

Networks in the Hellenistic World

According to the pottery in the
Eastern Mediterranean and beyond

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A pottery kiln underneath the Odeon of ancient Sagalassos. The excavation results, the table wares and their archaeometrical analysis

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Abstract

In 2007, a badly preserved pottery kiln was discovered beneath the remains of the imperial period Roman Odeon at Sagalassos. Geophysical research in the vicinity revealed the possible presence of more such structures. Additionally, recent archaeometrical research is presented in this paper, supporting the case for local production of pottery during the Hellenistic period at Sagalassos. Building on this, the pottery retrieved from the fill layers inside the dismantled Odeon kiln are discussed and attributed to the end of the third century and the (first half of the) second century BC. As no detailed typo-chronological framework for the wares can be constructed yet, the main types are presented and, as much as is already possible, placed in the socio-cultural context of Pisidian Sagalassos.

Keywords: Sagalassos, local pottery production, archaeometry, geophysics, Hellenistic fashion

The badly damaged kiln(s)

Between 2005 and 2008, the remains of the eastern half of the Roman imperial Odeon were excavated at Sagalassos, SW Turkey, by the University of Leuven, Belgium. The concert hall for musical, rhetorical and poetic performances is situated on a terrace to the north of the Lower Agora, partly built into the slope below the Upper Agora. The construction consisted of a covered semi-circular auditorium with a radius of 24m, fronted to the south by a stage building with a façade of c. 50m long. Although parts of the eastern entrance hall were still standing to a height of more than 6m, the quality of preservation of the scene, *orchestra* and mainly the *cavea* was of a different nature (Fig. 1).

Compared to other monuments at Sagalassos the building period of the Odeon was fairly long. Construction started in Augustan times, the *cavea* was in place by the end of the first century AD, while the building was completed in Severan times with the erection of the columnar façade on the scene (*scenae frons*). The hall remained in use until the early decades of the sixth century AD.

The excavations revealed a poor state of preservation of the *cavea*. Not only had the benches and seats been removed, possibly already in late antiquity, but also most of the foundation substructures had been dismantled and removed. At several spots, natural bedrock was encountered immediately underneath the erosional and collapse layers, excavated inside the auditorium. In the north-eastern part of the *cavea*, however, the absence of the foundations of the benches led to the discovery in 2007 of a feature predating the Odeon: a kiln (Fig. 2) (Locus 79 in sector 2350-2455)¹.

The kiln was partly dug into the natural bedrock of the steep slope situated between the Lower and Upper Agora. The plan of the kiln was hard to reconstruct, appearing in part as an ensemble of heterogeneously coloured spots with some charcoal. The contours of the entrance and combustion chamber could be traced, however, as the ophiolitic bedrock, on top of which the kiln was constructed, was discoloured as a result of radiating heat. The structure could not be entirely excavated as, upon its abandonment and dismantling, the north-eastern part of its remains was overrun by a water channel. The kiln was oriented more or less N/NW-S/SE, with the entrance from the south and the combustion chamber for the larger part situated inside the hill. In this way, the heat could be contained more efficiently. Because of the partial state of preservation, the original dimensions of the kiln could not be determined with certainty. This is the case for the height, but also the diameter could only be estimated. The combustion chamber appeared to have been more or less circular with a maximum length of 1.33m and an estimated width of c. 1.30m (1.10m preserved). The stoking channel was 0.90m long, 0.35m wide and preserved to a height of 0.26m. Based on these observations, we consider the kiln to have been originally designed as an updraught structure. Its estimated dimensions are most indicative of a pottery kiln, with the combustion chamber separated from the pot chamber by a pierced floor.

¹ For the preliminary excavation report, see Degraeve 2009, 433–434.



Fig. 1. Aerial view of the Roman imperial Odeon at Sagalassos (© Sagalassos Archaeological Research project)

Several fill layers were identified inside the preserved remains of the kiln, up to 0.85m deep in its back part. The stratigraphy was different in the stoking channel compared to the combustion chamber. In each zone three layers had been deposited. The floor of the opening into the kiln was covered by a thin layer (max. 0.15m) of light brown soil (Locus 134), followed by a black ash layer of only 0.05m thick (Locus 87). The upper stratum (Locus 81) was 0.30m thick and contained a lot of stone and brick. At the edge of the combustion chamber, the soil changed and a different stratigraphy was registered. The lowest part of the fill was composed of a very stony soil, 0.20m thick (Locus 129), topped by a silty, dark brown layer of another 0.20 m, containing a considerable quantity of charcoal particles (Locus 110). On top of this, a very heterogeneous red-brown layer was excavated, 0.40m in thickness (Locus 63). The north-western part of this layer was situated in a cavity, dug out into the natural bedrock. The build-up and relative chronology between these layers is not entirely clear, especially as the interface between the northern and southern sequences appeared to be a more or less vertical cut.

Analysis of the pottery contained in these layers pointed out, however, that the lowest strata (Loci 87, 134, 110 and 129) were probably contemporaneous. The material dated from the end of the third and the (first half of the)

second century BC (see below). Both upper layers (Loci 81 and 63) also contained a lot of Hellenistic material, but this was mixed with Roman imperial pottery of the end of the first century BC and the first half of the first century AD. Possibly, the upper part of the stratigraphy within the kiln was rearranged at a later stage, in preparation for the construction of the Odeon.

In any case, the kiln had been put out of operation and partially dismantled before the fill layers were deposited in its remains. Therefore, no relationship could be established between the functioning of the kiln and the pottery attested in the fill layers, apart from the fact that the latter should be considered as a *terminus ante quem* for the potting activity. The exact nature of the output of the kiln, as well as its period of activity, thus still remain unknown. Even though the chronological dating of the kiln is indirect, it still represents the oldest artisanal structure identified at Sagalassos thus far. In 2011, the origins of Sagalassos in Classical times were stratigraphically established², implying that the kiln could be generally attributed to a period between the fifth (i.e. the origin of the site) and third (i.e. the upper date of the fill material) centuries BC. During the excavation of workshops in the local Potters'

² Claeys *et al.*, in preparation.



Fig. 2. The badly preserved pottery kiln underneath the cavea of the Odeon, looking from the remains of the combustion chamber into the stoking channel (© Sagalassos Archaeological Research project)

Quarter, however, we repeatedly noticed that abandoned and dismantled kilns were fairly rapidly levelled with fill layers³, possibly because the remains of these structures could represent a hindrance in the continued occupation and use of the associated workshop buildings. This practice would suggest that the kiln found underneath the Odeon may be associated with the Hellenistic period, although there is no way to directly prove this point.

Apart from the chronological positioning of the kiln, its topographical location should also be noted. In the context of ancient Sagalassos the latter may be seemingly odd, at first sight, away from the local Potters' Quarter and underneath one of the public monuments – i.e. in the very centre of the Roman town. Obviously, the Hellenistic settlement was of a different organization and smaller in size⁴. So far, the oldest kilns excavated and dated in the Potters' Quarter were Augustan and have been linked to a phase of high-investment in craft production⁵. This could imply another location for the Hellenistic potters of Sagalassos. Actually, recent geophysical research, using ground penetrating radar as well as magnetometry techniques, in the area to the east of the Roman Odeon revealed the presence of five

small, yet possibly meaningful anomalies (**Fig. 3**). On the basis of the magnetic results, the surveyed area could be subdivided into two areas.

Area A revealed well preserved architectural remains down to the depth of at least 3 m, possibly forming part of one large building. In Area B no clear indications for walls were picked up, with fairly chaotic anomalies associated with collapse materials. The area also contained some stronger, magnetic anomalies typical for burned clay in any form, such as concentrations of bricks and tiles, or kilns. The shape of the latter anomalies was not as defined as with the geophysical signals of the well preserved kilns in the Potters' Quarter. Perhaps the geophysical anomalies represent badly preserved kilns, as was the case underneath the Odeon. The alternative option that these anomalies result from collapse materials mixed with bricks and tiles cannot be entirely ruled out, however. Apart from their state of preservation, the depth of these features as well as their covering with heterogeneous collapse materials could also explain the less defined nature of the magnetic anomalies. On the other hand, more irregular distortions are usually associated with collapsed materials mixed with brick and tile, whereas the discussed anomalies are somehow isolated, resulting from magnetic responses generated by smaller features, such as kilns. The above argumentation, together with the topographical location of the kiln(?)

³ Poblome *et al.* 2001.

⁴ Waelkens 2004.

⁵ Poblome *et al.* 2002a.

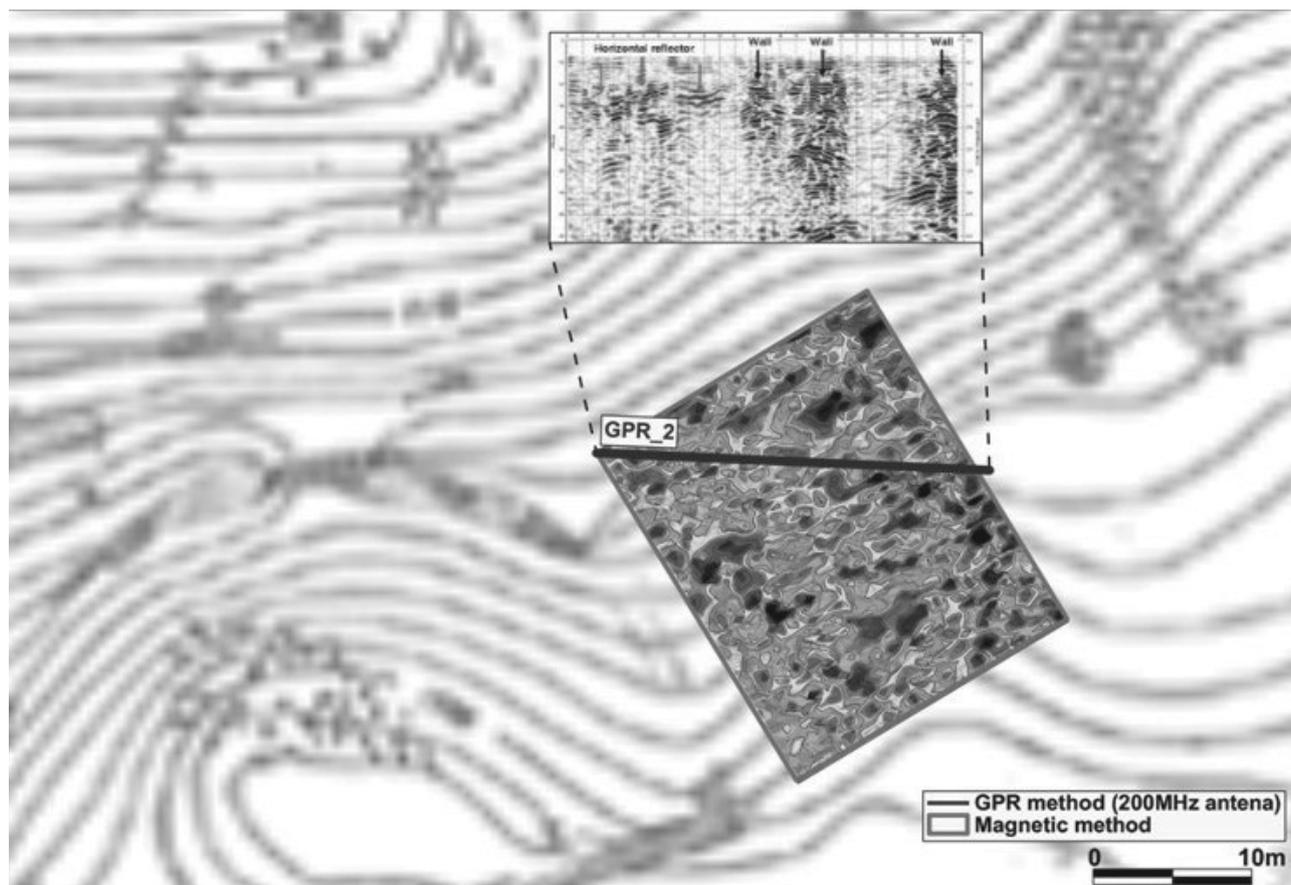


Fig. 3. The area immediately east of the Odeon, surveyed with geophysical methods. The arrows indicate the discussed anomalies (© Sagalassos Archaeological Research project)

anomalies on the same slope and at the same depth as the kiln underneath the Odeon, do not provide direct proof, but fairly substantial evidence for the identification of the Hellenistic potters' quarter of Sagalassos. If its location is to be established by future excavations, the Hellenistic potters' quarter would be located in the (intra-mural) eastern parts of the urban community.

Test tubes, powders and analytical stuff

The remains of the kiln underneath the Odeon, and the possible presence of others, are a first indication for the local production of pottery at (Classical/)Hellenistic(?) Sagalassos. Besides the presence of this structure, the archaeometrical analysis of contemporary pottery is also important to consider in this context. The so-called 'provenance postulate' of archaeological pottery⁶ implies that '*differences between distinct sources of raw materials can be recognized analytically*' and that '*compositional variations will be greater between sources than within sources*', making the archaeometrical characterisation of wares an essential step in determining whether or not

ceramics were locally or regionally produced and, if so, defining for which classes of pottery this was the case.

Based on analysis of material collected at Kozluca höyük⁷ and at Sagalassos⁸, local production of Hellenistic table ware at Sagalassos has been established⁹. The fabric and finish of the samples were macroscopically similar at both sites. The slip, on the other hand, was notably different from Roman imperial Sagalassos red slip ware. Based on the specific nature and quality of the slip and shape morphology, the sherds and fabric were attributed to the Hellenistic period. This pottery is usually slipped orange, brownish red or black. Different colour combinations, such as orange brown or reddish brown and blackish grey, also occur frequently. Overall, the slip is thin, sometimes dull and watery in appearance, and it does not always adhere well to the ceramic vessel. Occasionally the exterior lower part is not slipped, while the zone of the rim may be accentuated by a band of darker slip. Compared to Roman imperial Sagalassos red slip ware, the Hellenistic

⁶ Wiegand *et al.* 1977.

⁷ Nine samples of material collected during extensive surveying. The site is at c. 50 km south-west of Sagalassos.

⁸ Twelve samples of residual, Hellenistic material in early Roman imperial contexts.

⁹ Poblome *et al.* 2002b.

fabric tends to be somewhat softer and slightly more buff in colour, but no macroscopic differences are consistently apparent. The paste is very fine and highly microporous, ranging in colour from reddish yellow to brown (7.5 YR 5/4 brown; 5 YR 6/6 reddish yellow). Within this Hellenistic table ware fabric no further chronological distinctions could be made.

The archaeometric analyses indicated that the macroscopically defined Hellenistic table ware fabric actually consisted of two different groups, with different clay compositions and provenances. Half of the material was made from clays collected from the red weathering horizon of the ophiolitic bedrock sampled in the Potters' Quarter of Sagalassos, whereas the other half was made from clays quarried in the north-west part of the nearby Çanaklı valley, which would also serve the production of Roman imperial Sagalassos red slip ware. The fineness of the fabric does not allow these archaeometrical attributions to be replicated macroscopically, however. Nevertheless, as no archaeological indications for pottery production are present in the north-west part of the Çanaklı valley, these clays are considered to have been transported to ancient Sagalassos – fore-shadowing their grand-scale exploitation in Roman times, as the clay raw material for Sagalassos red slip ware. As the Çanaklı clays were used at the same time and for the same type of product as the ophiolitic clays from the Potters' Quarter, we presumed in the cited 2002 publication that the local Hellenistic table ware could already have been produced in the Potters' Quarter, as the area was largely used for this purpose in the Roman period. Since that 2002 publication, various parts of this quarter were intensively studied and excavated¹⁰ and, as stated above, no kiln pre-dating the Augustan period has been identified thus far. The available evidence is not yet substantial enough to entirely rule out production in the Potters' Quarter in Hellenistic times, but the presence of a kiln underneath the Odeon and the geophysical indications for more possible kilns in the immediate area, perhaps suggests other options in the urban landscape.

Even though the location of the Hellenistic workshops remains to be finally resolved, core-drilling in the central depression of the Potters' Quarter provided evidence for the quarrying of the local ophiolitic clays¹¹. After quarrying activity, a palaeosol developed in the sediments that accumulated on top of the quarried surfaces. The formation of the paleosol was C14-dated to between 370/60 BC to 50/40 BC¹², providing a *terminus ante quem* for the clay quarrying activities, as well as a general chronological association with the use of the local clays for the local Hellenistic table ware.

Another important observation resulting from the analytical programme is that already by the Hellenistic period, table

ware made at Sagalassos was being exchanged, as indicated by the representation of the same fabric compositions at Kozluca Höyük¹³. Macroscopically similar material was collected at other sites within the project's study region, mainly during extensive surveying campaigns¹⁴.

Recently, within the framework of the Leuven Centre for Archaeological Sciences, the clay raw materials available within the 1200km² territory of Roman imperial Sagalassos were mapped and analytically characterized¹⁵, and a substantial collection of Archaic, Classical and Hellenistic pottery found within the project's research region and at Sagalassos were archaeometrically analysed¹⁶.

As to the exploitation of the regional clay raw materials, the greenish grey clays, which had originally accumulated as part of a sequence of lake deposits in the north-west section of the Çanaklı valley, were confirmed as having a consistent and analytically definable geochemical signature in comparison to other clays from the same valley or elsewhere in the study region¹⁷. The clays are characterized in having higher amounts of chlorite and chlorite/smectite mixed layers. Petrographically, the sherds were made from a fine grained and levigated clay raw material, resulting in a microporous fabric with few amphibole and pyroxene minerals evenly distributed in the matrix, suggesting an igneous source rock. Noted differences in composition were mainly related to the calcareous content¹⁸.

Pottery made from this fabric was identified by analysis at the sites of Sagalassos, Düzen Tepe, the Ağlasun Valley, Taşkapı Kale and Hacılar Tekke. Sagalassos and Düzen Tepe were both Classical/Hellenistic community settlements with urban features. The material in the Ağlasun Valley was associated with a contemporary farming estate. Both Taşkapı Kale and Hacılar Tekke were fortified strongholds on a mountain top, originating at least by Archaic times in the case of Hacılar Tekke.

As to products, apart from the Hellenistic table ware defined by Poblome *et al.* 2002, the same ware also appeared with a *West Slope* type of decoration displaying incised lines and applied floral motifs. Additionally, a line of black glazed vessels was made from these clays, a table ware with a whitish cream slip, and tile. The latter were Hellenistic in design. Otherwise, the clay raw material was mostly associated with the higher end of the table ware repertoire, mostly following Hellenistic waves of fashion. The black glazed ware could possibly be somewhat older. In general, this ware is scarce, and when stratigraphically anchored, such as at Düzen Tepe, it appears in secondary fifth to second century BC contexts.

¹⁰ Murphy and Poblome 2011.

¹¹ Degryse *et al.* 2003.

¹² Six 2003–2004.

¹³ Poblome *et al.* 2002b.

¹⁴ Vanhaverbeke and Waelkens 2003, 217–240.

¹⁵ Neyt 2012.

¹⁶ Braekmans 2011; Braekmans *et al.* 2011.

¹⁷ Neyt 2012, 109–123.

¹⁸ Braekmans 2011, 191.



Fig. 4. Fragment of the mould-made bowl from Locus 81 (© Sagalassos Archaeological Research project)

The clays collected from the red weathering horizon of the ophiolitic bedrock in and around the central depression of the Potters' Quarter, on the other hand, proved more difficult to isolate as a typical clay raw material signature. The heterogeneity in the clay samples indicated that ophiolitic clays exhibit a range of signatures, due to the heterogeneous nature of the parent rock, slope activity, mass movements and/or human activity. As a result, the clays collected in the Potters' Quarter are similar to other clay raw materials in the Ağlasun Valley, Dereköy and Düzen Tepe¹⁹. The petrographic and geochemical analytical results of these Hellenistic sherds found at Sagalassos do not overlap, with clays characterized by a limestone related calcareous signature or, rather containing frequent small chert and volcanic inclusions, in different degrees of fineness²⁰. Black glazed wares, as well as Hellenistic shapes with mottled, brown, red brown and grey slips were made from these clays.

Apart from the kiln underneath the Odeon and possibly more kilns in that area, the quarrying of clays in and around the central depression of the Potters' Quarter testifies to pottery production in Hellenistic times at Sagalassos. In these workshops, whose locations still need to be confirmed, clay raw materials from the north-west part of the Çanaklı valley were also processed into quality table wares. Additionally, some other clays from the general surroundings of the site may have been levigated for processing into table ware vessels. A complicating factor in unravelling these details is that Sagalassos and Düzen Tepe²¹ originated at the same time during the fifth century BC, and both became active in pottery production. The potters of Düzen Tepe seem to have been manufacturing mostly Classical/Hellenistic wares, whereas only Sagalassos would move on to Hellenistic styles and

assemblages. However, some types of tableware, such as black glazed vessels, as well as cooking and storage wares could well have been made either at both places or only at one of them²².

The pottery in the fill layers of the kiln

Forming part of this research, 14 sherds were sampled from the 2007 excavations in the Odeon. Their analysis fits the picture of a local pottery production at Hellenistic Sagalassos, which made use of various clay resources. Therefore, in presenting the wares found in the fill layers in the kiln beneath the Odeon, we propose in this paper the local production of table wares at Hellenistic Sagalassos. Thus far, only a few Hellenistic deposits have been identified at Sagalassos. In chronological terms, the fill layers of the kiln underneath the Odeon are considered to represent the oldest Hellenistic deposits known from Sagalassos. The pottery from these fill layers is now presented, in an attempt to approach the logic of the morphology of the locally produced wares, as well as their chronological positioning. In what follows, no definite typology, quantification or seriation is attempted, because of the general paucity of deposits and material. A selection of shapes is presented instead, mainly as an overview of types and their chronological positioning, mostly based on external parallels.

In general, a recognizable range of table ware shapes was used throughout the numerous regions of the Hellenistic world (e.g. mouldmade bowls, echinus bowls, outturned rim bowls). However, besides the apparent similarity between the pottery assemblages of widely dispersed sites, there also existed substantial regional and temporal variation in table ware assemblages. Such was the case also at Sagalassos. It is exactly the tension between general trends of similarity in object design and use and the particular details of diverging local production and usage which makes the study of past material culture meaningful in highlighting the aspect of choice in the composition and functioning of table ware assemblages. This is an archaeological challenge and task *par excellence*.

Regarding drinking vessels, a fragment of a brown slipped, hemispherical, imbricate mould-made relief bowl has been identified (**Fig. 4**). Upon the invention of mould-made relief bowls in Athens, possibly on the occasion of the first Athenian Ptolemaia in 224 BC and under influence of metal and glass prototypes, their production was initiated in Asia Minor workshops by the end of the third century BC. Imbricate bowls continue in production into the early first century BC. Unfortunately, it is not possible to establish a chronological, stylistic evolution within these centuries²³. The medallion of the fragment found in

¹⁹ Neyt 2012, *passim*.

²⁰ Braekmans 2011, *passim*.

²¹ Vanhaverbeke *et al.* 2010.

²² Poblome *et al.*, in press.

²³ Ladstätter and Lang-Auinger 2001, 74; Rotroff 1982, 16–17; Rotroff and Oliver 2003, 91–95.

Locus 81 at the Odeon contained a central floral motif, surrounded by small ribbed leaves and one groove. The wall fragment displayed five rows of rounded lotus petals alternating with smaller leaves, topped by a band with guilloche. The rim is missing. The mould-made bowl was considered an import. In general, the question should be asked how quickly this new fashion of wine drinking was introduced into Hellenistic Sagalassos, when, for instance, mould-made bowls were absent from a deposit at Perge, datable to the end of the third and the beginning of the second century BC²⁴. In any case, mould-made bowls were never common at Sagalassos.

So-called mastoi were also registered for the fill layers in the dismantled kiln underneath the Odeon, and these represented the main type of drinking cup at Hellenistic Sagalassos (Fig. 5, 1). The execution of these vessels at Sagalassos is fairly simple, having a parabolic body with one or more grooves below the slightly everted rim, slipped orange or red/brown, and sometimes with a shallowly hollowed base. At other sites in Asia Minor, the shape is not common; it did not form part of the local Knidian pottery repertoire, for instance²⁵, nor was it noted at Perge²⁶, Gordion²⁷ or Nagidos²⁸, to name but a few recently published sites. S. I. Rotroff²⁹ cites the available, yet few parallels for her Athenian material, which she considered to have been produced during the first quarter of the second century BC. Also at Sardis, its representation is rare and considered as a possible import from Pergamon³⁰. Another example in ‘Firnishware’ formed part of a deposit datable to the second and third quarters of the second century BC at Ephesos³¹. The origins of the type can already be placed in the late sixth century BC³², although the morphological details were slightly different. The Hellenistic style of mastoi was developed in silver³³ as well as in glass. In the case of glass, parabolic cups formed part of luxury sets of drinking vessels developed in early Hellenistic times, and the shape would later feature as one mass-produced in mould-made glass from the second century BC onwards³⁴. Perhaps as a result, they also started in the second century BC to be produced among eastern sigillata A and Pergamene sigillata repertoires³⁵, but were never common. In contrast to most published sites, their regular presence at Sagalassos is somewhat striking. Admittedly, the finish of the cups at Sagalassos is not as elaborate when compared to other silver, glass or eastern sigillata examples, but mastoi are a standard in Hellenistic deposits at Sagalassos. Moreover, the parabolic cups would become one of the most common shapes produced during the initial stages of Roman imperial Sagalassos red slip ware, as type 1A130–

having implications for the process of romanisation of the local community³⁶.

A shape with roots in the Near East is the so-called Achaemenid bowl, of which a few sherds were identified in the Odeon kiln fill layers (Fig. 5, 2). These bowls are actually handleless cups with a small, shallowly hollowed base, rounded plain body and slightly splayed rim, thinned or simple, springing from a carination at the shoulder. As with the other drinking vessels discussed here, glass and metal examples of this shape are also traditional. In general, the shape forms part of a long line of bowls with everted rims, endemic to southeastern Anatolia and Iran, while the deep version of it can be traced back to the seventh century BC. Especially during Achaemenid times, the shape became popular throughout the empire and beyond³⁷. At Sardis, where this wine drinking cup had been particularly popular in Achaemenid times, its use continued at least into the later third century BC³⁸. At Perge, the exceptional discovery of the remains of ritual meals discarded in an unfinished cistern or bothros contained an extensive collection of dumped pottery datable to the end of the third and the beginning of the second century BC. The main type of drinking cup found in the cistern was the Achaemenid bowl, presumed to be of local fabrication, highlighting the continuation of regional wine-drinking traditions *à la Perse*³⁹. The limited amount of Achaemenid bowl fragments found and made at Sagalassos might well indicate the regional *Nachwirkung* of this shape in south-western Asia Minor. Although never common, Achaemenid bowls were nevertheless continued as type 1A120 in Roman imperial Sagalassos red slip ware.

Considering food serving vessels, various bowls with incurved rim were noted in the deposits (Fig. 5, 3). Differences in form execution as well as quality and colour of slip were discernible, but all vessels were similar to the ‘deep series’ described by S. I. Rotroff⁴⁰, regarding Athenian material. Deep echinus bowls became popular in the course of the third century BC, when the shape was also common on sites in Asia Minor⁴¹. We need to wonder in which ways morphological differentiation in echinus bowls, as described at other sites, were of importance to the potters of Sagalassos in making this shape, especially since deep bowls with incurving rim were already a traditional feature of the Classical/Hellenistic deposits at Düzen Tepe⁴². Also at Perge, comparable material was dated to around 300 BC⁴³, as well as to around a century later⁴⁴. The origin of bowls with incurving rims has been traced to Iran (Persia) from the late seventh century BC onwards⁴⁵, while

²⁴ Çokay-Kepçe and Recke 2007.

²⁵ Kögler 2010.

²⁶ Çokay-Kepçe and Recke 2007; Recke 2003.

²⁷ Stewart 2010.

²⁸ Durukan and Körsulu 2007.

²⁹ Rotroff 1997, 109–110.

³⁰ Rotroff and Oliver 2003, 42.

³¹ Ladstätter and Lang-Auinger 2001, cat. 37.

³² Schreiber 1999, 195.

³³ Strong 1966, 108.

³⁴ von Saldern 2005, 115–118.

³⁵ Hayes 1985, pl. III, 4–5; Meyer-Schlichtmann 1988, 78.

³⁶ Poblome *et al.* 2007.

³⁷ Çokay-Kepçe and Recke 2007; Dusinberre 2003, 176–178.

³⁸ Rotroff and Oliver 2003, 60–62.

³⁹ Çokay-Kepçe and Recke 2007.

⁴⁰ Rotroff 1997, 161–164.

⁴¹ Mitsopoulos-Leon 1991, 18–18; Rotroff and Oliver 2003, 24–25; Kögler 2010, 150–153 and Abb. 72.

⁴² Poblome *et al.*, in press.

⁴³ Recke 2003, Abb. 4, 10.

⁴⁴ Çokay-Kepçe and Recke 2007.

⁴⁵ Dusinberre 2003, 175.

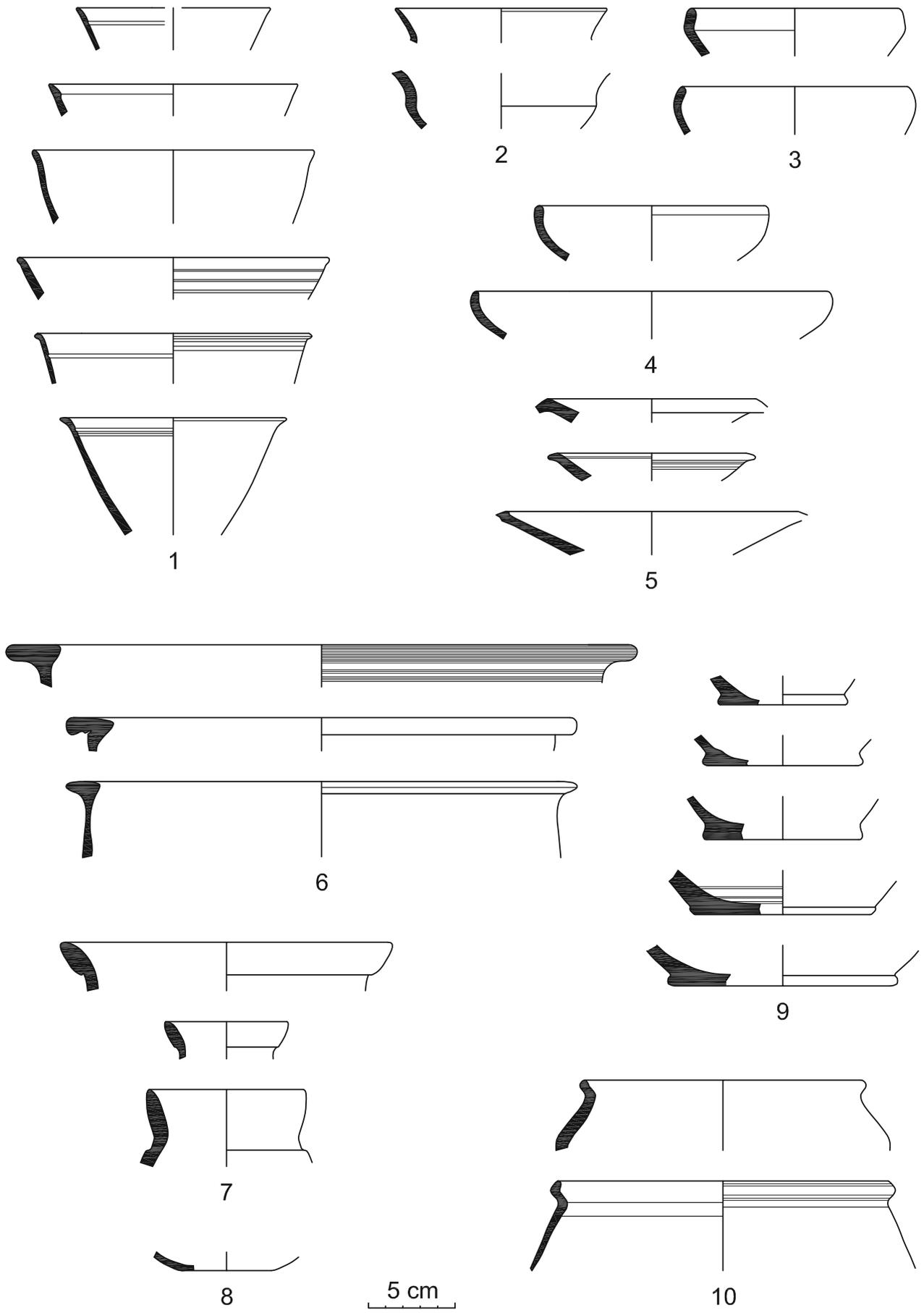


Fig. 5. An overview of the Hellenistic pottery types found at the Odeon (© Sagalassos Archaeological Research project)

Classical examples from the Aegean are also known⁴⁶. In Hellenistic times, the shape is considered to be popular at Anatolian sites, such as Troia, Pergamon, Gordion, Kilise Tepe⁴⁷ and Tarsos⁴⁸. Whether or not stylistic associations with other regions are implied for the pottery found at Sagalassos is an open question. Obviously, such stylistic transfers never happened as explicit processes of imitation. We may even wonder whether the potters involved were aware of the socio-cultural origins of the vessel styles. Taking the shapes together, however, does provide us with a general impression of the pottery assemblages attested at Sagalassos and how particular regional Hellenistic assemblages originated. Bowls with incurving rims, for instance, were long-maintained, as their form was to be continued as type 1B170 in Roman imperial Sagalassos red slip ware.

Another type of bowl which was common at Classical/Hellenistic Düzen Tepe is shallow and hemispherical in design, with walls curving to a vertical position ending in a plain rim (Fig. 5, 4). The same type is registered in the Hellenistic fabric described above and occurs frequently in the fill layers of the kiln underneath the Odeon. No genuine parallels can be listed, to our knowledge, however, the type would remain in production as type 1B150 of Roman imperial Sagalassos red slip ware.

Shallow dishes with downturned or projecting rim also formed part of the fill deposits in the kiln beneath the Odeon (Fig. 5, 5). In most cases too little of the vessel is preserved to determine whether there was a central depression (typical for fish-plates). Usually the slip is thick and lustrous, mostly orange or red/brown in colour. Most examples are not very shallow but are somewhat deeper, a trend which was discerned for fish-plates from the third century BC onwards by S. I. Rotroff and A. Oliver⁴⁹, based on material from Sardis. Simple dishes with downturned rim appear from the later part of the third century BC onwards as well⁵⁰. Dishes with downturned and projecting rims remained popular in Asia Minor throughout the late Hellenistic period.

Some slipped, handleless, deep bowls with projecting or ledge rims were also identified (Fig. 5, 6). These could have served in food preparation and/or serving and/or as a krater, or even for washing⁵¹. The rim is quite wide and extends horizontally, which, in the case of Athenian products, is considered as a third century BC feature⁵². Athenian plain ware lekanai Form 2 and 3 are similar and datable to respectively *c.* 525–215 BC and 275–50 BC⁵³. The rim execution of a third century BC krater and lekane

found at Perge is comparable⁵⁴. As far as Sagalassos is concerned, we presume the rim and vessel morphology to evolve in the direction of Roman imperial Sagalassos red slip ware type 1F150.

A couple of fragments of jugs with an almond shaped rim was also registered (Fig. 5, 7). Possibly in association, some nearly vertical strap handles with a single, central ridge were also noted.

As far as bottom fragments are concerned, flat, shallowly hollowed bases were identified (Fig. 5, 8), possibly as parts of (Achaemenid?) bowls, mastoi and jugs, along with so-called disk bases (Fig. 5, 9), and a few false ring feet.

Remarkably few sherds of cooking ware were discerned. Two rim fragments of a globular, closed cooking vessel were noted, with a plain rim, folded slightly outwards and with a shallow groove on the inside (Fig. 5, 10). The near absence of cooking and plain wares, as well as amphorae, from these deposits and the resulting dominance of slipped table and serving wares might be an indication that the artefacts from the discussed loci did not result from domestic activities. Rather, more specific waste routines can explain this pattern, such as local production (and failure) of the wares in question. In general, Roman imperial and early Byzantine deposits at Sagalassos are heavily dominated by table and serving ware waste, which is considered to be a direct result of the prolific Potters' Quarter to the east of the Theatre. Genuinely misfired pottery was absent from the Hellenistic deposits, but this aspect is also characteristic for the Roman imperial and early Byzantine dumps⁵⁵.

Based on the typological and chronological criteria discussed above, we would like to propose a date for these loci ranging between the end of the third century and the (first half of the) second century BC. Some shapes possibly appeared already earlier in the third century BC, while other shapes continued after the (middle of the) second century BC. The amount of available deposits is too limited, however, to build up quantified and seriated sequences and, consequently, independent local shape histories. Admittedly, the proposed date puts little weight on the presence of the discussed fragment of a mould-made bowl, and also does not necessarily take into account the fact that a worn eastern sigillata A body sherd formed part of these deposits. Both fragments were found in the upper fill layer of the dismantled front part and combustion chamber of the kiln. Both these loci also contained some early Roman imperial material datable to the final quarter of the first century BC and the first half of the next one. We cannot prove whether the mould-made bowl fragment and the eastern sigillata A sherd were part of this collection of later material. Both classes of artefact are rarely attested at Sagalassos, but in the few contexts, which have been

⁴⁶ Edwards 1975, note 15; Rotroff 1997, note 53.

⁴⁷ Nevett and Jackson 2007, 379–380.

⁴⁸ Berlin 1999, 94 and note 42; Jones 1950, 156–157; Schäfer 1968, 37–38; Stewart 2010, 170–172 and 195–197.

⁴⁹ Rotroff and Oliver 2003, 25–26.

⁵⁰ Kögler 2010, 147–149; Mitsopoulos-Leon 1991, 24; Stewart 2010, 200–201.

⁵¹ Berlin 1999, 94.

⁵² Rotroff 1997, 167–168.

⁵³ Rotroff 2006, 110–112.

⁵⁴ Recke 2003, fig. 3, 11 and fig. 4, 1.

⁵⁵ Poblome *et al.* 1998.

excavated, they are known to form part of early Roman imperial deposits. Lacking seriated evidence, the latter deposits are only indicative. In general, however, the methodology applied to the chronological reconstruction of assemblages at Sagalassos does not take full account of outliers and highly representative, yet rare, material, but rather it is based mostly on (seriated) main trends supported by the bulk of the material⁵⁶. In conclusion, the suggested date range for the Odeon deposits under discussion should be open to (criticism and) review, and will need to be reinforced by the excavation, study, and seriation of more contemporary deposits.

Aspects of interpretation

The studied material from the different loci in the Odeon is relatively consistent in its make-up, displaying similar shapes and surface finishing. Especially common are beverage consumption vessels, with the mastos being most represented. The most popular food consumption shape seems to have been the echinus bowl. As a result, the tableware assemblage in use at mid-Hellenistic Sagalassos appears to have been fairly restricted. The predominate mastos and the echinus bowl were augmented by only a handful of other types.

In comparison to other well published contemporary deposits from sites in the Aegean, Anatolia or the Levant, it is also of interest to note what types are conspicuously absent from the discussed Sagalassos deposits. Plates, saucers and dishes seem to have been relatively rare. Widespread Hellenistic shapes, such as the mould-made bowl, fish-plate, rolled rim plate and out-turned rim bowl are only sparsely represented. The kantharos, skyphos and two-handled cup seem to have been absent. Variety in closed vessels and kraters is limited and *West Slope* decoration is scarce. Grey wares and relief decorated wares are all but absent. The deposits presented above obviously cannot be taken to represent Hellenistic Sagalassos as a whole. No domestic contexts have been excavated thus far and the quantity of material currently unearthed is limited. If, however, the data from the above deposits is taken at face value it appears that the variety in tableware in use at Hellenistic Sagalassos was limited, yet functional. Possibly, a limited repertoire was sufficient to fulfil the dining practices of Sagalassos' inhabitants.

Considered at face value, Greek-style eating and drinking had possibly made only a limited impact on Hellenistic Sagalassos. We need to openly question what this 'at face value' means, however. Indeed, there is a tension in interpretation of the Sagalassos Hellenistic material. On the one hand, the presence of certain Greek wares and the popularity of 'doing things Greek' in the eastern Mediterranean is beyond doubt. In the case of the pottery, this is certainly promoted by the excellent standard of

publication at sites like Corinth and Athens. Yet how much this effects the preferential publishing of more 'representative' categories of Hellenistic pottery from other sites, is difficult to evaluate. Sagalassos is far from Corinth or Athens, however. Moreover, a more balanced consideration of socio-cultural influences and patterns inherent in the locally-produced material needs to be based on a long-term perspective, taking the Classical/Hellenistic local production of Düzen Tepe and Sagalassos into account, as well as the continued Roman imperial Sagalassos red slip ware production. Based on the study of the presented Odeon material, it is still too early to give a final verdict on the link between the nature of the material culture and the cultural identity of the community that conceived, produced and consumed it.

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⁵⁶ Poblome 1999.

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