THE CERAMIC ASSEMBLAGE FROM THE LATER PHASES AT TOMB 303: SETTLEMENT IN WĀDĪ ATH-THUGHRAH DURING THE ISLAMIC PERIOD

Micaela Sinibaldi

1. Context and Characteristics of the Ceramic Assemblage

This report presents the ceramics from the last phases of activity recorded at Tomb 303 during the excavations carried out in 2006 by the French archaeological mission to Petra. The stratigraphic units containing the Islamic-period pottery analysed in this contribution were both preceded and succeeded by phases of abandonment. The excavators have identified some of the stratigraphic units as a phase of occupation during the Islamic period¹. However, the faunal analysis carried out by Carine Tomé² has also yielded evidence that most of the late stratigraphic units have the character of a dump. This interpretation is suggested by several lines of evidence, mainly the presence of a very large number of animal fetuses (interpreted by Tomé as the result of a sickness inflicting an entire group of nearby animals) and by the generally very good representation of all animal body parts (which suggests that most of the animals entered the cave in one piece rather than after slaughter, i.e. they were probably dumped inside or, possibly, fell into the tomb). This hypothesis is reinforced by the presence of the remains of several animals within the same stratigraphic units (despite the small size of the assemblage), by the fact that most of the animal bones are from species not normally consumed by humans and, finally, that - although some caprine remains have been found - most of them did not show signs of butchering or cooking, an uncommon situation in occupational contexts at Petra, where caprines are always recorded as an important component of the medieval diet³.

The conclusion that the material from the stratigraphic units containing the Islamic pottery was mostly dumped inside the tomb is also supported by their location close to the cave entrance. The fact that several ceramic fragments were found in the most superficial stratigraphic units might be attributed to the presence of burrowing animals during a post-depositional phase (whose presence was in fact confirmed by the faunal analysis). This may be partially responsible for the fact that in most cases the Islamic sherds were found mixed with Nabataean fragments.

Islamic-period pottery was found in 12 stratigraphic units, comprising a total of 139 fragments and a minimum of 62 reconstructed forms. No ceramic object is complete but a large number of fragments originate from only a few forms, viz. the reconstructed jug with appliqué decoration, the lamp and several cooking pots (Figs. 2.1, 2.2, 3.1, 4 and 5). Large parts of the cooking pots are missing, meaning that these objects were not used inside the tomb. In addition, some of the pot sherds entered the tomb as fragments which broke into a maximum of two or three pieces on impact. Nevertheless, it seems that several ceramic objects, such as the ones mentioned above, entered the tomb when a good part of the form was still intact and that they primarily fragmented on impact. The most likely interpretation is that they broke somewhere nearby and that someone walked to the tomb, which was occasionally used as a dump, to throw them inside. Most likely the isolated

^{1.} See the article by Sachet et al. in this volume of ADAJ.

Observations drawn from the unpublished field report of Tomé.

^{3.} See for example Schmid and Studer 2003: 484-487 and Brown and Rielly 2010: 126-137 for Wādī Farasa and al-Wu'ayra respectively.

ADAJ 57 (2013)

fragments entered the tomb along with other material being dumped.

In sum, the character of the ceramic assemblage supports the supposition that the tomb was mainly used as a dump during the Islamic period. The different stratigraphic units identified by the excavators, and therefore the different character, composition and consistency of the soil matrices, may be explained at least in part either by different phases of dumping or by the presence of excavating animals, or - most likely - by both. At least some of the charcoal found by the excavators may also have been discarded in the tomb, being derived from activities carried out nearby.

Since most fragments are diagnostic in terms of form, it is possible to present a quantitative analysis of this aspect of the assemblage, although the very small size of the latter must be taken into account (**Fig. 1**). The assemblage comprises mainly closed forms, in particular cooking pots (65%). Cooking pots, jars and water jugs outnumber bowls and cups.

A study of the proportions of closed and open



1. Proportion of forms in the Tomb 303 assemblage, calculated by minimum number of forms.

forms during the Islamic period is not yet available, although this would certainly be desirable in future. However, some results are available for specific sites and periods, e.g. the Crusaderperiod castle of al-Wu'ayra⁴. The high proportions of cooking pots and closed forms are similar to other assemblages from the Petra region that were occupied over several centuries during the Middle and Late Islamic periods, e.g. Bayda and Wādī Farasa (where cooking pots were found in very high percentages)⁵. Although the material described here is not derived from an occupation context and is therefore not directly comparable with these stratified data, it still seems that the high proportion of cooking pots reflects an intensive use of these forms during the Middle and Late Islamic periods (in particular the Crusader to Ottoman periods).

With the exception of a moulded lamp, all of the sherds belong to vessels of the so-called 'handmade' group. Only two are red-painted, while the rest of the assemblage is unpainted. The general characteristics of fabric, manufacture, firing, surface treatment and, where identifiable, form, all allow the handmade pottery fragments to be identified as belonging to types commonly in use in the Petra region between the 11th and the 20th centuries. Some recent work on this class of pottery has established some diagnostic characteristics on which to base a preliminary chronological framework⁶. This description, discussion and interpretation of the most significant elements of the Tomb 303 assemblage is based on this work.

2. Description of Selected Fragments *Cooking pots*

Several types of cooking pot are included in the assemblage, with the two best-represented having close parallels at Petra. The fragment in **Fig. 2.2** represents a very common type, being a globular cooking pot characterized by ledge handles with an applied clay band connecting

6. Some results of this preliminary study of the Petra material and the diagnostic aspects of its chronology are presented in Sinibaldi 2013a: 170-176.

^{4.} Al-Wu'ayra castle was mainly occupied during the 12th century. For this site, data resulting from excavations by two different archaeological missions (Robin Brown and the University of Florence) do not completely match in several aspects; this may be due at least in part to different methods of analysis. According to my complete analysis of the data from Robin Brown's excavations of the 12th century phases, there was a higher proportion of open forms in the 12th cen-

tury than during the later periods in Petra (see Brown 1987 for some published forms; the full results of this study are discussed in Sinibaldi 2014).

Preliminary proportions and observations are presented in Sinibaldi 2009a: 453, 457.

them, no neck, an out-turned rim and a flat base. It has been found in large quantities at Ottoman Bayda and Khirbat an-Nawafla, Crusader al-Wu'ayra and pre-Crusader Khirbat al-Mu'allaq. This type was therefore both widespread and long-lived in the region, with the result that it is not currently possible to date it more precisely. It may be the product of unspecialized production since it often has quite irregular proportions⁷.

The second type (**Fig. 3.1**) typically has similar ledge handles, but is different in the sense that it does not have an applied band connecting them; it also has a narrower mouth, a neck, a globular body and a rounded base. It also tends to be characterized by a slightly higher manufacturing quality, obtained with the help of a turning tool. In comparison with the other type, it is often characterized by a high percentage of limestone inclusions in the fabric, added - as is often the case in cooking pots - to help the object withstand

the high temperatures to which it was exposed. For these two reasons, this type may be associated with a more specialized production; it might also not have been as long-lived as the first type. A similar example came from phase VIII (postclassical) of the Petra Pool Complex excavations, which has been dated to the 12th century on the basis of this specific ceramic object and its parallels with ceramic material from al-Wu'ayra⁸. However, in light of my more recent research on the Petra ceramics, the two cooking pots from the Crusader castle of al-Wu'ayra, which have significant differences, should now be assigned to two separate types⁹. Currently, both the cooking pot presented here and the example from the Petra Pool Complex excavations have their best stratified parallel at Wādī Farasa, in a 13th - 15th century context¹⁰. There is also another example from Bayda, found in association with material consistent with a Mamluk-period date¹¹.



- A selection of pottery from the assemblage (illustrations M. Sinibaldi): (1) jug; (2) cooking pot; (3) lid.
 (see also FIG. 5): Jug. Fabric: includes large chunks of limestone. Chaff proportion: high. Fabric surface colour: red. Manufacturing quality: medium. Firing: black core to no core, depending on the thickness of the different parts. Surface treatment: white slip of varying thickness on external surface except base. Other details: applied clay decorations to both lower and upper handle attachment. Height: 21.8 cm. Max width: 22 cm. Rim diameter: 10 cm. Base diameter: 14 cm. Wall thickness: 0.7 1.2 cm.
 - 2.2 Cooking pot. Chaff proportion: medium. Fabric surface colour: orange. Manufacturing quality: medium. Firing: black core. Surface treatment: smoothed on external surface. Rim diameter: 14 cm. Wall thickness: 0.6 0.9 cm.
 - 2.3 Lid. Chaff proportion: high. Fabric surface colour: buff. Manufacturing quality: medium. Firing: light grey core. Surface treatment: smoothed on external and internal surfaces. Other details: eight holes (four of which incomplete) arranged in two concentric lines; ridge on internal surface to fit pot rim. Diameter: ca 24 cm. Thickness: 1.5 cm.
- See Sinibaldi 2009a: 452-453, Fig. 8, and 460-461 for a discussion of the longevity of this type at Petra, its occurrence at al-Wu'ayra and a full profile from Bayda. For Bayda, see also Sinibaldi and Tuttle 2011: 443-445, Fig. 15.2. For a full profile from Khirbat an-Nawafla, see 'Amr *et al.* 2000: 253, Fig. 26.2. The presence of this type in an Ottoman context has been reported in a personal communication by project director Khairieh 'Amr. For Khirbat Mu'allaq, see Lindner 1996: 124-125, figs 21 and 24.
- 8. See Bedal 2000: 144-145; Bedal 2003: 83, 84 and Plate XXVIb.
- For examples of these different types of cooking pots at al Wu'ayra, see Vannini and Vanni Desideri 1995: 531, Fig. 16, Vannini and Tonghini 1997: 380, Fig. 16 and Sinibaldi 2009a: 461 for a discussion of the types.
- My publication of the Wādī Farasa ceramic assemblage is forthcoming.
- My publication of the ceramic assemblage from the Bayda Documentation Project is currently in progress.

Lid

One completely hand-made lid was included in the assemblage (**Fig. 2.3**). It was formed by pushing a rounded piece of clay onto a flat surface; a concave ridge was then made around the rim of the lower surface, in order to make a better fit with the rim of the pot. Its surface still displays clearly visible traces of smoothing. The lid was pierced from its external surface in order to create a vent for steam; eight holes are visible, arranged in two concentric rows concentrated towards the centre of the lid. This very long-lasting basic form is known from the Petra area from at least the 11th century onwards and was in use throughout the whole Islamic period, albeit with many variations¹². For this reason, it is not possible to specify a date for the lid which may, in view of its very low manufacturing quality, be the result of non-professional production.

Knob-decorated cup

A small cup decorated with a knob (Fig. 3.2),



- 3. A selection of pottery from the assemblage (illustrations M. Zambello): (1) cooking pot; (2) cup; (3) bowl.
 - 3.1 Cooking pot. Fabric: includes large chunks of limestone. Chaff proportion: medium. Fabric surface colour: red to grey. Manufacturing quality: medium. Firing: black core. Surface treatment: smoothed on external surface. Other details: ledge handles. Original height: ca 25 cm. Rim diameter: 12 cm.
 - 3.2 Cup. Fabric: exploded chunks of limestone. Chaff proportion: medium. Fabric surface colour: buff. Manufacturing quality: medium / high. Firing: black core. Surface treatment: smoothed on external and internal surfaces. Other detail: applied knob decoration. Height: 5 cm. Rim diameter: 8 cm. Base diameter: 3 cm. Wall thickness: 0.5 0.8 cm.
 - 3.3 Bowl. Chaff proportion: medium. Fabric surface colour: grey to pink. Manufacturing quality: medium. Firing: black core. Surface treatment: smoothed and covered with white slip on external and internal surfaces, thicker on external surface. Paint colour ranges from red to grey. Height: 9.2 cm. Rim diameter: 20 cm. Base diameter: 11 cm. Wall thickness: 0.9 1.9 cm.
- See for example Lindner *et al.* 1996: 120, Fig. 12, 124, Fig. 21.1-2, Fig. 24.1-7 (Khirbat al-Mu'allaq, pre-12th century); 'Amr *et al.* 2000: 247, Fig. 18.1 (Khirbat an-Nawafla, Fatimid); Tonghini and Vanni Desideri 2001: 713, Fig. 8d (Crusader or immediately

pre-Crusader); Vannini and Vanni Desideri 1995: 532, Fig. 17.8-9 (al-Wu'ayra, chronology not indicated); Sinibaldi and Tuttle 2011: 445, 443, Fig. 15.4 (Bayda, Ottoman). perhaps mirrored by another on the opposite side, is characterized by a medium / high manufacturing quality obtained with the help of a turning tool and by well-smoothed internal and external surfaces. Knob decoration is common at $W\bar{a}d\bar{1}$ Farasa where the form has a parallel in a small cup, albeit shallower than the example from Tomb 303, from a context dated to between the 13th and 15th centuries.

Jug with appliqué decoration

A large jug has been almost completely reconstructed (Figs. 5 and 2.1). It may have been tossed into the tomb after its handle, which was not found by the excavators, broke off. It used to have a neck-to-body handle, connected to the body of the jug by means of two appliqué decorations; the one connecting it to the widest part of the body is characterized by three terminations. This specific decoration, used to connect a jug handle to the body of a pot, and the form itself both have close parallels at Wādī Farasa from a context dated to between the 13th and 15th centuries. However, a 20th century pot from Dana has exactly the same type of decoration, albeit on a different form of roughly the same size as the one from Thughrah (Biewers 1991 27). This kind of decoration therefore appears to be another example of extreme longevity in the region, necessitating caution when attempting a chronological attribution. It is noticeable that the surface treatment, viz. a white slip of varying thickness, as well as the low standard of manufacture are not paralleled in the Wādī Farasa assemblage.

Painted and slipped bowl

A bowl (**Fig. 3.3**) is one of two painted objects in the assemblage. It is characterized by its medium manufacturing quality and was formed with the aid of a turning tool. Several elements, including the rim shape (flattened on part of the diameter, but rounded and thickened on another), show that the manufacture is relatively irregular.

The uneven firing of the object, very common in Middle and Late Islamic pottery from Petra, is evident in the variations in colour (ranging from grey to red) of the paint used to decorate the bowl. Before the slip and paint were applied, both internal and external surfaces were carefully smoothed. Afterwards, the internal surface was covered with a light white slip and then painted with linear patterns in red, while the lip was decorated with a broad brushstroke. The external surface of the bowl was covered with a thick white slip, giving this area a sharp contrast of colour and decorative effect.

The bowl belongs to a type that, on the basis of recent observations, has considerable longevity at Petra (at least 12th to 15th centuries), but at the same time seems also to be characterized by variations in its chronological development. The decorative pattern was also long-lived, as it has been often recorded for Islamic-period handmade pottery produced at Petra¹³. Examples of this type originate from a context dated to the second half of the 12th century at al-Wu'ayra; numerous other examples come from the Khirbat an-Nawafla assemblage in a context of late Mamluk date. Yet others are known from a 12th - 15th century context in Wādī Farasa, with several additional examples coming from the Jabal Harun survey assemblage¹⁴. On the basis of comparisons with other assemblages, a date of between the 13th and 15th centuries can tentatively be proposed.

Moulded lamp

This important piece (**Fig. 4**) belongs to the so-called Emmaus type, the last moulded type produced in Bilad ash-Sham. This type is often characterized by a fine but very fragile fabric, a slipper shape and roughly the dimensions of the example presented here. It is generally dated to between the 12th and 14th centuries¹⁵. The Emmaus type is also the last lamp with a slipper form to have been produced in the Palestine region¹⁶. In addition to the characteristic decorative patterns, such as rosettes, herringbone pat-

Khirbat an-Nawafla is in progress. For al-Wu'ayra, see Brown 1987: 285-286, Fig. 10.29 and Vannini and Vanni Desideri 1995.

- 15. I am very grateful to Kate da Costa for her help with this identification. For a description of this type, see Da Costa 2012: 264, Fig. 583.
- 16. Kennedy 1963: 91 and pl. XXIX, 807, type 27.

^{13.} See for example the painted pottery from Bayda, which has some painted patterns of great longevity (Sinibaldi and Tuttle 2011: 441-443, Fig. 14).

^{14.} See Sinibaldi 2013a: 180 and 191-192, Fig. 2.10, cat. nos 10, 12 and 13 for drawings and photos of the examples from Jabal Harun and a description of this type at Petra. Publication of the ceramic assemblage from



 Moulded lamp (illustration M. Zambello). Moulded lamp. Type: Emmaus lamp. Fabric: very fine and soft. Fabric surface colour: cream. Other details: decorated under base; channel borders. Height: 3.5 cm. Length 13 cm. Width 8 cm. Wall thickness: 0.5 cm.



5. Jug in Fig. 2.1 (photo M. Sinibaldi).

terns, radial designs and pearls¹⁷, the lamp from Tomb 303 appears to have some features in common with examples found at Baysan, including the presence of channel borders (not normally present in this type) and an additional ridge around the filling hole¹⁸. Although a chronological subdivision has been attempted on the basis of the handle form¹⁹, this has not yet been confirmed by finds beyond Baysan. Therefore, the best date that can be proposed for the Tomb 303 lamp ranges from the 12th to the 14th centuries. The example presented here appears to be particularly complex in its decoration, which deviates from the more common geometric patterns, and is also characterized by the presence of decoration under the base. A close parallel for the elaborate decoration under the base, which is not always present in this type, comes from a late 14th century context from the Armenian Garden in Jerusalem (Tushingham 1985: 397, Fig. 45.1).

These being the only moulded lamps in the southern Levant during this period, it is to be expected that numerous manufacturing centres

^{17.} See Kennedy 1963: 92, type 27; Hadad 1999: 217 and figs 9.31-33 and 4.16-17 (type 8); 217, figs 9.34-35 and 4.18 (type 9); Kedar and Pringle 1985: 178, Fig. 4.3.
18. Personal communication by Kate da Costa.

^{19.} Hadad 1999: types 8 and 9; Tushingham 1985: 147, Fig. 37.6, Fig. 38.17, Fig. 39.24, Fig. 39.41, Fig. 37.13, Fig. 38.14 (type G.2); 151, Fig. 43.17, Fig. 45.1-3 (type N. 2).

were producing the Emmaus type, which has been found at several sites. Evidence for its manufacture in Jerusalem comes from the Armenian Garden in a context dated to the last quarter of the 14th century, from which some moulds for these lamps were recovered (Tushingham 1985: 151). Additionally, a lamp of this type and what has been interpreted as a mould for the same lamp were found at the Church of the Ascension in Jerusalem (Corbo 1965: Fig. 111.2; Mason and Milwright 1998: 187-188).

Apart from Jerusalem, other examples of this type come from sites elsewhere in Palestine and in Syria. In addition to the sites mentioned above, these include al-Oubayba where it was first identified²⁰, al-Fula (12th - 13th centuries) (Kedar and Pringle 1985: 178, Fig. 4.3), St Mary of Carmel (13th century) (Pringle 1984: 100, Fig. 5.9), the Red Tower (13th - 14th centuries) (Pringle 1986: 145, Fig. 47), Khirbat al-Lawza (12th - 13th centuries) (Ellenblum et al. 1996: 192, 194, figs 7-8), Jaffa (13th century) (Kletter 2004: 202-205, Fig. 16.10) and Yoqne'am (Avissar 1996: 195, Fig. XV.27, no. 28). The Emmaus type is also represented by examples from sites in Jordan, e.g. Tall Hisban, where it is well-dated by a hoard of coins dating to 1260 - 1277 (Thompson 1973: 77), Karak, in a fabric which does not appear compatible with the typical Karak fabric (Mason and Milwright 1998: 177, Fig. 2.9, 187-188) and several examples from Ghawr as-Safi (the sites of Tawāhaīn as-Sukkar and Khirbat ash-Shaykh 'Isa)²¹, where occupation at the sugar production site during the 13th - 14th centuries is evidenced by the presence of these lamps.

Discussion

The assemblage from Tomb 303 is of great interest for several reasons, including the fact that it presents an opportunity to analyse and publish a small group of objects from Islamic Petra - a period that needs much more investigation.

The first important contribution of the Tomb 303 assemblage is the evidence it presents for settlement in this part of the Petra valley during the Middle to Late Islamic period. It is possible

to hypothesize that the tomb was used primarily as a rubbish dump for a nearby settled community for a limited amount of time, since there seems to have been no obvious accumulation of dust (that would suggest a long period of abandonment) during the period in which the material was deposited. This and, as suggested by the excavators, any possible brief occupation of the space seems to have occurred in the Mamluk period. Thus, the possible date of the dump could extend from the late 12th century to the 15th century, but can most likely be narrowed down to the 13th - 14th centuries, primarily on the basis of the date of the lamp. Evidence for settlement in this area of Petra during the Mamluk period has been demonstrated by the case study of Wādī Farasa, where a Nabataean funerary complex (Schmid 2001, 2002; Schmid and Studer 2003) was frequented and inhabited at various times between the 12th and 18th centuries, with a significant occupation during the Mamluk period. A settlement was also present on Jabal Harun during the Mamluk period, perhaps in connection with the building of the *weli* in the 14th century (Sinibaldi 2013a: 183). It can also be noted that the path passing through Thughrah was historically one of the main routes leading to Petra from Wādī 'Araba; today this is also the main route leading from the ancient city centre of Petra to Jabal Harun. Additional evidence for Mamlukperiod settlement in the Petra valley may also be present at the Petra Pool Complex, on the basis of the intact cooking pot described above. Beyond the Petra valley, the Mamluk period was important at the site of Khirbat an-Nawafla and recent archaeological evidence is suggestive of Mamluk-period settlement at Bayda (Sinibaldi, in press b). It is too early to speculate about the extent, distribution and intensity of Mamluk-period settlement compared to other periods in the Petra region; this will certainly be an important topic to explore in the near future. Nevertheless, the preliminary evidence described here suggests that its presence was significant.

The second important contribution of the Thughrah assemblage to our understanding of Islamic-period Petra relates to the trade and circulation of the imported ceramics. The Emmaus

^{20.} Bagatti 1947: 140, pl. 28. This site, long identified as Biblical Emmaus, was the source of the original name for this lamp, but this identification can no longer be

supported.

^{21.} Personal communication by Kate da Costa.

ADAJ 57 (2013)

lamp is currently one of very few known chronologically bounded imports found in the Petra region for the Middle Islamic period; it is therefore particularly important. Currently available evidence suggests that the 'handmade' tradition was predominant in Middle / Late Islamic Petra, with a very limited presence of wheel-made or moulded pottery objects, which are therefore commonly assumed to be of non-local origin. The very few examples of imports in the Petra area that date to the 12th - 14th centuries have to date been identified at al-Wu'ayra as originating from the Syrian region, or more generally from the southern Levant (Vannini and Tonghini 1997: 382; Brown 1987: 284). The sources for imports at Bayda and Wādī Farasa have been identified as being the Lebanese coast, Red Sea, Syria / Egypt and Palestine²²; the lamp therefore adds some important information to this picture.

The possibility cannot be excluded that the Petra example belongs to the late 12th century, because the area was trading with Palestine during the Crusader period (Sinibaldi 2014), but it should be borne in mind that the other examples found in Jordan all date to the Mamluk period. The location of the sites at which they were found (Karak; Tall Hisbān; Tawāhaīn as-Sukkar and Khirbat Shaykh 'Isa in Ghawr as-Safi) hints at how this object may have arrived in Petra. Karak, refortified as a major settlement by the Franks in 1142, increased its connection with Palestine and Jerusalem from this time onward, and these connections were maintained during the Ayyubid and Mamluk periods when the new rulers chose not to destroy the Crusader castle, but to refortify and use it as an important post on the Darb al-Hajj; the same strategy was also adopted at Shawbak. Ghawr as-Safi was likewise well-connected with the Palestine region; this is evident from the rich ceramic assemblages at sites dating to the early Mamluk period. These ceramics include, for example, some relief-moulded bowls, a well-known type of the 13th - 14th centuries²³ which is also represented by several examples at Tall Hisban, a very significant site during the Early Mamluk period (Walker and La Bianca 2003: 464-466). Numerous examples of these bowls have also been found at Karak castle and on the Karak plateau (Milwright 2008: 201-207; Brown 1991: 233, 278, nos 252-257). What is of interest is the fact that these bowls of the 13th - 14th centuries were produced in Jerusalem (See Avissar and Stern 2005: 23-24, type I.1.7), to which all these sites seem to have been well-connected; this may also have been the origin of some of the Emmaus lamps in Jordan.

The hypothesis that the lamp may have arrived in Petra from Palestine through Karak or Ghawr as-Safi is supported by the fact that several ceramic products created in early Mamluk Palestine have been found at all these sites²⁴. If the lamp was produced in Jerusalem, this example would fit very well with the preliminary evidence already gathered for the existence of trade connections between Palestine and the Petra region during the Middle Islamic period along the King's Highway, starting in the Crusader period and continuing until at least early Mamluk times. The fact that an Emmaus lamp has been found in Petra therefore supports the conclusion that Petra had a continuous, though not intense, connection with the castles located along the King's Highway (Karak and Shawbak) from the Crusader period into at least the early Mamluk period. At Shawbak, only *ca* 25 km from Petra, a preliminary ceramic assessment of survey and excavation material has demonstrated that traded products of the Early Mamluk period were rich and varied, and certainly included some from the Palestine region²⁵.

Concluding Remarks

A recent preliminary study of the characteristics of handmade pottery in Petra (the dominant group there in the Middle and Late Islamic periods), as well as the identification of its most diagnostic aspects, now makes it possible to propose a preliminary chronological framework for several sites in the region. It also casts some light

^{22.} Such evidence is documented at Bayda and Wādī Farasa for the 12^{th} - 15^{th} centuries.

^{23.} Personal observations from my examination of the excavated ceramic material from these sites (courtesy of director K. D. Politis and ceramic specialist A. Grey).

^{24.} My study of ceramic imports to Petra is curently in progress.

^{25.} See for example Walker 2009 and Sinibaldi 2009b for some of the imported early Mamluk fragments recovered from excavations and surveys at Shawbak, as well as the locally better-known handmade pottery.

M. Sinibaldi: The Ceramic Assemblage from the Later Phases at Tomb 303, Settlement in WādĪ ath-Thughrah

on the important subject of the extent, nature and chronology of settlement in the Petra region in its post-urban phase and of its relationship with trade²⁶. While it is hoped that additional work will in future yield further information on these themes, currently available data, as shown for example by results from the Tomb 303 assemblage, already make it possible to demonstrate with certainty that (1) settlement in the Petra valley existed during the Mamluk period and (2) during this period imports to the Transjordanian region reached the Petra valley itself.

The decision of several researchers involved in recent work in Petra, which is normally focused on the study of earlier periods, to encourage the specialized study of pottery from later excavated contexts has been an important step in coming to a better understanding of the chronology of these sites²⁷. Evidence is gradually demonstrating that, although settlement certainly seems to have significantly decreased in the Petra valley after the Byzantine period, it did not stop completely²⁸. The commonly held view that the valley was abandoned sometime after the Nabataean period and was only briefly reoccupied during a period of revival under Frankish rule in the 12th century²⁹ now seems impossible to sustain. Instead, ceramic evidence is gradually providing a more nuanced and complex picture of continuing settlement in the valley during the Islamic period, with the Mamluk period beginning to emerge as a significant phase 30 .

- 26. Some preliminary observations on the subject of the relationship between ceramics and settlement in the Petra region will appear in Sinibaldi, in press a.
- 27. I am grateful to all project directors who asked me to include their ceramic material in my current study. In addition to the excavated assemblages from Thughrah Tomb 303 analyzed here (directors Christian Augé and Isabelle Sachet) and the assemblage from the Djin Blocks (director M. Mouton), both part of the wider From Petra to Wādī Ramm project (Institute Français du Proche Orient), my current analysis includes assemblages from Wādī Farasa (International Wādī Farasa Project excavations, Humboldt University [director Stephan Schmid]), Bayda (Beidha Documentation Project excavations, American Centre of Oriental Research [director Patricia M. Bikai]), surveys and excavations by the Brown University Petra Archaeological Project (directors Susan Alcock and Christopher Tuttle), Khirbat an-Nawafla (Department of Antiquities of Jordan excavations [directors Khairieh 'Amr and Ahmad al-Momani]), Jabal Harun (excavations and surveys by the Finnish Jabal Harun Project, University of Helsinki [director Jaakko Frösén]), al-Wu'ayra

Bibliography

Amr, K. et al.

2000 Summary Results of the Archaeological Project at Khirbat an-Nawafla/Wādī Musa. ADAJ 44, 231-255.

Avissar, M.

- 1996 The Oil Lamps. Pp. 188-197 in A. Ben-Tor, M. Avissa and Y. Portugali (eds.), Yoqne'am I. The Later Periods. Qedem Reports n. 3, Hebrew University of Jerusalem.
- Avissar, M. and Stern, E.
 - 2005 Pottery of the Crusader, Ayyubid and Mamluk periods in Israel. *Israel Antiquity Authority Reports* n. 26, Jerusalem.

Bagatti, B.

1947 I monumenti di Emmaus el-Qubeibe e dei dintorni. Studium Biblicum Franciscanum, Collectio Maior 4, Jerusalem, Franciscan Printing Press.

Bedal, L. A.

- 2000 *The Petra Pool Complex. A Hellenistic Paradeisos in the Nabatean capital*, M.A. dissertation presented to the University of Pennsylvania, Department of Anthropology.
- 2003 The Petra Pool Complex. A Hellenistic Paradeisos in the Nabatean Capital, Gorgias Press.

Biewers, M.

1991 L'Habitat Traditionnel du sud de la Jordanie. Les villages de 'Aima. Dana et Khirbat Nawafleh, Amman.

1987 A 12th century A.D. sequence from Southern Transjordan Crusader and Ayyubid occupation at el-Wu'eira. *ADAJ* 31: 67-288.

(excavations directed by Robin Brown) and Ba'ja (excavations at Ba'ja I by the German Protestant Institute of Archaeology [director Dieter Vieweger]). For preliminary results see Sinibaldi 2009a and b; Sinibaldi and Tuttle 2011.

- 28. As already suggested by Fiema (2002: 241-242), at least for the 7th 11th centuries.
- 29. According to this view, the Frankish presence in the area caused "a rapid though ephemeral re-emergence of the historical conditions that had already constituted twice in the past the basis of the fortunes of Petra." But "Afterwards, the fall of the Latin Kingdom caused Petra to become again merely the internal region of a vast dominion and to lose its strategic importance. For this reason, the area was deserted and the same phenomenon of decadence that had been caused by the Roman (and later Arab) conquest occurred all over again. In this manner Petra suddenly became a site of minor importance without a lasting settlement…" (Vannini and Vanni Desideri 1995: 513, 538).
- 30. See Sinibaldi 2013b and Sinibaldi, in press a for some preliminary observations on this subject.

Brown, R.

ADAJ 57 (2013)

- 1991 Ceramics from the Kerak plateau. Pp. 169-279 in Miller, M. (ed.), Archaeological Survey of the Kerak Plateau. American Schools of Oriental Research Archaeological Reports (ed. L. Herr), number 1, Atlanta.
- 1992 Late Islamic Ceramic Production and Distribution in the Southern Levant: A Socio-Economic and Political Analysis. Unpublished PhD dissertation, Binghamton State University.

Brown, R.M, and K. Rielly,

- 2010 A twelfth century faunal assemblage from al-Wu'ayra in the southern highlands of Jordan, *ADAJ* 54: 121-141
- Corbo, V.
 - 1965 Ricerche archeologiche al Monte degli Ulivi, Studium Biblicum. Franciscanum, Collectio Maior, Jerusalem 16.

Da Costa, K.

2012 The Ceramic Lamps. Pp. 223-291 in K. D. Politis (ed.), *Sanctuary of Lot at Deir 'Ain 'Abata in Jordan*. Excavations 1988-2003. Amman, Jordan Distribution Agency.

- 1996 Khirbat al-Lawza, a Frankish Farm House in the Judean Hills in Central Palestine. *Levant* 28: 189-198.
- Fiema, Z. T.
- 2002 Petra and Its Hinterland during the Byzantine Period: New Research and Interpretations. Pp. 191-252 in J. Humphrey (ed.), *Roman and Byzantine Near East: Some New Discoveries III.* Journal of Roman Archaeology Supplementary Series no. 49, Portsmouth, RI.

Hadad, S.

- 1999 Oil Lamps from the Abbasid Through the Mamluk Periods at Bet Shean. *Levant* 31: 203-224.
- Kedar, B.Z. and Pringle, D.
- 1985 La Fève: a Crusader Castle in the Jezreel Valley, Israel Exploration Journal 35, 2-3: 164-179.

Kennedy, C.

1963 The Development of the lamp in Palestine. Berytus XIV (II): 67-115

Kletter, R.,

- 2004 Jaffa, Roslan Street, 'Atiqot 47: 193-207.
- Lindner, M., Knauf E.A. and Zeitler, J.P.
 - 1996 An Edomite fortress and a Late Islamic Village near Petra (Jordan): Khirbat al-Mu'allaq. ADAJ 44: 111-135.
- Mason, R.B., and Milwright, M.
 - 1998 Petrography of Middle Islamic Pottery from Karak, *Levant* 30: 175-190.

Milwright, M.,

2008 The Fortress of the Raven. Kerak in the Middle Islamic Period (1100-1650). Leiden and Boston, Brill. Pringle, R.D.

- 1984 Thirteenth-century pottery from the monastery of St. Mary of Carmel, *Levant* 16: 91-111.
- 1986 The Red Tower (Al-Burj al-Ahmar). Settlement in the plain of Sharon at the time of the Crusaders and Mamluks AD 1099-1516, London, British School of Archaeology in Jerusalem, (Monographs series 1).

Schmid, S.G.,

- 2001 The International Wādī Farasa Project (IWFP): 2000 Season. *ADAJ* 45: 343-358.
- 2002 The International Wādī Farasa Project (IWFP): 2001 season. *ADAJ* 46: 257-277.
- 2005 The International Wādī Farasa Project (IWFP). Preliminary report on the 2004 season. ADAJ 49: 71-78.
- 2007 The International Wādī Farasa Project (IWFP). Preliminary report on the 2006 season. *ADAJ* 51: 141-150.
- Schmid, S.G. and Barnasse, A.
 - 2004 The International Wādī Farasa Project (IWFP). Preliminary report on the 2003 season. *ADAJ* 48: 333-346.
 - 2006 The International Wādī Farasa Project (IWFP). 2005 season. ADAJ 50: 217-228
- Schmid S.G. and Studer, J.
 - 2003 The International Wādī Farasa Project (IWFP). Preliminary report on the 2002 season. *ADAJ* 47: 473-488.
- Sinibaldi, M.
 - 2009 a The Franks in Southern Transjordan and the contribution of Ceramic Studies. A Preliminary Report on the Pottery Assemblages of Bayda and Wādī Farasa. ADAJ 53: 449-464.
 - 2009 b Entries n. 69-71. Artifacts descriptions: ceramics from Shawbak castle. Pp. 138-140 in G. Vannini and M. Nucciotti (eds.), *Catalogue of the Exhibition "From Petra to Shawbak, Archaeology of a Frontier"*, Florence.
 - 2013 a The pottery from the 11th-20th centuries from the FJHP survey. Ceramics, Settlement and Pilgrimage at Jabal Harun during the Late Islamic periods, in Pp. 169-197 P. Kouki and M. Lavento (eds.), *Petra, the Mountain of Aaron. Vol. III. The Archaeological Survey.*
 - 2013 b Archaeology and History of Crusader-period Settlements: 12th century sites in Transjordan. Bulletin of the Council for British Research in the Levant, 62-65.
 - 2014 Settlement in Crusader Transjordan (1100– 1189): a Historical and Archaeological Study. PhD thesis submitted to Cardiff University, U.K.
 - in press a The ceramics from the later phases of occupation at the Monastic site of Jabal Harun, In Z.

Ellenblum, R., Rubin R. and Solar, G.

M. Sinibaldi: The Ceramic Assemblage from the Later Phases at Tomb 303, Settlement in WādĪ ath-Thughrah

Fiema and J. Frosén (eds.), *Petra, the Mountain of Aaron. Vol. II.The Nabataean Sanctuary and the Byzanting Monastic Complex.*

in press b The Islamic Bayda Project, Bayda (Petra Region), Season 2014. Palestine Exploration Quarterly.

Sinibaldi, M. and Tuttle, C. A.

- 2011 Brown University Petra Archaeological Project:
 2010 Excavations at Islamic Bayda. ADAJ 55: 431-450.
- Tonghini, C. and Vanni Desideri, A.
 - 2001 The Material Evidence from al-Wu'ayra: a Sample of Pottery. *SHAJ* 7: 707-719.

Thompson. H.O.

1973 "Heshbon 1971: Area C". Andrews University Seminary Studies XI/1: 72-88.

Tushingham, A.D.

1985 Excavations in Jerusalem 1961-1967, Volume I,

Royal Ontario Museum, Toronto.

Vannini, G. and Tonghini, C.

1997 Medieval Petra: the Stratigraphic Evidence from Recent Archaeological excavations at al-Wu'ayra. *SHAJ* 6: 371-84.

Vannini, G. and Vanni Desideri, A.

1995 Archaeological Research on Medieval Petra: a Preliminary Report. *ADAJ* 39: 509-40.

Walker, B. J.,

- 2009 Entries n. 64-69. Artifacts descriptions: ceramics from Shawbak castle, in Pp. 136-138 G. Vannini and M. Nucciotti (eds.), *Catalogue of the Exhibition "From Petra to Shawbak, Archaeology of a Frontier"*, Florence.
- Walker, B. J., and La Bianca, O. S.
 - 2003 The Islamic Qusur of Tall Hisbān: Preliminary Report on the 1998 and 2001 seasons, *ADAJ* 47: 443-471.