall excavated in Area A with the other portions of the same wall excavated by the past Spanish expeditions in the southern and western borders of the settlement, it is possible to affirm that the fence was built with different method of construction. In particular in the southern sector, running along the southern cliff of the mountain, the settlement wall was built in its upper part with more squared regular stone blocks, similar to the foundation of the houses walls (Muñiz/Polcaro/Alvarez 2013). The south-eastern door of the settlement wall discovered in 2013 excavations is similar to the other doors yet identified along the other sectors of the fence,
built with two large stone slabs, about one meter wide. Furthermore, during the first survey of the EB I village, Hanbury-Tenison (1989a: fig. 4) discovered a larger door, called the Southern Gate, not related to a private building of the village but to another wall separating the eastern sector of the village from the central one. In fact, this door was located inside the eastern part of the settlement, about 130 m from the southern door identified in 2013, and it is possible to identify an inner path between the two gates of the village. The presence of inner divisions and the difference in the construction technique of the eastern and southern part of the settlement wall suggest that this fence was built in several chronological phases, perhaps following the expansion of the Early Bronze Age I village.

The third important result achieved concerns the function of the dolmens that, in Jebel al-Mutawwaq, were surely used as tombs: compared with the houses identified in the settlement, the large number of megalithic monuments suggests that dolmens were used for the same purpose not only by the population of the nearby village, but also by the entire population of the countryside. The inner stratigraphy of the megalithic chamber of all the excavated dolmens since now (nos. 228, 232, 318, 316, 317, 321) presents layers of stone and earth filling completely the burial space. This layers represent the last sealing phase of the structure. In this upper layers just few EB I pottery sherds and some flints were recovered, but in the deeper layer, directly above the floor slab, small fragments of human bones like teeth, finger bones and ribs were recovered in all the dolmen excavated. This indicates that originally the dead were deposed, decomposed and rearranged inside the burial chamber. Then, at the end of the use of the dolmen, all the most important human remains, like the long bones and the skulls, were removed together with the funerary gifts. Finally, the burial chamber was sealed forever with layers of stones and earth.

Fig. 5. East-West section of Area A: in the center is visible the North-South (W. 2) and the East-West (W. 7) parts of the settlement wall.
Furthermore, the final prove comes in the 2013 campaign with the discovery of an entire burial (denominated B. 25) left inside dolmen no. 317 (Polcaro et al. 2014: fig. 17). The burial was hidden in the lower layer excavated inside the burial chamber of the dolmen through a flat stone separating the lower part of the burial chamber. Inside this lower layer, Stratum 51, an entire human skeleton was found (Polcaro et al. 2014: fig. 12). The bones of the burial, after the decomposition of the body, were re-arranged inside the chamber. Another concentration of fragmentary human bones (denominated B. 26), belonging to at least other five people, was discovered pushed on the back of the chamber (Polcaro et al. 2014: fig. 13). These burials were deposed in dolmen no. 317 and then their skulls and long bones were moved in another location: the only dead left in the burial chamber was burial B. 25. No vessels have been found with this burial, but just two objects has been discovered in 2013: two flat flint scrapers, with double blade and the cortex visible on one side, recalling the so-called fan scrapers typical of the Late Chalcolithic and Early Bronze Age periods.\footnote{Objects very similar to these two finds were recovered as funerary gifts in cave tombs of the western southern Levant, and in Jordan in the EB II–III temples (see Polcaro et al. 2014: figs. 14–15).}

Also in the Temple of the Serpents similar flint tools were recovered in House 75 near an altar (Polcaro et al. 2014: fig. 6). This indicates that these objects were perhaps used in ritual context, probably for butchering or working animal skins. The anthropological analysis made on the bones of burial B. 25, showed that he had very good health condition, no disease, a balanced alimentation and no muscular stress, for an age of 30–40 years (Polcaro et al. 2014). Moreover, a particular feature was observed on the skull: on the left parietal, in the ectocranial side, a hole is visible with triangular section, ending in a small hole in the endocranial side of the skull (Polcaro et al. 2014: fig. 18). Due to the absence of the cranial bone growth around it, the wound could be interpreted as perimortem or postmortem. We are carrying out further analysis on the skull of B. 25, in order to find a flint object or weapon consistent with the hole in the cranium.

3. The Pottery of Jebel al-Mutawwaq\footnote{By Andrea Polcaro, Juan Muñiz.}

In April 2014, we start to study and drawing all the pottery coming from the past excavations of the Oviedo expedition to the Temple of Serpents and still unpublished. We starts with ten pottery boxes coming from House 76 and in the future campaigns we will continue to study the other pottery materials coming from the other structures of the sacred area. It is now possible to compare provisionally the pottery coming from the necropolis with the ones coming from the village and from the sanctuary: the pottery of Jebel al-Mutawwaq is
generally rough, low fired, hand made, with red-orange paste. In the necropolis we found just red slip as surface treatment but in Area A inside the village and in the temple area also a heavy whitish slip was recovered on some sherds. Only in the temple we registered painted red decoration on the surface of some vessels, mostly wave lines or parallel vertical
lines (fig. 6.1). Incised or impressed decoration and applied roped decoration are common in all the contexts (fig. 6.2–3). Just in the temple area also a lot of sherds presenting applied knobs of different shapes have been recovered (fig. 6.4). Also typical of the temple area are decorations of snakes applied to the neck and the body of the vessel, and pointed band impressed decoration in parallel vertical lines, recovered on spouted bowls and hole-mouth jars (fig. 6.5–6).

The most common pottery shape in the village and in the temple is hole-mouth jars (fig. 7a), only sporadically discovered in the necropolis. This shape, common in all the Early Bronze Age periods are not chronologically relevant. Concerning the bowls (fig. 7b), the most typical shape is the hemispherical bowl with rounded or pointed rim, recovered in all the areas of investigations. In the temple area bowls, slightly carinated, with everted pointed rim and sometime ring loop handle, are also present. This typology is not present in Area A, but it is present in Area B connected to the dolmens, so it is perhaps linked to a more cultic function. Big storage jars, with ledge handle are common in all the area investigated. In the temple area, as well as in the eastern sector of the village and in the necropolis, the ledge handle are of the simple plain typology, typical of the EB I, without any wavy shape typical of the following EB II–III periods or pushed up ledge handle of the late EB III (fig. 8a). These storage jars have usually everted rims and present often a roped applied decoration on the neck (fig. 8b). Another jar typology is the one with ribbed everted plain rim: also this typology is present just in the temple area and in the necropolis (fig. 8c), but further investigations in Area A in the following campaigns could change this presence. Also this shape could be inserted in the EB I period. Another typology of vessels typical of the EB I are jars with simple flat vertical rim and wide neck, till now recovered just in the temple area. Last typology of vessels recovered in the temple are decorated jugs with loop handles, often painted with red band decorations.

In conclusion all the pottery recovered till now from the village and the necropolis in the shape and in the surface treatment have good parallel with the pottery of the EB I period from Jebel Abu Thawwaq, Jawa and Tell Umm Hammad. The absence of Grey Washed Ware points to ascribe Jebel al-Mutawwaq in the EB I culture of central Transjordan. However, it is not clear yet if the site continued to be used in EB II, even if reduced

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12 See in particular the pottery from Jebel Abu Thawwab (Douglas/Kafafi 2000: 105–108, figs. 6.2, 6.4, 6.5). Some shapes and decorations, like the hole-mouth jars with pushed-up lug handles and pointed impressed decoration are typical from Jawa in the eastern Black Desert to Tell Umm Hammad and were recovered also along the Wadi az-Zarqa valley in EB I sites (see Philip 2008: fig. 6.8:3).
13 The presence of the Grey Burnished Ware is considered a distinctive trait of the EB IA northern culture of Galilee and Western Palestine and, even if present in some sites of Northern Jordan, it is uncommon in the eastern Jordanian highlands and in the southern desert during the same chronological phase (see Philip 2008: 167).
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Further excavation areas inside the village and the necropolis, and further surveys around the mountain will be done to better identify the chronological extension of the site occupation, related to the reuse of the ruins of the village or of isolated dolmens.

4. Further Considerations

The Spanish-Italian excavation at Jebel al-Mutawwaq in 2013 definitively proved that Hanbury-Tenison was wrong affirming the dolmen field and the village are unlike to be contemporary (1989a). The presence of pattern of streets connecting the village and the megalithic monuments proved that, at least for some time, the two areas were connected and

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the large necropolis was used also by the EB I inhabitants of the nearby settlement. Moreover, it is possible to say that the dolmens scattered on the mountain and in particular the ones on the eastern border of the village, were funerary monuments used as family tombs by the Jebel al-Mutawwaq population.

The study of the dolmens architecture and of the typology of these megalithic constructions it is also interesting. The discovery of the presence of a tumulus covering the dolmens connects this kind of tombs in the Southern Levant megalithic funerary tradition: in particular, dolmens appear to be the natural evolution of the Late Chalcolithic cairns and cists attested near Tuleilat al-Ghassul and Bab edh-Dhra. These kind of tombs are considered a funerary costume typical of eastern side of Jordan Valley, as distinctive from the ossuary and cave tombs tradition of the western region of Palestine. In the changed landscape and society of Early Bronze Age I the Chalcolithic underground cist was taken above the soil and in the dolmens the megalithic burial chamber is enlarged and built above the ground. Also the tumulus covering the monument thus assumes a different shape, with the introduction of a **dromos** leading inside the burial chamber. The architectonical changing testifies a different ideology pointing to physically show the presence of the tomb on the landscape and moreover, the enlargement of the megalithic chamber for burials testifies also the transformation of the funerary monument in a family tomb, linking a clan to a landscape in a striking and evident way. The concentrations of dolmen fields in the Southern Levant along the main rivers and lakes could suggest also different scenarios of relationship between the new Early Bronze society and economy with the surrounding water landscape; further excavations and surveys must delineate also this aspect of the EB I megalithic tradition.

**Bibliography**


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