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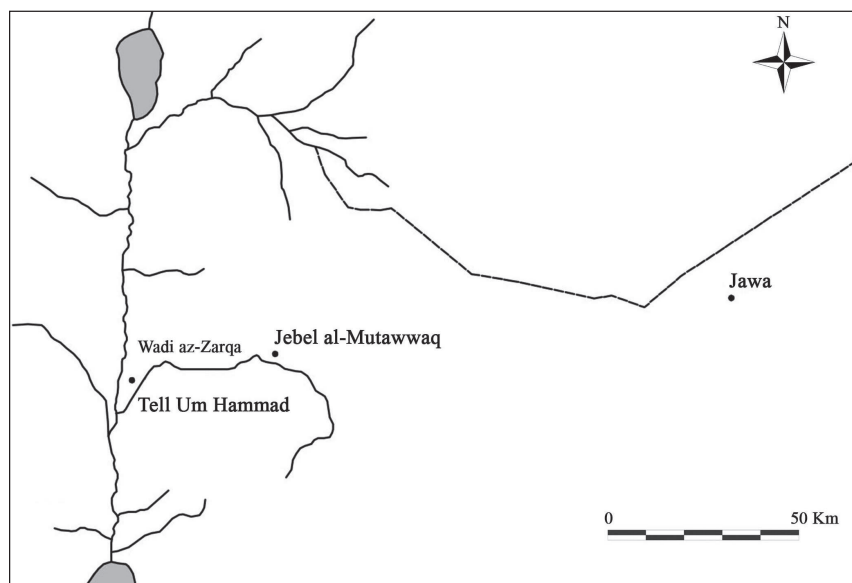
Preliminary Results of the 2014-2015 Excavations Campaigns at the Early Bronze Age I Settlement of Jabal al-Muṭawwaq, Middle Wādī az-Zarqā', Area C

Introduction

Jabal al-Muṭawwaq is an Early Bronze Age I site located along the Middle Wādī az-Zarqā' Valley, between the confluence of the Zarqa River with Wādī Ḥumayd (FIG. 1). It is characterized by a strategical location, looking

toward the river valley and close to two springs, one of that, the Khuraysān Spring, still being the main source of fresh water for local villages, like al-Qunayyah.

The site, first surveyed by J.W. Hanbury-Tenison², then excavated by the expedition of



1. Location of Jabal al-Muṭawwaq, along the Wādī az-Zarqā' Valley.

1. The co-directors of the Spanish-Italian Archaeological Expedition to Jabal al-Muṭawwaq, Juan Ramon Muñiz and Andrea Polcaro, warmly thank all the students and colleagues from Italian and Spanish universities that have participated at the last five excavation campaigns, and all the friends of al-Qunayyah and of the Wādī az-Zarqā', workers and colleagues of local universities and of the Department of Antiquities of Jordan involved in different levels in the

Jabal al-Muṭawwaq expedition and in the Khuraysān Spring Project. This kind of collaboration between foreign and local institutions is so much important in Jabal al-Muṭawwaq, in order to protect an impressive archaeological site that in the last decades has suffered systematic destruction of the village and the megalithic necropolis.

2. Hanbury-Tenison 1986, 1989.

Oviedo University directed by Juan Antonio Fernández-Tresguerres Velasco since 1989 till 2011³, is from 2012 object of a joint Spanish-Italian archaeological expedition of the Facultad San Esteban of Salamanca and of Perugia University. The Early Bronze Age I settlement is well known for the main temple located in the center of the village⁴, denominated the Temple of the Serpents for the presence of large jars with serpents applied decoration, recovered by the first Spanish expedition in the inner rooms of the sanctuary⁵. Moreover, the site had other important peculiarities, such as the stone fence enclosing all the area of the village, investigated in different areas, first by Fernández-Tresguerres and then by the Spanish-Italian archaeological expedition in Area A. The settlement wall did not have a defensive purpose, at least on its eastern side, but it was certainly a division between the space of the living and the space of the dead⁶. A megalithic necropolis, mostly contemporaneous to the village with hundreds of dolmens still preserved, in fact surrounds the settlement⁷. Moreover, the excavation at the eastern side of the settlement wall had recovered only sherds and materials dated to the Early Bronze Age IA, without any typical pottery shape or decoration indicative of the Early Bronze Age IB-II⁸, the period during which the so-called walled settlement system started to appear in the Southern Levant⁹.

The Excavations in Area C

Since 2014 the Spanish-Italian archaeological expedition started the excavation of Area C, located at the eastern side of the central sector of the Early Bronze Age I village (FIG. 2). This area, characterized by the presence of some structures, larger and different in shape from the usual double-apsidal dwellings of Jabal al-Muṭawwaq, is located east from the temple area. The central sector of the EB IA village is separated from the eastern one by an inner wall (not completely preserved), along which a huge door delimited by two high stone jambs was first discovered by Hanbury Tenison. This inner gate between the two sectors, called “the Hanbury-Tenison Door” (FIG. 3), gives access to Area C from the eastern side, being the ending point of a street (L. 5) coming directly from the eastern door of the settlement wall opened toward the necropolis (Area B)¹⁰. In front of this entrance (1.40 m wide)¹¹, there is an open space looking the eastern side of a large semi-circular structure denominated Great Enclosure. To the west, in the center of the Area C, we discovered between 2014 and 2015 other two buildings (Building 131 and Building C), separated by an open rectangular courtyard (L. 51). Continuing to the west of the area, toward the western sector of the village and the Temple of the Serpents, a series of dwellings with the typical double apsidal plan of Jabal al-

3. Fernández-Tresguerres 1999, 2005a. See for a reassessment of the Spanish excavations: Muñiz *et al.* 2014: 63-72; Muñiz and Polcaro 2016.

4. The building is the only one of Jabal al-Muṭawwaq where it was possible to collect samples useful to perform two C14 analysis, that produced 5290-5040 BP = 3340-3090 BC (Beta-194526) and 5270-5170 BP = 3320-3220 BC (Beta-194527): see Fernández-Tresguerres 2008a: 49.

5. Fernández-Tresguerres 2005b, 2008b.

6. The doors identified on the settlement wall are simple, without defensive system like posterns and complex gates (Polcaro, Muñiz and Alvarez 2016; Polcaro *et al.* 2014; Fernández-Tresguerres 2008a: 40). Thus, the settlement wall of Jabal al-Muṭawwaq, at least on its eastern and southern sides, seems very different from the almost contemporary fortification systems of Jāwā, that shows at least a main complex gate in Area G (Helms 1991: 34-35) or the Early Bronze Age IB fortifications with rectangular towers and bent-gates, like Tall al-Ḥandaqūq North (Mabry 1995: 123-124). The hypothesis of two circular towers on the western side of the Early Bronze Age IA Jabal al-Muṭawwaq settlement wall (Nicolle

2012) is doubtful, because extended excavations have not been yet performed in that area and actually stratified materials in context from these structures are lacking.

7. The Spanish-Italian Archaeological Expedition to Jabal al-Muṭawwaq performed two campaigns of excavation in the eastern sector of the necropolis, investigating six dolmens between 2012 and 2013 (Alvarez, Muñiz and Polcaro 2013, Muñiz, Alvarez, and Polcaro 2013; Polcaro *et al.* 2014, Polcaro, Muñiz and Alvarez 2016).

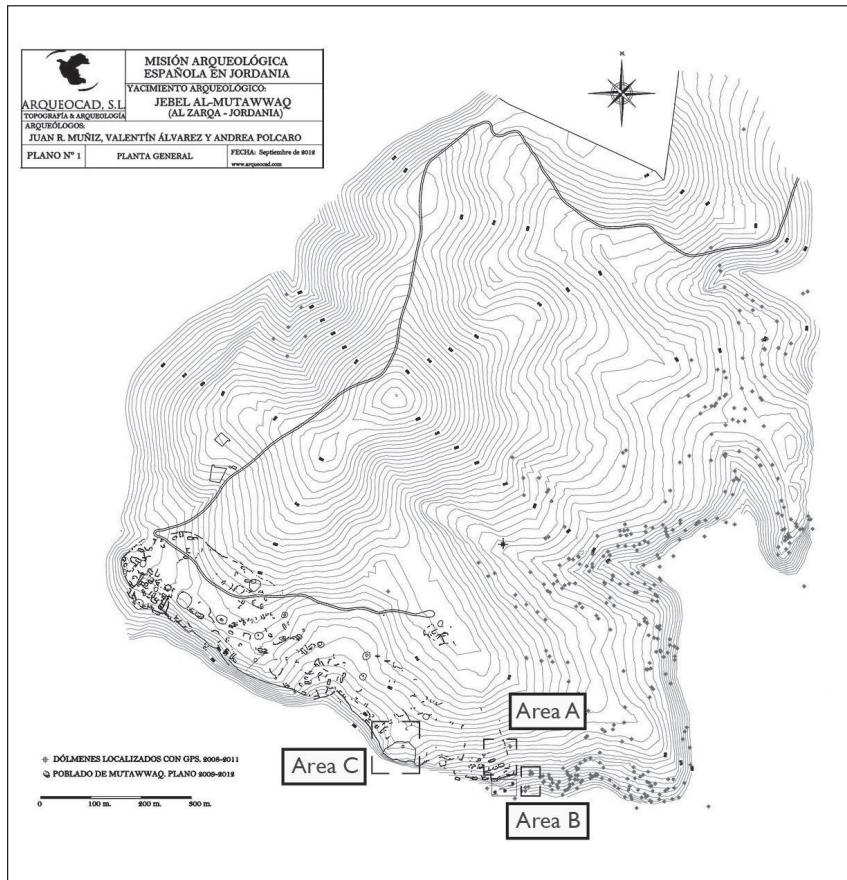
8. Polcaro *et al.* 2014. Pottery dated to the EB IB - EB II have been recovered till now only in few dolmens built inside the settlement after its abandonment (Polcaro, Muñiz *in press*). About the date of the Jabal al-Muṭawwaq pottery from Area A and B see also: Casadei *in press*.

9. See about a landscape approach Philip 2003.

10. Polcaro, Muñiz and Alvarez 2016: fig. 4.

11. This door is larger than the normal doors of the double apsidal houses of Jabal al-Muṭawwaq, usually between 0.75m and 0.80m (Muñiz, Polcaro and Alvarez 2013: 85).

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2. Topographical plan of Jabal al-Muṭawwaq, with the indication of the excavation areas of the Spanish-Italian Archaeological Expedition from 2012 to 2016.



3. The Hanbury-Tenson door, from East.

Muṭawwaq are visible on the surface. From the number of houses¹², this area had a high density of population.

Building C and the Open Courtyard L. 51

Excavations begin in 2014 on the western

part the Area C, in order to investigate the large courtyard of about 150 square meters, L. 51 (FIG. 4), opened between two buildings oriented north-south, delimited by long walls made of a single row of stones¹³. On the western part of the courtyard, close to the door of the first building still un-excavated (Building C), a large semi-circular platform, I. 57, built with large stone blocks, was discovered (FIG. 5). This platform was built against the two still standing stone jambs of the door of Building C, directly above the bedrock, representing the floor of the courtyard L. 51, just leveled where there were difference in altitude with a compact layer of earth and small stones. This platform is still un-compared in the site of Jabal al-Muṭawwaq and no other similar structures have never been identified in the private dwelling of the site. It is difficult at the present state of art to advance

12. In this sector, the past Spanish archaeological expeditions identified 71 houses (Muñiz, Polcaro and Alvarez 2013: 83).

13. This size of this courtyard is average compared to the courtyards

of the private dwellings that are between 100 and 200 square meters (Fernández-Tresguerres 2008a: 41).

a hypothesis about its function¹⁴.

North of the semicircular platform, close to the northern border of Courtyard L. 51, the natural bedrock rise in elevation; here the rock was carved in order to obtain small circular installations (I. 65 and I. 66), in which we found almost complete large storage jars (FIG. 6). Moreover, in the installation I. 65 the base of a jar was found *in situ* directly above the bedrock¹⁵, testifying the use of the natural rock as the main surface of the courtyard. Thus, it seems that at least this part of the open courtyard was used as a storage area. This interpretation is supported by the analysis of the pottery sherds collected in Courtyard L. 51. In fact, the pottery recovered in the whole courtyard, dated to the Early Bronze Age I, is hand-made, with the typical red-orange fabric of the Jabal al-Muṭawwaq, with many examples of applied rope decoration with circular impressions on the body. The most frequent shapes are jugs and jars with vertical or slightly everted neck and simple rims and hole mouth jar with knobs and small circular impressions that finds comparison with those of EB IA Tall Umm Ḥamid and Jāwā¹⁶; Simple Ware is almost completely absent, with a great percentage of Storage Ware pottery (FIG. 7).

Concerning the flints, a small group of lithic tools, four small scrapers (FIG. 8: 1-4) and four blades (FIG. 8: 5-8), were discovered in the southern part of the courtyard, perhaps indicating the use of the area also for some working activities; between them also a Neolithic Jericho-Type point (PPNB), clearly out of context, has been discovered (FIGS. 8, 9)¹⁷.

14. Circular stone platforms and installations located in courtyards are usually interpreted as open air altars in the Early Bronze Age II archaeological contexts in Jordan: see *e.g.* Bāb adh-Dhrā' (Rast, Schaub 2003: 157-166, fig. 10.57) and Khirbat al-Batrawy (Nigro 2013: figs. 4-5). Nevertheless, usually these features are located at some meters from the main broad room building (the *sancta sanctorum* of the temple) and not placed against its wall. Moreover, Building C seems different in plan from the other only cultic building discovered at Jabal al-Muṭawwaq, such as the Temple of the Serpents. 15. Noteworthy is the presence of reed impressions on the base of the large storage jar recovered *in situ* in the northern I. 65 installation. This technique is largely attested also in Chalcolithic contexts, such as Tulaylāt al-Ghassūl, but is quite common also in Jabal al-Muṭawwaq, in particular in some examples from the Temple of the Serpents, testifying the persistency of older pottery manufacture in

Building 131 and the Area Dedicated to the Food Production

In the eastern part of the courtyard the second building of Area C, Building 131, was completely excavated in 2015, recognizing at least two phases of use of the structure. In Phase I (FIG. 9), the building has an apsidal shape, larger than Building C, a main door opened on the western side toward courtyard L. 51 (FIG. 10)¹⁸, with the door socket found in place, and probably another opposite entrance on the eastern side, not easy to recognize due to the bad state of preservation of the eastern wall in this area. As in Courtyard L. 51, the floor of the Building was the natural bedrock, in this point naturally well leveled. Close to the southern wall of Building 131, two large circular installations, I. 158 and I. 159, were identified. The presence in this point of a deep cup-mark, if interpreted as the base for a wooden pillar, could indicate that at least the southern area of the building was roofed. The two installations, 1.8 m of diameter and 20 cm height, are stone lined and filled with leveled layers of small white rubbles (FIG. 11). The installations occupied almost completely the southern part of the building, clearly with some purpose of production, and there are no parallels of such installations in the whole private houses since now excavated in Jabal al-Muṭawwaq. The two circular installations must have been used for working purpose, possibly for the production of butter, cheese or a product from sheep's milk. This indicates that Building 131 in Phase I could had have not a domestic purpose, but

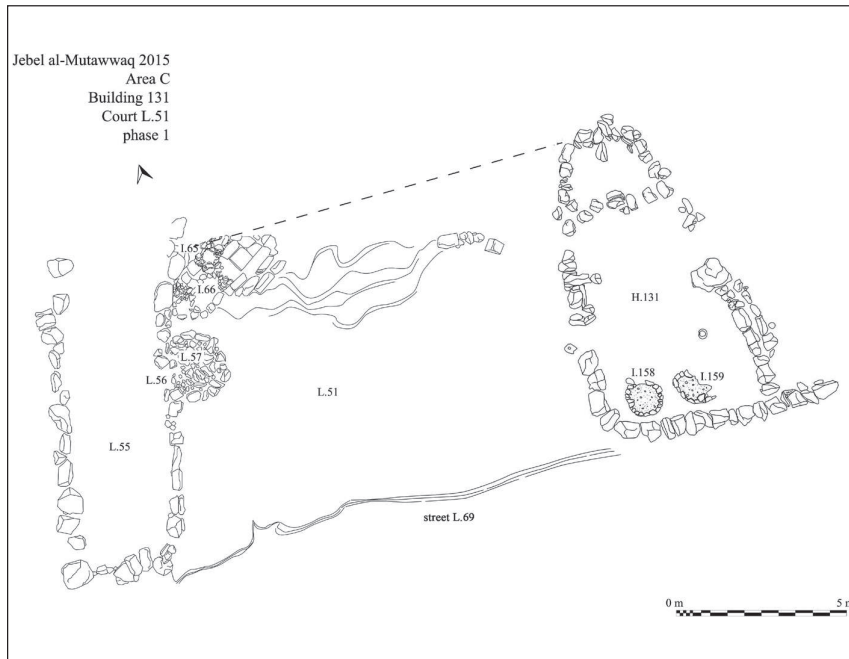
the site (see Casadei *in press*; Polcaro, Muñiz and Alvarez 2016: 1640-1643).

16. Helms 1991: 51-55, 1992: 45-68.

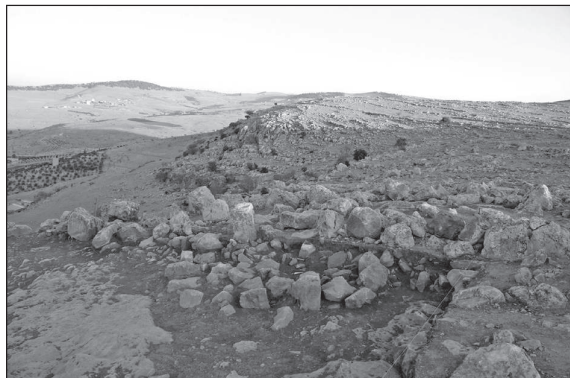
17. See for comparisons: Gopher 1994: 36; Kujt and Goring-Morris 2002: fig. 11a. The presence of a PPNB point in an archaeological context clearly dated from the pottery sherds, architecture and stratigraphy to the Early Bronze Age I is very interesting. It could suggest the decision of the people of al-Muṭawwaq to keep an ancient object, perhaps recovered along the valley of the Wādī az-Zarqā' at the base of the mountain, where a Neolithic site, Khuraysān, was discovered (Edwards and Thorpe 1986) and it is actually under excavation by a Spanish expedition (see Ibañez *et al.* 2016).

18. The main western door of Building 131 is larger than the usual door of the houses of Jabal al-Muṭawwaq, reaching 1.5m wide.

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4. Jabal al-Muṭawwaq, plan of Area C.



5. The circular platform L. 57 of Building C, from East.

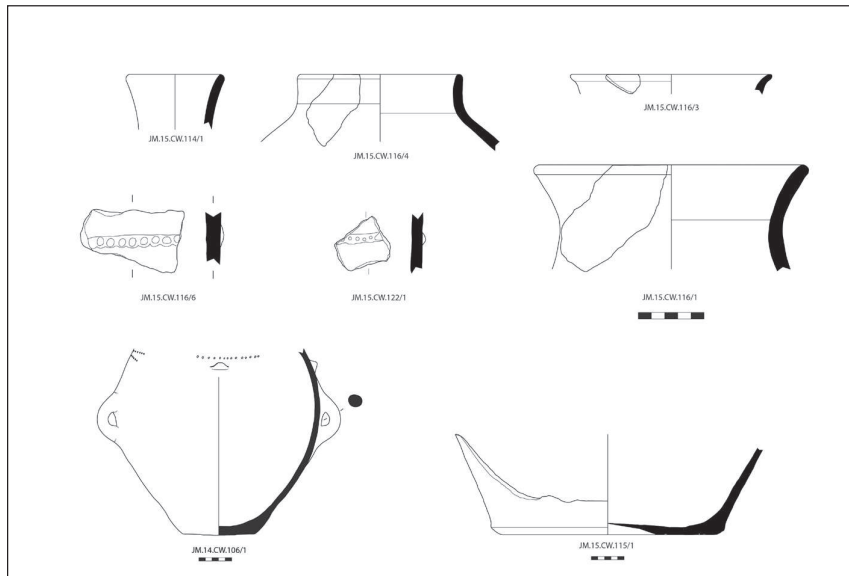


6. The small installation I. 66 in L. 51, from East.

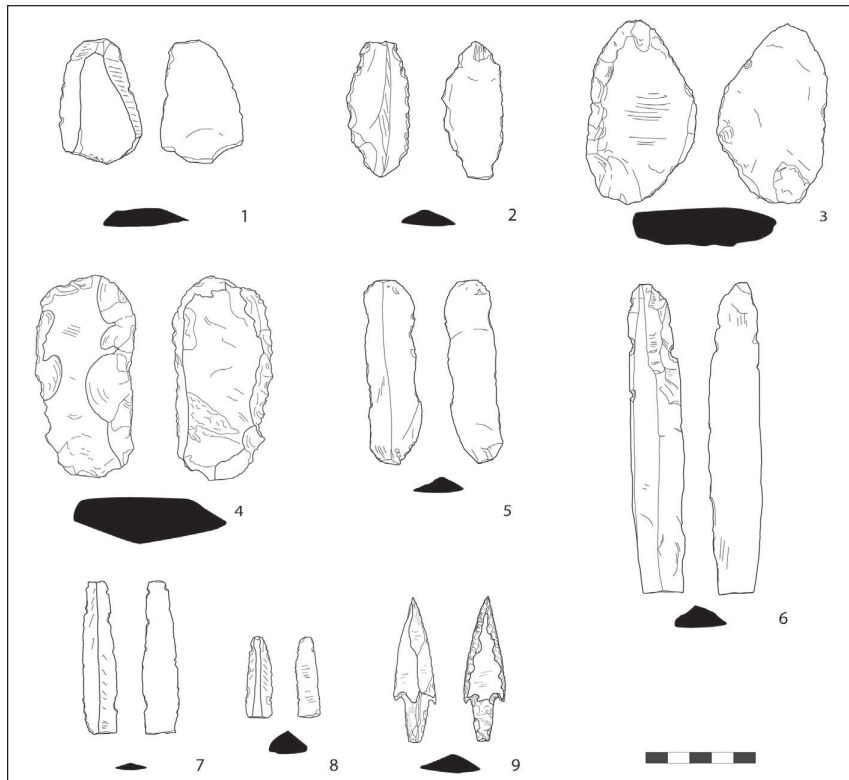
was dedicated to the production of food for the needs of a group larger than a single family.

Pottery from Phase I of building 131 is dated to the Early Bronze Age IA, handmade, row red-orange fabric. Except for the hemispherical cups and bowls, the majority of sherds are medium and large jars with vertical or slightly everted neck with plain ledge handles and hole-mouth jars. Both the shapes are attested in cooking and storage ware (FIG. 12).

In Phase II (FIG. 13) the inner space of the building was reduced and the floor slightly raised with a compact layer of earth. In the northern part, wall 172 was built, obtaining a small room (L. 174), as such as in the southeastern corner of the building through wall 160, obliterating the second platform, clearly no more in use during this phase. Moreover, a circular pit, P. 155, delimited by stones, was joined to the external eastern facade of the building, filled with stones, sandy layers and some animal bones. Pottery from Phase II is similar in morphology, decoration and fabric to the assemblages of Phase I, dated to the Early Bronze Age IA, as it is proved by the presence of hemispherical bowls and slight everted neck jars (FIG. 14).



7. Early Bronze Age I pottery from the courtyard L. 51.



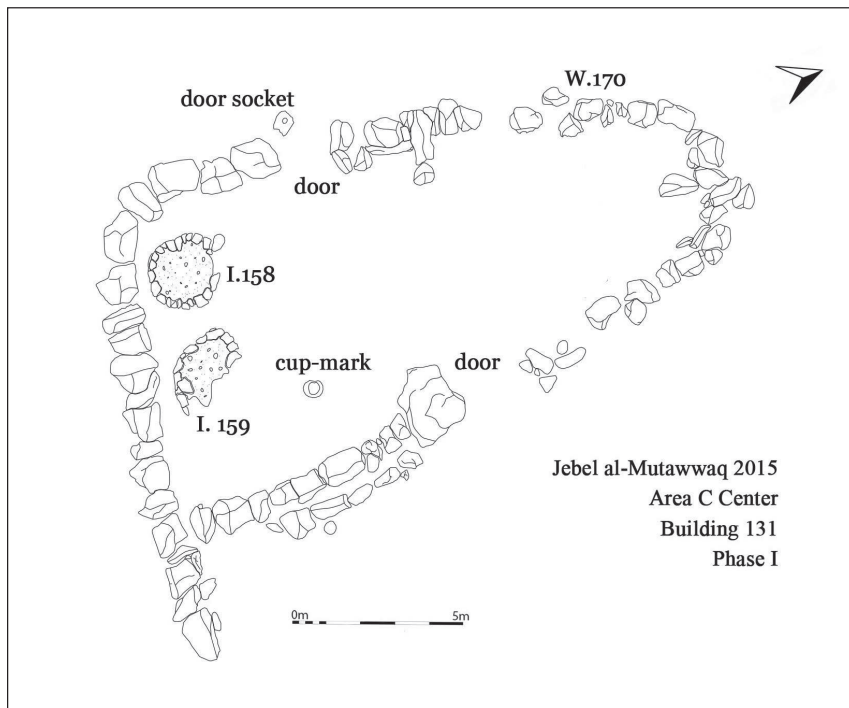
8. Lithic tools discovered in L. 51: 1-4 (EB scrapers), 5-8 (EB blades), 9 (PPNB Jericho-point).

In pit P. 155, a flat elongated flint scraper, similar to the one discovered in 2013 in Dolmen 317, has been discovered (FIG. 15). The elongated scraper of this typology discovered in the funerary equipment of Burial B25 in

Dolmen 317 was in couple with a large flat flint tool of the fan or tabular scraper typology¹⁹. These kind of lithic tools could be reasonable interpreted as instruments for the wool cut during sheep shearing²⁰.

19. Polcaro *et al.* 2014: fig. 15. Other flint scrapers of this kind come from the Temple of the Serpents (Fernández-Tresguerres 2008b: fig. 15; Polcaro *et al.* 2014: fig. 5), whose last use was dated, by old C14 analysis performed on few olive seeds discovered in the sacred area

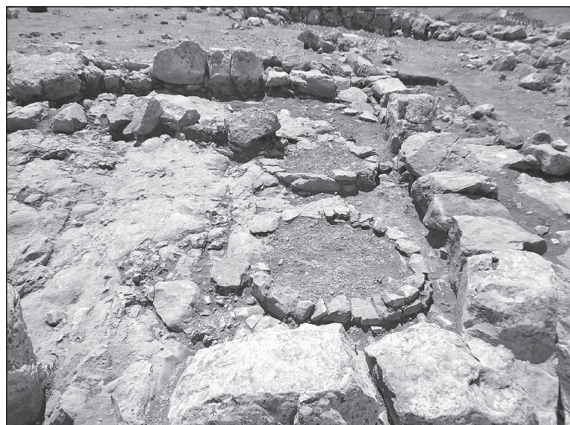
by the past Spanish expedition, between the 3300 and the 3050 BC, at the end of EB I: see Fernández-Tresguerres 2008a, 49.
20. Barket and Bell 2011.



9. Plan of Building 131, Phase I.



10. The western door of Building 131, from South.



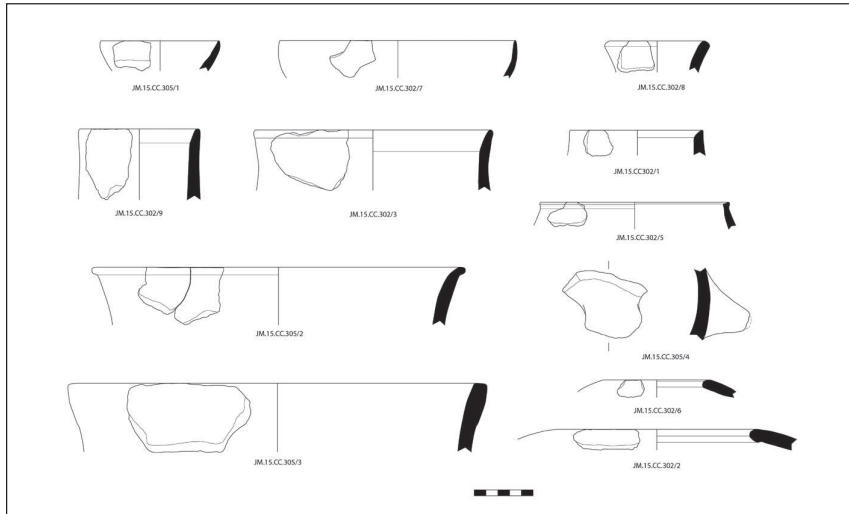
11. The two large installations (I. 158 and I. 159) in Building 131, from West.

Summarizing, this part of Area C seems to be related to production and storage activities, not directly connected to the private houses of the settlement, with two buildings linked by a large open courtyard, with some particular features like platform I.57 and installations I. 158 and 159. South of this complex of structures, following a lower natural level of the mountain, a street, L. 69, runs from west to east, bordering the southern wall of courtyard L. 51. The floor of the street was obtained leveling the natural bedrock and was covered by layers of deposition terrain (Strata 124 and 129) and collapsing layers of large stones of the southern wall of Courtyard L. 51 (Strata 126 and 128). The pottery recovered on the floor of the street is contemporary to the use of the courtyard (FIG. 16): hole mouth jars with pushed up lugs and groove below the rim, having good comparisons with BA IA samples from Jāwā²¹.

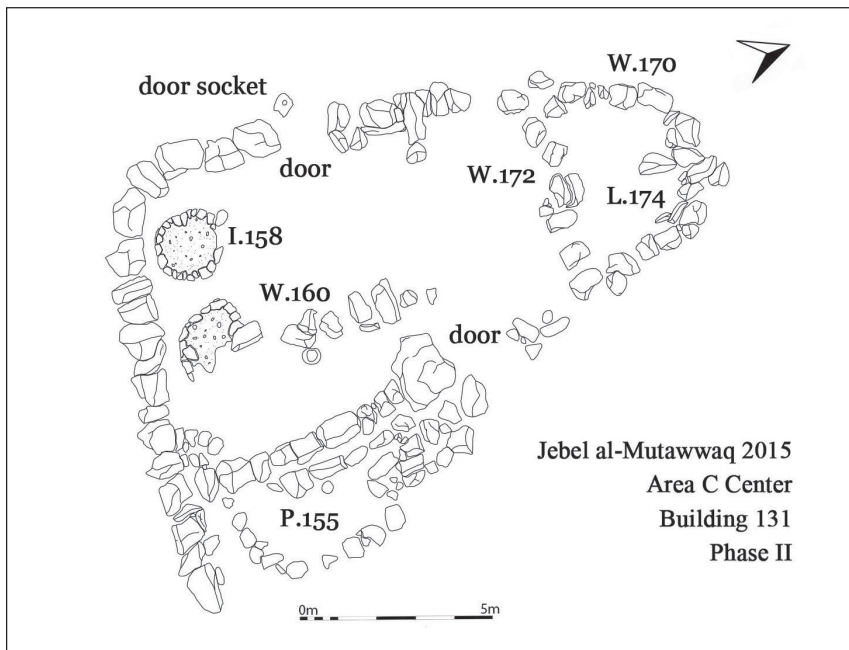
The Great Enclosure: an Enigmatic Structure

Street L. 69 leads toward a large enigmatic structure, called Great Enclosure. The structure consists of a large semicircular enclosure of *ca.*

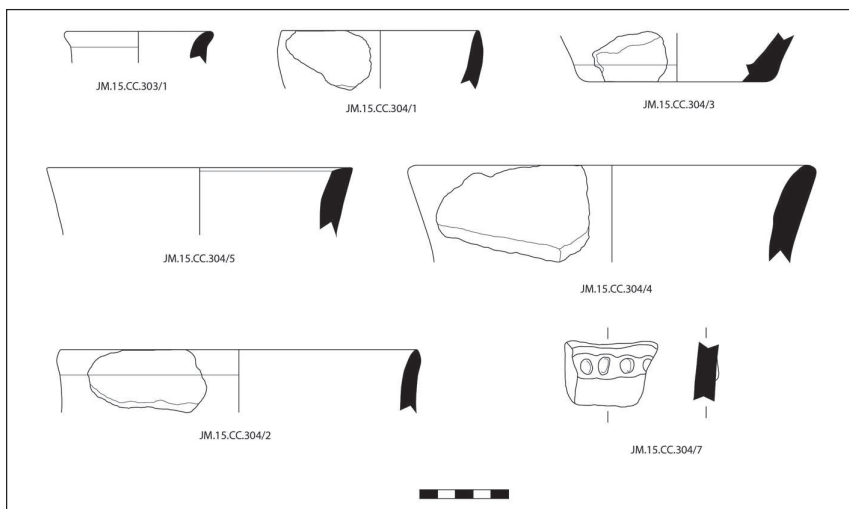
21. *e.g.* Helms 1991: fig. 112: 20-23.



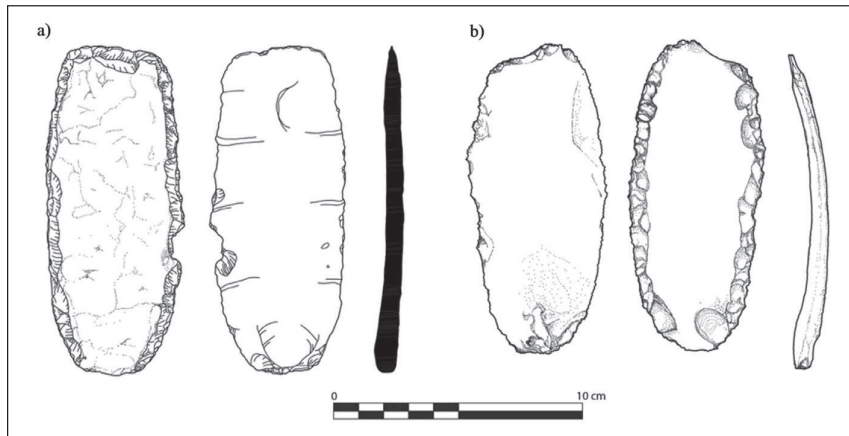
12. Early Bronze Age I pottery from Building 131, Phase I.



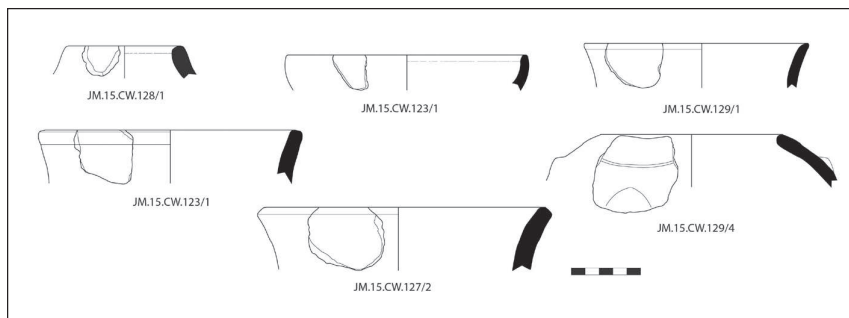
13. Plan of Building 131, Phase II.



14. Early Bronze Age I pottery from Building 131, Phase II.



15. Flat elongated scrapers from Building 131 (a) and from Burial B25 in Dolmen 317 (b).



16. Early Bronze Age I pottery from street L. 69.

50 meters of diameter with a single standing stone in the center (FIG. 17). Firstly interpreted as a cultic open area for the presence of the standing stone, a campaign of survey and excavations of the structure allows to advance also different possible interpretations. This large open space is delimited with a huge massive stone wall (W. 102), built closed to the southern cliff of the mountain, without any clear entrance apart a megalithic door, partially covered by a high layer of huge collapsed stones, with a lintel in place made with a large capstone in a similar way of the dolmens. The external line of W. 102 is still preserved in some points for three courses of stones, reaching a height of 1.50 meters (FIG. 18). During the 2014-2015 excavation campaigns, a small circular room (L. 107), delimited by a single line of stones (W. 104) and with a circular installation inside (I. 109), have been discovered close to the western sector of the structure (FIG. 19). These kind of small circular architectural features were discovered also inside the stone enclosure of

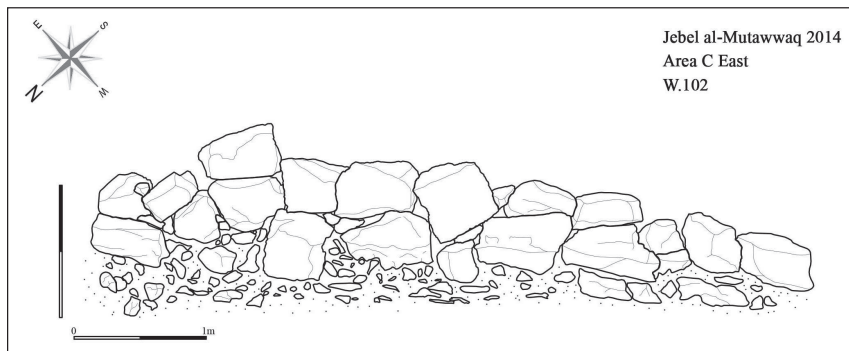
the EB I sites identified around the settlement of Jāwā, like Khirbat Abū al-Ḥuşayn²², and were interpreted as circular storage facilities, like silos. Even if the poor stratigraphy preserved inside the Great Enclosure of Jabal al-Muṭawwaq had given almost no materials, the presence of few diagnostic sherds inside the inner part of the wall and its foundation can date the structure to the same period of the village.

Only future excavations campaigns in the area could clarify the real function of this huge



17. The Great Enclosure, from West, with the standing stone visible in the center.

22. Müller-Neuhof *et al.* 2013.



18. Northwestern section of wall W. 102.



19. The circular room discovered inside the Great Enclosure, delimited by wall W. 104, from North.

structure, but in any case some architectural characteristics such as the impressive enclosure wall and the single small entrance, could point to a protective function for economic resources important for the whole community. In this regard, the comparison of the plan of the Great Enclosure with the large central enclosure of Khirbat Abū al-Ḥuṣayn (FIG. 20), a site located on an area suitable for pasture during the grazing periods²³, could suggest activities related to the exploitation of the herds, a place where the sheep flock can be collected for shearing and where the wool could be stored. Moreover, milking activities could have been performed in the same area, perhaps linked to the production activities performed in the nearby Area C. However, this hypothesis does not preclude the possibility that some rituals, possibly involving animal sacrifices, could be performed in the enclosure, perhaps in connection with the standing stone²⁴.

23. Müller-Neuhof *et al.* 2013.

24. In fact, a smoothed flat rock was discovered close to the standing stone, together with a small podium delimited by stones, presumed to be an altar, in an excavation sounding performed by the

Conclusions

The discoveries in the central sector of the Early Bronze Age IA village of Jabal al-Muṭawwaq provided an important historical information about the organization of the economic activities of the settlement, pointing to the importance given to the herd exploitation, that seems to have been the central activity performed in Area C. The architectural effort and the organization of the settlement space in a central area of the large EB IA village suggest also a kind of central organization, fact that seems to be confirmed by the set of fan scrapers discovered in the temple area by the past Spanish expeditions²⁵.

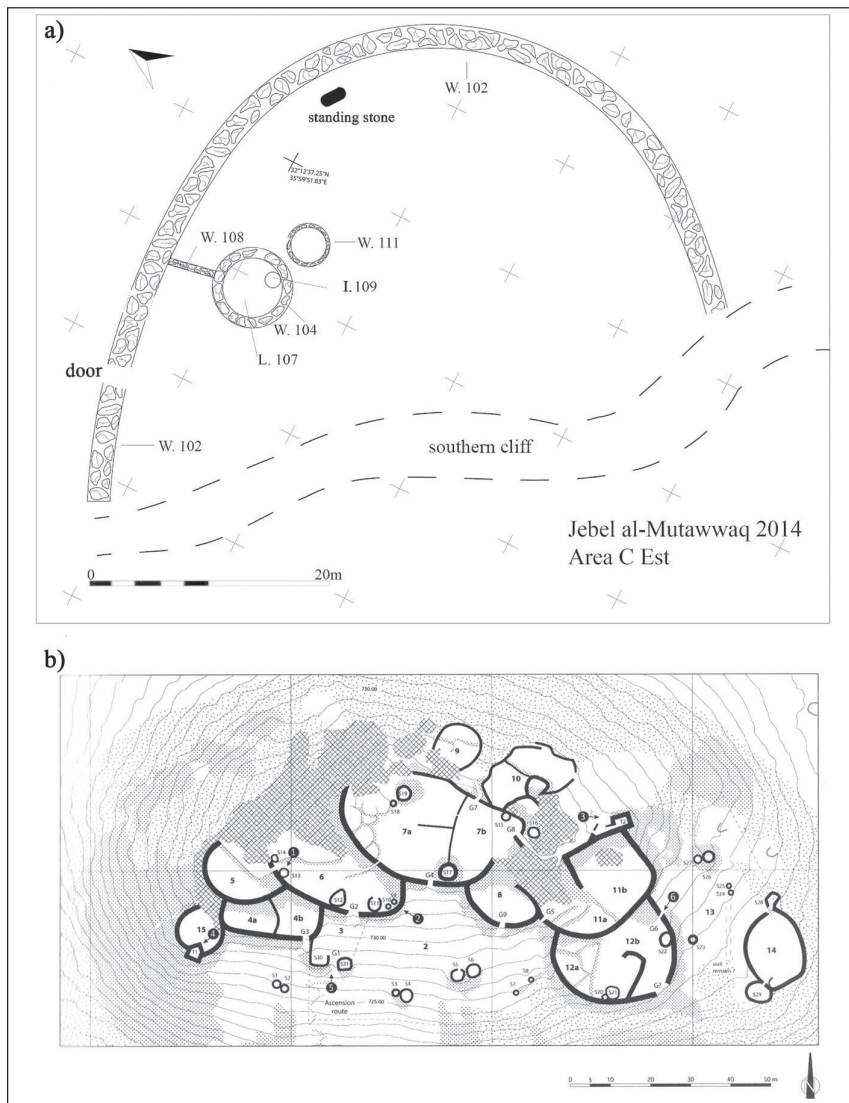
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past Spanish expedition of Oviedo University on the southern side of the megalith (Nicolle 2012: 436).

25. Fernández-Tresguerres 2008b: fig. 15.

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20. Comparison between (a) schematic plan of the Great Enclosure of Jabal al-Muṭawwaq and (b) plan of Khirbat Abu al-Ḥuşayn (from Müller-Neuhof *et al.* 2013: fig. 7).

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