

# POTTERY FROM SCHEDIA NEAR ALEXANDRIA (EGYPT)

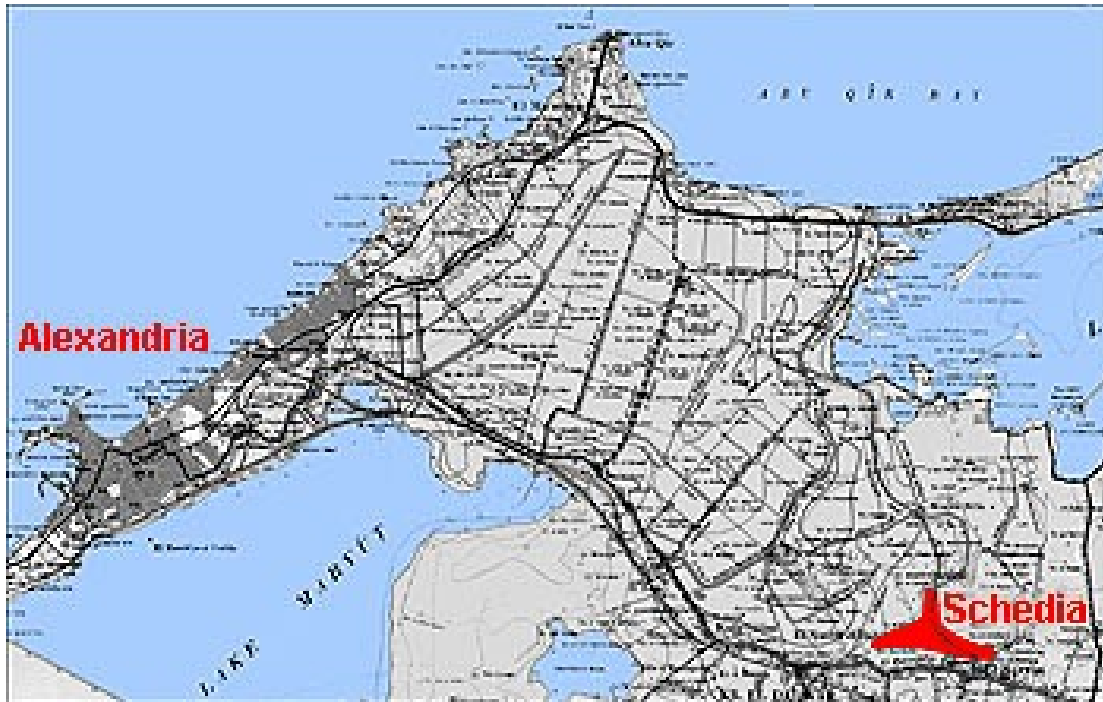
**Archer Martin**

## **Introduction<sup>1</sup>**

When Alexandria was founded in 331 BC on a limestone ridge between the Mediterranean and Lake Mareotis, Schedia, built at the same time to the southeast on the then westernmost arm of the Nile, the Canopic branch, represented an element necessary for the existence of the great metropolis. A canal was dug between Schedia and Alexandria to bring fresh water to Alexandria and guarantee it access to the Nile Valley. Goods coming downstream had to be transhipped at Schedia in order to travel along the canal. Schedia is also mentioned as the station for the Nile boats belonging to the praefect of Egypt and as a customs station for all goods transported up and down the Nile. For the latter purpose a pontoon bridge (*σχεδία*) was installed, which gave its name to the place. According to the sources the city had a large garrison, temples and a synagogue. It was also one of the first towns in Egypt to be Christianised, with its own bishop's seat.

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<sup>1</sup> See [www.schedia.de](http://www.schedia.de) for an overview of the site and the project and the interim reports on the 2003 and 2004 seasons. Kees 1921 is still useful.

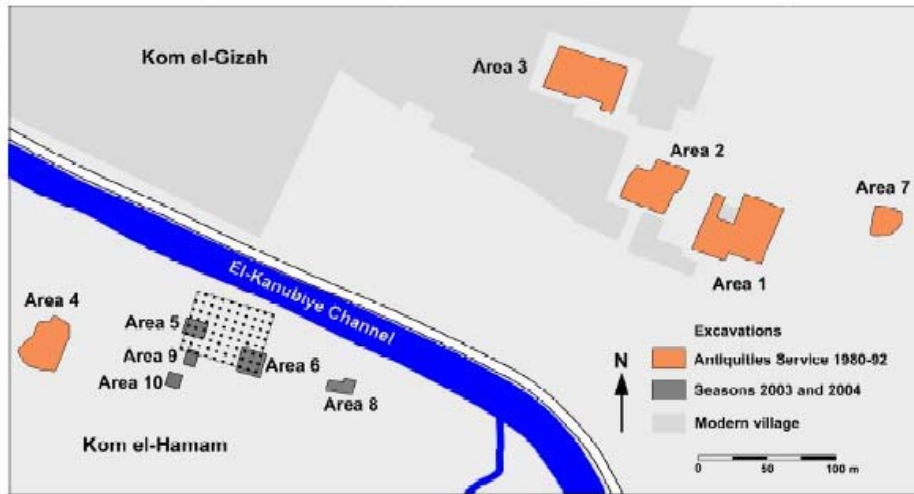


In spite of its importance the site attracted little attention, perhaps also because the Canopic Nile and the canal had vanished and only small parts of the original series of settlement hills remained. In the 19<sup>th</sup> century it was proposed to identify Schedia in the extensive mounds of ruins between Kom el-Giza and Kom el-Nashwa, and the identification was confirmed by the discovery there of inscriptions with the name of Schedia. Between 1981 and 1992 the Egyptian Supreme Council of Antiquities carried out rescue excavations on the increasingly threatened Kom el-Giza and Kom el-Hamam. This work established the presence of a number of Roman and late Roman buildings, including a bath complex, a villa and tombs on Kom el-Giza and a large pillared building constructed of bricks on Kom el-Hamam, as well as vats on both sites (at least some of which must have served for wine production). Since 2003 a project under the direction of Prof. Marianne Bergmann of the Universität Göttingen and Prof. Michael Heinzelmann now of the Universität Bern has investigated the site, with geophysical surveying and with excavations designed to complement those carried out by the Egyptian authorities. These new excavations have produced c. 1200 crates of pottery.

### **Area 5**

The pottery processing team decided to make its first objective the preliminary classification of the assemblages found in this trench carried out on Kom el-Hamam, which account for approximately a tenth of the material overall. The reason was

because Area 5 promised to give the most complete cross-section of the occupation of the site.



Map with excavation areas

View of Kom el-Hamam with Area 5

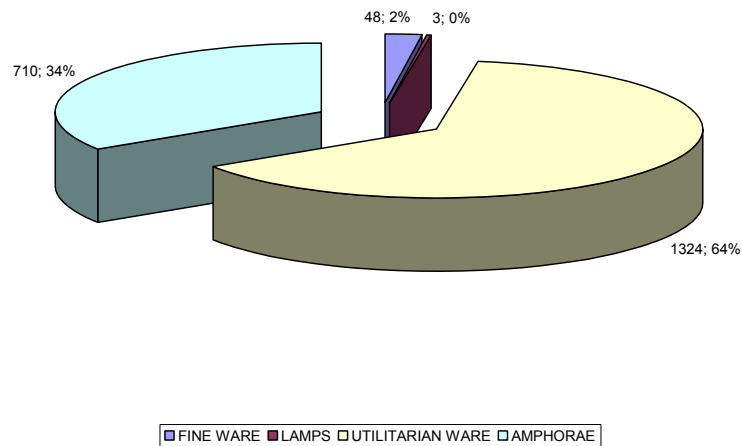


The purpose of this paper is to follow the evolution of the assemblages through the centuries. The analysis considers two major aspects: the composition of the assemblages by functional group and the provenience of the products. The functional groups are transport amphorae, lamps, utilitarian ware (cooking and other coarse wares, which at Schedia present the same range of fabrics) and fine ware. In the presence of assemblages of overwhelmingly Egyptian origin, the crucial distinction in provenience is between imported and Egyptian. The basis for the statistical elaborations here is the maximum number of vessels, which means the sherd count sherds adjusted for joins.

### Phases 1-7

In Phases 1-7 there were various structural activities, particularly raises of the floor levels, preceding the construction of a foundation in *opus caementicium*. They gave a maximum of 2047 vessels. The rim fragment found in Phase 1 of an imported amphora, probably from the northern Levant, which belongs to a family of vessels that is common in deposits of the 2<sup>nd</sup> and early 3<sup>rd</sup> centuries is important for defining the chronology.<sup>2</sup> There are fragments of Egyptian amphorae that are consonant with such a date – Amphore Egyptienne 3 (early imperial) and Amphore Egyptienne 4 (1<sup>st</sup> – late 3<sup>rd</sup> century) – as well as a few of the earlier ones in the series – Amphore Egyptienne 1 and 2.<sup>3</sup> Most imports are scrappy pieces, which can be identified as such only because they do not present Egyptian fabrics.

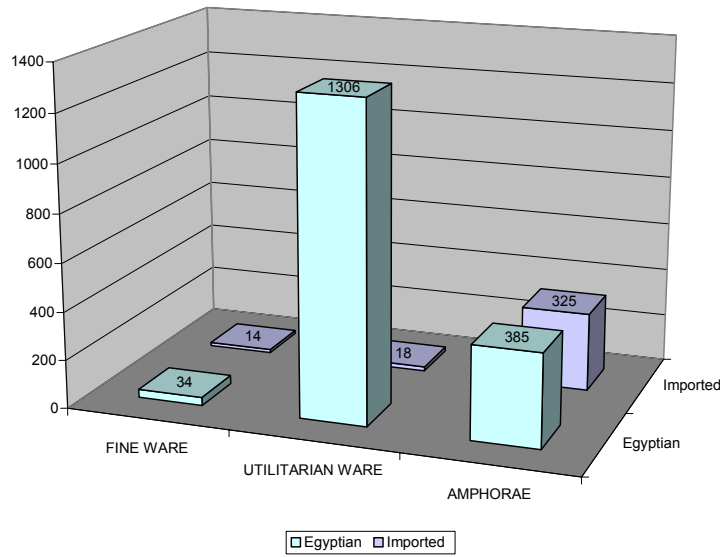
**PHASES 1-7 - FUNCTIONAL GROUPS**  
(by max. number of vessels - total = 2085)



<sup>2</sup> Reynolds 2005, p. 567 (Amrit amphora); Hayes 1991, p. 94 (Type IX).

<sup>3</sup> Empereur-Picon 1998, pp. 75-77.

**PHASES 1-7 - EGYPTIAN VS. IMPORTED PRODUCTS**  
**(by max. number of vessels - total = 2083)**

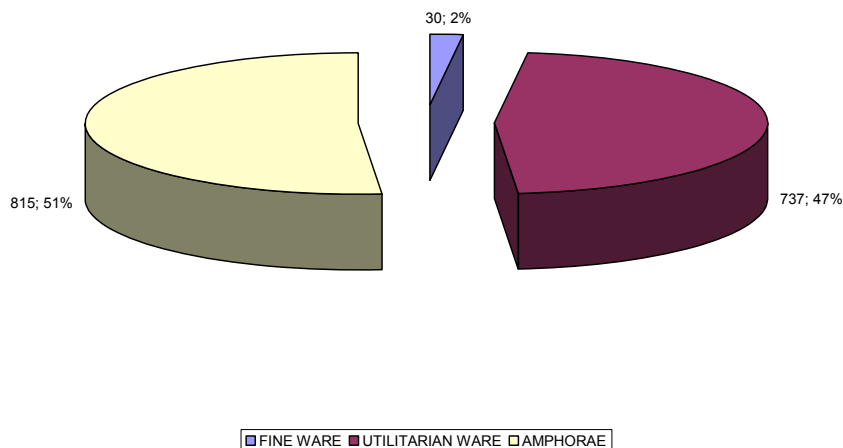


**Phases 11-14**

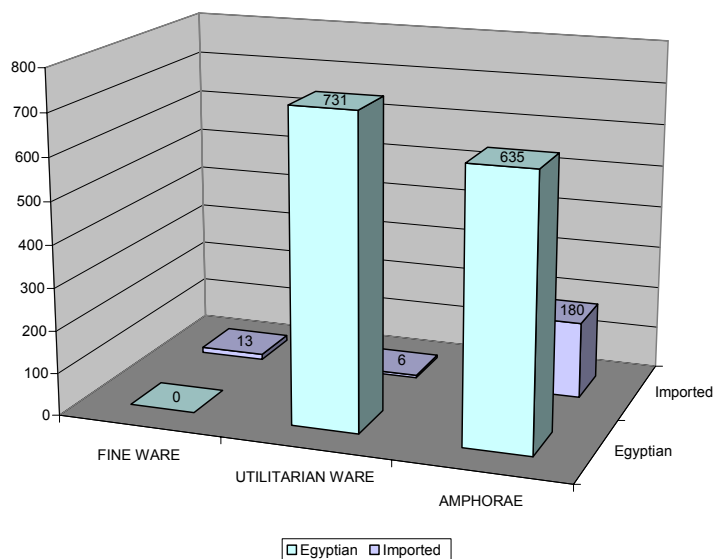
Above layers associated with the construction, use and abandonment of a foundation in *opus caementicium* (Phases 8-10), which contained too few sherds to permit any considerations, was found another series of phases concerning the residential use of the area. The assemblage, consisting of a maximum of 1587 vessels, is not as satisfactory as one would wish. There was a two-year pause in excavation, and it appears that the two exposed layers became contaminated in spite of the excavators' attempts to protect them. Thus, five late-antique fragments found in those layers, which stand out as anomalous from the rest of the assemblage, have been eliminated from the calculations. Almost all the pottery comes from Phase 11, the first phase of residential activity. Aside from the pieces considered intrusive, the material presents nothing to distinguish it chronologically from Phases 1-7. The identifiable amphorae belong to the range of Amphores Egyptiennes 1-4, with the exception of an example of the Schöne-Mau V amphora from the Levant, which is found from the mid 1<sup>st</sup> century AD to the mid 2<sup>nd</sup>.<sup>4</sup> As before the imports are mostly unidentifiable amphora sherds in Aegean to Levantine fabrics.

<sup>4</sup> Reynolds 2005, p. 565.

**PHASES 11-14 - FUNCTIONAL GROUPS**  
 (by max. number of vessels - total = 1582)



**PHASES 11-14 - EGYPTIAN VS. IMPORTED PRODUCTS**  
 (by max. number of vessels - total = 1582)

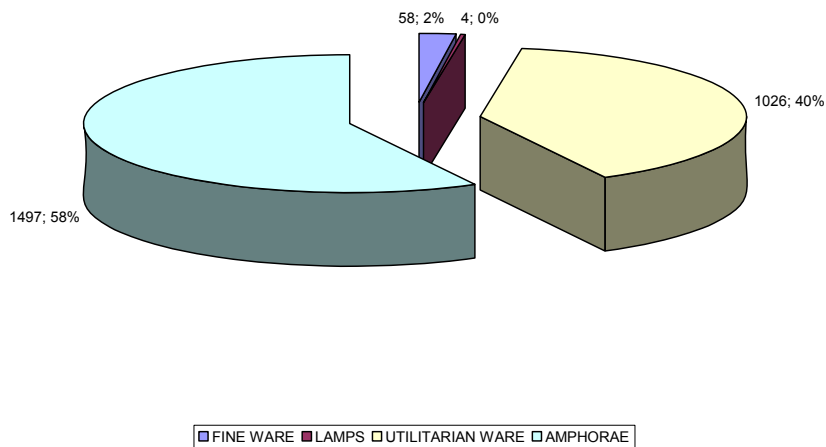


**Phases 15-19**

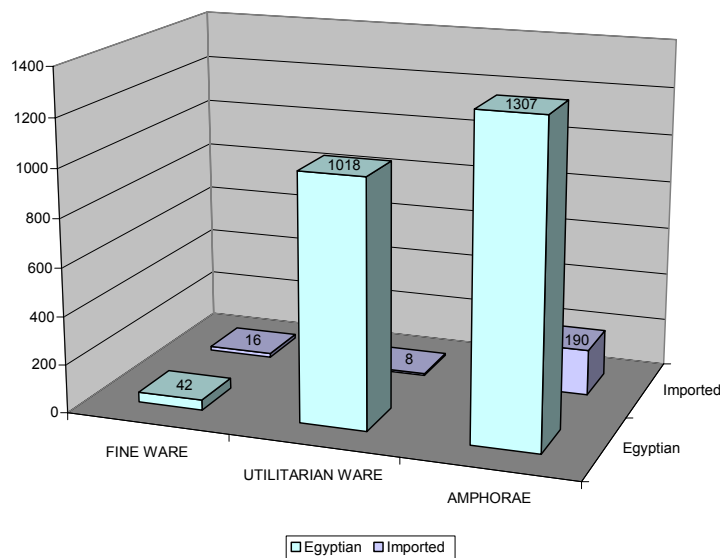
The layers associated with the erection, use in two phases and abandonment of the pillared brick building already evidenced in the Supreme Council's excavations contained a maximum of 2585 vessels (not counting 293 from a layer whose stratigraphic interpretation presents problems). Once again the evidence for dating differs little from Periods 1-7 and 11-14. The Egyptian amphorae AE 2-4 dominate. The identifiable imported pieces are an example of the Amphore Crétoise 1/Agora G197 dating from

the mid 1<sup>st</sup> to the mid 3<sup>rd</sup> century<sup>5</sup> and possibly one of Majcherek 1/Zemer 36 from Gaza with a date range from the 1<sup>st</sup> to the 3<sup>rd</sup> century.<sup>6</sup> The situation with the imports remains much as before – mostly a scatter of amphorae presumably from the Aegean and the Levant.

**PHASES 15-18 - FUNCTIONAL GROUPS**  
(by max. number of vessels - total = 2585)



**PHASES 15-18 - EGYPTIAN VS. IMPORTED PRODUCTS**  
(by max. number of vessels - total = 2581)



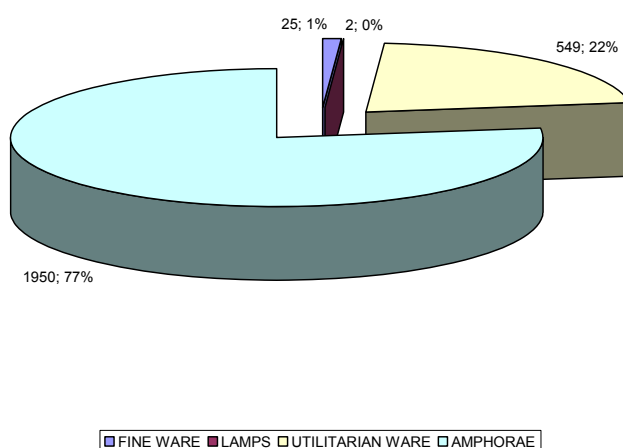
<sup>5</sup> Markoulaki-Empereur-Marangou 1989, p. 556.

<sup>6</sup> Majcherek 1995, p. 166.

### Phases 25-27

After a series of residential activities (Phases 20-24), not considered here because of the discrepancy between the ceramic and the numismatic dates – the pottery resembles the preceding phases, but the numismatic evidence indicates a date at least in the second half of the 4<sup>th</sup> century<sup>7</sup> – come phases concerned with the construction, use and destruction of a granary. They gave a maximum of 2508 vessels (2348 from the Phase 25, 160 from Phase 26 and none from Phase 27). The dating evidence comes from amphorae: Egyptian Egloff 172, datable from the late 4<sup>th</sup> to the mid 6<sup>th</sup> century;<sup>8</sup> Egyptian Carthage LRA 7, from the late 4<sup>th</sup> to the 6<sup>th</sup>/7<sup>th</sup> century;<sup>9</sup> Carthage LRA 1 from Cilicia, from the 4<sup>th</sup> to the 7<sup>th</sup> century.<sup>10</sup> No standardized late-antique fine ware was found, and there are still numerous examples of the Egyptian amphorae that dominate the earlier phases. The provenience of the products is very largely Egyptian. Among the amphorae, where imports are most significant, there are only a few examples of the imported vessels that become more numerous in later phases in the midst of the sort of mix of attestations found in the earlier phases.

### PHASE 28 - FUNCTIONAL GROUPS (by max. number of vessels - total = 2423)



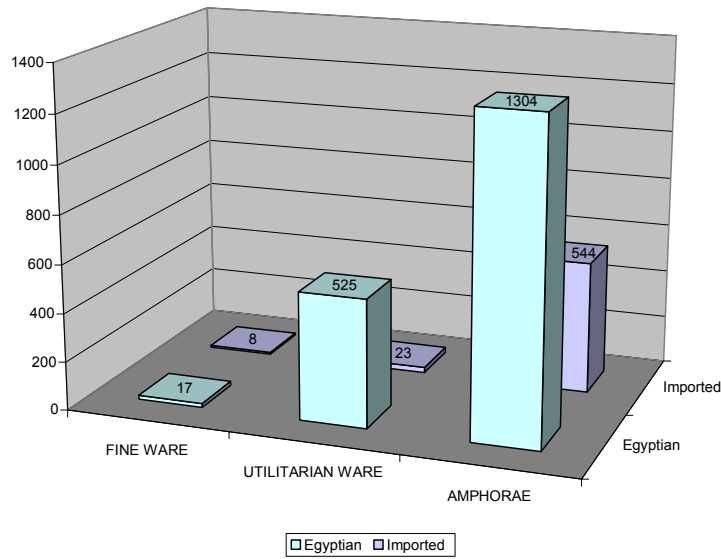
<sup>7</sup> For the numismatic evidence for this and other phases of Area 5 I am grateful to Hans-Christoph Nöske (Frankfurt am Main), who is preparing the coins for publication.

<sup>8</sup> Peacock-Williams 1986, p. 207.

<sup>9</sup> Peacock-Williams 1986, p. 204; Sciallano-Sibella 1991, p. 102.

<sup>10</sup> Reynolds 2005, p. 565.

**PHASE 28 - EGYPTIAN VS. IMPORTED**  
**(by max. number of vessels - total = 2423)**



**Phase 28**

A maximum of 2428 vessels was found in the spoliation phase of the granary. The best chronological indications come from a sherd of African Red-Slip Ware Hayes 104.15, which dates to 570-600,<sup>11</sup> and another of Hayes 99.18, 2-23, which dates to 560/580-620. They are supported by the presence of fragments of amphorae belonging to Majcherek's type 4 of the Gazan Carthage LRA 4, which is common in the late 6<sup>th</sup> to 7<sup>th</sup> centuries.<sup>12</sup> Many fragments of fine ware and imported and Egyptian amphorae are consonant with this date. For the first time there are significant quantities of standardized Egyptian fine wares – Group K/Egyptian Red-Slip Ware B, vessels from Lower Egypt whose production began in the late 4<sup>th</sup> or early 5<sup>th</sup> century and lasted at least into the 7<sup>th</sup>,<sup>13</sup> Group O/Egyptian Red-Slip Ware A, from Upper Egypt whose production also began in the late 4<sup>th</sup> century and lasted at least into the 7<sup>th</sup> century.<sup>14</sup>

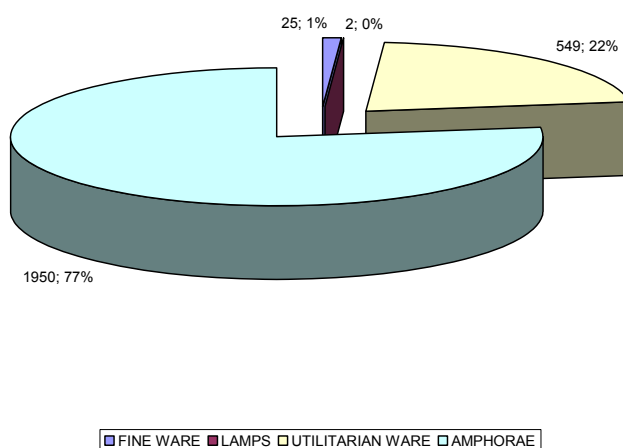
<sup>11</sup> Hayes 1972, p. 166.

<sup>12</sup> Majcherek 1998, p. 169.

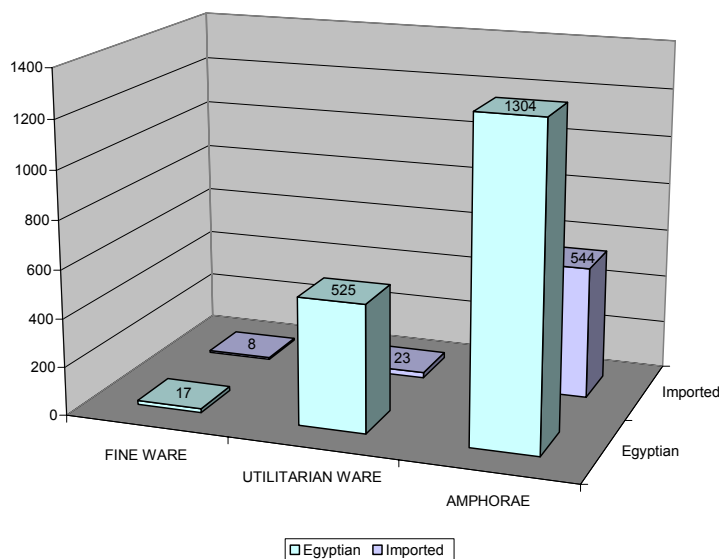
<sup>13</sup> Rodziewicz 1976, pp. 50-53; Hayes 1972, pp. 397-399; Hayes 1980, p. 530.

<sup>14</sup> Rodziewicz 1976, pp. 54-60; Hayes 1972, pp. 387-397; Hayes 1980, p. 530.

**PHASE 28 - FUNCTIONAL GROUPS**  
 (by max. number of vessels - total = 2423)



**PHASE 28 - EGYPTIAN VS. IMPORTED**  
 (by max. number of vessels - total = 2423)

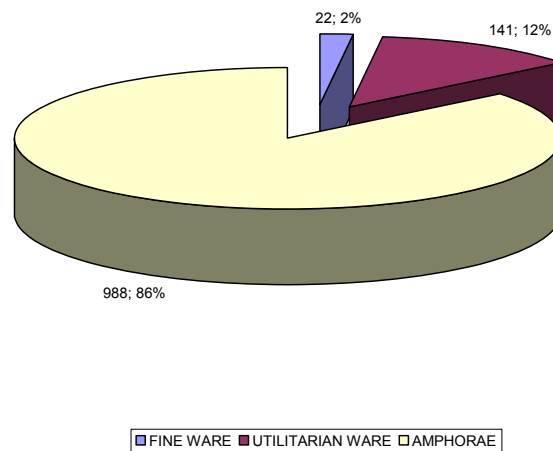


**Phase 29**

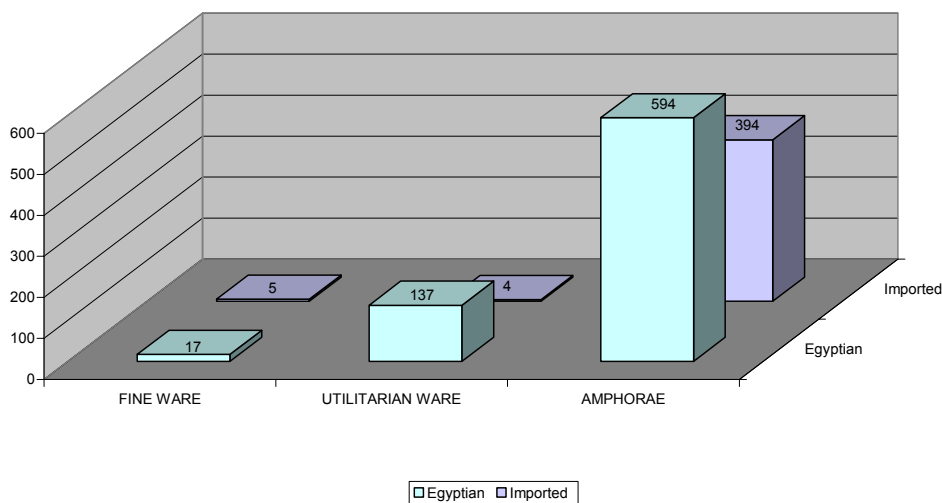
The layer concerning a late-antique/early Coptic settlement established above the ruins of the granary gave a maximum of 1151 vessels. The best chronological evidence for the phase comes from a coin minted between AD 602 and 608, guaranteeing a date no earlier than the 7<sup>th</sup> century. The ceramic assemblage is consonant with such a date, especially for the numerous examples of Egyptian and imported amphorae whose date ranges reach into the 7<sup>th</sup> centuries. The fine ware is Egyptian (Groups K and O), with

two examples of Cypriot Red-Slip Ware Hayes 2 (small version), which dates to the late 5<sup>th</sup> and the first half of the 6<sup>th</sup>.<sup>15</sup> Imports are much more important in this phase as far as amphorae are concerned. This reflects significant numbers of Carthage LRA 1 and 4.

**PHASE 29 - FUNCTIONAL GROUPS**  
(by max. number of vessels - total = 1151)



**PHASE 29 - EGYPTIAN VS. IMPORTED**  
(by max. number of vessels - total = 1151)

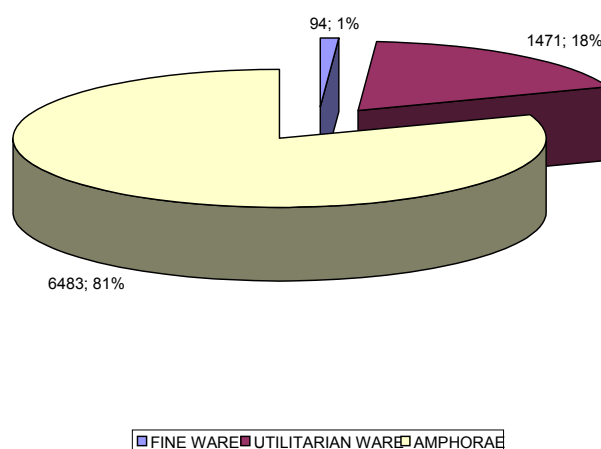


<sup>15</sup> Hayes 1972, pp. 375-376.

### Phase 30

This phase regarding the end of the settlement contained a maximum of 8048 vessels. The best chronological indication comes from the 7<sup>th</sup>-century coin found in the underlying Phase 29. The datable pottery is consonant with the date. Cypriot Red-Slip Ware is attested by Hayes 1 (dated from the late 4<sup>th</sup> century to the third quarter of the 5<sup>th</sup>),<sup>16</sup> Hayes 2 (of the late 5<sup>th</sup> and first half of the 6<sup>th</sup> century) and possibly Hayes 8 (perhaps to date to the 6<sup>th</sup> century).<sup>17</sup> The fine ware includes an example of Phocaeen Red-Slip Ware Hayes 3F, the developed 6<sup>th</sup>-century form.<sup>18</sup> There is also a rim fragment of African Red-Slip Ware Hayes 99, which is dated between 500 and 580.<sup>19</sup> Among the imported amphorae there are numerous Carthage LRA 4/Majcherek 4 of the late 6<sup>th</sup>-7<sup>th</sup> centuries, which dominate the imports along with the earlier Gazan variants and the Cilician Carthage LRA 1.

**PHASE 30 - FUNCTIONAL GROUPS**  
(by max. number of vessels - total = 8048)



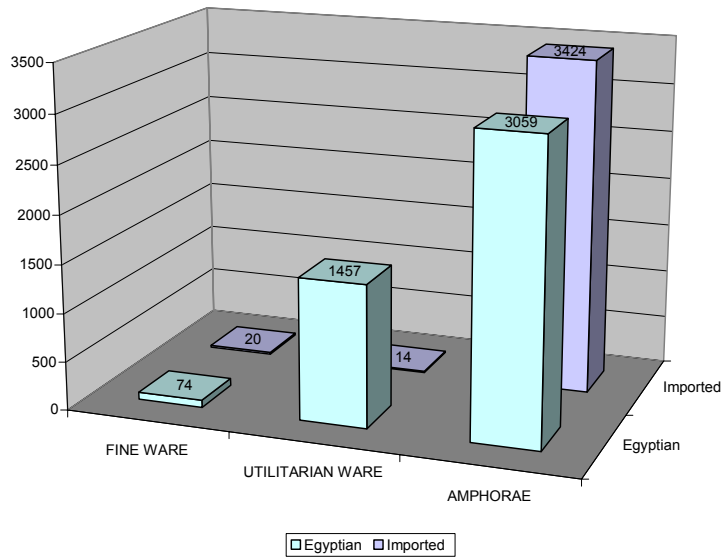
<sup>16</sup> Hayes 1972, p. 373.

<sup>17</sup> Hayes 1972, p. 379.

<sup>18</sup> Hayes 1972, p. 338.

<sup>19</sup> Mackensen 1993, p. 417.

**PHASE 30 - EGYPTIAN VS. IMPORTED PRODUCTS**  
**(by max. number of vessels - total = 8048)**



## Discussion

In examining ceramic assemblages too little attention is paid in general to the overall composition by functional groups. At Schedia the percentage of amphorae ranges from 34% in Phases 1-7 to 86% in Phase 29. At Schedia the percentages, although increasing gradually from Phases 1-7 to Phases 25-27, remain below 2/3 well into the 4<sup>th</sup> century. In the 6<sup>th</sup> and 7<sup>th</sup> centuries they are consistently above 3/4. The fine ware remains constant at 1-2%, and there are ever only a few examples of lamps. So the variation in the percentage of utilitarian ware makes up the difference.

The percentages of the functional groups can reflect the relationship of the site with regard to the network of maritime commerce, with of amphorae being especially sensitive.<sup>20</sup> One should normally expect attestations of amphorae at 2/3 to 3/4 or more on Roman sites around the coasts of the Mediterranean, while about 1/3 appears to be typical of sites that are connected only at a remove to the maritime trade routes, as was the case at a site 100 km up the Tiber from Rome. Thus, until late antiquity we have the picture of a site that is connected with the network of maritime commerce but not fully integrated into it.

The constant 1-2% attestation of fine ware hides an important difference between the phases up to Phase 27 and the last three. In the later phases fine ware consists essentially of

<sup>20</sup> Martin 2005 presents a case study to show this.

standardized wares – Egyptian Groups K and O and imported Cypriot Red-Slip Ware in particular and occasionally African and Phocaean Red-Slip Ware. In the earlier phases, where standardized wares are to large extent lacking, anything that seemed to stand out from the ordinary run of utilitarian wares has been counted, perhaps overgenerously, as fine ware in the preliminary classification, resulting in a hodgepodge including black-gloss fragments in alluvial Egyptian fabrics and various color-coated sherds. Standardized Roman-style wares account for very little, only a few pieces of Eastern Sigillata A. It appears that the site did not participate in the Augustan tableware boom, a moment of integration in which many parts of the empire adopted a typical Roman concept of technology and design embodied in Italian sigillata and then went on to develop their own versions of it.<sup>21</sup> Only in the 5<sup>th</sup>-6<sup>th</sup> century can it be said that Schedia began to use similar tableware to that found elsewhere around the Mediterranean.

The situation with regard to imports is somewhat less clear-cut than with the functional groups. Among amphorae Phases 1-7 show a high percentage of imports (45.77%), although in a smaller and perhaps less representative assemblage than others. Otherwise the phases up to 25-27 have values close to or above 80% for Egyptian amphorae. In Phase 28 nearly 30% of the amphorae are imported, in Phase 29 almost 40% and in Phase 30 more than half (52.82%). This change corresponds to one in the nature of the imports. In the earlier phases the imported amphorae appear to be mostly Aegean and Levantine, with no type dominant. In the later phases two types prevail very decidedly – Carthage LRA 1 from Cilicia and 4 from Gaza. It seems that, as imports increased in the 5<sup>th</sup>-6<sup>th</sup> century and afterwards, they also become more focused.

## Conclusions

How typical are the results of Area 5? A first examination of the material from other trenches in our excavations suggests that Area 5 is typical for the site. The mix of the functional groups is similar. Nor are there any significant imports not already seen in Area 5. Among fine wares no layer has produced more than a few Eastern Sigillata A fragments or the very occasional sherd of Italian sigillata or Eastern Sigillata B; the overwhelming majority have no sigillata; and many contained no fine ware at all, even by

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<sup>21</sup> Poblome-Brulet-Bounegru 2000, in particular p. 282; Poblome-Zelle 2002; Poblome 2004; Poblome-Talloe 2004.

our inclusive definition. It is interesting to note that we have not identified any example of Cypriot sigillata, although there are some cases of coarse-ware imitations. The imported amphorae in the earlier layers are always a scatter of mostly Aegean to Levantine fragments, and the later layers present mostly Carthage LRA 1 and 4. Beyond Schedia, it remains to be seen how the site compares on the one hand with Alexandria and on the other with the interior of the province, between which Schedia stands as an intermediary.

Should further research bear out our results, what can be the explanation? One would normally expect a picture such as the earlier phases present for a site in a secondary position in the network of international exchanges and that for the latest phases for a well integrated one. Historical sources do not support the idea that Schedia was a much less important port in Roman times than in late antiquity. Therefore, there must be another explanation. Perhaps Schedia was indeed less well integrated into the system of international exchange in the Roman period, not because it was an unimportant port but rather because the imperial authorities were able to obtain the goods they wanted from Egypt without giving much in return. The province was in effect a separate domain with its own monetary system; grain was owed as tribute; the granite and porphyry quarries were in imperial hands. The generally low percentage of amphorae and the lack of Roman-style tableware until late antiquity could reflect Roman Egypt's detached position. The much more normal picture for late-antique Egypt, when it was a province among others, is a further suggestion that Egypt was in a special position in earlier times.

#### Abbreviations

Empereur-Picon 1998 = Jean-Yves Empereur et Maurice Picon, Les ateliers d'amphores du Lac Mariout, in Jean-Yves Empereur (édité par), *Commerce et artisanat dans l'Alexandrie hellénistique et romaine*, Bulletin de Correspondance Hélienique Supplément 33, Paris, 1998, pp. 75-91.

Hayes 1972 = J.W. Hayes, *Late Roman Pottery*, London, 1972.

Hayes 1980 = J.W. Hayes, *A Supplement to Late Roman Pottery*, London, 1980.

Hayes 1991 = J.W. Hayes, *Paphos III. The Hellenistic and Roman Pottery*, Nicosia, 1991.

Kees 1921 = Kees, Schedia, *Paulys Realencyclopädie der classischen Altertumswissenschaft*, II.A1, Stuttgart, 1921, pp. 401-403.

Mackensen 1993 = Michael Mackensen, *Die spätantiken Sigillata- und Lampentöpfereien von El Mahrine (Nordtunesien). Studien zur nordafrikanischen Feinkeramik des 4. bis 7. Jahrhunderts*, Münchner Beiträge zur Vor- und Frühgeschichte, 50, München, 1993.

Majcherek 1995 = Grzegorz Majcherek, *Gazan Amphorae: Typology Reconsidered*, in Henryk Meyza and Jolanta Młynarczyk (edited by), *Hellenistic and Roman Pottery in the Eastern Mediterranean - Advances in Scientific Studies. Acts of the II Nieborów Pottery Workshop, Nieborów, 18-20 December 1993*, Warsaw, 1995, pp. 163-178.

Markoulaki-Empereur-Marangou 1989 = Stavroula Markoulaki, Jean-Yves Empereur et Antigone Marangou, *Recherches sur les centres de fabrication d'amphores de Crète occidentale*, *Bulletin de Correspondance Hellénique*, 113, 1989, pp. 551-580.

Martin 2005 = Archer Martin, *Variation in Ceramic Assemblages as an Indicator of Openness to Trade*, in John Pollini (edited by), *Terra Marique. Studies in Art History and Marine Archaeology in Honor of Anna Marguerite McCann on Receipt of the Gold Medal of the Archaeological Institute of America*, Oxford, 2005, pp. 61-76.

Peacock-Williams 1986 = D.P.S. Peacock and D.F. Williams, *Amphorae and the Roman economy. an introductory guide*, London-New York, 1986.

Poblome 2004 = Jeroen Poblome, *Italian Sigillata in the Eastern Mediterranean*, in Poblome-Talloe-Brulet-Waelkens 2004, pp. 17-30.

Poblome-Brulet-Bounegru 2000 = Jeroen Poblome, Raymond Brulet and Octavian Bounegru, *The Concept of Sigillata. Regionalism or Integration*, in *Rei Cretariae Romanae Fautorum Acta* 36, 2000, pp. 279-283.

Poblome-Talloe 2004 = Jeroen Poblome and Peter Talloe, *The Eastern Roman Empire*, in in Poblome-Talloe-Brulet-Waelkens 2004, pp. XII-XIV.

Poblome-Zelle 2002 = Jeroen Poblome and Michael Zelle, *The table ware boom. A socio-economic perspective from western Asia Minor*, in Berns, Christof, Henner von Hesberg, Lutgarde Vandeput und Marc Waelkens (herausgegeben von), *Patris und Imperium. Kulturelle und politische Identität in den Städten der römischen Provinzen Kleinasiens in der frühen Kaiserzeit. Kolloquium Köln, November 1998*, Babesch Supplement 8, 2002, pp. 275-287.

Reynolds 2005 = Paul Reynolds, *Levantine Amphorae from Cilicia to Gaza: A Typology and Analysis of Regional Production Trends from the 1<sup>st</sup> to the 7<sup>th</sup> Centuries*, in J. M<sup>a</sup>. Gurt i Esparraguera, J. Buxeda i Garrigós and M.A. Cau Ontiveros (edited by), *LRCW I: Late Roman Coarse Ware, Cooking Wares and Amphorae in the Mediterranean. Archaeology and Archaeometry*, Oxford (BAR International Series 1340), 2005, pp. 563-611.

Rodziewicz 1976 = Mieczysław Rodziewicz, *Alexandrie I. La céramique romaine tardive d'Alexandrie*, Varsovie, 1976.

Sciallano-Sibella 1991 = Martine Sciallano et Patricia Sibella, *Amphores. Comment les identifier?*, Aix-en-Provence, 1991.