

- 1) Rim and neck of a jar, cream color paste with large black particles. The exterior and interior surfaces are covered in white. This same form occurs at Medeineh.
- 2) Rim, neck, and shoulder of a slightly carinated bowl. Red paste with white surface. Also found at Medineh, the shapes reminiscent of the Late Bronze Age.
- 3) Rim and neck of an open-mouth jar. Red paste with coarse black particles. This form also occurs at Medeineh.
- 4) Small fragment of an alabaster plate with a rim of an extended lip in a horizontal plane.

THE IRON I STRUCTURES IN THE AREA SURROUNDING MEDEINEH AL MA'ARRADJEH (SMAKIEH)

by Mario Menéndez

Introduction

Having observed in the aerial photograph of Khirbet Medeineh, obtained by the Spanish Archaeological Mission, the existence of a series of a circular structures on a plateau to the west of the *tell*, we decided to excavate this area to determine their nature. We had been previously informed of the abundance of retouched flints around the circular structures.²

Once we had examined the region, we decided to excavate the group of circles which were on the upper level of the highest part of the plateau, 900.00 m. high, directly west of Khirbet Medeineh. These structures were without doubt the best preserved in terms of their construction. With regard to the retouched flints, their greatest concentrations appeared to coincide with the stone circles we had selected for excavation. Having made these observations, we began our work on 14 August 1982.

Structures

A visual analysis of the aerial photograph allowed us to distinguish two associated units, although in form they were quite different. The first unit was the Great Circle, formed by slabs of stone sunk into the ground (Locus 1) and the second consisted of a rectangular precinct adjacent to the exterior (Locus 2). Undoubtedly these two structures are associated since this scheme or mode is repeated many times in the group of circles at Medeineh, and we are able to verify this association at other sites in the Moab region.

Locus 1

Locus 1 presented us with an almost perfectly circular arrangement with a diameter of 18.00 m. The circle is defined by large slabs of stone sunk in the ground down to approximately 0.70 m. below the surface. We opened a 2.00 x 2.00 m. trench in the centre of the circle. The upper level, perfectly horizontal, was archaeologically sterile, although there were numerous bits of gravel and small stones of ca. 0.05 m. diameter. At a depth of 0.50 m. there appeared a level of huwwar, formed by a compact white chalk. There were, therefore, no archaeological levels in the interior of the stone circle, nor any organic remains which would have helped us to recognize and establish its use.

Locus 2

Locus 2 consists of the rectangular structure adjacent to the exterior of the Great Circle. The dimensions of the trench we opened were 5.00 x 3.00 m., following the structure walls visible on the surface. The direction of the short wall is precisely westerly. The first row of stones, perfectly preserved, rests directly on the ground. The other two walls run parallel for a distance of 2.50 m. with the short wall closing in the area at the northern end. The southern wall, which would have closed in the rectangular structure, is not preserved, nor is the probable door or gate which would have provided access to the small chamber (Fig. 1). The soil of this area is of ("earth"); it contained no organic remains or ashes, but ceramic

excavating at the same time at Khirbet Medeineh. It was possible to make daily comparisons of the material from the respective sites.

¹ Cf. aerial photograph of the Spanish Archaeological Mission (Fig. 3) and Fig. 1 of E. Olávarri in his study cited in note 3, below.

² This information was provided by E. Olávarri,

pieces in the soil indicate past habitation of this level. This layer appeared 0.32 m. below the ground-level.

Ceramics

The collection of ceramics which Locus 2 offers us is very broken up and heterogeneous. The oldest sherds are present at Medeineh with the same type of paste that characterizes that site.3 To this oldest group belongs 90% of the potsherds, which can be assigned to the ancient phase of the Iron I period.4 We also found representatives of Iron II, Nabataean, and Byzantine periods, but in no case do these latter phases represent permanent habitation or intensive use of the structure. We must therefore consider the short, incidental use of the structure, with insignificant archaeological evidence other than that of the Iron I age.

The characteristic ceramic forms are the following:

- Rim and neck of a jar (Fig. 2:1) with cream color paste containing large black particles. The exterior and interior surfaces were covered in white.
- Rim, neck, and shoulder of a bowl, slightly carinated, of red paste with white inclusions (Fig. 2:2). This shape is documented at Medeineh, where it is a surviving example of the late phase. Late Bronze Age.
- Rim and handle of an open-mouthed jar (Fig. 2:3), red paste with black-granules, the exterior surfaces are covered in white.
- Small fragment of an alabaster plate with the rim of an open, horizontal lip.

The ceramics of Locus 2 present us with a group of forms and pastes characteristic of the early phases of Iron I, placing the group in a close temporal relationship with the materials from Khirbet Medeineh.

Conclusions

The two trenches in the area of circles, situated to the west of Medeineh, demonstrate the contemporaneity of these structures with the city nearest to them. That is to say, they were constructed around 1,200-1,075 B.C., in an early phase of Iron I times, as is attested by the ceramic fragments. These circles were re-used during the Iron II and Byzantine eras, but these later uses have an ephemeral character about them, and in neither case do they conform to true levels of occupation.

With regard to the possible functions of the circles, it would be risky to try to establish definitive conclusions. Neverthless, the fact that they appear in proximity to a fortified city, which undoubtedly offered them a protection they could provide for themselves, leads us to think that these circles were built by some of the groups of shepherds who lived in the Moab area during the Iron I period. To this way of thinking, the great slabs of stone sunk into the ground formed a circular corral in which the shepherds guarded their property. This form of circular corral can be seen at the present time in some of the towns in the Moab region. This would also explain the lack of archaeological levels inside these structures.

The rectangular chamber (Locus 2) would be, according to this hypothesis, the cabin in which the shepherd stayed. Its construction and occupation was connected with the existence of Medeineh. The destruction or abandonment of these cities also resulted in the end of the occupation of these cabins. They were used again only in an accidental and sporadic way.

RB, 72 (1965), p. 77-94.

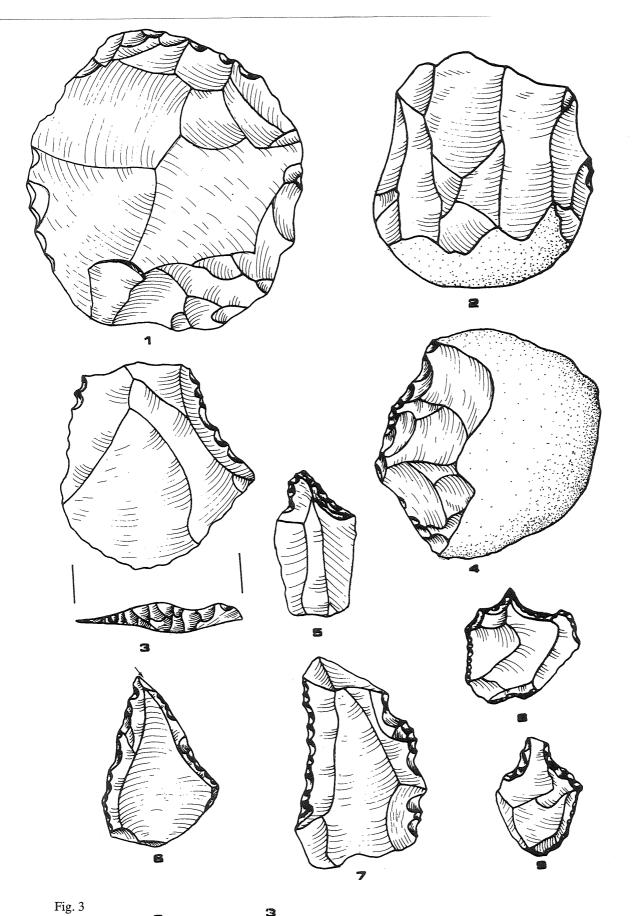
³ E. Olávarri, "Sondeo Arqueologico en Khirbet Medeineh" *ADAJ*, 22 (1977-1978), p. 136-149.

⁴ Although there is not an abundant bibliography on this theme, cf.

⁻ J. W. Crowfoot, An Expedition to Balu'a,

PEF,QS (1934) p. 76-84.

^{G.L. Harding, An Early Iron Ag Tomb at Madaba,} *PEFA* 6 (1953) p. 27-47.
E. Olávarri, Sondages à Aroer sur l'Arnon,



1) Bifacially flaked disc of white flint, with traces of use all around its perimeter.

- 2) Chopper. Cortical base; in the distal area there appear deep traces of use. 3) Levallois flake. Direct semi-steep retouch on the right edge, producing a denticulte. On the left, simple alternate retouch. Multi-facetted platform.
- 4) Simple convex sidescraper, with excellent Charentian retouch.
- 5) Nosed carinated endscraper.
- 6) Burin on retouched flake.
- 7) Denticulate on thick flake. Simple direct retouch occurs on the left edge.
- 8) Awl on a small flake.
- 9) Broken awl.

The Paleolithic Surface Deposit

The abundant remains of flint which appeared on the surface cannot be put in relation with the previously mentioned structures. This lithic material forms part of an open-air site, situated at the highest area of the slope, with its location coinciding with that of the later circles. From the top of the hill, where we place the site's nucleus, the flints begin to spread out along the sides of the hill, becoming progressively smaller in density.

The flints gathered from the site amount to about 300, enough for us to make a statistical analysis with a reasonable amount of certainty. We suspected that in this kind of survey collection that it would be very difficult to eliminate the subjective element when we conducted the analysis. For example, we observed substantial differences in the items collected by different people in the same area. To this we must add the scarce number of typical implements at this site and the difficulty of using "guide fossils" for the Paleolithic of the Near East. But a typological analysis is the only means available to us to determine a cultural affiliation.

The flint implement sample presented us on the one hand with a series of tools with clear Mousterian aspects: an excellent disc with bifacial retouch (Fig. 3: 1), choppers (?) (Fig. 3: 2), and numerous sidescrapers. The last are generally simple, 5 some being the "Quina type" with

excellent Charentian retouch (Fig. 3: 4). On the other hand, there exists a high percentage of other tools of blades and flakes. There are some notches and some rare burins (Fig. 3: 6). The denticulates are generally produced on small flakes (Fig. 3: 7).

Among this group, which we have defined as Mousterian, there is a great number of pieces that point to a more advanced age, different from the Middle Paleolithic but still closely allied to it. There is a high percentage of endscrapers, many of which are thick and "nosed" (Fig. 3: 5). There are excellent awls (Fig. 3: 8, 9) and a large number of retouched blades and small flakes. Therefore it appears that this open-air site should be classified as Early Aurignacian, parallel with Levels 11 c-d and 12 at Khiam. These clearly belong to the Upper Paleolithic but demonstrate a strong dependence on the implements of the Mousterian tradition, with a high percentage of denticulates, which can be compared favourably with other sites in the region.7 Some of the flakes in the sample are of Levallois technique (Fig. 3: 3), reflecting an older tradition.

In conclusion, we are confronted with an open-air site absolutely independent of the stone circles. The flints present us with an industry typical of the Early Aurignacian, with strong influence of the tools of the Mousterian tradition.

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⁵ F. Bordes, Typologie du Paléolithique Ancien et Moyen, (1961).

⁶ J. Glz-Echegaray, Excavaciones en la terraza de El Khiam, BPH, Tom, I, Madrid, 1964.

D. de Sonneville-Bordes, Paléolithique Supérieur et Mésolithique à Yabrud (Syrie), L'Anthropologie 60 (1956) p. 78.