

An Enigmatic Group of Natufian Basaltic Artefacts at the Dar al-Saraya Archaeological Museum in Irbid, Jordan

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Abstract

A unique group of clandestinely excavated basaltic artefacts, housed in the Dar al-Saraya Archaeological Museum in Irbid, Jordan, provides important new evidence about the Natufian period in the country. The group consists of the largest Natufian basaltic mortar ever found in Jordan, accompanied by two similarly large pestles. All that is known about the pieces is that they derive from a clandestine excavation conducted somewhere in the northern Jordan Valley, within the jurisdiction of the Irbid Governate. Footed-base mortars of the type in the Dar al-Saraya are only found in large Early Natufian village sites located in the Mediterranean region of the southern Levant. The style of the footed mortar and the two pestles, and the composition of the group as a whole, indicate that the pieces may have been looted from the early Natufian site, Wadi Hammeh 27. The stylistic resemblances are close, and Wadi Hammeh 27 is the only Natufian site in Jordan to supply any such parallels. However, if the artefacts were not from this site, there may be another large Natufian village site, somewhere in northern Jordan, that awaits discovery.

Keywords: Natufian, basaltic groundstone, Jordan Valley, Dar al-Saraya, illicit excavations, Wadi Hammeh 27.

Introduction

This study concerns a group of three basaltic groundstone artefacts of unknown origin (I.R. 8226) housed in the Dar al-Saraya Archaeological Museum, Irbid, and which are attributed by the museum staff to the Natufian culture. The collection comprises a large mortar and two large pestles. The lack of provenience for the group was a key motivation in undertaking this study, given the unusual size and character of the individual items, their rarity, the unusual composition of the group as a whole, and the items' striking resemblance to basaltic artefacts excavated from the Early Natufian site of Wadi Hammeh 27. There is no possibility of radiometrically dating the artefacts. We are left then with comparative artefact morphology, the traditional method of relative chronology that relies upon the axiom that each society produces unique configurations of material culture. While groundstone objects continued to be manufactured after the Natufian period, the Levantine record demonstrates that no subsequent period has produced objects similar to Natufian examples. Furthermore, as we demonstrate in this article, only Wadi Hammeh 27, of all the

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Natufian sites, has produced basaltic artefacts that closely resemble the Dar as-Saraya objects, This is particularly the case for the mortars.

Acquisition of the objects by the Dar al-Saraya Museum

The Dar al-Saraya museum, housed in the Irbid Antiquities Directorate in northern Jordan, functions as the repository for clandestinely excavated archaeological objects recovered within the jurisdiction of the Irbid Governorate. The three items registered as I.R. 8226 were handed over to the Department of Antiquities office (via the Tabaqat Fahl office) on 15 April 2009, having been referred by the Court of the Northern Jordan Valley (written reference No. 1/ 1/ F/ 90). There was no information available from the court about the origin of the artefacts, including the critical evidence about which police station confiscated the artefacts. The lead author of this paper (Edwards) first encountered the objects on 13 May 2019 during a visit to the Dar al-Saraya Museum, when they were temporarily stored on an upper level of the building. The three items are referenced collectively as I.R. 8226. They are now displayed in the Dar al-Saraya Archaeological Museum (**Figure 1**).



Figure 1. The basaltic mortar and two basaltic pestles (I.R. 8226), displayed in the Dar al- Saraya Archaeological Museum.

Description of the artefacts

The mortar (**Figures 2-3**) stands on a footed base, 45 centimetres high, with the body flaring to a flat rim. The exterior diameter at the rim is 36 centimetres, and the interior cavity at the rim measures 29 centimetres in diameter. The base, at 27 centimetres in diameter, is solid rather than hollowed, and has been left with a slightly convex profile, so that the vessel does not stand perfectly flat on a horizontal surface. The vessel is fashioned

from light-grey, fine-grained basaltic stone with few vesicles. The footed base tapers upwards to a sharp carination, offsetting it from the main body of the vessel, at a point nearly a fifth of the height of the object.

Figure 1. The basaltic mortar and two basaltic pestles (I.R. 8226), displayed in the Dar al-Saraya Archaeological Museum.

One side of the mortar (**Figure 2**) has been lost, but whether this break occurred in antiquity or at the time of its modern discovery is unclear.



Figure 2. Obverse and reverse views of the basaltic mortar (I.R. 8226).

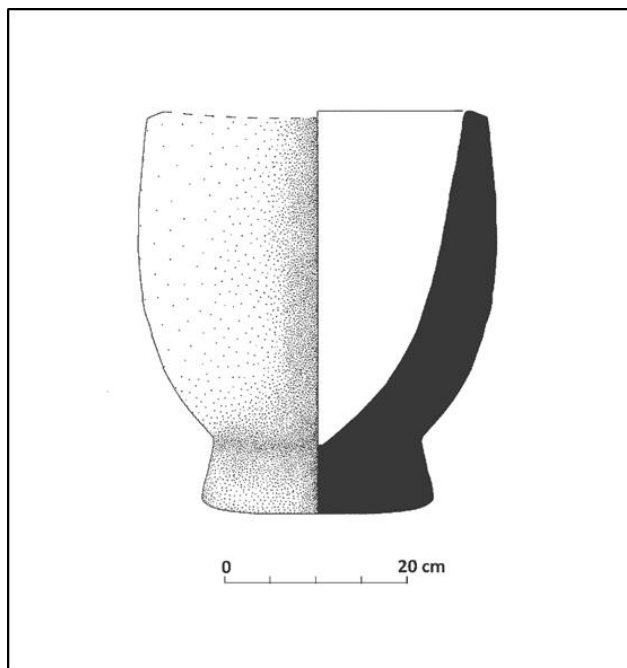


Figure 3. The basaltic mortar (I.R. 8226).

The two pestles are similar in size and form. The first example (**Figures 4.1-5.1**) is made of light-grey, fine-grained basaltic stone. It is 38 centimetres long and has a greatest width of 10 centimetres, with the maximum girth occurring near one of the terminations, which is convex in profile. The pestle then tapers gradually towards the opposite termination, which is also convex, but more distinctly pointed. The object is asymmetric about the long axis, with one side gently convex and the other flatter.

The second pestle (**Figure 4.2-5.2**), made of vesicular, light grey basaltic stone, is symmetrical about the long axis, with the main mass concentrated about the pointed end. The shaft tapers gradually to the opposite, more rounded end. The piece is essentially the same size as the first one, also being 38 centimetres long, and with virtually the same maximum thickness (9.6 centimetres, as opposed to 10 centimetres).

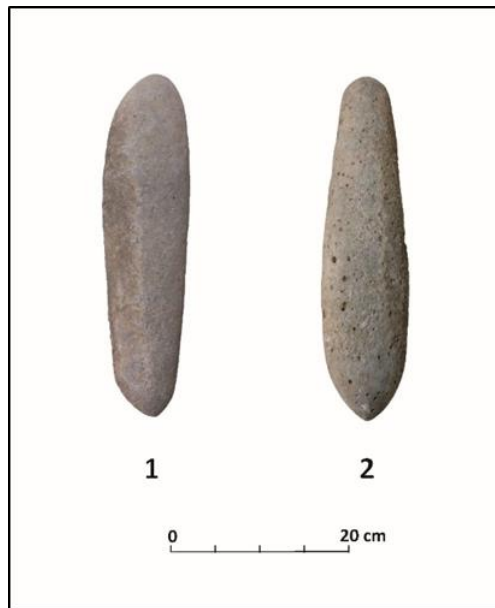


Figure 4. Two basaltic pestles, part of the I.R. 8226 group.

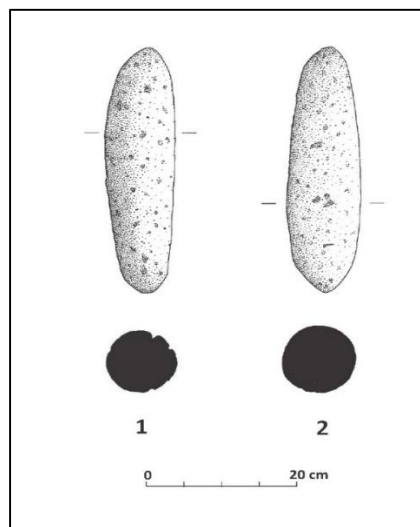


Figure 5. Two basaltic pestles, part of the I.R. 8226 group.

The surface condition of the basaltic mortar as evidence for its mode of retrieval

The mortar has been badly damaged, with almost one half of the vessel dislodged from the rim. It is not clear from the relative conditions of the vessel's surface and the break whether this is a modern or ancient fracture, but a number of other impact fractures on the exterior surface of the mortar indicate that the object was damaged by contact from a digging implement. The first of them consist of a pair of superimposed divots on the body (**Figure 6**).



Figure 6. Impact fractures on the body of the basaltic mortar.

These indentations suggest that the mortar was contacted by two blows from the pointed end of a heavy tool such as a pick or a mattock. Further around the body lie two parallel, narrow striae, indicating lengthy strokes delivered from a pick (**Figure 7**). On the opposite face are two broader parallel tracks (**Figure 8**), delivered by the flat blade of the tool.



Figure 7. Long striation on the body of the basaltic mortar.



Figure 8. Parallel striations on the body of the basaltic mortar.

Taken together, these markings indicate that a digging implement was used to hastily unearth the object during an inexpert, clandestine excavation. Even if such an important object was discovered by an initial accidental blow during a permitted excavation, a professional excavator would be unlikely to continue to strike the object in the manner indicated by the extensive damage tracks. Another indication that the pieces were discovered together, rather than compiled at different times by a collector, is the complementarity in size of the elements of the group. This is especially evident for the two pestles, which appear to have been finished to be the same size.

Parallels to the basaltic mortar

The mortar corresponds to Wright's (1992: 76-77, Fig. 11:124) 'solid-foot vessel' in her Levantine groundstone artefact classification system. The Dar al-Saraya example finds few counterparts in the regional record. Only two Natufian sites have produced such footed mortars - Ain Mallaha and Wadi Hammeh 27 - and they are, notably, the only two large Early Natufian open-air village settlements excavated in the Mediterranean Levant. Examples from Ain Mallaha include specimens from the original excavations at the site by Perrot (1966: 466-467, Fig. 12:12-14) and later excavations by Valla (Valla et al. 2017: 300, Fig 34:4B).

According to shape and proportion, the closest parallels to the Irbid objects derive from Phase 1 of the Early Natufian site of Wadi Hammeh 27, dated 12,000 BCE (Edwards 2013). Two examples, RN 120059 and RN 120061 (Edwards and Webb 2013: 215-217), have sharply carinated bases, just as I.R. 8226 does (**Figure 9-10**).

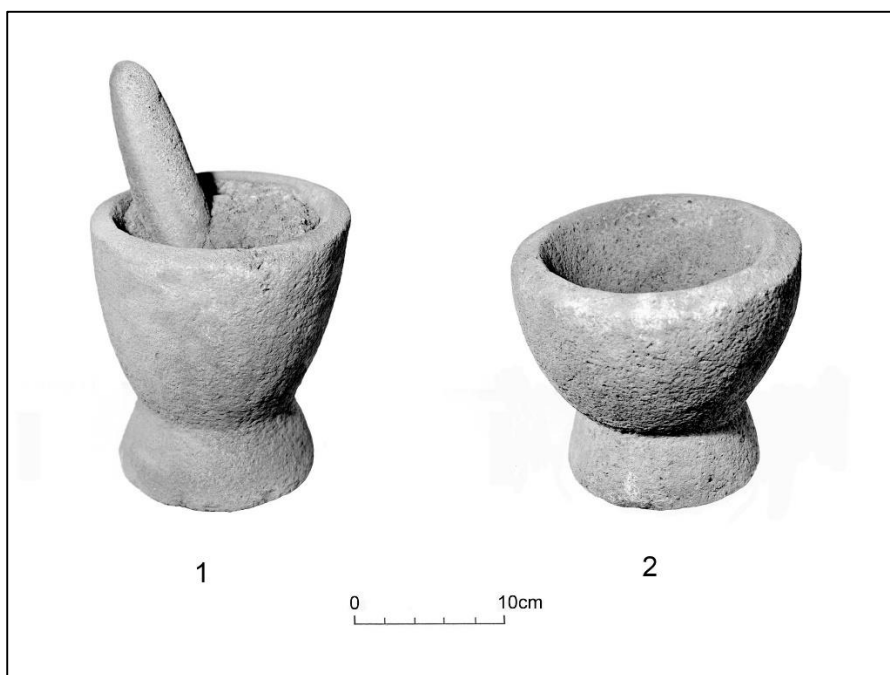


Figure 9. Basaltic mortars 1) RN 120059 with associated pestle RN 120060 and 2) RN 120061; from Phase 1, Wadi Hammeh 27.

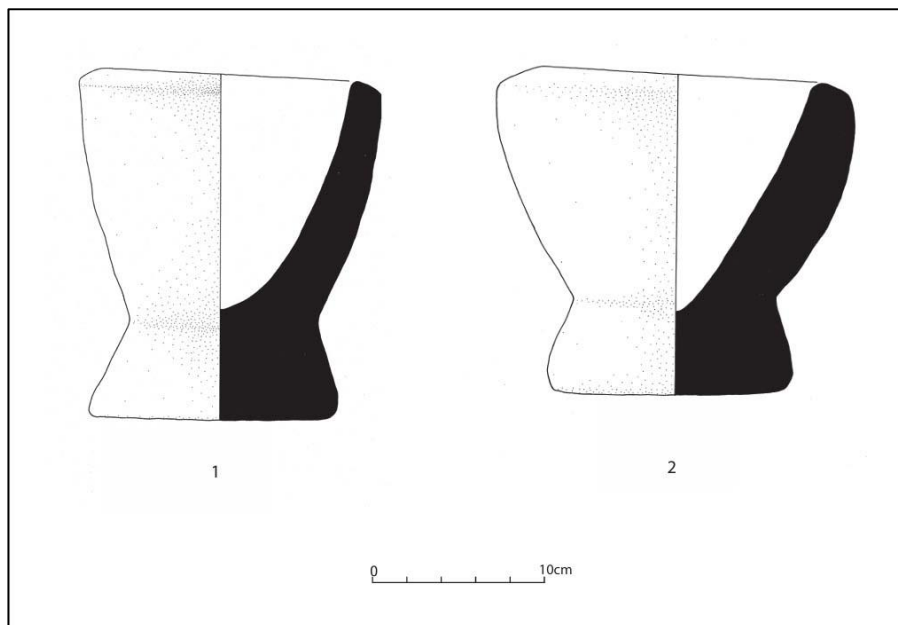


Figure 10. Basaltic mortars 1) RN 120059 and 2) RN 120061; from Phase 1, Wadi Hammeh 27.

A basal fragment of another mortar, RN 90103 (Edwards and Webb 2013: 219), bears a similarly carinated profile, and one of the smaller mortars (RN 90225; Edwards and Webb 2013: 216), found as part of ‘Artefact Cluster 6’ (Edwards and Hardy-Smith 2013: 108-109) is also sharply carinated (Figure 11).

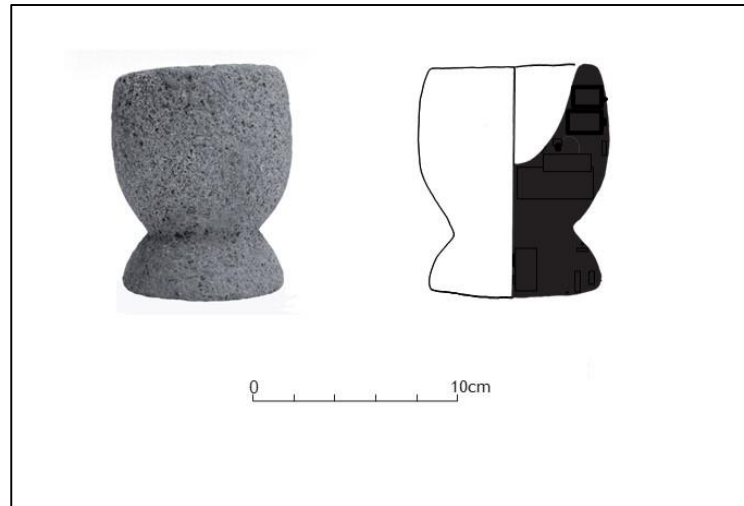


Figure 11. Basaltic mortar (RN 90225) from Phase 1, Wadi Hammeh 27.

The Dar al-Saraya specimen is distinguished by its large size. At 45 centimetres high, it is more than double the size of the largest example from Wadi Hammeh 27 (at 20 centimetres in height; Edwards and Webb 2013). I.R. 8226 is by far the largest Natufian mortar discovered in Jordan, and perhaps the third biggest ever found, being exceeded only by examples from Hayonim Cave (Belfer-Cohen 1988) and Ain Mallaha. At the latter site, the largest example reaches 60 centimetres in height (Valla et al. 2017: 299).

Parallels to the basaltic pestles

The two Dar al-Saraya pestles also find parallels from Phase 1 at Wadi Hammeh 27. The first specimen (**Figures 4.1-5.1**) has two pointed convex terminals, with one end more rounded than the other, closely resembling RN 90203 from Wadi Hammeh 27 (Edwards and Webb 2013: Fig. 8.16-4). At 37 centimetres long (**Figure 12**), the Dar-as Saraya example is 25% bigger than RN 90203. The second Dar al-Saraya pestle (**Figures 4.2-5.2**) has one convex terminal, with the shaft broadening along its length until it narrows to a pointed terminal at the opposite end. This configuration resembles RN 100037 (Edwards and Webb 2013: Fig 8.14-4), a mostly complete example (**Figure 13**).



Figure 12. Basaltic pestle, RN 90203; surface find from Wadi Hammeh 27.

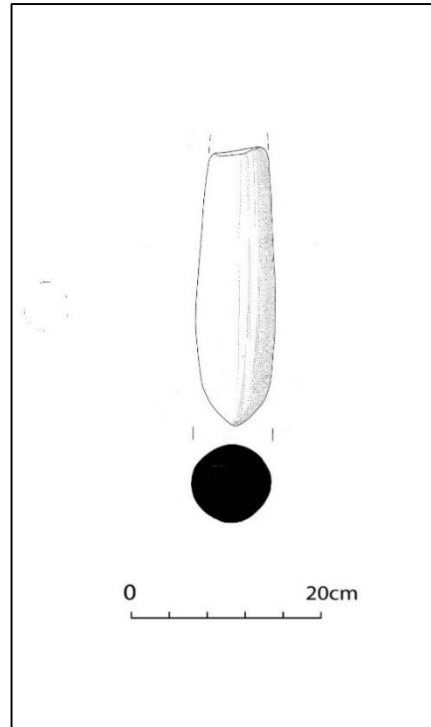


Figure 13. Basaltic pestle (RN 100037) from Phase 1, Wadi Hammeh 27.

Composition of the assemblage as an indication of its origins

The overall composition of the Dar al-Saraya trio is also important as a clue to the origin of the group. Wadi Hammeh 27 is the only Natufian site where pestles have been found placed in pairs (**Figure 14**). These deposits include ‘Artefact Cluster 6’ (Edwards and Hardy-Smith 2013: Fig. 5.18), which includes two mortars and two pairs of pestles (including one pair placed over the mouth of a mortar), Artefact Cluster 2 (Edwards and Hardy-Smith 2013: Fig. 5.15), comprising an isolated pair of pestles, and two pestles (RN 160128 and RN 160129) found together at the eastern edge of the site (Edwards et al. 2018: 284-285). The Dar al-Saraya mortar is much bigger than the Wadi Hammeh 27 parallels, and the pestles from Wadi Hammeh 27 that closely resemble the Dar al-Saraya examples are smaller than them. Yet, the Wadi Hammeh 27 basaltic industry reached comparable sizes to Dar al-Saraya, given that the largest basaltic pestle from the site (RN 80024) is, at 44.5 centimetres long (Edwards 2013: 316), considerably larger than the Dar al-Saraya pestles.



Figure 14. Artefact Cluster 6; two pairs of basaltic pestles and a pair of basaltic mortars located in Structure 2, from Phase 1, Wadi Hammeh 27 (after Edwards and Hardy-Smith 2013: 109).

Conclusions

An inspection was made onsite at Wadi Hammeh 27 in 2019 after the Dar al-Saraya assemblage had been encountered in Irbid, but that yielded no trace of any illegal excavations. On the other hand, permitted excavations have been intermittent, having been undertaken between 1983 and 1990, from 2014 to 2016, and in 2022; so that there has been plenty of time for illicit investigations to have been undertaken between these periods, especially from the eroding edges of the site, without leaving traces of clandestine excavation pits.

Sourcing the origins of basaltic stone used to make the artefacts would probably not help to define their provenience. For example, La Trobe University's sourcing studies have shown that the Wadi Hammeh 27 groundstone objects were mainly sourced from rock outcrops near Umm Qays and Irbid, but also from up to nine flows along the Jordan valley, down to the southern Dead Sea region (Edwards et al. 2018: 261). Therefore, identification of the origin of raw materials would not help to specify the site of origin of any basaltic artefact from a Natufian site located in the Irbid Governate, because basalt was sourced from many different areas.

Typological parallels, assemblage composition, the findspot of the objects, and the lack of plausible alternative sites are all factors indicating that the Dar al-Saraya basaltic artefacts were looted from Wadi Hammeh 27. It may also be germane that the referral from the Northern Jordan Valley court was originally sent to the Department of Antiquities office at Tabaqat Fahl, which lies only two kilometres southwest of Wadi Hammeh 27. But, if the objects do not come from this site, then a second Early Natufian village site may yet lay undiscovered somewhere in the northern Jordan Valley.

Acknowledgments

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مجموعة غامضة من الأدوات البازلتية النطوفية في دار السرايا، إربد

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ملخص

توفّر مجموعة فريدة من الأدوات واللقى البازلتية التي نُقِبَ عنها بشكل غير قانوني، والموجودة في متحف دار السرايا الأثري في إربد، الأردن، أدلةً جديدةً مهمّةً عن فترة النطوفيين في البلاد. تتكوّن المجموعة من أكبر هاون بازليّ نطوفيّ عُثِرَ عليه في الأردن، يرافقه مدّقان كبيران بنفس الحجم، والمعروف عن هذه القطع أنّ استخراجها قد جرى إثر تنقيب غير قانوني في مكان ما في شمالي وادي الأردن، ضمن اختصاص محافظة إربد. الهاون ذو القاعدة المزوّدة بأقدام من النماذج الموجودة في دار السرايا؛ حيث تظهر فقط في مواقع القرى النطوفية الكبيرة في منطقة البحر المتوسط في جنوبي بلاد الشام، ويشير نمطُ هذا الهاون والمدّقين وتكوين المجموعة ككل إلى أنّ القطع قد تكون نُهبت من موقع نطوفيّ مبكّر، وادي حمّة 27؛ فالتشابهات الأسلوبية وثيقة، وادي حمّة 27 هو الموقع النطوفيّ الوحيد في الأردن الذي يوفّر مثل هذه الأوجه المتشابهة. ومع ذلك، إذا لم تكن القطع من هذا الموقع فقد يكون هناك موقعٌ قريّة نطوفيّ كبيرٌ آخرٌ في شمالي الأردن ينتظرُ اكتشافه.

الكلمات الدالة: النطوفية، حجر بازلي مشغول، وادي الأردن، دار السرايا، تنقيبات غير قانونية، وادي حمّة 27.

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