The Nabataean fine ware with its egg-shell thinness is unique among the contemporary Hellenistic and Roman pottery. After Conway's and Horsfield's identification of this special kind of pottery as a product of Nabataean potters, Nelson Glueck established the painted fine ware as a reliable criterion for Nabataean presence in settlements and trading centres. The search for reliable criteria to establish a typology that is connected to stratigraphy, therefore leading to precise classification and dating of this pottery, has nevertheless failed so far. This situation is, on the one hand, due to the fact that research has concentrated mainly on the stylistic development of the painted ware, and on the other that the stratigraphy in the excavations was too unclear or the quantity of the excavated material not representative enough to allow for painstaking differentiation. The understanding that only a carefully done typological and statistical registration of the sherds will lead to further results has only been generally accepted recently. To get further knowledge of the provenance and chronology of the Nabataean fine ware, attempts have lately been made by the use of chemical analysis. The pottery found during the four campaigns which were carried out by our team beneath the peak of az-Zantur in Petra meet the fundamental conditions for a promising classification—both in what concerns the quantity as well as the provenance of stratified find units. Our main interest focused on the shapes of the Nabataean plain ware because these seemed to have—in contrast to the painted specimens—more similarity to Hellenistic and Roman pottery of the Near East. It became apparent that it is possible to class the Nabataean fine ware into three groups with the frequently occurring shallow bowls and plates as leading shapes. The first group includes mostly vessels which are derived from the Hellenistic wealth of shapes. On the one hand we are dealing with fairly high bowls with incurving rims and considerable diameters (FIG. 1:1) and on the other with shallow plates and dishes with more or less incurving rims (FIG. 1:2-4). Apart from these shapes, Jordanien, ZDPV 95, 1979, 87-110; J. P. Zeitzer, Houses, Sherd and Bones: Aspects of Daily Life at Petra, in: The Near East in Antiquity, German Contributions to the Archaeology of Jordan, Palestine, Syria, Lebanon and Egypt, Vol. 1 (1990) 44ff.


The achieved typology of shapes is based mainly on sherds of the Nabataean fine ware of which we registered and catalogued several tens of thousands.

See also Preliminary Report 1989 and Preliminary Report 1991. In an unpublished MA thesis from the University of Basel, the author established a typology and a chronology of the most frequent forms of the Nabataean fine ware; the aim of the author's doctoral thesis (preliminary title: Die Feinkeramik der Nabataer, Typologie, Chronologie und kulturhistorische Bedeutung) under the supervision of Prof. Dr. R. A. Stucky at Basel University, will be a more complete study of Nabataean fine ware.

1 The following abbreviations will be used in this paper:


The achieved typology of shapes is based mainly on sherds of the Nabataean fine ware of which we registered and catalogued several tens of thousands.

See also Preliminary Report 1989 and Preliminary Report 1991. In an unpublished MA thesis from the University of Basel, the author established a typology and a chronology of the most frequent forms of the Nabataean fine ware; the aim of the author's doctoral thesis (preliminary title: Die Feinkeramik der Nabataer, Typologie, Chronologie und kulturhistorische Bedeutung) under the supervision of Prof. Dr. R. A. Stucky at Basel University, will be a more complete study of Nabataean fine ware.
there are sporadic plates with outturned rims (FIG. 1:5-7). A characteristic of these sherds is the mainly reddish slip which may sometimes merge into reddish brown. A further distinctive mark is the “normal” wall thickness, that is to say the thickness of the sherds corresponds to that of comparable pottery from Hellenistic sites and is far from the finesse of the egg-shell ware.

A second group already shows indications of an independent development; the shapes get more elegant and the wall thickness decreases considerably. The most important representatives of this group are hemispherical bowls (FIG. 2:8-9) and shallow bowls with incurring rims (FIG. 2:10-11). Beside these shapes, we sporadically find dishes with projecting rims. Compared to the first group, the frequency of sherds with reddish slip is smaller. Specimens made of light, orange coloured clay predominate; they often show a white slip on the exterior, beneath the rim.

The third group reflects a further and final refinement of the shaping. This ware has a thickness of only a few millimetres and the clay is fired to a metallic hardness. In this group the open shapes predominate as well, mainly represented by shallow bowls with vertical rims which are either left plain (FIG. 3:13) or are decorated

---

11 The preference for a reddish ware fits well into the picture of Near Eastern Hellenistic pottery; generally speaking it seems that the Greek prototypes of shapes have been readily imitated but rarely the Greek black glazed decoration. This special liking for red pottery leads finally to the initiation of the Eastern Sigillata; see L. Hannefort, Change and Conservation. Hellenistic Pottery in Mesopotamia and Iran, in: Akten des XIII. Internationalen Kongresses für Klassische Archäologie, Berlin 1988 (1990) 179-186.
with ridges (FIG. 3:12). Also a very common shape is the small, somewhat deeper bowl (FIG. 3:14) and the further developed variant of the thin-walled hemispherical bowl — known from our group 2 — which shows incurving rims (FIG. 3:15). Dishes with projecting rims which appeared sporadically in groups 1 and 2 are missing here completely.

The considerations on the formal development of the Nabataean fine ware were confirmed by the analysis of the stratigraphical sequences in different trenches and soundings on our terrace beneath az-Zantur (FIG. 4). Specimens representing the first group were found in the lowest strata of our large trench EZ II (FIG. 5, layers 9-31) as well as in the lowest strata of soundings A (FIG. 6, layers 19-21), D, E and F. Vessels assigned to the second group were recovered in strata somewhat above the ones aforementioned in trenches A (FIG. 6, layers 1-18), D, E and generally in sounding B as well as in some layers of the large trench EZII (FIG. 5, layers 2-16). A common feature of these finds is that they were recovered under the level of the pavements belonging to the Nabataean house built at the end of the first century BC or at the beginning of the first century AD. The forms belonging to the third group were found directly on the pavement and just outside the house in a thick layer of ashes that was interspersed with quantities of pottery (FIG. 4, trench C; FIG. 7, layer 2). A comparable thick layer of ashes, again full of sherds that belong to group 3 was found on the terrace beneath our main excavation. The recovered pottery was encrusted with ash and a few specimens showed blisters and cracks resulting from extreme heat. Under the destruction layer, we came upon the collapsed remains of a once sumptuous building (FIG. 7, layer 3b); in its debris pottery belonging to the third group was again found. The conclusion that we are dealing here with evidence of a destruction is unquestionable but the reasons for the fire remain unclear.

The collected statistics and the analysis of the different stratigraphies prove that the separation of the formal groups into three subsequent phases in a relative chronology is justifiable: In strata with pottery of one par-

---

2. Nabataean fine ware forms, Group 2. 8: Hemispherical bowl; ware: 2.5YR 6/8 light red; interior: 10R 5/4 weak red; exterior: 5YR 6/6 reddish yellow, upper part with slip 5YR 5/2 reddish gray. 9: Hemispherical bowl; ware: 10R 6/8 light red; interior: 2.5YR 5.5/8 (light) red; exterior: 2.5YR 6/7 light red, upper part with slip 5YR 3/1.5 very dark gray/dark reddish brown. 10: Shallow bowl with incurving rim; ware: 2.5YR 5.5/6 (light) red; interior and exterior: 2.5YR 5.5/2 pale red/weak red, upper part of exterior with slip 2.5YR N3/2 dark gray/weak red. 11: Shallow bowl with incurving rim; ware, interior and exterior: 2.5YR 6/8 light red, upper part of exterior with slip 7.5YR 8/4 pink.

---

3. Nabataean fine ware forms, Group 3. 12: Shallow bowl with vertical moulded rim; ware: 10R 6/8 light red; interior and exterior: 10R/2.5YR 6/8 light red. 13: Shallow bowl with vertical rim; ware, interior and exterior: 2.5YR 4.5/8 red. 14: Small deep bowl; ware, interior and exterior: 2.5YR 6/8 light red. 15: Thin walled bowl with incurving rim; ware, interior and exterior: 10R 6/7 light red, upper part of exterior with slip 7.5YR 8/4 pink. 16: Cup with impressed decoration; ware and interior: 2.5YR 6/7 light red; exterior: 2.5YR 5/8 red. 17: Bowl with moulded lip and rouletted decoration; ware, interior and exterior: 2.5YR 6/7 light red.

The question of the chronological position of the different phases remains to be answered. Because of the large quantity of fine ware recovered from the excavations, we could establish many combinations with datable objects such as terracotta lamps, coins and imported pottery. As a start, Eastern Sigillata A gives fairly reliable criteria for the dating of the fine ware found in combination with it.\(^{13}\)

The strata with ceramics of phase 1 also produced Sigillata of the shapes Hayes 2A, 2B, 4A, 9, 18, 19A and 19B, which allow a dating of phase 1 in the late second and the early first century BC. Fine ware of phase 2 was found in conjunction with several fragments of Sigillata Hayes 7, 22B and 45. Accordingly we may establish an approximate dating of phase 2 in the second half of the first century BC to about AD 20. Most interesting in this context are the finds made directly on the pavement of the Nabataean house that must have been built — according to the numismatic evidence — during the reign of Aretas IV. The recovered pottery in question showed hardly a shape belonging to phase 2: the vast majority of the sherds could be assigned to phase 3. Consequently phase 2 must have come to an end in the first decades of the first century AD. Phase 3 runs from then on to the destruction of the house which is datable — on account of the recovered Sigillata Hayes 51, 54, 56, 58 and 60A — to about AD 100.

Graphically expressed the situation looks as follows (see FIGS. 8 and 9). The transition from one phase to the other must not necessarily be abrupt. It is imaginable that two phases coexisted for a certain time. Because the main material of phase 3 was recovered from destruction layers dating around AD 100, it is not possible yet to define the transition in a closer sense. At least the coin ev-

\(^{13}\) In the following all shapes will be quoted after J. W. Hayes, Sigillate orientali, in: *Atlante delle forme ceramiche II* (Enciclopedia dell’arte antica, 1985) 1ff.; the numbers relate to Hayes numbering of the Eastern Sigillata A; see also Preliminary Report 1989.
Further investigations on the pottery will concentrate on a refinement of the chronologically differentiable typology, which will allow us to classify less common shapes as well. Even now it is possible to make some statements in connection with certain other shapes of fine ware.

Not a single vessel with rouletted or impressed decoration (Fig. 3:16-17) occurred in strata assign able to phase 1 and 2 but numerous examples were found in strata of phase 3, that is to say an analogous dating of these characteristic decorations is probable.\textsuperscript{15}

The reported observations and preliminary results were not limited to the plain Nabataean fine ware but included the painted fine ware as well. Proceeding in just the same way — by distinguishing types of forms and analysis of the stratigraphical correlations — it was again possible to define three groups.\textsuperscript{16} The earliest group consists of deep bowls which are carelessly painted with thinly applied pale red slip. The patterns of decoration consist mainly of straight and undulating lines which cut across each other at the bottom of the vessels (Fig. 10:18-19); furthermore, the rims may show a bead-like decoration. Another group consists of thin walled bowls painted with branches of palmettes which may radiate from the bottom of the vessel (Fig. 10:21) or run concentrically around the vessel’s body (Fig. 10:20). The rims of these bowls are slightly incurved, whereas the examples with the radial decoration show an additional “step” in the wall (Fig. 10:20). The third group is made of very delicate bowls with diminished rims. These bowls are usually painted with stylised palmettes and rhomboid to trapezoid motifs which generally are interconnected with hatchings of the same dark brown to nearly black colour (Fig. 10:22).

Not only the clear distinction of the shapes and the schemes of decoration but most of all the regular co-finds of corresponding unpainted sherds allow a doubtless assignment to the chronological phases defined above. Accordingly, the simple painted examples belong to about the second half of the second and the first half of the first century BC\textsuperscript{17} and are our earliest witnesses of Nabataean ceramics. In the second half of the first century BC, the “realistic” floraly painted sherds occur, and in the first century AD the dark coloured ones appear.\textsuperscript{18}


\textsuperscript{15} For the decorated Nabataean pottery see also N. I. Khairy, Fine Nabataean Ware with Impressed and Rouletted Decorations, in: A. Hadidi (ed.), Studies in the History and Archaeology of Jordan 1 (1982) 275-283.

\textsuperscript{16} For the groups see also Preliminary Report 1989.

\textsuperscript{17} Because nowhere in our excavation have we reached the bedrock, not even in the over 5m deep stratigraphical trench EZ II, it is not possible to say when phase 1 starts. On account of ESA (Hayes 2A), our earliest documented strata should not be earlier than about the second half of the second century BC.

\textsuperscript{18} The smooth transition to phase 2 justifies the term Nabataean, and the opinion that the painted pottery starts only in phase 2 (so K. Schmitt-Korte, in: M. Lidner (ed.), Petra und das Königreich der Nabatäer 5 (1989) 220; idem, Archäologischer Anzeiger 1966, 500ff) must be revised.

\textsuperscript{19} It is not certain that the same break in about AD 100 happened elsewhere in Petra; cf. the kilns discovered near Petra in which the potters seem to have continued producing the known types: P. Zayadine, ADAJ 26, 1982, 390ff.; K. ‘Amr, ADAJ 35, 1991, 313ff. The fact that the tradition of painted pottery was maintained in later times is proved by some painted specimens found in destruction layers from AD 363 on az-Zantur; cf. Preliminary Report 1988, 269 FIG. 8 N-R. On the other hand there are other places showing comparable destruction layers with corresponding fine ware pottery; see for example F. Villeneuve, The Pottery from the Oil-factory at Khirbet edh-Durah (2nd Century AD), ARAM 2, 1990, 567ff.
5. Az-Zanţur: Trench EZ II, southern section.

FINE WARE
Chronology of Phases

AD

BC

Phase 1
Phase 2
Phase 3

8. Chronology of the Nabataean fine ware phases.

That there was not a clear break from one phase to the next but a continous development is illustrated by painted bowls like the one shown on FIG. 11. The shape is a mix between the characteristic forms of phase 2 and 3 (cf. FIG. 10:20, 22) and the decoration shows the same palmettes as in the case of the late examples of phase 2 close to the rim, but on the inside motives typical of phase 3 occur.

Until now very few examples of Nabataean pottery with figural decoration are known.20 The four campaigns of the Swiss-Liechtenstein excavations at Petra produced some examples which allow further interpretations. Absolutely unique is the sherd with a bearded male face painted in polychrome (FIG. 12).21 It should be noted that the paint was applied after firing. The sherd was found in a layer with phase 2 material and one could be tempted to declare it as imported from a centre of Hellenistic pottery production in Egypt or Syria. But very close to the polychrome sherd, a rim sherd with the shape of a "commonly" painted Nabataean bowl was found, showing the characteristic drops at the rim as well as polychrome painting on its body.22 This observation and the fact that both sherds show identical traces of manufacturing on the outside prove that they belong to the same bowl which was originally a "commonly" painted bowl of phase 2 with a painted figural scene in polychrome. Another unusual example shows a figural scene (FIG. 13).23 A squat bird with a marked beak is depicted in the centre of the vessel. Around the bird are two human figures and two quadrupeds which can be identified as donkeys due to their long ears. The whole scene is framed by two rows of dots and a palmette.24 The somewhat clumsily painted figures and the carelessly painted floral ornaments could invite a dating in the third or fourth century AD. But this bowl shows exactly the same shape as the bowls characteristic of phase 3 (cf. FIG. 10:22)25 and it was found in the thick destruction layer dateable to about AD 100 or shortly afterwards.26 Obviously the Nabataean potters were much more familiar with the floral elements of decoration than with figural scenes.27

To sum up, we may declare that it is possible to divide the fine ware found on az-Zantur into three groups which show clear distinctions concerning typology of shapes and relative chronology. Thanks to the fact that we found the different shapes of fine ware together with numerous sherds of Eastern Sigillata A which are most helpful in dating the Nabataean pottery, we succeeded in formulating a chronological scheme for the different groups and in establishing a classification in phases on this ground (FIG. 9). Consequently, we may say that the spectrum of shapes represented in the Nabataean pottery in its earliest so far identifiable phase corresponds more or less to that of other Hellenistic sites in this area.28 The second phase shows on the one hand a development and refinement of the latter shapes and on the other the first men from his private collection at the Fifth International Conference on the History and Archaeology of Jordan.


23 Cf. Preliminary Report 1991 PL. V: 2 and FIG. 5 with a tentative reconstruction; see also S. G. Schmid, Die Feinkeramik der Nabatäer, in: Petra und die Weihrauchstrasse, Exhibition catalogue Zurich/Basel (1993) FIG. 121; during the 1993 campaign more fragments belonging to this bowl were found and allowed for a new reconstruction (see also Preliminary Report 1993).

24 As for painting and ware, K. Schnitt-Korte showed a very similar speci-


27 This observation may be connected with some kind of prohibition of figural representation, as was suggested by J. Patrick, Prohibition of a Graven Image Among the Nabataeans: The Evidence and its Significance, ARAM 2, 1990, 185ff. But in recent times the quantity of figurally painted fine ware increased considerably so that this thesis should be re-examined.

28 Cf. for example A. McNicol, R. H. Smith and B. Hennessy, Pella in Jordan I, Plates and Illustrations (1982) 137 No. 3. 7-10; 139 No. 5. 6. 10. 12; 141 No. 4. 5. 9.
9. Typology and chronology of the Nabataean fine ware.
steps to an independent conception of pottery; this is all the more true for the painted decoration. During the third phase the Nabataean potters freed themselves entirely from the given prototypes and even the plain fine ware shows since then completely new shapes.²⁹

²⁹ Since the presentation of this paper, further results allowed a more detailed differentiation into phases and sub-phases that are described in: Preliminary Report 1993.
11. Part of a painted bowl with palmettes and geometric motives.

12. Sherd with a bearded male face painted in polychrome.

13. Nabataean painted bowl with a figural scene.