NABATAEAN POTTERY
UNIQUE EGGSHELL THIN CERAMIC WARE
ARTICLE BY CLUB MEMBER THOMAS

Why are ancient pottery pieces or even broken potsherds so important for archeologists?

When assessing or excavating a historic site, experts can rather quickly define the age of ancient settlement by looking at the ceramic remains they find, even if they are tiny pieces.

And be assured, when there is an ancient settlement underneath the ground you stand on, you will find broken pottery pieces on the surface. Or put differently, if you find potsherds you have found an old settlement site.

Even today when wandering in Petra up the hills through the residential areas you will see many small broken ceramic pieces and believe me, they are all over 2,000 years old. Only the coins local Bedouins offer to sell should not be trusted. When looking at the pottery an ancient culture produced, you will be able to judge the sophistication of their craftsmanship and the wealth of that culture quite well.

Very little has been written about Nabataean pottery, despite the fact that it is remarkably thin and this culture was mass producing its ceramic wares. These were used for various purposes, such as religious ceremonies and well off Nabataean households were well equipped with over a hundred pottery items.

A further short coming in the lack of information is that, despite sufficient foreign exchange earnings from more than a million tourists per annum, the Jordanian authorities unfortunately have not made any investment into a decent Nabataean museum, neither in Petra nor in Amman. The museum on the Amman acropolis is far too small and in a terrible state, despite some recent renovations around it.

Over 90% of the Nabataean pottery excavated over the years has unfortunately no home where it can be seen and admired. In addition archeologists always fall years behind in publishing their results, so there is very little to read about Nabataean pottery as well. But let me share with you some of my research collected over time from various sources and museum visits in several countries.

Ceramic History

Nabataean ceramic ware was first mentioned in 1908 by German archeologist Gustav Dalmann in two books he published, but unfortunately he did not mentioned any details about
The first details were made public in 1929 by George Horsfield and Agnes Conway-Horsfield. In 1957 Philip Hammond published his dissertation, which was a pioneer work on Nabataean pottery that finally every expert welcomed. Various excavated pieces were included in later publications of archeologists such as Murray, Harding, Glueck, Schmitt-Korte, Parr and Negev, for those of you who want to research this subject further.

The first true Nabataean ceramic pieces were produced around 75BC during the rule of King Aretas the Third. Quickly Nabataeans developed their own very distinctive and independent pottery style. This is remarkable, as they adopted many Hellenistic styles and items in their architecture, as seen from their famous tomb facades.

But in their ceramic-ware no Hellenic scenes and techniques were used. This is even more significant, as Nabataeans did not develop their own style for coins they minted. They took it easy here and copied the Roman silver coin design and form, minting the heads of their own rulers on the coin faces as Romans did and also using the same weight and silver content. Surprisingly Nabataean ceramic oil lamps were very much influenced by the typical Roman style again.

Experts today divide Nabataean pottery into three phases of development. For this purpose pottery pieces with five basic forms have been researched. The largest piece measured thirty centimeters, about the size of a big dining plate today and the average size was about half of that, with the smallest piece just having a diameter of eight centimeters, about the size of a coffee cup plate.

In general it could be said, that painted-ware was only produced for official and religious purposes used during regular banquet or triclinium meals honoring the dead. Mostly flat bowls were painted, but only on the upper side. All cups, mugs and jugs were seldom painted. Paint colors used were rose, red brown, dark brown and black. All common daily use ceramic ware was mainly unpainted. Only later with growing wealth did important family households in Petra started to use also painted pottery.

**Ceramic Art Development**

Nabataean pottery is found from the north border of their territory at Madeba to the south at Aqaba or Aila as it was called at the time, including the Negev area to Gaza and down further south to Madain Saleh close to the present Saudi Arabian town of al‘Ula.

We do not know why Nabataeans developed extraordinary eggshell thin ceramic ware with a thinness of only...
one to four millimeters. Even plates with a diameter of thirty centimeters were produced to this thinness and surprisingly they were very strong and did not break easily. This was achieved by producing well fired pieces from local clay with the necessary characteristics. Not surprisingly these pieces produced a metallic sound when snapped with a fingernail like high quality crystal. Ceramic mass production sites were discovered in Petra and in the Negev at today’s Avdat, which Nabataeans renamed Oboda, as King Oboda the Third was buried here. Breaking with Nabataean tradition he was the only king being buried outside Petra.

All Nabataean pottery was wheel produced and hand modeled over a core mould using local red clay. Their quality was rivaling those of Greco Roman decent. In their large scale production methods, they used techniques such as stamping and rolling on designs. But still they developed specific Nabataean characteristics with hand painted floral and geometric patterns which I will explain later on.

**Ceramic Items Produced**

Nabataeans produced a wide variety of ceramic items. Mainly flat plates and bowls measuring between seventeen to twenty five centimeters were produced and used. Common Nabataeans were eating with their fingers and these bowls were food servicing bowls. The wealthy used spoons, but it is not certain yet if the spoons found were not servicing spoons.

The second most important item were drinking cups, mugs, juglets and jugs, pitchers and bigger drinking vessels. It is interesting that Nabataean cups had a very small base and could not be rested on a flat surface when empty, but they balanced much easier, when the cup was full.

Was there a difference in social standing in Petra? Definitely yes! Rich Petra inhabitants used golden drinking cups. Some of the more out of the ordinary ceramic items discovered included various refined animal sprouted vessels, a complete ridged drinking cup, an undamaged oil lamp filler in the form of a well shaped hedgehog and an ibex headed infant feeder. And ceramic faïences round up the development level of Nabataean pottery techniques and high level of sophistication at the time.

The list of pottery items produced also included huge storage jars, which could reach one meter in height and various sets of kitchen pots. In addition various forms of flacons were produced, most had a long neck for the storage of perfume and ointments. Like the Greek ladies, Nabataean females were using makeup and eye color, perfumes and lots of various well smelling oils. A huge oil lamp production is also proof of an active social life after sun set. Just imagine that over 800 oil lamps alone were excavated at the Great Temple.
Petra’s Communal Kitchens

One has to consider also the fact that Nabataean houses in Petra had no kitchens with cooking places. Due to the densely populated Petra suburbs with houses built next to each other, the risk of fast spreading fires was high. Therefore kitchens were banned from houses and centralized communal cooking stations in each suburb were used to prepare food. This created the need for bigger ceramic food containers and servicing plates for transport of meals from the numerous suburb cooking stations to nearby family homes.

How widespread the daily use of pottery items was, is demonstrated by over 30,000 potsherds found only in the small portion of residential quarters excavated on Petra’s ez-Zantur hill behind the Great Temple complex.

This is supported by a recent important discovery in a cistern in upper part of Wadi Farasa right next to the so-called Soldiers Tomb. In this cistern a full set of Nabataean household pottery with several dozens of complete ceramic vessels were discovered. This is the biggest find in Petra of undamaged pottery, and no reason was found yet as to why such a huge and complete ceramic household set was deposited in this cistern.

Different Nabataean Phases

The first phase started with the rule of Aretas the Third around 75BC and in the Negev area even later between 15AD to 50AD during King Aretas the Fourth times. The ceramic ware was smooth with matt surfaces and showed on the backside some white inclusions. It was a softer and porous ware, which absorbed water and was not very strong yet, as it chipped easily.

Only at the beginning did Nabataeans use some Hellenistic decorations and motives. But their forms and pieces were already unique, mainly producing flat bowls with a rim. The color was pink to light red, brown or beige colored. Designs used were leaf motives and simple decor lines.

The second phase started in the Negev area around 80AD and was very distinctive and a defined own style was developed. This ware was produced to eggshell thinness on average with one and a half millimeters. To achieve this metal hardness it was well burnt. The backside gave a polished appearance. The color was now fire red clay with darker red brown painted coloring.

Also new specific ornaments were used such as, needle designs, eyes, points, mash and three palm leafs. Rims were facing inwards and had different heights.

The third phase started around 150AD during Roman rule and again later in the Negev area after 200AD. Unfortunately now under Roman rule the pottery lost elegance, was tougher and thicker, in summery just a more crude ceramic ware.

It now also showed many crude sand inclusions and there was a limited scale of motives with more monotone ornaments. These included mainly palm leaves and diagonal double field designs. Rims were painted on the outside, using white, yellowish, brownish to dark brown and black coloring. The pottery bases were either solid or had a ring or foot.

Motives & Ornaments Used

Experts divide Nabataean pottery motives into five groups with actually limited choice of motives used. These were mainly floral and geometrical designs depicting vine and ivy leaves, acacia and palm leaves, various common flowers and plants.
But also fruits and rather symbolized fruit were used, including pomegranates, figs, olives and grapes. Seldom animals were painted on pottery and if we find them, it is probably depicting a bird most likely a dove. Stars and triangles were also rare in the Nabataean pottery designs. The patterns used by Nabataean potters were geometrical motives including wire mesh, needle patterns, styled border, points and eyes with a point and circle around.

Decoration Schemes

The decoration schemes used were split into seven types of division of pottery surface. First the diagonal division had two fields and four motive schemes with motives on both sides of the dividing line including various needle forms, eyes/points/mash, palm leafs and other decorations. Some pieces were decorated with border motives as well.

Secondly the Y-shape form division with three fields had four schemes again including various leaves, ornament lines, needle forms and palm leafs. This second division form was the most commonly used with palm leafs being the favorite motive.

Thirdly the radial six pointed star division had only two schemes with leaves plus ornament lines and other decoration forms. The adornment was fleeing from the central point towards the border rim like fire works. For this it was common to use small decoration items.

Fourthly the concentric division had three schemes with needle forms, eyes/points/mash and other decoration forms. Here the needle ornament was the most used typically on thin bowls.

Fifthly the whirl fan division had three schemes with leaves plus ornament lines, needle forms and other decoration forms. This division was mainly used on small pottery items. This design was similar to concentric designs with some designs similar to three field scheme.

Sixthly the asymmetric division had two schemes with eyes/points/mash and other decoration forms. Very few pottery pieces featuring this design have been excavated so far. The last design form is the full surface design with no division at all showing two schemes with eyes/points/mash and other adornment forms.

No surprise that after the Roman takeover of Petra in 106AD all pottery produced became more and more Roman with fewer Nabataean features. After 300AD in Byzantine times they vanished totally.

So in summary this remarkably eggshell thin and unique pottery design had survived only 200 years and in the Roman-Nabataean mixed style up to 400 years.

Different Pottery in Madain Saleh

Do not be surprised that Nabataean pottery discovered in various settlements was different in design and form. Madain Saleh pottery for example was easily distinguished, as it was different in form and fabric and did not imitate the typical Petra ware. It was also diverse to other Nabataean sites, which in contrast did imitate the Petra style.
Surprisingly in Madain Saleh plates and bowls were practically non-existent, but lots of cooking pots and storage jars and jugs were locally produced and used. Bottles used elsewhere in the Nabataean kingdom again were very rare in southern Madain Saleh.

Numerous grey soft stone bowls, wrongly called steatite stone, were excavated in Madain Saleh. Most pottery was found in the city’s urban residential areas in stone and mud brick built houses of normal household size.

But as is typical for desert areas, this included large storage vessels. The ceramic items found here were made of medium coarse pottery using brown, grey, greenish, yellowish and reddish local clays. They all were produced on a potter’s wheel with slip put mostly on the outside of pottery vessels, with some exceptional use on the inside and few pieces with slip applied to both sides.

Common Madain Saleh ceramic products were burnished ware with typical thin Nabataean walls, well fired to become hard and oxidized. But residents also imported over time regularly ceramic ware from Petra, which were dated between 100BC to 100AD.

During excavations in Madain Saleh also some Hellenistic potsherds were discovered dating back to 200BC including some pieces of glazed Parthian pottery. In addition some Byzantine ceramic items were also excavated, but are dated to much later settlement periods between 400AD to 600AD. Thereafter only few Islamic settlement traces were proven in Madain Saleh by the discovery of some typical glazed Islamic ware from the times after 1,000AD.

In conclusion we can say that the Nabataean pottery discovered helped a lot to shed light on the sophistication of this yet little known but important ancient culture and the daily life and living conditions of Petra and Madain Saleh residents, which I will cover more in detail in one of the next Sand Ladder articles.