

VRG_Folder_0585



HWA 1



HWA 2



HWA 5



HWA 6



HWA 8



HWA 3

= 3 in Greece 1986

Fig. 26. Zenon-Group amphoras from the Serçe Limani Hellenistic wreck. Jars 1:10, stamp 1:1.

The excavators found no traces of stoppers; nothing in the jars indicated where and how they were stoppered. Numerous traces remain, however, of the apparently resinous linings of their interiors: in nearly a dozen cases, a deposit 0.003–0.009 m. in diameter in

the toe of the jar; in one vessel (HW 84.16), thick swirls of the same dark substance over the lower sides of the body; and in several other examples (notably IC), a very thin coating in black patches over parts of neck and body interior. Samples of these linings, as

of earlier scholars' views (frequently all the way back to Evans and Holm), and for footnotes of monstrous length which too often dwarf the text: to cite just one example, p. 85 n. 17 with its four separate headings is more like an essay on developments in Greek Sicily between 338 and 316 B.C. Even if not always convincing, V.'s ideas in this little book are interesting ones. Greater succinctness could only enhance their appeal to the reader.

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HAMMOND (N. G. L.) **Three historians of Alexander the Great: the so-called Vulgate authors, Diodorus, Justin and Curtius.** Cambridge, etc.: Cambridge University Press, 1983. Pp. xi+205. £20.00/\$39.50.

H. reacts against the tendency to label 'almost anything which is not Arrian' as belonging to 'the vulgate sources', against the common assumption that 'the vulgate sources' all depend primarily upon Cleitarchus, and against the trend towards more critical evaluation of Arrian's account. His warning against misuse of the term 'vulgate' echoes a battle-cry of W. W. Tarn and still merits attention. Not surprisingly H. finds that none of the three secondary sources was a single-source historian (though on Diodorus xiii see now L. Pearson's argument in *Hist.* xxxiii [1984] 1 f.), and he still holds that Cleitarchus contributed the greatest part to each account. He is reactionary in his return to the notion that there was a genuine *King's Journal* for Alexander's reign, which was not available to Cleitarchus (109) and Aristobulus (117 of *Tarn, Alexander* ii 38), but was publicized by Ptolemy, and paraphrased by Arrian and Plutarch on the subject of Alexander's last illness. He offers no good reason why Ptolemy should have barred access to the *King's Journal* until the 280s B.C., but he contends that Ptolemy wrote as late as the period 285-3 B.C., and certainly after Cleitarchus and Aristobulus, since they would not have contradicted Ptolemy on issues on which he had superior knowledge (H. cites in particular Curtius ix 5.21 and Arrian iii 30.5). H.'s belief in Ptolemy's objectivity and his reluctance to concede that Ptolemy may have distorted the record to suit his own immediate political ends (e.g. 166 f., *contra* Bosworth) seem to be bound up with his conclusion that Ptolemy wrote towards the end of his life.

With regard to Diodorus, Justin and Curtius H.'s procedure is to seek to identify in each of these three accounts groups of passages which manifest similar characteristics: the criteria which he applies are the same as in his earlier work on Diodorus xvi (in *CQ* xxxi [1937] and xxxii [1938]), *viz.* fullness, accuracy, military and political detail and conception of the central theme. However, he offers not so much a clinical exercise in content analysis as a somewhat summary report of his findings. He argues that for Bk xvii Diodorus used Diyllus and Cleitarchus, the former traced in passages where the style is sober, the detail full, the emphasis on Greek affairs and the bias sympathetic to Alexander, the latter reflected in the more sensational passages where the bias is hostile to Alexander. Using these attributions for Diodorus H. proceeds to argue that Justin's account

of Alexander depends primarily upon Cleitarchus, and Curtius' principal source was Cleitarchus with Diyllus as a source on Greek affairs, and Aristobulus as a minor source, mainly in Bk vii.

By taking Diodorus, Justin and Curtius on their own and emphasizing the sources which they are presumed to have shared, H. risks reinforcing the concept of the 'vulgate' tradition which he seeks to undermine. H. makes too little of the parallels between the narratives of Curtius and Arrian; he notes that where Curtius and Arrian have the same facts they 'used them in a different way' (123) and were therefore following different sources, but with regard to Diodorus and Curtius H. notes at p. 129 that a difference in treatment is no obstacle to the assumption of a common source.

In concentrating on each individual source H. should focus on internal contradictions and inconsistencies, but he glosses over at least one (between D.S. xvi 93.9 and xvii 2.3) and emphasizes a questionable case on p. 31 between D.S. xvii 8.1 and 9.1. The transition from D.S. xvii 8.1 to 8.2 is unbroken, but H. marks a change of source at that point: it would be safer to look for source changes where there are abrupt transitions.

His characterization of Cleitarchus' work is conventional but his profile of Diyllus has to be treated with caution, since so little is known about the man and his work, but H. is certainly right to raise again the possibility that Diyllus was one of Diodorus' sources for Bk xvii because of the citations in xvi 14.5 and 76.5.

In my view H. falls between two stools: he offers neither a more detailed analysis of any one of the three 'vulgate' accounts (for that operation individual commentaries are the appropriate medium), nor an adequate general survey since this study is restricted to the three sources, though he ends the book by noting that he hopes to publish a sequel covering the sources used by Plutarch and Arrian.

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ORRIEUX (C.) **Les papyrus de Zénon: l'horizon d'un grec en Égypte au III^e siècle avant J.C.** Prof. E. Will. [In mem. R. Rémondon.] (Deuclalon.) Paris: Macula, 1983. Pp. 161, [3] maps. Fr. 80.

Every generation will rewrite history and Orrieux's new study of the Zenon papers coincides with the completion, or near-completion, of the publication of this massive archive. Zenon was the Carian manager from 256-248 B.C. of the *διοικητες* Apollonios' large gift-estate from Ptolemy II at Philadelphia, a new town of the early Ptolemaic development area of the Fayum. In 1922, soon after the archive reached the major international museums which house the papyri, Rostovtzeff published *A large estate in Egypt in the third century B.C.* Using the Zenon papyri as his base, this was a study in economic history. In 1947 Claire Préaux used the same material for her detailed little study of *Les Grecs en Égypte d'après les archives de Zénon*. In analysing the contents of the archive and in her use of the London material she filled out the picture of Rostovtzeff, providing a survey of the different economic activities and institutions mentioned in the archive. She discussed Zenon's personal life and career, the society of which he was part, and life and religion as seen through his papers.

Now in the 1980s a powerful group of scholars under the guidance of P. W. Pestman has produced the fine volumes of *P. Lugd. Bat.* xx-xxi making the archive more generally available, and O.'s general study may be seen as marking both this new interest in the Zenon papyri and some concerns of contemporary French scholarship.

In this study the archive is exploited for an essay in colonial anthropology written for a general audience. Zenon is portrayed as the representative of a particular 'mentalité', as the immigrant Greek who is both actively conscious of his origins, of the life of the *polis* back home, and at the same time represents the beginnings of a new 'sociabilité', the provincial society of substantial Greeks who settled 'en province' in the Egyptian countryside. No longer is it possible to ignore Egypt and the Egyptians, and throughout the suggestive analysis of this study the demotic material of the archive is used, and the world of the Egyptians shown as affected by and affecting that of the immigrant Greeks. Conflicts in the society were not simply those of nationality but those of economic groups with different interests which might not divide along racial lines. O.'s lively picture of this complex society is well documented.

There are indeed many strengths to this book. The argument is subtle, the style polished. Aware of the ways in which the society functioned, the author places his protagonists in the wider context of both Egyptian and Mediterranean politics. His extensive translation of the documents vividly takes the reader into the world he discusses. This Zenon is not the bourgeois manager of Rostovtzeff but a representative rather of the ever-adaptable Greek settlers who were to stay on in their new home.

Having set the scene, like Préaux, O. plunges straight into the economic (and especially monetary) problems of the early Ptolemies. Little of this is controversial; liquidity was surely a problem in the closed Ptolemaic coinage system. On occasion one misses the detailed discussion necessary to make the argument clear. Generally the notes give a pointer but how for instance (32-3) is *P. Mich. Zen.* 3 to be explained as it stands if, as O. claims, there is no error in the text? Occasionally the line between report and interpretation is not altogether clear (cf. p. 120 on *PSI* 502) but overall the touch is sure, the picture convincing. The maps leave much to be desired (Medinet Madi [Narmouthis] is wrongly identified, *Oxyrhynchos* misspelt and the Small Lake (99) not shown; Theadelphia is hidden in a fold). The Canopus decree (79) dates from 238 B.C. and the Ionian and Carian mercenaries were only moved on Memphis in the sixth century B.C. (95). Mistranslations are rare but strigils were in fact cheaper in Memphis than in Alexandria (74). The main problem however which English readers will find with this study is its very French flavour. Not only (understandably) is the bibliography almost exclusively French, but so are the terms of reference (e.g. 19 'orléaniste', 137 'en province', and the terms of the analysis on pp. 135-6, 147-8). To be deterred however would be wrong not 'wright' (120). It is worthwhile emulating Skeat (18) in 'une obstination tout britannique' and persevering. This is a stimulating and entertaining study.

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ALLEN (R. E.) *The Attalid kingdom: a constitutional history.* Oxford: Clarendon Press. 1983. Pp. xi + 251, 2 maps. £20.00.

The strengths and weaknesses of this book are summed up in its subtitle: 'a constitutional history'. It is careful, thorough and reliable, especially on the epigraphic material (though in the preface Allen curiously passes over E. V. Hansen, *The Attalids of Pergamon*² [1971], which has the merit of including art and archaeology). Unfortunately, the large amount of untranslated Greek in his text will greatly reduce his readership. The two maps, though clear, would also have been more informative, especially to those who do not know the terrain, had they included contours. An additional regret is that the Clarendon Press took four years to bring the book out. Other potential authors will no doubt take note of such delays in production.

After a chapter on the sources, the book goes through the history of the kingdom in three chapters, and follows these with three further chapters, on the Galatians, the royal cults, and the city of Pergamon. There are also four appendices: the genealogy of the Attalids, the Galatian war of Attalos I, Queen Stratonike, and selected inscriptions (from outside Pergamon). A. traces with great finesse the growth of the kingdom from its initial control of the area round Pergamon itself; the hegemony over cities further afield, which were liable to pay tribute and to give military support; and the acquisition of new territory, including four or five 'gift' cities, in 188 B.C., which was accompanied by an increase in royal control (the appointment of civic officials, the minting of royal coins by the 'gift' cities). The outlines of this story are familiar and uncontroversial, but A. is helpful on numerous points of detail, such as the foreign policy of Attalos I, the status of Teos and the terminology of tribute payments.

The book is, however, weak in organisation. The meat is mainly in the three chapters on the kingdom, while the subsequent three chapters are insufficiently integrated. The chapter on the kingdom after Apameia is oddly constructed, including a section on festivals of Athena half of which pertains to the period before Apameia, and a section on officials of the royal administration which pertains to the whole period. A rather different organisation might have been preferable: (1) sources, (2) dynastic history, including the material on the Galatians and the expansion of the kingdom, (3) the city of Pergamon, including festivals of Athena, (4) royal administration, (5) the relation of Greek cities to the kingdom, including civic ruler cults. This plan moves outward from the centre, ending with the way that cities responded to the ruling power.

There are also two more general weaknesses in the book. First, A. excludes consideration of the general significance of some important aspects of Attalid history. His pages on the 'friends' of the king (133-5) conclude that the term was really an honorific title 'with no particular constitutional or administrative significance'. And yet, as Habicht showed (*Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte* xlv [1958] 1-16; cf. now G. Herman, *Talanta* xii-xiii [1980-81] 103-49), such people formed the new ruling class of the Hellenistic monarchies. Or again, A. argues that the assumption of the title of king by Attalos I was because of his victory

ÉCOLE FRANÇAISE D'ATHÈNES

BULLETIN
DE CORRESPONDANCE HELLÉNIQUE

SUPPLÉMENT XIII

RECHERCHES
SUR LES
AMPHORES GRECQUES

édité par
J.-Y. EMPEREUR et Y. GARLAN



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ABRÉVIATIONS UTILISÉES DANS CE VOLUME

I. Articles et volumes concernant les amphores

- BON 1957 : A.-M. et A. BON, *Les timbres amphoriques de Thasos, Études thasiennes IV*, 1957.
- BRAŠINSKIJ 1973 : I. B. BRAŠINSKIJ, « The Progress of Greek Ceramic Epigraphy in the URSS », *Eirene* 11 (1973) p. 111-144.
- BRAŠINSKIJ 1980 : I. B. BRAŠINSKIJ, *Les importations céramiques grecques sur le Don inférieur du V^e au III^e siècle avant notre ère* (en russe), 1980.
- BRAŠINSKIJ 1984 : I. B. BRAŠINSKIJ, *Méthodes d'analyse du commerce antique (l'exemple de la côte Nord de la mer Noire)* (en russe), 1984.
- CALVET 1972 : Y. CALVET, *Les timbres amphoriques (1965-1970), Salamine de Chypre* 111, 1972.
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- EMPEREUR 1979 : J.-Y. EMPEREUR, « Timbres amphoriques à Chypre », *REG* 92 (1979) p. 220-223.
- EMPEREUR 1982 : J.-Y. EMPEREUR, « Les anses d'amphores timbrées et les amphores : aspects quantitatifs », *BCH* 106 (1982) p. 219-233.
- GARLAN 1966 : Y. GARLAN, « Contribution à une étude stratigraphique de l'enceinte thasienne », *BCH* 90 (1966) p. 586-652.
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- GARLAN 1982 : Y. GARLAN, « Les timbres amphoriques thasiens. Bilan et perspectives de recherche », *Annales* 37 (1982) p. 837-845.
- GARLAN 1983 : Y. GARLAN, « Greek amphoras and trade », *Trade in the ancient economy*, Ed. P. GARNSEY, K. KOPRINS et C. R. WHITTAKER, 1983, p. 27-35.
- GRACE 1934 : V. GRACE, « Stamped Amphora Handles found in 1931-1932 », *Hesperia* 3 (1934) p. 107-310.
- GRACE 1949 : V. GRACE, « Standard Pottery Containers of the Ancient Greek World », *Hesperia, Suppl. VIII*, 1949, p. 175-189.
- GRACE 1952 : V. GRACE, « Timbres amphoriques trouvés à Délos », *BCH* 76 (1952) p. 514-540.
- GRACE 1953 : V. GRACE, « The Eponyms Named on Rhodian Amphora Stamps », *Hesperia* 22 (1953) p. 116-125.
- GRACE 1956 : V. GRACE, « Stamped Wine Jar Fragments », *Hesperia, Suppl. X*, 1956, p. 113-189.
- GRACE 1963 : V. GRACE, « Notes on the Amphoras from the Koroni Peninsula », *Hesperia* 32 (1963) p. 319-334.
- GRACE-PÉTROPOULAKOU 1970 : V. GRACE et M. SAYYATIANOU-PÉTROPOULAKOU, « Les timbres amphoriques grecs », *Exploration archéologique de Délos XXVII*, 1970, p. 277-382.
- GRACE 1971 : V. GRACE, « Samian Amphoras », *Hesperia* 40 (1971) p. 52-95.
- GRACE 1974 : V. GRACE, « Revisions in Early Hellenistic Chronology », *AM* 89 (1974) p. 193-200.
- GRACE 1979-1 : V. GRACE, « Kouriska », *Studies Presented in Memory of Porphyrios Dikaio*, 1979, p. 178-188.
- GRACE 1979-2 : V. GRACE, *Amphoras and the Ancient Wine Trade, Excavations of the Athenian Agora, Picture Book n° 6*, 2^e éd. 1979.
- GRACE-EMPEREUR 1981 : V. GRACE et J.-Y. EMPEREUR, « Un groupe d'amphores ptolémaïques estampillées », *BIFAO* 81 (1981) *Suppl.*, p. 409-426.
- GRAKOV 1928 : B. N. GRAKOV, *Les timbres céramiques à noms d'astynomes en Grèce ancienne* (en russe), 1928.
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- NILSSON 1909 : M. P. NILSSON, *Timbres amphoriques de Lindos, Exploration archéologique de Rhodes V*, 1909.
- PRIDIK 1917 : E. M. PRIDIK, *Catalogue d'inventaire des timbres sur anses et cols d'amphores, ainsi que sur têtes, de la collection de l'Ermitage* (en russe), 1917.

SOME AMPHORAS FROM A HELLENISTIC WRECK

A wreck of the Hellenistic period was investigated for the Institute of Nautical Archaeology by George Bass and his associates in the bay of Serge Liman off the west coast of Turkey.¹ The work started in 1978, in the intervals of clearing the nearby spectacular cargo of 11th century after Christ glass vessels, which has been reported in the *National Geographic* magazine for June 1978.

From the Hellenistic wreck, the great majority of amphoras so far recovered, large and small (see Figure 1), are in shape rather like Knidian jars of the 3rd century B.C.: Figure 2 has on the left a jar from the wreck, and to the right an Early Knidian amphora from the Agora Excavations in Athens that is datable by context to about 240 B.C.² They resemble one another in their broad well-marked shoulders, simple rim, and a knobbed toe that might develop into the familiar ringed toe of later Knidian.³ The toes here are not exactly the same. A perhaps more noticeable difference is in the handles, which in the Agora jar have long tops that *descend* slightly from the upper attachments; they are also thinner than the handles of the Serge Liman

(1) The wreck was partially excavated under the supervision of Cemal Pulak as part of the overall Serge Liman project directed by George Bass. For an early report, see *Institute of Nautical Archeology Newsletter*, Vol. 6, no. 4 (winter 1979-80) pp. 1-3; on p. 2 appears the photograph by Don Frey which is Fig. 1 of the present article. I am grateful to Professor Bass for permission to publish, with the papers of the amphora colloquium, a selection of the amphoras so far recovered from his Hellenistic wreck; a more complete report on material from the site, by Bass and others, will shortly be presented elsewhere. I am obliged to Professor Bass and Mr. Pulak for information on these jars and photographs of them; also, for some further detail, to Professor Carolyn G. Koehler; I have not seen anything from the wreck myself. Others whom I thank here for information and various facilitations for this article are Maria Petropoulakou, Andreas Dimoulinis, P. M. W. Matheson, M. B. Wallace, David Jordan, and various librarians of the American School of Classical Studies in Athens. For much time and consideration given to my concerns in Rhodes (cf. 10, 17, and 21-23 here published), I am greatly indebted to Dr. I. Papachristodoulou and to Madame Angeliki Yannikouri. To Homer Thompson I am grateful for permission to illustrate here two amphoras and a stamped handle from the American Excavations of the Athenian Agora, see 2, 12 and 24; and to Dr. Doreya Said for permission for 6, 7 and 8, from the Benaki Collection, now in the Graeco-Roman Museum in Alexandria, of which Dr. Said is General Director. Others are mentioned below.

To those used in this Supplement, I add one more short title for reference in the present article:

GRACE 1985: V. R. GRACE, "The Middle Stoa dated by amphora stamps," *Hesperia* 54 (1985) pp. 1-54.

(2) See catalogue at end of article for documentation, readings, etc., of the objects illustrated, and references to previous publications of them.

(3) Cf. GRACE 1979-2, fig. 64, and drawing on title page. For a profile drawing at ca. 1:2, see J. BOUZEK, ed., *Anatolian Collection of Charles University [Kyme I]* (1974) p. 90, fig. 1.

jars. Stamped Knidian handles datable before about 200 B.C. are broad and thin, and descend from their upper attachment.⁴

For these differences between the Serçe Liman amphoras and the one from the Agora, are they due merely to a difference in date? We know Knidian shapes that are later than that of the Agora jar shown here, but have not recognized earlier ones. The clay of most of the jars from the wreck, however, has repeatedly been described to me as "pale" or "light buff", not like typical Knidian.⁵ And, finally, a few of these jars turned out to bear stamps of the so-called Zenon Group.⁶ See Figure 2, 3 and 4, of which 3 is the stamp on top of one of the handles of the amphora 1. Here are two abbreviated names, Ζηγ and Φιλζ. Note the zeta made like a capital iota. All the Zenon Group stamps so far recovered from the wreck have the same combination of abbreviated names.

These jars give us for the first time a whole shape for amphoras of the Zenon Group. We have thus up to now no shape-sequence into which to fit them. But for dates, there is a lead in the stamps: some probably related stamp types are dated to near 270 B.C. by discovery in the Ptolemaic camp at Koroni in Attica.⁷ In Figure 2, 6, 7, and 8 are duplicates (from Alexandria) of the three Zenon Group stamps found at Koroni. Again these contain, each, two abbreviations: Ζη with Μοσ, Ζη with Σω, and Ζη with Φ. As a group, one might guess that these three stamp types are a bit later than those in our wreck: they are more accomplished, and the abbreviations are briefer.

Another suggestion that the Serçe Liman Hellenistic wreck is slightly earlier than the camp at Koroni lies in the shape of the single Thasian amphora in the wreck, see Figure 3, 11. Unfortunately we know of no whole Thasian jars dated by any of the three names on stamped Thasian handles found at Koroni (Δημόλκης, Ἰδνάδης and Κλεόστρατος),⁸ and in general have lacked Thasian amphoras datable to the first half of the 3rd century (by modern dating). However, the amphora from the wreck (11)

[4] Cf. GRACE 1985, p. 16 and pl. 2, no. 4.

[5] I quote from observations by Cemal Pulak, the excavator, in a letter to me of 11.V.83: "Of the 18 stamped amphoras only 4 (possibly 5) had the framed ΝΦ[] stamp. The remaining were ΖΗΝ. All of the framed stamps ΝΦ[] were executed on amphoras having very dark brownish-red smooth clay while the majority of the other type of stamp were found on amphoras having a very light buff colored gritty clay." (He was unable to report completely on all the material owing to lack of time for clearing all jars of concretions. A few more of the amphoras were later found to be stamped, see catalogue at the end of this article, under 1.) An earlier letter, from G. Bass (24.IV.74), described one of his "Knidian" amphoras, as seen in a slide, as "very pale, a more creamy color..." It may be remarked that in its side view photograph the amphora HWA 5 (of which only the stamp is shown here, 18) looks very dark.

[6] GRACE 1985, p. 19, note 46, with references; see especially those to GRACE 1963. Cf. GRACE-EMPEREUR 1981, p. 426 with note 3. Note however the date given to our 7 by presence at Koroni.

[7] E. VANDERPOOL, J. R. MCCREDIE, and A. STEINBERG, "Koroni: a Ptolemaic Camp on the East Coast of Attica," *Hesperia* 31 (1962) pp. 26-61. List of the stamped handles of the Zenon Group from Koroni, GRACE 1963, p. 319 (numbers are those of the publication of Vanderpool, etc.). See GRACE 1974 for revision of earlier Agora Hellenistic deposit dates, which brings the date of the stamps at Koroni into agreement with the historical date proposed by Vanderpool, McCredie and Steinberg.

"Stamp types": in our usage, a stamp type is a group of one or more dies having the same content and arrangement of letters and/or devices, i.e. the same minuscule reading.

[8] See GRACE 1963, p. 319, for a listing of the Thasian items at Koroni.

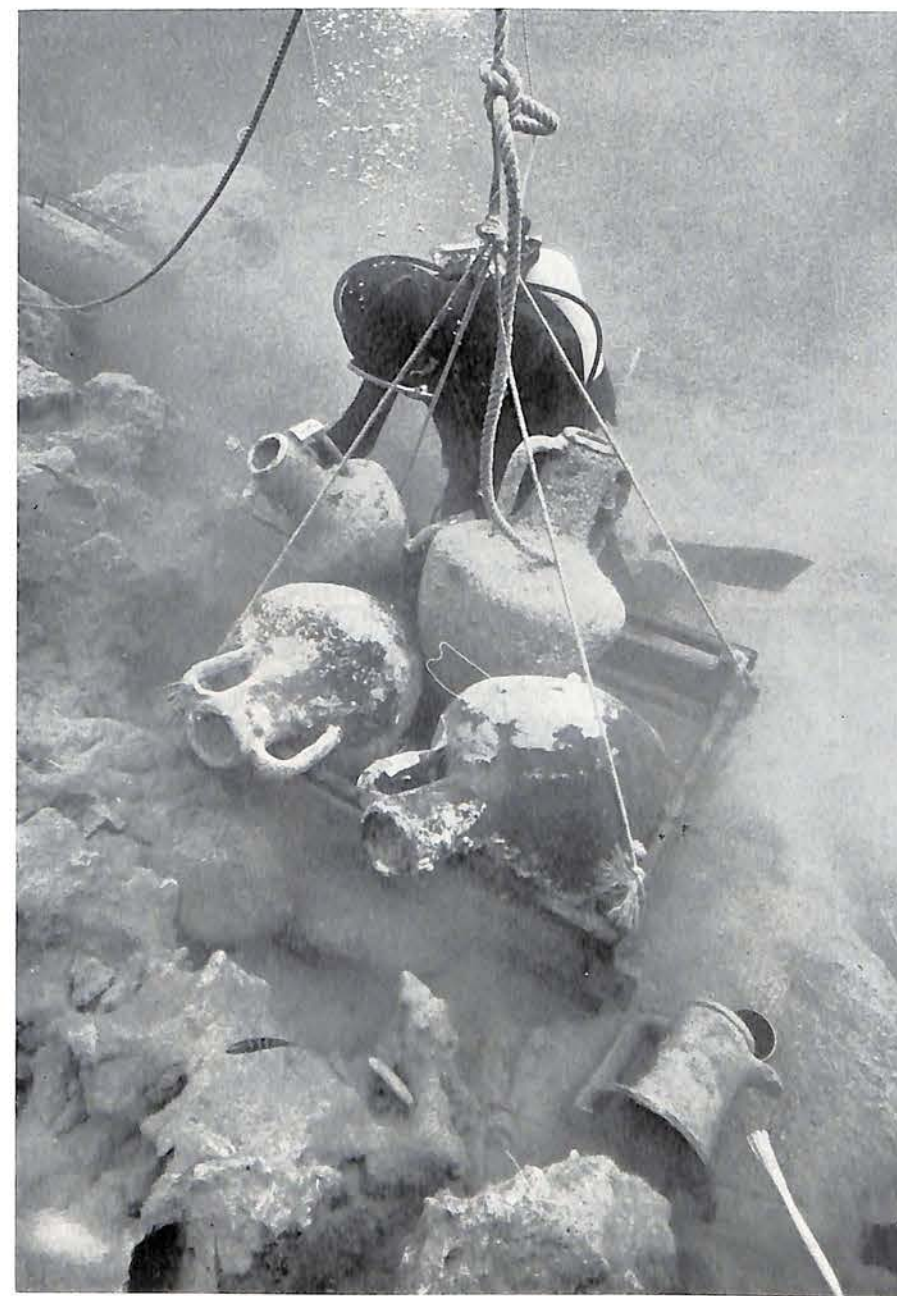


Fig. 1. — Amphoras lifted from the Hellenistic wreck at Serçe Liman. Note two sizes. Photo Don Frey, see footnote 1.

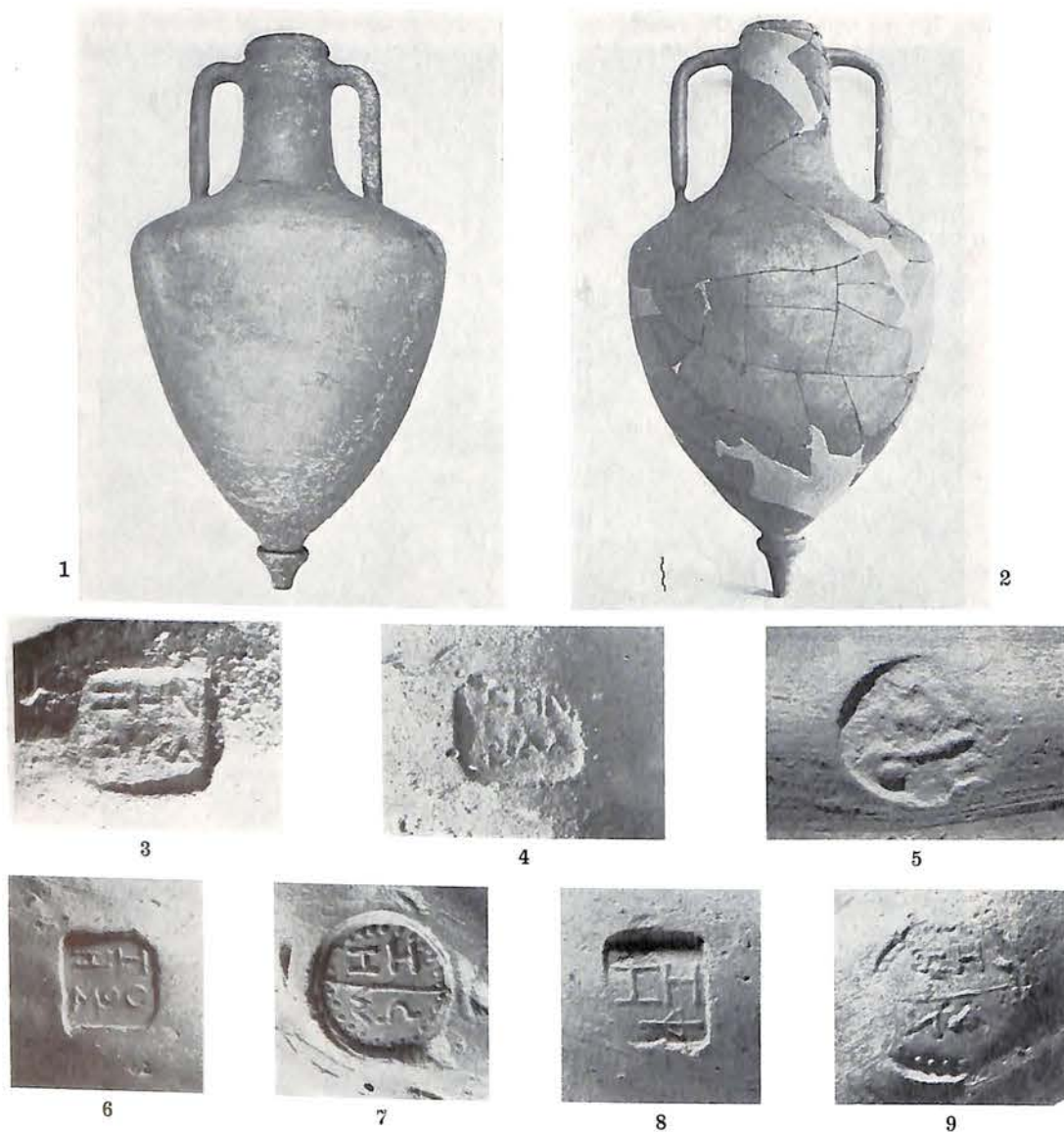


Fig. 2. — Stamped amphora (1) of the Zenon Group from the wreck, and its stamp (3), compared with Early Knidian stamped amphora at the Athenian Agora (2, 5); Zenon Group stamps from the wreck (3, 4) compared with types present at Koroni (6, 7, 8). 1:10 (jars) and 1:1 (stamps). (3 is slightly oversize.)

seems much less related to those datable after *circa* 240 B.C., like 12 with its wide neck and full but narrower body, than to such possibly still 4th century jars as 10, with its distinctive outswung handles and elegant body. 10 was found in a tomb on

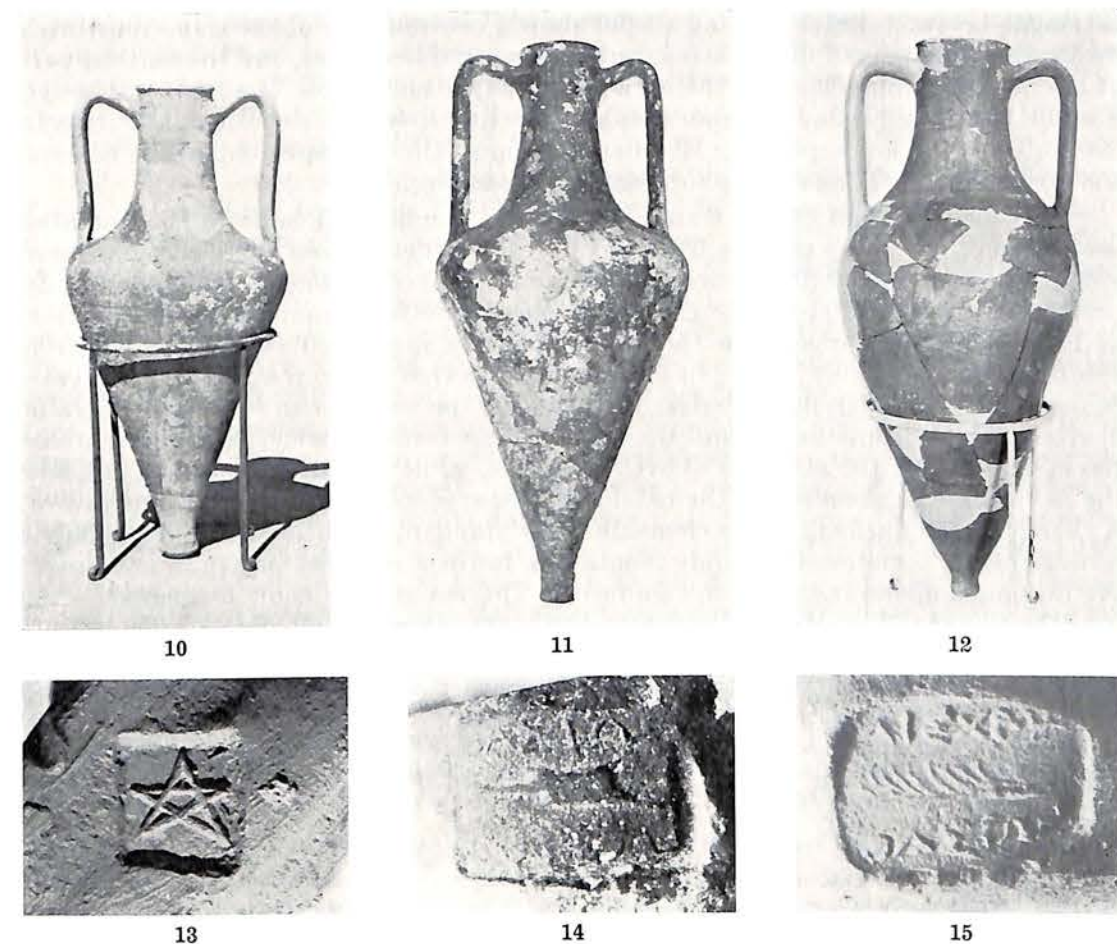


Fig. 3. — Thasian stamped amphora from the wreck (11, 14) compared with earlier (10, 13) and later (12, 15) stamped Thasian jars. 1:10 (jars) and 1:1 (stamps).

Chalke off Rhodes, which had also fine ware of the 4th century B.C.⁹ 12 comes from an Agora deposit somewhat later than Thompson's Hellenistic Group B, and now downdated with Group B to the second half of the 3rd century B.C. For detail, see

[9] The fine ware in Tomb 7 (see Catalogue below, under 10) at one time suggested a date in the first half of the 4th century B.C., where however we cannot place 10, because we know the Thasian shape of that period and it is different. See GRACE 1956, pl. 60, 1-4, noting the toes of 2 and 3 in a separate photograph (very different from those of our 10 and 11), for the small-size Thasian jars of ca. 390-340 B.C.; on these amphoras, see *ibid.* pp. 123-124, note 8; all four have stamps of the earlier, two-name, kind. A full-size (but incomplete) amphora resembling 10 was found in Tomb 9 of the same cemetery in Chalke. See Box 1957, p. 22, where these jars from Tombs 7 and 9 are shown side by side (fig. 6, nos. 4 and 5); they are examples of Bon amphora Type 11. The stamp of the jar from Tomb 9 names Αὐτοκρατορῆς (Box 1957, p. 152, no. 450), and lunate sigmas

catalogue below. Later Thasian shapes show a continuation of the trend illustrated by **12**: the body stays full to the toe, but narrows and lengthens, and the vertical part of the handles comes closer to the neck (since they attach below to a narrower body). See the latest well-dated Thasian amphora we know, from a deposit dated close to 200 B.C. by the accompanying Rhodian amphoras, the Villanova deposit in Rhodes; the stamp on the Thasian amphora names *Χαριππίδης*.¹⁰

The identification of the stamp (**14**) on the amphora **11** adds to the potential usefulness of the group of finds from this wreck. Single names stamped on Thasian amphoras after about 340 B.C. are now seen to be those of annually appointed officials, perhaps controllers of production. The name of a potter or manufacturer no longer, as in earlier years, appears in the stamp, but the individual production center is identified by the device (in **14**, an oar) assigned to that pottery works for that year. Stamps used in different potteries in Thasos in the same year will show different devices, but the same name, and the same arrangement of name, device and ethnic (*Θασίων*). In **14**, the ethnic is above the device, while the name, inverted, is below the device; see the reading in the catalogue below, since our example is much worn. A change in arrangement of the elements of the stamp apparently indicates a different term in office, sometimes certainly identifying for us a different person, a homonym. We owe our understanding of the stamps on Thasian amphoras of this period to the investigations by Y. Garlan in a number of ancient potteries on Thasos.¹¹ The system of stamping in Rhodes, for instance, was quite different: there the organization seems to have been in the hands of the manufacturers (perhaps licensed?), who issued year by year, or more often, pairs of stamps naming successive dating names (and months, after about 240 B.C.) as well as their own names, often in a continuing style, e.g. circular stamps with a rose as device, like those of *Δαμοκράτης*, *Ἀριστοκλῆς*, and *Ἰπποκράτης*.¹²

The name *Πυθίων*, to be restored in **14**, is that of a number of homonyms among Thasian stamp officials. Nine different stamp styles with the name have been sorted out and numbered in a tentative sequence.¹³ Our stamp **14** belongs to *Πυθίων* V of the sequence. *Πυθίων* III and *Πυθίων* IV are dated by context before perhaps

appear in name and ethnic, a letter form which seems not to be found in Thasian stamps before at least 300 B.C. See DEBIDOUR 1979, p. 287, note 61. I believe the first lunate sigmas in Thasian stamps are rightly dated here. (Note however, that barred sigmas are by no means confined, as the author seems to suggest, to the period before 290 B.C., there are many in later stamps, cf. **15** in Fig. 3, and the stamp naming *Χαριππίδης* on the Thasian amphora from the Villanova deposit, see below with footnote 10.)

(10) A. Maiuri, "Una Fabbrica di Anfore Rodie," *AnnScAtene* 4-5 (1921-1922) [1924] p. 40 [262], fig. 7. The jar, no. 4570, see p. 39 [261], fig. 6, lower right corner. Cf. also V. R. GRACE, "The Canaanite Jar," S. S. WEINBERG, ed., *The Aegean and the Near East*, Studies Presented to Helty Goldman (1956) pl. XI, photographs of the same Thasian jar (7) and stamp (8); BON 1957 illustrates the jar (p. 22, fig. 6, no. 6) and a duplicate of the stamp (p. 412, no. 1699). On the Villanova deposit, cf. GRACE-PÉTROPOULAKOU 1970, pp. 294-295.

(11) GARLAN 1979 and *supra*, p. 201-276.

(12) GRACE 1985, pp. 9-10.

(13) See DEBIDOUR 1979, p. 284, where the various styles are described; the author has adopted the numbering from my archives, see his note 41, if with reservations, see his note 54a. I would now omit *Πυθίων* I, since a *κεραμογράφος* is a master potter rather than an eponym, and I would study further *Πυθίων* II. On the Ivy Leaf group, cf. DEBIDOUR 1979, p. 292, see also F. HENNINGER, in V. MILOJIC and D. THEOCHARIS, *Demetrias* I (1976) p. 129, under no. 171.

285 B.C.¹⁴ *Πυθίων* VII is placed by the shape of a whole jar bearing one of his stamps,¹⁵ the shape falling between our **12** and the amphora naming *Χαριππίδης* dating in the early 2nd century, see above, text with notes 10 and 11. The amphora **11**, by its stamp naming *Πυθίων* V, gives us by its shape perhaps the first good evidence for the date of *Πυθίων* V.

The Zenon Group of stamps has been associated tentatively with Zenon of Kaunos, Zenon of the Large Estate in Egypt. This was chiefly because of the number of handles with stamps of the two-name Zenon Group found in the Ptolemaic camp at Koroni (see above, text with note 7), while most of the others we know have been found in Egypt itself. A few of the Knidian-shaped amphoras from the wreck bear an apparently Egyptian stamp, thus further favoring an attribution of the lot to an Egyptian provenance. See **18**, **19**, and **20** in Figure 4, three stamps that are about the same, all rather dim. **19** is the stamp on the amphora **16** from the wreck, **18** is on another jar from the same source, both jars closely similar in shape to the Zenon Group amphora, our **1** above, and to nearly all the amphoras as yet raised from the wreck, stamped and (mostly) unstamped. **20** however is on **17**, a jar of quite a different shape, not from the wreck, but found in Rhodes. In the stamps **18-20** one can make out, inside a freehand frame, Greek letters: a nu, a phi, and space for a third letter after these. What Greek word begins with nu phi? But taking it as a Ptolemaic transliteration of a common Egyptian adjective, we reach *nfr* which means *good*, all kinds of good. Further, this word is known to have been used by the Egyptians (of the Mycenaean period) for ranking wine: *nfr*, good (wine) and *nfr nfr*, excellent (wine).¹⁶ It seems the kind of Egyptian word to have been familiar to Egyptian Greeks.

We can find fair parallels for the shape of **17** (Figure 4), which does not match **16** although their stamps are similar: see **21** and **22** in Figure 5, two amphoras also found in Rhodes. Each is stamped on one handle with an abbreviation in two letters. The

(14) Examples are found in Agora Deposit Q 10: 1, cf. GARLAN 1979, p. 249: of *Πυθίων* III, SS 11525, SS 13222 (like CANARACHE 1957, p. 62, no. 69); of *Πυθίων* IV, SS 11488 (like BON 1957, no. 1447), SS 11494 (like BON 1957, no. 1485), SS 11526 (like BON 1957, no. 1468). The stamp **14** was identified by A. Dimoulis.

(15) GRACE 1934, p. 202, fig. 1, 4; cf. text, p. 304, where a photograph of the stamp is shown.

(16) For *nfr* meaning various kinds of *good*, see R. O. FAULKNER, *A Concise Dictionary of Middle Egyptian*, 1962 (reprinted 1972) pp. 131-132. On the use of *nfr* by the Egyptians of the Mycenaean period for ranking wine, see P. V. STANLEY, "KN Ue 160 and Mycenaean Wines," *AJA* 86 (1982) p. 578, and cf. L. H. LESKO, *King Tut's Wine Cellar*, 1977, p. 27. I am much obliged to Dr. Stanley for sending me copies of these texts. See also W. C. HAYES, "Inscriptions from the Palace of Amenhotep III," *Journal of Near Eastern Studies* 10 (1951) especially pp. 88-90: "The superior vintages, imported into the Thebaid often from considerable distances, are usually accompanied by their dates and by the names of the districts from which they came, the latter serving also, as with our modern vintages, to identify the type of wine in question." (p. 88) "In twelve cases the wine is described as 'good' (*nfr*) and in twenty instances 'very good' (*nfr-nfr*), these notations of quality or grade being applied for the most part to otherwise unidentified vintages... or to wines donated by private individuals..." (pp. 89-90). I am greatly obliged for this information (and much more) to Professor S. A. Immerwahr and to Ms. Orly Goldwasser of Jerusalem, whose report was received by courtesy of Professor Jack Sasson of the University of North Carolina.

The kind of frame that surrounds **18**, **19**, and **20** identifies a few more stamp types as probably related to them. Most examples I have seen are in the Benaki Collection, now in the Museum in Alexandria. We have, however, at the Athenian Agora two examples of a similarly framed type that reads, retrograde, *ΝΑΚ*: SS 897 and SS 10354 (no useful context). If this is short for *νάκ' ὀρος*, possibly the contents are identified as a tithe? On *na(koros)* in amphora stamps in Cyprus, see GRACE 1979-1, p. 186, under 9b, where an acknowledgment to John McK. Camp for the suggested restoration is regrettably omitted.

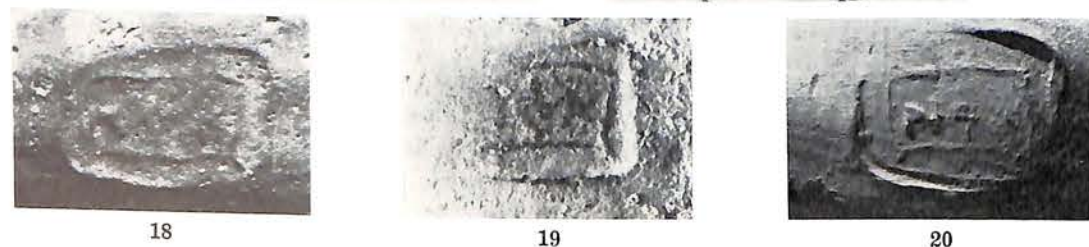
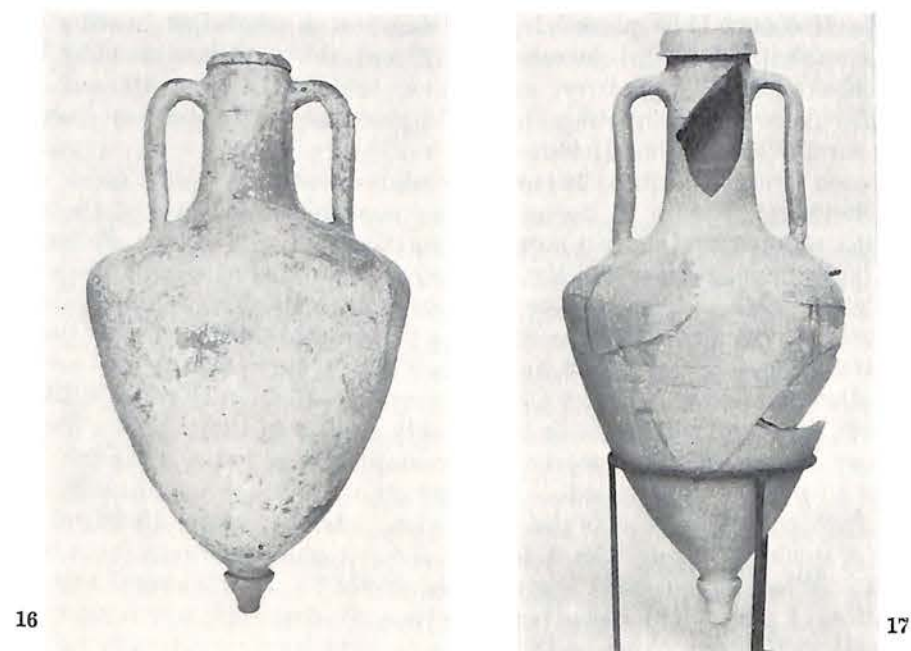


Fig. 4. — Stamped Ptolemaic (?) jar from the wreck (16, 19; 18 is from another similar jar from the wreck) compared with a later Ptolemaic (?) jar with similar stamp (17, 20, in Rhodes). 1:10 (jars) and 1:1 (stamps).

stamps of 21 (cf. 24) and of a fragmentary similar (Ptolemaic ?) jar (25; a side view of the fragment is not illustrated) read sigma omega, an abbreviation capable of many restorations, but one notes in the Zenon archive a Σώστρατος closely associated with Zenon's affairs. The stamp of 22 (see 26) reads epsilon tau, which is the beginning of very few Greek names, but prominent in the Zenon archive is a certain nomarch 'Ετέαρχος, brother of Zenon's Σώστρατος and himself closely involved with Zenon.¹⁷

(17) P. W. PESTMAN, *A Guide to the Zenon Archive*, 1981, p. 328, listing of papyri references to 'Ετέαρχος, son of Κλέων, brother of Δῆμος and of Σώστρατος, 'Ελένιος ["an Alexandrian demotic" see *ibid.*, p. 483], νομάρχης. For Sostratos, see *ibid.*, pp. 423-424. The relations of these persons with each other and with Zenon, as evidenced in the papyri, are discussed in Rostovtzeff's *A Large Estate in Egypt in the Third Century B.C.* (1922, reprinted in 1979), a book of unending interest. See p. 188 of its index, 11 entries for Elearchos the nomarch.

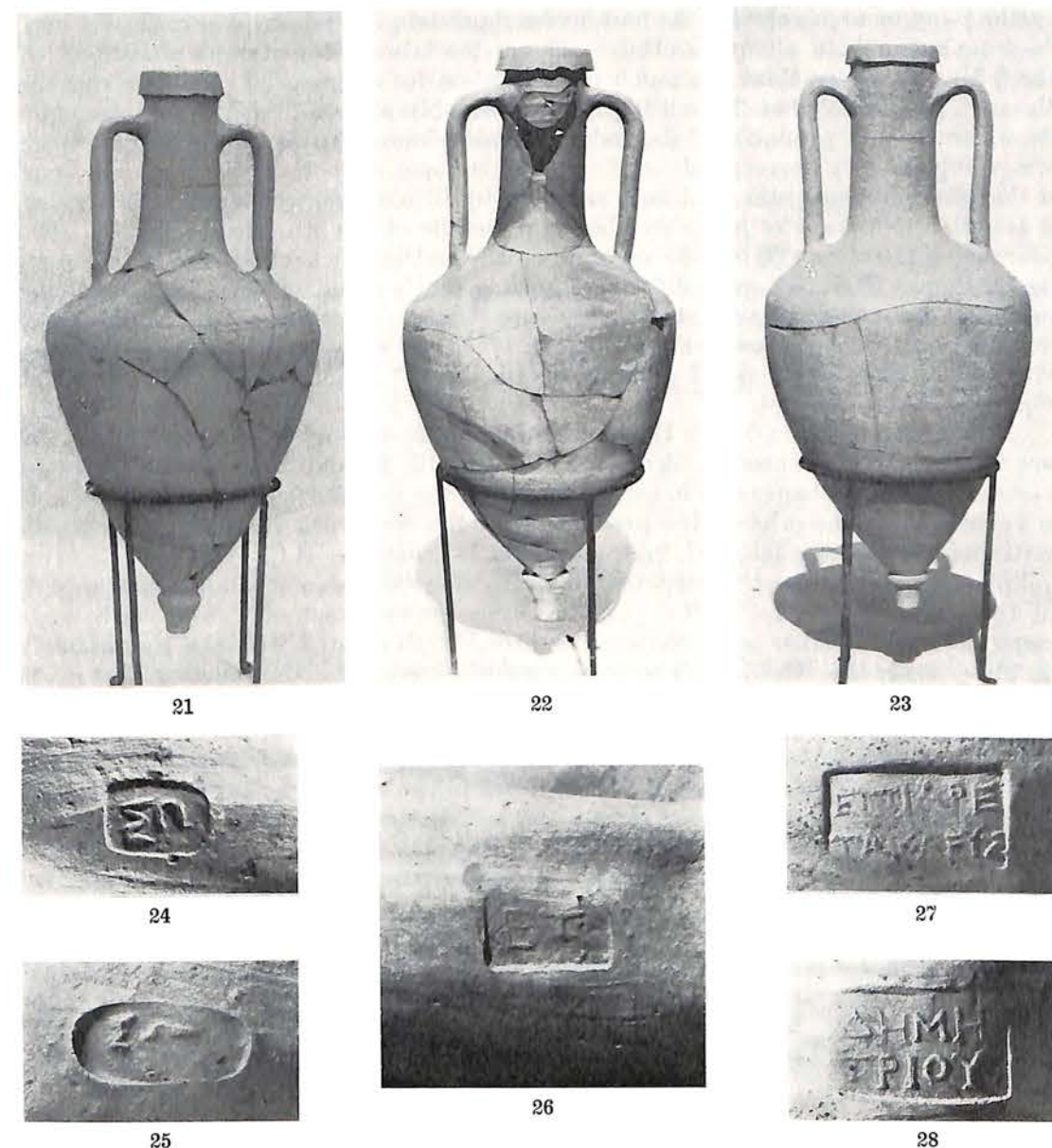


Fig. 5. — Mid 3rd century B.C. stamped Ptolemaic (?) amphoras (21, 22; cf. 17) compared with contemporary Rhodian (23); associated stamps. All in Rhodes save 24. 1:10 (jars) and 1:1 (stamps).

Let us see where these various bits of information fit into what we know of the life of Zenon. Born in Kaunos in Caria at about the beginning of the 3rd century B.C., he moved fairly early to Egypt. But the part of his life that is closely covered

by the papyros archive, when he had his headquarters in Philadelphia in the Fayum, does not begin until about 259 B.C. This is too late for the stamps at Koroni (cf. our 6-8), and, as we think, so much more too late for our wreck. What about the pleasant possibility that 21 and 22, and presumably also 17 which much resembles them, are actual products of Zenon's associates known to us through the papyri preserving Zenon's correspondence? There is some support in the apparent date of the amphora shape: the container endorsed by Et(earchos) was found with a group of Rhodian amphoras of probably about the middle of the 3rd century B.C.¹⁸ The closeness of the stamp 20 to some on amphoras from the wreck (cf. 18 and 19), whereas the jar shapes 16 and 17 are so different from one another (and one guesses they may be a quarter of a century apart), this makes a problem. I can only point out that the message of the stamp seems to have been one which had served well enough for marking wine jars in Egypt a thousand years before the days of Zenon, and perhaps it did not require constant renewal.

In Figure 5 I have added a Rhodian amphora (23) of roughly the same date as the jars tentatively attributed to Zenon's associates, 17, 21 and 22. The shape of 23 is one of two main shapes still in use in Rhodes in the mid 3rd century, this one about to vanish, while the other is the predecessor of the developed Rhodian shape which continues through the late 3rd, 2nd, and early 1st centuries B.C., with its rolled rim and plain peg toe. See the shapes at an earlier stage as found at Koroni, the amphoras there now dated ca. 270 B.C. 23 is a later development of Koroni no. 5, with longer neck and handles and a more defined toe.¹⁹ Compared with the Egyptian (?) 17, 21, and 22, the Rhodian 23 is more regularly made, and the handles have a lift from the upper attachment which those of the Zenon group (?) no longer have. Further studies are indicated of 3rd century Rhodian and Knidian amphoras in comparison with the shapes used as we think by Zenon and his associates. Such studies need help from analyses of the clay used in the various series. To the naked eye, the clay of Rhodian jars that already in the first half of the 3rd century B.C. have the rolled rim of later times (though fatter), this clay is closest to that of the later Rhodian. So far as I know, there has been no systematic testing of clays to distinguish between the various kinds of stamped early Rhodian. For a control of the provenance of Zenon stamps like those at Koroni, cf. our 6, 7 and 8, one test at least has been made, by Ian Whitbread of the University of Southampton, Department of Archaeology. Formal publication is yet to be made, but he permits me to report that the clay of our 9, from Alexandria, contains volcanic inclusions. This would apparently permit Egypt as a possible provenance, since volcanic outcroppings do exist there.²⁰

[18] See catalogue below, under 22.

[19] Koroni no. 5; *Hesperia* 1962 (see footnote 7 above) pl. 19, 5 (photograph; GRACE 1963, p. 323, fig. 1, 5 profile drawing). Note in this figure that nos. 2, 3, and 4 all name the same Rhodian eponym, and so display the contemporary variety in Rhodian shapes of the material at Koroni, now dated ca. 270 B.C. (see GRACE 1974). No. 6 shows the rolled-rim Rhodian at a later stage, about contemporary with our 23; on this no. 6, see Catalogue below under 25, from the same building lot in Rhodes.

[20] In attendance of the clay analyses, it may be said that descriptive notes exist on many amphora handles bearing Zenon Group stamps of the kind with two abbreviated names (cf. 3, 4, 6-9), and that these notes suggest a clay similar to that of e.g. 22 and 24. Although Egyptian (as I am guessing), this clay would

For Bass's wreck, we are guessing, then, a date of somewhere about 280-275 B.C., when Zenon was young, more or less at the beginning of his career, but no doubt already active. So much is to be learned from further investigation of this wreck, it is certainly to be hoped that it will be completely excavated, so that coins and other small finds can confirm, or correct, the date suggested.

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presumably come from a different bed from that of another Egyptian series, the Petos Group, cf. GRACE-EMPEREUR 1981. A comparative study might usefully be made between the Petos clay and that of the darker amphoras from the Hellenistic wreck, those with the Egyptian (?) stamps, see footnote 5. Note that the rim and handle profiles illustrated in the photographs GRACE-EMPEREUR 1981, pl. LXI, figs. 21 and 22 (with stamps of Herieus and Petos) show a likeness to rim and handles of the typical amphora from the wreck, see Fig. 2, 1, and Fig. 4, 16.

Catalogue of illustrated items

Numbers in boldfaced type, here and in the Figures and in the text, are those of items in this catalogue, all of which are illustrated (Figures 2-5). Photographs of amphoras from Bass's Hellenistic wreck, also all descriptive information on these jars (measurements, etc.), come from Professor Bass or his associate Cemal Pulak; see footnote 1. On two capacity figures, M. B. Wallace has given me the following statement: "The capacity of the jars no. 21 and no. 23 were taken as described in P. M. W. MATHESON and M. B. WALLACE, "Some Rhodian Amphora Capacities," *Hesperia* 51 (1982) pp. 293-320, Appendix 3 (pouring in cupfuls of polystyrene beads, and counting each cupful as equivalent to 525 ml.)."

1. From Bass's Hellenistic wreck in Serge Liman, HWA 3. See footnote 1. Whole jar, intact. Ht., 0.752; greatest diameter, 0.434. Stamped on one handle, see 3: Ζην Φιλζ. About 23 other amphoras from the wreck have so far been found bearing this stamp, including HWA 2, see 4. Other examples of the stamp known to me are one from Rhodes, now in the British Museum (published *IG* XII, 1, no. 1306, 2; a rubbing is on file at the Agora Excavations); and one in the Musée Gréco-Romain in Alexandria (VG photo number 362.22).

Other amphoras from the wreck published here: Fig. 4, 16 (similar to 1) and Fig. 3, 11 (Thasian); cf. also Fig. 1.

2. Excavations of the Athenian Agora, SS 371, from Thompson's Hellenistic Group B, now dated (end date) ca. 240 B.C., see GRACE 1974, p. 198, note 19, and cf. S. I. ROTROFF, *The Athenian Agora XXII, Hellenistic Pottery: Athenian and Imported Moldmade Bowls* (1982) p. 108. Previous publication, GRACE 1934, p. 202, fig. 1, no. 6, and see text, pp. 204-205 and p. 304; note the handle to the right in the photograph is a restoration. Cited as from the group by Thompson, see *Hesperia* 3 (1934) p. 332. Cf. also GRACE 1979-2, fig. 64, jar furthest left; and GRACE 1963, p. 325, note 13. Ht., 0.79; greatest diameter, 0.414;

capacity (wheat), 39,700 cc. Stamped on preserved handle with a circular stamp containing a monogram (?), see 5.

3. Stamp of 1, which see.

4. Stamp of HWA 2 from the wreck. See on 1.

5. Stamp of 2, which see. Previous publication of the stamp, GRACE 1934, p. 280, no. 233. Cf. *ibid.*, p. 205: the stamp alone would not be recognized as Knidian, but identification of the amphora shape depended, and depends, on the resemblance of the shape to those of later amphoras bearing known Knidian stamps. A second example of this stamp type has not been found.

6. Alexandria, Benaki Collection, Z ABC 93, handle stamped $\begin{smallmatrix} Z\eta \\ \Sigma\omega \end{smallmatrix}$. Of this stamp type, 8 or more examples from Alexandria; 1 probably from Athens (A. DUMONT, *Inscriptions céramiques de Grèce* [1870] p. 322, no. 160, probably the same object as Z EM 14 found by us in the National Museum, Athens); and 3 from Koroni (cf. footnote 7 above), *Hesperia* 31 (1962) pp. 48 and 52, nos. 84, 115, 116, in pls. 18 and 19. Another type exists with the same combination of abbreviations, but reading retrograde: Z ABC 85 (unpublished), the shape of the stamp is that of our 25 (Fig. 5).

On identification in the National Museum collection of items in Dumont's publication, see GRACE-PÉTROPOULAKOU 1970, p. 323.

7. Alexandria, Benaki Collection, Z ABC 99, handle stamped $\begin{smallmatrix} Z\eta \\ \Sigma\omega \end{smallmatrix}$ in beaded circle divided horizontally. At least 5 more examples from Alexandria; 1 from Naukratis (*AJA* 86 [1982] p. 375, no. 4 and pl. 47, fig. 8); 1 from Rhodes (*IG XII*, I, no. 1393, now in the British Museum); 2 from the Athenian Agora (for one, see GRACE 1934, p. 284, no. 247; the provenance is deposit H 6: 4); and 2 from Koroni (cf. footnote 7 above), *Hesperia* 31 (1962) pp. 51, 52, nos. 113 and 114, pl. 19.

8. Alexandria, Benaki Collection, Z ABC 105, handle stamped $\begin{smallmatrix} Z\eta \\ \Phi \end{smallmatrix}$ horizontal. At least 5 more examples in Alexandria; and 2 from Koroni, *Hesperia* 31 (1962) p. 52, nos. 117, 118, pl. 19; *ibid.* no. 119 is from a variant die.

9. From Alexandria, British Museum 1848, 7-31.322, handle stamped $\begin{smallmatrix} Z\eta \\ \text{'Av} \end{smallmatrix}$ (retr.) in beaded circle divided horizontally. No other examples known to me. For the style of the stamp, cf. 7. Clay from 9 has been analyzed, see above, p. 560. The handle is published here by permission of the Trustees of the British Museum.

10. From Chalke, off Rhodes, Tomb 7: *Clara Rhodos* II, p. 130, amphora illustrated in pl. VI, opposite p. 154. Rhodes Museum A 673 (MΣ 610). See also Bon 1957, p. 22, fig. 6, no. 4 (amphora, Bon Type II). Ht., 0.635; diameter 0.29; capacity, 11,125 (water 1979). Stamped on one handle, pentagram (13), no letters. See footnote 9.

11. From Bass's Hellenistic wreck in Serge Liman, Thasian amphora, HWA 9. See footnote 1. Good part of body missing (unphotographed side). Ht., 0.75; greatest diameter, 0.347. Stamped on one handle (see 14): oar Stamp of $\Pi\upsilon\theta\iota\omega\nu$ V, see above, text with notes 13 and 14. For parallels for the stamp, see under 14.

12. Excavations of the Athenian Agora, SS 8932, Thasian amphora from deposit N 21: 4, lower fill, a fill now dated "third and early fourth quarters of 3rd century", see ROTROFF, *op. cit.* under 2 above, p. 105. Repaired and restored; note handle on the left is a restoration. Previous publications: GRACE 1949, p. 186 and pl. 19, 6 (dated too early); Bon 1957, p. 20, fig. 4, no. 4 (amphora, Bon Type III); GRACE 1979-2, fig. 52, right end. Ht., 0.74; greatest diameter, 0.318; capacity, 20,875 cc. Stamped on preserved handle (see 15): sprinkler $\begin{smallmatrix} \text{A}\lambda\sigma\chi\rho\omega(\nu) \\ \Theta\alpha\sigma\iota\omega\nu \end{smallmatrix}$

13. Stamp on 10., which see. Previous publication, Bon 1957, p. 492, no. 2145. I know of no duplicate of this stamp. A pentagram as device appears in Thasian stamps that name officials perhaps all datable ca. 340-300 B.C.: cf. for instance Bon 1957 nos. 791, 838, 970, 972-3 and 1396, which all have names to be found in Garland's list for that period to be found in the present volume.

14. Stamp on 11, which see. Previous publication of the stamp type (not in Bon 1957): *BCH* 82 (1958) p. 400 and fig. 11 on p. 402, no. 97 (Thasos 2124). Two more examples of the stamp, both from Thasos: Th. 3967, 4387.

15. Stamp of 12, which see. Previous publication: Bon 1957, p. 94, no. 146 (context dated too early); GRACE 1979-2, fig. 55. Single example known to me of this stamp type.

16. From Bass's Hellenistic wreck at Serge Liman, HWA 4. See footnote 1. Whole jar, intact. Ht., 0.754; greatest diameter, 0.438. Stamped on one handle with an incomplete impression (19) of an Egyptian (?) stamp in Greek letters inscribed within a freehand frame; cf. 18 and 20, and see above text with footnote 16.

Compare the amphora shape with that of 1 (Fig. 2).

17. From the city of Rhodes, apparently from the Baltis lot in 1963, amphora, now repaired, Rhodes Museum A 491 (MΣ 464). On excavations in the Baltis and Kakou lots in 1963, see Professor K. Ch. Phatourou's report, *Arch Dell* 19 (1964) respectively pp. 472 and 462. I am obliged to Professor Phatourou for permission to publish 17 with its stamp 20, and 23 with its stamps 27 and 28. Ht. of 17, 0.795; greatest diameter, 0.393. Good part of body missing on one side, and of neck on the other side. Stamp on one handle, see 20: $\text{N}\Phi[]$, two letters and space for a third, within a freehand frame. Apparently the Egyptian word *nfr*—"good"—in Greek letters: see p. 557 above, with footnote 16.

18. From Bass's Hellenistic wreck at Serge Liman, stamp on the handle of HWA 5, a whole amphora (not shown) in shape like 1 and 16. Read $\text{N}\Phi[]$ within a freehand frame. See on 17. See also footnote 5, on the clay.

19. Stamp on handle of 16, which see.

20. Stamp on the handle of 17, which see.

21. From the city of Rhodes, near the Girls' High School, outside the city walls; provisional number, MΣ 161. Found in 1952 by G. Dontas, then Epimelete under the Ephor I. Kondis. Recorded in 1956 by M. Savvatiannou (now Mrs. Petropoulakou), by permission of the Ephor and by request of Mr. Dontas. Published here with the kind permission of Dr. Dontas, subject to agreement of J.-Y. Empereur, who has courteously ceded a prior permission. Repaired, parts of rim missing. Ht., ca. 0.78; greatest diameter, 0.37; capacity,

24,640 cc. (1979, polystyrene beads). Stamped on one handle: ΣΩ, possibly for Σώ(στρατος). See 24, perhaps from the same die (by comparison of rubbings—no photograph is available of the stamp of 21). Below unstamped handle of 21, dipinto alpha. See above, footnote 17, on the name.

22. From the city of Rhodes, Pipinou lot, 1968, amphora Rhodes Museum A 674 (MΣ 540). See *ArchDelt* 24 (1969) [1970] p. 457, mention of a group of amphoras found together, in the report (pp. 451-485) on the Dodekanese in 1968 by G. Konstantinopoulos, by whose generosity 22 is published here, and the accompanying Rhodian amphoras mentioned, see below. Ht. of 22, 0.805; greatest diameter, 0.367. Red clay, fine dark bits, some mica; remains of light-colored surface coat. Stamped on one handle (see 26): ET, perhaps for Ἐτ(εραρχος), see above, p. 558 with footnote 17.

Rhodian amphoras from the Pipinou lot, apparently from the same deposit as 22, have the following dating names in their stamps: Ἀριστάνναξ (1st), Εἰς[όδο]τος (?), Ἐπίχαρμος, Πολυκλῆς, Τιμοκλῆς (1st), and Τιμόστρατος. Month names never appear with these eponyms, and I believe them to date somewhere about the middle of the 3rd century B.C. Provisional numbers of these amphoras are MΣ 504, 539, 541, 543-545, 547. Note that this deposit is distinct from the earlier one reported on Konstantinopoulos's (*op. cit.*) p. 459, as containing two redfigure bell kraters; on this earlier deposit cf. also GRACE 1971, p. 84, *Addendum*.

On Εἰσόδοτος for Ἰσόδοτος, cf. NILSSON 1909, p. 146, instances of epsilon iota for iota in Rhodian stamps.

23. From the city of Rhodes, Kakou lot, 1963, Rhodian amphora, Rhodes Museum A 419 (MΣ 600). On excavations in the Kakou lot in 1963, see above under 17. Repaired. Ht., 0.796; greatest diameter, 0.357; capacity, 27,535 cc. (1979, polystyrene beads). A different stamp on each handle (see 27 and 28):

a) Ἐπὶ Ἀρε
τακλῆς

b) Δημη
τρίου

The term of Ἀρετακλῆς fell before ca. 240 B.C. when months began to be named on Rhodian amphoras (see GRACE 1974, p. 197), but not long before, according to name connections: e.g. an amphora of Ποταμοκλῆς (Rhodes Museum A 409, MΣ 598) names Ἀρετακλῆς, while others of the very distinctive eponym types of Ποταμοκλῆς name Εὐκλῆς (2nd), Καλλιερᾶτης (1st), and Φιλωνίδας, who are datable soon after months are first named. Cf. GRACE 1952, pl. XXI, 14 and 15, for a probable pair of Ποταμοκλῆς with Εὐκλῆς, showing the special style of this potter's stamps, with the legend around four sides of a nearly square rectangle.

The amphora 23 gives us the best evidence available for dating the fabricant Δημήτριος. The name in this (non-Doric) form is uncommon in Rhodian stamps. Cf. NILSSON 1909, p. 145, on forms with eta in stamps of this class. More are now known, but they remain exceptional. Perhaps this fabricant was a foreigner.

24. (The stamp, only, is illustrated.) Excavations of the Athenian Agora, SS 9076, stamped amphora handle found in 1939 in Section BB (no useful context). Upper part of handle only, no rim preserved. Width by thickness of handle at position of stamp, 0.045 by 0.03. Red clay, grayish at core; white and other bits and some mica; remains of cream slip. Stamped, on outside of curve of handle: ΣΩ.

Perhaps from same die as 21, which see. Numerous examples known from various dies, many from Alexandria. Cf. 25.

25. (The stamp only is illustrated.) From the city of Rhodes, Papademetriou lot, 1957, accession no. BE 1349 (MΣ 311). On the excavations, with mention of the group of amphoras found, see I. KONDIS, *PraktArchEl* for 1957 [1962] pp. 129-130. The date given there for the amphoras is by the unrevised early Hellenistic chronology (cf. GRACE 1974 for revisions, now generally accepted). The group would now be dated somewhere about the middle of the 3rd century B.C., i.e. about like the later of the two Pipinou groups, see under 22 above. For a published Rhodian amphora from the Papademetriou group, see GRACE 1963, p. 323, fig. 1, no. 6, and cf. text, p. 333: amphora of Σώτας dated in the term of Λύσανδρος. In this fig. 1, one sees the position in the shape sequence of 6, between 4, period of Koroni, and 7, at the end date of Thompson's Group B, ca. 240 B.C. Of 25, top half of jar is preserved, ht. of fragment 0.29, much resembling the top half of 21: mushroom rim, handles that drop a little from their upper attachments and are of uneven height. Clay brownish, fairly dark, with smears of cream yellow slip. Between the lower handle attachments, red dipinto iota; note that 21 also has a dipinto. Stamped on one handle: ΣΩ possibly for Σώ(στρατος), see on 21. A handle bearing the same stamp as 25 (i.e. apparently from the same die) has been found in Samos: Heraion I 943. (Mentioned by permission of Dr. G. Jöhrens, who is preparing a publication of these stamps.)

26. Stamp of 22, which see. Suggested restored reading, Ἐτ(εραρχος), see above, p. 558 with footnote 17. No other example of this stamp is known to me.

27. Eponym stamp of 23, which see. A handle stamped with the same reading, but from a different die, is in the Benaki collection, Alexandria. See also NILSSON 1909, p. 375, no. 70, 3.

28. Fabricant stamp of 23, which see. No other Rhodian stamp known to me with this reading. The name appears in a circular type on a Rhodian handle of about the same period (Alexandria, Benaki collection; unpublished); also in a circular type with rose as device, on a handle of Rhodian shape but non-Rhodian clay, Agora Excavations SS 12034, datable ca. 185 B.C. (Middle Stoa construction fill, cf. GRACE 1985). On these imitation Rhodian, see GRACE-PÉTROPOULAKOU 1970, p. 308 under E 20. I know of one more apparently Rhodian stamp type with the name Δημήτριος: the name is accompanied by three asterisks and a thyrsos; examples have been found in Rhodes and in Alexandria (unpublished).

I am informed by Mrs. Petropoulakou that the name Δημήτριος is common in stamps of Kos. She also calls my attention to a stamp type on characteristic handles of the Parmeniskos Group with exactly the same reading as 28. The name should be added to the list of this group, GRACE 1956, p. 168.

- SZTETYLLO 1975 : Z. SZTETYLLO, « Timbres amphoriques grecs des fouilles polonaises à Alexandrie (1962-1972) », *Études et travaux VIII*, (1975) p. 159-235.
- SZTETYLLO 1976 : Z. SZTETYLLO, *Les timbres céramiques (1965-1975)*, *Nea Paphos I*, (1976).
- VINOGRADOV 1972 : Ju. G. VINOGRADOV, « Les timbres céramiques de l'île de Thasos » (en russe), *NE 10* (1972) p. 3-63.
- WILL 1982 : E. L. WILL, « Greco-Italic Amphoras », *Hesperia* 51 (1982) p. 338-356.
- ZEEST 1960 : I. B. ZEEST, *L'emballage céramique du Bosphore* (en russe), *MIA* 83 (1960).

II. Périodiques

Ne figurent dans la liste d'abréviations ci-dessous que les périodiques n'apparaissant ni dans les abréviations habituelles du *BCH*, ni, à défaut, dans l'*Année Philologique*.

- AIB : *Archeologija i istorija Bospora*.
Archéologie et histoire du Bosphore.
- AMA : *Antičnyj Mir i Archeologija*.
Monde antique et archéologie.
- BISPAN : *Bjulleten' Imperatorskoj Sankt-Peterburgskoj Akademii Nauk*.
Bulletin de l'Académie impériale des Sciences de Saint-Petersbourg.
- BMNV : *Izvestija na narodnija Muzej-Varna*.
Bulletin du Musée National de Varna.
- BSAV : *Izvestija na Varnenskoto archeologičesko Družestvo*.
Bulletin de la Société archéologique de Varna.
- IAK : *Izvestija Imperatorskoj Archeologičeskoj Komissii*.
Bulletin d'information de la commission impériale d'archéologie.
- LANG SSR : *Izvestija Akademii Nauk Gruzinskoj SSR*.
Bulletin d'information de l'Académie des sciences de la R.S.S. de Géorgie.
- IAINT SSR : *Izvestija Akademii Nauk Turkmenskogo SSR*.
Bulletin d'information de l'Académie des sciences de la R.S.S. du Turkménistan.
- IGAIMK : *Izvestija Gosudarstvennoj Akademii Istории Material'noj Kul'tury*.
Bulletin d'information de l'Académie d'État de l'histoire de la culture matérielle.
- IIBN : *Izvestija Istoriko-filologičeskogo Instituta Knjazja Bezborodko v Nečine*.
Bulletin d'information de l'Institut historico-philologique du prince Bezborodko à Nečine.
- ITOLAE : *Izvestija Tauričeskogo Otdelenija Istории, Archeologii i Etnografii*.
Bulletin d'information du département d'histoire, d'archéologie et d'ethnographie de Tauride.
- ITUAK : *Izvestija Tauričeskogo Učjonog Archivnoj Komissii*.
Bulletin d'information de la commission scientifique des archives de Tauride.
- KSIIMK : *Kratkie Soobščeniia Instituta Istории Material'noj Kul'tury*.
Brèves communications de l'Institut de l'histoire de la culture matérielle.
- MASP : *Materialy po Archeologii Severnogo Pričernomor'ja*.
Matériaux archéologiques du Nord de la mer Noire.
- MIA : *Materialy i Issledovanija po Archeologii SSSR*.
Matériaux et recherches archéologiques de l'URSS.
- OAK : *Otčet Imperatorskoj Archeologičeskoj Komissii*.
Rapport de la commission impériale d'archéologie.
- SA : *Sovetskaja Archeologija*.
Archéologie soviétique.
- Tr. GIM : *Trudy Gosudarstvennogo Istoričeskogo Muzeja*.
Travaux du Musée historique d'État.
- UZMGU : *Učjonje Moskovskogo Gosudarstvennogo Universiteta*.
Mémoires de l'Université d'État de Moscou.
- UZMGPI : *Učjonje Zapiski Marijskogo Gosudarstvennogo Pedagogičeskogo Instituta*.
Mémoires scientifiques de l'Institut pédagogique d'État de Mari.
- UZMOPI : *Učjonje Zapiski Moskovskogo Oblastnogo Pedagogičeskogo Instituta*.
Mémoires scientifiques de l'Institut régional pédagogique de Moscou.
- ZODID : *Zapiski Imperatorskogo Odesskogo Obščestva Istории i Drevnostej*.
Mémoires de la Société impériale d'histoire et d'antiquités d'Odessa.
- ZVUAK : *Zapiski Vsesukrainskoj Učjonog Archivnoj Komissii*.
Mémoires de la commission scientifique panukrainienne des archives.

See also folder of

PETOS GROUP

in alphabetical series

7.V.86

For history of article, "Some Amphorae
from a Hellenistic Wreck," see folders of
BASS: Hellenistic Wreck in Underwater section
(cabinet for letter files ^{against} ~~under~~ the East wall).

2.VI.86

For photocopies of relevant pages of D.C.
Faulkner's Dictionary of Middle Egyptian, see
folder EGYPTIAN = PHARONIC -

7. 8. 86

5.01

Correspondence with Ian Whitbread III-IV. 86
on his tests which suggested to him that Zenon Group and
Prow-stamp amphoras were both made in the same
place, apparently Knidos.

[5.02]
From CGK 24, IV. 86 (i.e. after my 2nd letter
to I.W.)
I. Whitbread, ms. Section on Prow-stamp
jar.

- RAGA 144 -

and certain refired sherds of Mendeian amphorae (Table 000). The inability to produce briquettes fired at 700°C and 900°C which can survive thin sectioning suggests that this clay may not be suitable for making pottery. Furthermore, it contains much more silt than is present in the group 1 fabric, while it is also too well sorted to be compared favourably with group 2. Similar clays have also been collected from ravines in the vicinity of Nea Skioni, associated with grey clays similar to those found with lignite deposits. Briquettes of these clays are of even poorer quality than that of the Mende clay. The stratigraphic position and character of the deposits suggests they belong to the same formation.

Samples of red clays from Nea Skioni and Nea Foukas have produced much more encouraging results on analysis. Both have unimodal grain-size distributions and the Nea Foukas sample is well sorted. Thus, they cannot be considered comparable with the fabric of group 1 amphora samples and are similar to group 2 only as a result of the unimodal size distribution and general size range. The most important characteristic of these samples is their similarity in composition with that of the amphorae. To which one may add that they produced briquettes which both fired well and were easily thin sectioned thereby indicating that they could have been used to make ceramics of roughly comparable quality to the ancient pottery.

The similarity between the Nea Skioni and Nea Foukas samples and the ancient tile fragment from Athitos provides sufficient evidence to suggest that they are from the same source, i.e. the red deposits considered by Marininos et al. (1970) to be a periglacial palaeosol. Further investigation of this deposit as a possible source of clay for the Mendeian (and other amphorae, eg. Parmeniskos group, below p. RAGA 000) jars will be necessary owing to the differences noted above. If its distribution is largely restricted to the northeastern part of the Kassandra peninsula, as indicated by Guy et al. (1969) this may be a factor in limiting its exploitation in the area of Mende and Skioni. The coastline between these two settlements remains the prime area for future field study owing to their both being mentioned as sources for amphorae of Mendeian wine (Demosthenes XXXV, 10).

6.11 Prow-Stamp Amphorae

This class of stamped amphora handle has been identified on the basis of the distinctive stamp, which bears the image of a ship's prow (Fig. 000; for a drawing see Calvet 1982, Fig. 24).

no 4

Grace (1971, 83 n. 81) was able to count 150 examples of this type of stamp in collections from Alexandria, Naukratis and Tell Fara'in (and other localities in Egypt), the Black Sea region, Athens and Salamis, Cyprus. The stamps are usually square or rectangular, although Grace (1971, 83) has noted circular examples. The device is accompanied by a name (Fig. 000), a list of ~~which has~~ been published by Grace (1971, 84 n. 82).

names has

Amsted
& London
1969
Cretan
mark

The series is known to have been in existence in the second half of the 4th century (Grace 1971, 84 n. 83; Börker 1986) and contexts at Tarsus (Grace 1950, 147) and the Athenian Agora (Grace 1971, 84) give a terminus ante quem of the early 2nd century B.C. (ibid.).

Only one example of the (almost) complete jar has been recorded (Grace 1971, 83 and Pl. 15, 15). This amphora has a tall neck with handles rising from the shoulder, set high on the body, to meet the neck just below the rim. The lower body tapers from the shoulder towards the foot, which in this instance is missing. It has a 'shallow rolled rim' (Grace 1971, 84, n. 83) but another rim form is also attested amongst examples from Rhodes, which Grace (ibid.) has described as a 'heavy mushroom rim'.

Crete, Samos and Knidos have all been suggested as possible sources for the prow-stamped amphorae (Börker 1986). Milne (1905 CHECK; Grace 1950, 147) suggested Crete. Following Pridik (Brashinsky 1961, 297; 1973, 123) Shelov (1957, 215) assigned these stamps to Knidos. This is based upon the occurrence of the ship's prow device on Knidian stamps, the agreement between names on Knidian and prow-stamped amphorae and on the similarity of the clay (ibid.). Grace (1971, 82) suggested that this class may be of Samian origin, however, owing to the association of the ship's prow (of the samaina) with Samos (p. RAGA 109). She made this statement with reserve (1971, 83; 1979a, 185 n. 1) for the amphora shape (1971, Pl. 15, 15) is unlike that of other jars considered to be Samina (Grace 1971, 83; see RAGA 109f.) and names on the stamps, except in one case, do not agree with those on Samian coins (Grace 1971, 84). Following Grace's discussion, Calvet (1982, 46) refers to the prow-stamp amphora as 'Cretan or Samian?'.

Börker (1986) has recently discovered a coin bearing precisely the image represented in the prow-stamp examples. Above the ship's prow are the letters 'KN' which he suggests constitute the ethnic for Knidos. In favour of this attribution he has also found a correspondence between names on prow-stamp amphorae and prosopographical evidence from Knidos.

You should follow a fixed order of descrip. for each jar type. I currently favor body first (w/ toe + shoulder) then neck w/ rim, + hdl. But a consistent descrip. from the top down is OK - though I'd still do hdl last.

Not worth spending so long on this because V.G. no longer believes it - at one point V. Grace tentatively suggested the p.s. amphs might represent 1st c. stage in the Samian sequence, but 'since a fig. from

V.G. has mentioned to me that "precisely" is not correct.

a sim. prow-st. jar was found in Rhodes in a 4th-c. context, she has abandoned that hypothesis" (vel quid sim)

+ Now there is a whole wreck. See Börker's 1986 article (and)

1950
Grace does not suggest a Cretan origin, but cites Milne's suggestion
just Grace references to good public. by Pridik

- RAGA 146 -

(b) Previous analysis of prow-stamp amphorae

The fabric of this class has been described in hand specimen by Grace (1971, 83) as:

'red, reddish or brown, sometimes fired reddish at the core; it is coarser than that of the earlier Samian (?) jars above identified (Grace 1971, 66ff.), and contains numerous white bits as well as mica in varying quantities'.

within 0986 (see below p. RAGA 153)

(c) Analysis of Prow-Stamp amphorae

Number of samples = 13

All samples are from the collection in the British Museum (see Grace 1971, 84, n. 81). Each bears the characteristic prow-stamp except for BM 1925, 1-19, 617. This was sampled as an 'unknown' and bears a monogram in a square field (Fig. 000). It has been included with this class as a result of the similarity in its fabric.

Hand specimen analysis

Colour:

Hardness: hard
Feel: harsh to rough
Fracture: hackly

Inclusions

Frequency: common to abundant
Sorting: well sorted
Average size: up to 1mm
Rounding: angular to subrounded
Composition: (a) Frequent, dark grey rock fragments.
(b) Common, white inclusions, probably quartz-feldspar fragments,
(c) Few, dark reddish brown inclusions, probably rock fragments.
(d) Rare, reddish brown inclusions, dull, probably clay pellets.
(e) Very few, colourless grains, probably quartz.

from analysis or from appearance of the hand specimen?

- RAGA 147 -

Thin section analysis

Four groups have been isolated in thin section.

Group I

Samples: British Museum; 1925, 1-19, 617; 1925, 1-19, 342; 1955, 9-20, 43 (Riley 1582); 1955, 9-20, 44 (Riley 1583); 1955, 9-20, 45 (Riley 1584); 1955, 9-20, 46 (Riley 1585); 1955, 9-20, 47 (Riley 1586); 1955, 9-20, 48 (Riley 1587); 1955, 9-20, 145; 1955, 9-20, 148.

→ Bm 1955, 9-20, 144 cont. high cont. limit, more cryst. & fab. + is opt. distinct action. *streaked & fab.*

I Microstructure

- (a) Vuggy microstructure; ca. 5% voids, predominantly mesovughs.
- (b) Single-spaced porphyric related distribution.
- (c) Preferred orientation is very weakly developed.

II Groundmass

- (a) Homogeneous
- (b) Micromass: optically inactive with very rare to rare crystalline b-fabric in few samples.

Colour: ppl (x45) = dark yellowish brown
xpl (x45) = dark yellowish, to reddish, brown

*opt. & act.
dark yellow
→ opt. inv*

(c) Inclusions

c:f:v₁₀ (x45) = ca. 20:75:5

Sizes: Few very coarse sand, medium to coarse sand, common medium to very fine sand and few silt. Grain-size analysis has produced a unimodal distribution (logarithmic scale; Fig. 000) which is poorly sorted. Inclusions are predominantly angular to subangular with common subrounded to rounded. They are predominantly equant to ovoid although micaceous rock fragments and feldspars tend to be prolate.

Composition

Despite the unimodal size frequency distribution (Fig. 000) the coarse and fine (ie. very fine sand and smaller) fractions are presented separately to test whether the larger grains may have been added as temper.

Coarse Inclusions

Common; Rock fragments; different types of rock fragment occur in various proportions in each sample, the most frequent are quartz-biotite-*not opt. very...*

- RAGA 148 -

plagioclase ^{v.f. silt.} ~~set~~st, phyllite and mudstone. The latter fragments are related and can be found together in a single rock fragment. The phyllite is ^{red} of red and white micas with rare, silt-sized quartz. The mudstone is grey (ppl and xpl) and has only very rare to rare white mica. In some cases, it is difficult to distinguish between mudstone and tcf's. Of rare occurrence is a well sorted siltstone with a reddish brown opaque (ppl) matrix predominantly containing angular, monocrystalline quartz with very rare, subrounded, plagioclase feldspar. ^{some are solution}

Few: Monocrystalline quartz; maximum size is about 1.5mm, although its is predominantly represented in the fine sand to silt fraction (Fig. 000). Large quartz grains are angular to subangular are frequently have no trace of undulose extinction. This last property may indicate a volcanic origin for the quartz. (Folk 1974, 71) which is supported, in this case, by the rare occurrence of large quartz crystals with traces of volcanic glass around their edges. Polycrystalline quartz; subgrains are of different sizes, with strong undulose extinction and sutured boundaries. They are commonly cloudy with vacuoles. Feldspar; plagioclase is dominant and commonly possesses a sub^{sub}hedral shape. It is angular where broken and of fresh appearance. Albite twinning with a maximum extinction angle in the range of labradorite to bytownite (Kerr 1977, Fig. 13-26). Rarely presented are pericline twins or concentric zoning. Sanidine is present, although it is difficult to estimate its proportions reliably owing to its similarity to the quartz, from which it differs in relief, cleavage and blaxial character (Kerr 1977, 303f.). Volcanic rock fragments; these are predominantly composed of colourless to pale brown volcanic glass. ^{some cloudy, some rounded, some with small vesicles} It is fresh and contains ^{large} a large quantity of vesicles, frequently distorted by flow-lines (Whitbread 1986a, Fig. 3). Inclusions are rare and consist of euhedral crystals of biotite and twinned feldspar. The volcanic glass is predominantly angular to subrounded. Rarely, highly altered volcanic rock fragments are present. These are identified by the occurrence of euhedral laths of the feldspar, dominantly in a dark yellowish to reddish brown opaque (ppl) matrix. - Very Rare: micritic and well rounded, rare examples contain very few angular monocrystalline quartz silt.

Very few-rare: Chert; both mega- and microquartz (Folk 1974, 80) occur, the latter rarely traversed by vein quartz. Subgrains are predominantly equigranular and cloudy with red (ppl) opaque material. Very finem icaceous minerals are present in small quantities between subgrains of very few examples. Serpentine; yellow to orange (ppl) and subangular to rounded.

Very rare-absent: Amphibole; subhedral and strongly pleochroic reddish

925mm
RIK 600
in Seinal

4

- RAGA 149 -

*ortho from
p. 149.*

brown to pale yellowish brown (hornblende). Rock fragment; very fine sandstone, well sorted with frequent, ^{angular} monocrystalline quartz. It is matrix supported. The matrix is composed of yellowish green phyllosilicate crystals with a mosaic to stipple speckled b-fabric. Biotite; large laths, ca. 0.8mm in length, slightly oxidised.

Fine inclusions

Frequent: Monocrystalline quartz, angular. Polycrystalline quartz; equigranular, rarely with sutured subgrain boundaries. ~~Common~~ Very Few: Serpentine; yellow, subangular to rounded. Mica; biotite and white.

Very few: Feldspar; twinned, fresh and angular.

Rare: White mica phyllite. - Absent: Limestone, micritic and rounded. *S - v rare*

Very rare: Chert; subangular to subrounded. (Volcanic glass; subrounded) and orange serpentine, rounded.

III Textural concentration features

Tcf (X45) = ca. 2-5%

(1) Dark yellowish brown (ppl and xpl, x45), high optical density, clear boundaries, subrounded to rounded and equant to ovoid. Constituents: ca. 5-10%; frequent, angular monocrystalline quartz silt and yellow micaceous minerals. Internal preferred orientation is weak and turbid. They are discordant with the external features. Maximum size is about 0.5mm with a mode of about 0.25mm. These tcf's are the dominant type noted and are distinct.

(2) Pale yellowish brown (ppl, x45), reddish brown to yellow (xpl, x45), low optical density, sharp to clear boundaries, subrounded and equant. Constituents: ca. 10-20%; frequent angular monocrystalline quartz silt with red and white micaceous minerals. Internal preferred orientation is weak, and thus concordant with external orientation features. Average size is about 0.4mm. These are prominent tcf's and they are few in the overall population.

(3) Pale brownish yellow (ppl, x45), brownish yellow to yellowish green (xpl, x45), neutral optical density, clear boundaries, rounded and equant. Constituents: ca. 5%; frequent monocrystalline quartz silt and red and white micaceous minerals. Internal preferred orientation is very weak and thus it is concordant with external features. Average size is about 0.25mm. These tcf's are rare and faint.

(4) Dark yellowish brown (ppl, x45), dark reddish brown (xpl, x45), high optical density, sharp to clear boundaries, rounded and equant. Constituents: ca. 5%; predominantly monocrystalline quartz silt with few

- RAGA 150 -

red (ppl) opaque inclusions. Internal preferred orientation is very weak and thus concordant with external features. Average size is approximately 0.25mm. These tcf's are few and distinct.

IV 'Amorphous' concentration (depletion) features

Acf (x45) = less than 2%

Predominantly black (ppl), pure nodules, subangular to rounded and equant to ovoid. They are about 0.4mm in maximum size, with a mode of about 0.1mm. Boundaries are sharp to diffuse.

V Crystalline concentration (depletion) features

Kcf (x45) = less than 2%

Predominantly present in the form of a crystallitic b-fabric composed of evenly distributed, discrete crystallites. Rarely found are ~~hypocoatings~~ (ca. 0.04mm thick) with clear boundaries which encircle voids and grains of limestone.

Group 2

Sample: British Museum 1955, 9-20, 149

N1K7

I Microstructure

- (a) Massive; ca. 2% voids, predominantly mesovughs.
- (b) Single-spaced porphyric related distribution.
- (c) Moderately developed preferred orientation comprising optically slightly active micromass, micas and voids.

II Groundmass

- (a) Homogeneous *matrix of coarse & fine cements*
- (b) Micromass: optically slightly active with a weak, parallel striated b-fabric. - *matrix of coarse & fine cements*

Colour: ppl (x45) = yellowish brown
xpl (x45) = reddish brown

(c) Inclusions

c:f:v_{10u} (x45) = ca. 10:88:2
c:f:v_{0.125mm} (x45) = ca. 5:93:2 to 8:90:2

Sizes: ~~few~~ *some* very coarse sand, common medium coarse sand, few fine to very fine sand and common silt. Grain size analysis was not conducted on this sample since the glass slide does not fit the bracket of the

- RAGA 151 -

mechanical stage. The size frequency distribution does appear to be bimodal in character. Large grains are ^{well sorted} moderately sorted, rounded to well rounded in most cases. Fine grains, predominantly of silt-size, are angular to subangular. The inclusions are predominantly equant to ovoid, with very few prolate.

Composition

In view of the apparent bimodal nature of the size frequency distribution the coarse and fine (silt) fractions are considered separately.

Coarse Inclusions

Predominant: Volcanic rock fragments; these include, subrounded, yellow, devitrified volcanic glass with microlitic feldspar the fragments commonly surrounded by a red (ppl) opaque rim. Devitrified glass (brown) with black (ppl) opaque inclusions and rare clinopyroxene in subangular fragments. Subangular fragments of fresh trachytic lava with ^{that clear} few black ^{is feldspar in zone} and red (ppl) opaque crystals. Reddish brown (ppl) opaque inclusions with relatively large crystals of feldspar and pyroxene embedded within them.

V Few: Feldspar; fresh, euhedral and with albite twinning.

Rare: Clinopyroxene; about 1.2mm diameter, colourless and subhedral. Chert; equigranular megaquartz, angular with a maximum size of ca. 0.75mm. Mudstone; grey with common inclusions, dominantly monocrystalline quartz with few red and white micaceous inclusions and rare feldspar. Phyllite; predominantly red and white micas with rare silt-size quartz, rounded and with a maximum size of approximately 0.5mm.

Fine Inclusions

Predominant: Monocrystalline quartz, angular to subangular.

Very few: Polycrystalline quartz; equigranular. Plagioclase; albite twinning. Phyllite; red and white micas. Biotite and white mica.

III Textural concentration features

Tcf (x45) = probably absent

The similarity between optically dense weathered volcanic rock fragments and tcf's makes it difficult to clearly distinguish the two. As there is such a large amount of volcanic material in the sample such inclusions are considered to be of volcanic origin.

- RAGA 152 -

IV 'Amorphous' concentration (depletion) features

Acf (x45) = ca. 2%

These are predominantly well sorted, black to reddish brown (ppl), pure nodules. They are subangular to rounded and have sharp to clear boundaries. Average size is about 0.04mm.

V Crystalline concentration (depletion) features

Kcf (x45) = ca. 30%

This occurs as moderately impregnated crystalline segregations with clear boundaries. They stretch for several millimeters but also occur in smaller sizes of about 1mm. ~~Very rare~~ traces of crystallitic hypocoatings are present rarely present around inclusions. They are approximately 0.04 to 0.1mm thick with clear to diffuse boundaries.

Group 3

Sample: British Museum 1955, 9-20, 49 (Riley 1588)

I Microstructure

- (a) Vuggy microstructure: ca. 5% voids, predominantly mesovughs with few microvughs and rare megavughs.
- (b) Single-spaced porphyric related distribution.
- (c) Preferred orientation is moderate to strongly developed, a function of micas and serpentinite inclusions.

II Groundmass

- (a) Homogeneous
- (b) Micromass: optically very slightly active as apparent in traces of extinction under crossed polarised light. The b-fabric is too weakly preserved to establish its character.

Colour: ppl (x45) = dark yellowish brown
xpl (x45) = dark yellowish, to reddish, brown

(c) Inclusions

c:f:v_{10u} (x45) = ca. 10:85:5

Sizes: / ^{fine ground} Predominantly fine sand to very fine sand, with common silt. Grain size analysis has not been conducted on this sample. It appears to have a unimodal size frequency distribution and is well sorted (Fig. 000). Inclusions are angular to subrounded and frequent examples are prolate while equant grains are common.

- RAGA 153 -

Composition

No distinction is made between the coarser and finer grains in terms of composition.

Predominant: Serpentinite; bright orange and yellow in plane polarised light, grains are angular to subrounded and form the major constituent throughout the size range. This is particularly clear in plane polarised light.

Few: Polycrystalline quartz; equigranular with straight subgrain boundaries and undulose extinction.

Very Few: Monocrystalline quartz; angular and predominantly found in the silt-size range. Chert: mega- and microquartz (Folk 1974, 80), equigranular and subangular.

Rare: White mica; thin laths up to about 0.2mm in length. Biotite; short laths of about 0.04mm length.

Very rare: Amphibole; small prolate examples, strongly pleochroic reddish brown to yellow (hornblende). Clinopyroxene; small, anhedral and colourless grains. Plagioclase; subhedral and fresh with albite twinning. Rock fragments; grey mudstone with rare inclusions, predominantly well sorted, silt-sized monocrystalline quartz and black (ppl) opaque material which displays distinct foliation. Maximum size is ca. 0.5mm, prolate and subangular. Phyllite; red and white mica with rare silt-sized quartz. Quartz-feldspar rock fragment, feldspar is untwinned and cloudy. Orthopyroxene; displaying twinning, probably enstatite, subangular.

III Textural concentration features

Tcf (x45) = no examples securely identified.

IV 'Amorphous' concentration (depletion) features

Acf (x45) = ca. 5%

Predominantly black (ppl), ^{prolate} pure nodules. These are well sorted, ~~sub~~angular to subrounded, equant and have clear boundaries. Average size is about 0.08mm.

V Crystalline concentration (depletion) features

Kcf (x45) = absent

(d) Discussion

Whitbread (1986^a) provided a brief discussion of the fabric and its significance with respect to the Knidian attribution, based upon a preliminary examination of the samples taken by Riley. It is now possible

- RAGA 154 -

to provide a more comprehensive review using the results above.

The three groups which have been isolated possess several common properties, and it may be that future research will cause these groups to be amalgamated. These properties are the high tenor of volcanic material, particularly volcanic glass of acidic character, the presence of serpentinite and the occurrence of grey mudstone and phyllite. The differences which have been noted relate, in large part, to the absence of one of these components; the serpentinite in group 2 and the volcanic material in group 3. *1- additive, group 2 may include additives of material not to the 6-mudstone character or its correlation with composition.*

If these groups are compared against the analytical results obtained from the study of Samian amphorae (above, RAGA 113ff.) it is clear that there is little in common between them. Volcanic rocks do occur on Samos, however, in addition to serpentinites (above, p. RAGA 111f.) so it is not possible to rule this island out on the basis of fabric alone.

Crete is devoid of volcanic deposits of post-Oligocene age (Fytikas et al. 1979, Fig. 1) although traces of tephra from the Minoan eruption of Santorini have been found on the island (Cadogan and Harrison 1978). Serpentinite does, on the other hand, occur in ophiolite sheets, ~~as noted by Wood (1977, 115f.), as does phyllite (Wood, 1977, 115).~~ *(Crete, etc. 1972)* Despite the occurrence of all the major ingredients of the fabric, Crete does not appear suitable as a source owing to the limited occurrence of recent, i.e. fresh, volcanic material.

The Datça peninsula possesses serpentinite and phyllite (flysch) as has been noted for the Knidian amphorae. *Y. Raga 1978* Indeed, rare samples of Knidian jars contained an odd fragment of volcanic glass (p. RAGA 23). The description of pyroclastic deposits on the Datça peninsula, the Cesmeköy Tuff (Oronbelli et al. 1967, 838) as a vitric tuff, apparently of rhyolitic composition, with pumice fragments and accessory volcanic material, namely andesitic rock, fits well the character of the volcanic material described in the above analysis.

Taking the evidence offered by Shelov (1957, 215) and Börker (1986) a Knidian origin would appear to be a reasonable proposition. Certain features of the Prow-stamp amphora fabrics, the serpentinite and phyllite, can be matched in the Knidian fabrics. The amount of volcanic material, the distinctly different type of stamp to that commonly seen on Knidian jars and the apparently different shape of the Prow-stamp jars to those of the series stamped 'Knidian', point to differences in the production of these two series. Börker (1986) has suggested that the Prow-stamp jars may have been made in an area under Knidian control, rather than Knidos itself. Another possibility is that, as seen at Corinth (below, p.000),

note that
sp. = not
all jars of this
fabric have the
stamp or may
be missing.
altho it is not clear
this jar is not
of the group but of
some fabric - it
fits in well if it
is not !!

*Crete is not
suitable*

*Keller
1969
corroborated
or not
have been in
detail as not
in Knidian series*

more than one series was produced by this state. The Knidian stamped amphora stamps have been dated as early as the 3rd century B.C. (above, p. RAGA 15f.) which is later than the dates of at least some of the Prow-stamp jars (p. RAGA 145). The differences between the two series of amphorae may, therefore, reflect changes in the manufacture of Knidian jars over time. If the dated range of either series can be extended so as to secure an overlap in the series, then it is possible that the differences noted may be the result of other factors, perhaps contents. In which case the different character of the fabric are likely to be due to variation in regional geology. On the basis of Orombelli et al. (1967, 838) it can be suggested that those Prow-stamp amphorae which contain large amounts of volcanic inclusions should, perhaps, originate from the western end of the peninsula, while that which contains largely serpentinite without volcanic grains (group 3) may be derived from workshops in the east (Orombelli et al. 1967, 838f.). In this respect it is interesting that the serpent fabric of Knidian is yellow clay (Orombelli et al. 1967, 838f.).

this



6.12 Sinopean Amphorae

Sinope, situated on the southern coast of the Black Sea (Fig. 000), lies beyond the geographical limits of this study. It has been included owing to the occurrence of Sinopean amphorae in the Aegean in larger numbers than other Black Sea amphorae (eg. Chersonese and Heraclea Pontica) and specifically because of the nature of the fabric itself.

In early articles (eg. Grace 1934, 205; 1956, 164) handles bearing the names of astynomol were referred to as being of 'Pontic' or 'South Russian' origin. Grakov (1928) argued a Sinopean origin for these stamped handles on the basis of philological and archaeological evidence (Sztetyho 1983, 19). In particular, the device that depicts a dolphin, found both on the amphora stamps (Fig. 000??; Grace 1949, Pl. 20,13) and on coins of that city (Grakov 1928, Pl. 17). Robinson (1905, 300) had already implied this in his study of Inscriptions from Sinope. Astynomol stamps, previously suggested to be of Knidian, and later Olbian, origin (ibid.) had been found in some quantity at the site (Robinson 1905, 294) and the occurrence of numerous names on the stamps which are the same as those of Sinopeans lead Robinson to suggest that not all astynomol stamped handles were of Olbian origin, and that:

0

'Sinope may have manufactured amphoras, and exported them to the northern shore [of the Black Sea] where so many handles similar to ours have been found.'

(Robinson 1905, 300)

On outside of already sealed envelope, write: "Planes de soil
an identification) Penabek's "Kinds" amplan 30 it
American School of Classical Studies stamps?
54 Swedias Street, Athens 106 76, Greece

[S.14]

April 22, 1986

[F.V. 86 Ian is due in Athens on May 16
for conference at Dauscitas on Archaeometry]

Dear Ian,

I had meant to put into my letter of April 18 the enclosed photocopies. On these results of spectrographic tests made at Brookhaven, cf. Délos 27, p.320, note 1, with quotation from Sayre. (Checked with him before publication.). The enclosed diagrams have not been published, and of course must not be published without explicit permission from Mr. Sayre. Perhaps you have seen them before; but I want to discuss them a little.

Note in Fig.1 that the first 10 Knidian samples all come from handles bearing the same stamp, dated by the eponym ΗΘΑΙΟΥΧΗΣ, datable somewhere about 190 B.C. On him see / "Middle Stoa Dated", p.47 under no. 6. It is remarkable to see the ^{among} differences ~~between~~ the 10 samples stamped with KT 1071, all Knidian, all the same date, same shop. Fig.2 is a contrast to Fig.1: Rhodian handles at four successive dates ~~retain a remarkable~~ stay remarkably parallel. (On no. 12, refer to Fig.1, and Délos 27, loc.cit.) Not included in the Rhodian diagram (because not available at the Agora) are samples of earlier stamped Rhodian, some of which have clay that does not look like common stamped Rhodian. Lots in Rhodes, and in Alexandria. Job for you.

I note you refer, on p. 5 of your proposal, to Rhodian stamped amphoras or fragments "with yellow micaceous fabric". Can you ~~identify~~ identify such Rhodian pieces? I do not recall any.

If after testing further samples of the earlier Zenon Group and of the prow-stamped group, you continue to find the clay the same, we might consider whether the prow-stamp jars are themselves from Egypt. Perhaps you might read my full ^{before} article (1986) deciding against an Egyptian origin for the earlier Zenon Group —

Greek Egyptian.

Hope we will see you at the Centenary!

Yours,

American School of Classical Studies
54 Swedias Street, Athens 106 76, Greece

April 17, 1986

Dear Ian,

I have your letter dated March 5, and its enclosed typescript proposal for microprobe analysis for further investigation of the relationship between the clay of the prow-stamp jars and that of those bearing Zenon Group stamps, and whether and in what way either or both of these series are related to established Knidian amphoras.

I think we do need chemical and/or physical tests of the various clays used in amphoras. Right now I am particularly interested in the ^{clay of} various 3rd century B.C. jars, the Ptolemaic (?) ones that rather resemble contemporary Rhodian, see Garlan and Empereur fig. 5 of my 1986 article, as well as the slightly earlier ones that have been taken (by Bass and others) to be Knidian, ibid. fig. 2. I think we all needed this BCH Suppl. 13 to see each others' articles, before taking too firm stand. Here in Athens we got our copies of the volume the other day, and the first article I read was yours, to help me understand the text you sent in your letter of March 5. We have not yet got our offprints. I will send you one of mine, in case it is convenient for you to have it.

On your text for the proposal: perhaps you have already used it, in which case I hope you got the necessary money, since we all need the information you may derive from the investigation. Here are some comments on the material:

1) As you say, you certainly do need lots more samples. Where you would find plenty of handles of the Zenon Group, first series, is of course Egypt, in cabinets in the Musee Greco-Romain in Alexandria, where I put them. Empereur, recently there, says it is now very difficult to get permission there to take samples; could you gather more clout? There is one in Eton College, if that would be easier. I would honestly take another from the same handle, if I could not get plenty from elsewhere.

A plentiful source would be the Hellenistic Wreck, what has been lifted from that, which must be in Bodrum. But getting permission there is perhaps also hard. And I do not know if there is a problem with pottery that has been long immersed.

2) In general for a more formal ~~publication~~ presentation than an application, I would certainly want to ~~know~~ have identified for me the objects from which the samples ~~from~~ were taken. You speak of three kinds of prow-stamp fabric. The one that seemed to match that of the Zenon Group fragment, was it the fabric of a fair proportion of the prow-stamp handles? Or just of one or two? And what were their stamps in that case? Eventually, one needs inventory numbers. And how were the other fabrics different? I gather, no volcanic glass.

3) As I am not yet convinced by Professor Bürker that the prow-stamp jars are Knidian (though I no longer think they were Samian), so I am not disturbed by the facts you tell me, that a) the clay of these jars - or some of them - has volcanic glass, while b) this is apparently not found in the Datcha peninsula.

4) Ptolemaic amphoras I suppose might have been made elsewhere than in Egypt? or just ~~inhabiting~~ inhabiting I.e. to what extent were those people dominating the Anatolian mainland in the 3rd century B.C.? But, myself, I still think the Zenon Group jars were made in Egypt.

So, you see, you have a lot to do with your tests, and I hope you will be able to do it.

Yours,

Miss V. R. Grace,
American School of Classical Studies at Athens,
54, Odos Souedias,
GR-106 76 Athens,
GREECE

Department of Archaeology,
The University,
Southampton,
SO9 5NH.
ENGLAND

5th March, 1986

Dear Miss Grace,

I have just completed the second draft of my chapter on the analysis of amphora fabrics. This is the first time that I have been able to compare all of the fabrics in detail. The first draft was incomplete and of variable quality. One of the last pieces to be considered was the Zenon sample. I had only expected to describe this and discuss the possibilities of an Egyptian provenance. During a search for some results of grain-size analysis I realised that I was confusing this sample with another, which turned out to be one of my prow-stamp amphora samples. Comparing the two together, under the microscope, it is clear that they are identical in fabric.

When I originally sampled the prow-stamp amphorae (at the British Museum) all of the thin sections were prepared for microprobe analysis (this is a means by which to obtain chemical data from thin sections). The reason being that Dr. I. C. Freestone of the British Museum Research Laboratory was interested in analysing the volcanic glass we knew to be present from earlier studies (by J. Riley). I have therefore put together the enclosed proposal for microprobe analysis with the aim of further investigating the relationship between the Zenon sample and those of the prow-stamp amphorae. I have enclosed a copy of this proposal for two reasons. Firstly, considering how much work you have invested in the series concerned I think you should know about this development at once. Secondly, I would value your opinions on what I am proposing.

I hope that the microprobe analysis will go ahead in May (by which time I shall have this wretched thesis off my hands, I hope). In addition, I will try to obtain samples of the other Zenon stamped handle (earlier type) and some of the later Zenon stamped handles which are in the BM collection. In all, the number of samples is small. I am in no doubt about the connection between the different amphora series, but the range of fabric variation (particularly in the Zenon samples) will be difficult to establish on so few samples.

If all goes well with the analyses (I think it should) I hope that the results would be worth publishing. Your knowledge of the material is of major importance in this respect and, if you are in agreement with the analytical results and

conclusions, any contribution which you may wish to make to such a publication would, I am sure, enhance its usefulness.

Naturally, all this depends upon the results of the analyses and on your opinions of the my proposed linkage of the prow-stamp, Zenon and Knidian series on archaeological grounds. I am merely trying to chart out the possibilities as early as possible.

I have sent a copy of this proposal to Ian Freestone. I also enclosed a copy in a letter that I was sending to Carolyn. I was writing to her anyway, and her experience in dealing with petrographic/amphora problems has always been helpful.

Finally, I would like to thank you for the photographs from your archive, which Carolyn sent me, for inclusion in my thesis. It was a great relief to know that I could illustrate most of the shapes about which I will be writing. I hope to obtain a photograph of Peacock's Knidian amphora in a few days time, and I will send a copy on to you as soon as I can.

Best wishes,



Ian K. Whitbread

PS. I must apologise for the lousy xerox. I have too many complaints about Southampton University and its xerox machines to put them all down on paper. Owing to the abysmal quality of the reproduction I have not included the illustrations. They consist of: a xerox of your photograph of the prow-stamp jar, a xerox of the 'Knidian' amphora illustrated by Bass, a xerox of the Knidian amphorae in your Picture Book (fig. 64) from the photograph Carolyn sent me, and a couple of maps of the Datça peninsula.

Need to test more samples, and identify all of them [S.19]

(i.e. give their numbers, or

PROW-STAMP, ZENON AND KNIDIAN TRANSPORT AMPHORAE:

FABRIC ANALYSIS AND THE INVESTIGATION OF AMPHORA

PRODUCTION ON THE DATÇA PENINSULA, SW TURKEY

1. The amphorae

Four classes of amphorae are included in this research programme: (1) prow-stamp amphorae, (2) Zenon amphorae, (3) Knidian amphorae and (4) Koan amphorae. All classes have been studied by petrographic analysis and it is proposed that microprobe analysis of volcanic glass in prow-stamp, Zenon and Koan samples be undertaken to secure the conclusions based on mineralogical examination.

(1) Prow-stamp amphorae: archaeological evidence

These stamped amphora handles are known from contexts dated to the second half of the 4th century B.C. (Grace 1971, 84 n. 83; Börker 1986) and contexts at Tarsus (Grace 1950, 147) and the Athenian Agora (Grace 1971, 84) give a terminus ante quem of the early 2nd century B.C. The class is named after the distinctive device on the stamp, which depicts a ship's prow, and is accompanied by a name (Grace 1971, pl. 13, nos. 16 and 17). They were originally considered to be 'Cretan' in origin (Grace 1950, 147) but Shelov (1957, 215) suggested a Knidian provenance on the basis of prosopographical evidence, the use of a ship's prow on Knidian stamps and general similarity of the fabric in hand specimen. Grace (1971, 82ff.) suggested, tentatively, that they may be Samian amphorae owing to the use of a ship's prow on Samian stamps, which in some cases is accompanied by the ethnic ΣΑ. (Grace 1971, 56). Börker (1986) has reported an identical ship's prow device, to those on prow-stamp amphorae, on a coin, accompanied by the letters ΚΗ, which he used together with prosopographical evidence to suggest that prow-stamp amphorae may be a proto-Knidian type. Only one, near complete, example of a prow-stamp jar is known (Fig. 1, from the archives of V. R. Grace; see also Grace 1971, Pl. 15, 15). Grace (1971, 84 n. 83) has also reported a prow-stamp jar with a 'heavy mushroom rim'.

(2) Zenon amphorae: archaeological evidence

Like the prow-stamp amphorae, this class has until recently been known only through stamped amphora handles, and not by the shape of the entire vessel. There are two series of Zenon stamps (Grace 1963, 331 n. 27; 1985, 19 n. 46). The early series has the letters Ζη or Ζην with a second abbreviated name, the later series has the same Zenon letters accompanied by a device (a dot, cross, or other) (ibid.).

or mostly by nothing

stamps, ZH, have been published by Vasilenko (1973, Fig. 2) and Grace (1934, 281 no. 235 and 236 no. 256 - I have not seen these to check). This later type is dated to about the late 3rd century to early 2nd century (Grace 1935, 19). It is the earlier type which is the immediate subject of this study but, as the later type may be connected with the early Zenon stamps (Grace 1935, 19 n. 46) it would be useful to sample those examples in the British Museum collection. The earlier type of Zenon stamp is dated to ca. 270 B.C. (Grace 1936). *(and earlier)*

check
29.10.86 =
C&K has checked
+ it is so.
Amphorae shaped 'rather like Knidian jars of the 3rd century B.C.' have been found in a shipwreck off the coast of Turkey (Grace 1936). I believe one of these is illustrated by Bass (1974, Fig. 2) see Fig. 2. Some of these jars bear stamps of the early Zenon type (Grace 1935, 19 n. 46). Grace (ibid.) has suggested that the Zenon stamps may be related with Zenon of Kaunos, agent for Apollonios of Egypt *(ca 270 B.C.)* (Postovtzeff 1922), although the date of the shipwreck is somewhat earlier than the papyrus archive (mid-3rd century B.C.). Moreover, some of the Knidian-shaped amphorae of the wreck have 'an apparently Egyptian stamp' (Grace 1936). *285?*

(3) Knidian amphorae: archaeological evidence

Knidian amphorae from about 240 B.C. to early 1st century B.C. are shown in Fig. 3 (from Grace 1979, Fig. 64). Jars of this type are frequently stamped with the name of a dating official (a magistrate, or in the phrourarchoi period, possibly garrison commanders, 188-167 B.C.; Grace and Savvatianou-Pétropoulakou 1970, 318ff.), that of the fabricant and the ethnic *Κνίδιον* *of the* (Grace 1934, 193ff.). Use of the ethnic secures the identification *of the* place of origin; Ancient Knidos is situated on the western tip of the Datça peninsula, SW Turkey (Fig. 4). The early 3rd century dates originally proposed for Knidian have been brought down *to* the mid-3rd century by dating the end of Thompson's Group B to about 140 B.C. *last* (Grace 1974; 1985, 17). Early Knidian monogram stamps are known in this period (Grace and Savvatianou-Pétropoulakou 1970, 286) and some of the earliest eponyms should be attributed to this period also (Grace 1935, 31).

(4) Koan amphorae: archaeological evidence

Koan amphorae of the 3rd to 1st centuries B.C. are illustrated by Grace (1979, Fig. 53). Handles of Koan jars are identified by their stamps, and by the characteristic double-barrelled handle.

Detail of stamp - not known with all the before but 1/4 of 3rd

† but what he says in [5.21]
detail, further down,
does not make this at all
clear

2. Ceramic Petrology

A very brief survey of the petrographic characters of these amphorae is given by Whitbread (1986). This may be summarised:

- (1) P-stp: volcanic material, phyllite, quartzite, serpentinite.
- (2) Zenon: volcanic material, phyllite, quartzite, serpentinite.
- (3) Knid: phyllite, quartzite, serpentinite.
- (4) Koan: various, including phyllite with volcanic material.

The most important, and most recent, result is the matching of the prow-stamp fabric (group 1, out of three fabrics) with that of the single Zenon amphora which has been sampled. The connection was not made until recently owing to a concentration of study upon a possible Egyptian source. Once considered together there is no doubt that the fabrics of the two types of amphorae are the same. This consists of: volcanic glass (pumice with a high silica content), sanidine and plagioclase feldspar (ca. labradorite), and quartz (straight extinction and associated with volcanic glass). There is evidence of corrosion on these grains; embayment filled with glass. In association with the glass is biotite. Volcanic rock fragments are very rare, some are weathered, one example contains hornblende and pyroxene(?). Red and white mica phyllite can be associated with the quartzite, probably a very fine sandstone, together with a white mica phyllite (grey in ppl).

Knidian amphorae (about 40+ have been studied) contain red and white mica phyllite, associated with very fine grained sandstone (quartzite). Very rarely, a sample can be found which contains an odd fragment of volcanic rock or glass. They also contain white mica phyllite (grey in ppl).

Koan amphorae which have volcanic inclusions contain relatively large (its variable) quantities of volcanic glass (pumice with a high silica content) and crystals of feldspar, quartz etc.

3. Regional geology

The Datça peninsula, situated between the islands of Kos and Rhodes, is composed of limestone and flysch in the west, a central isthmus of Neogene sediments, and peridotite in the east (Orombelli et al. 1967). In the western part of the peninsula there is a deposit of pyroclastic rocks, the Cesmeköy Tuff (ibid.). The tuff is described by Orombelli et al. (1967, 838) as vitric, 'seemingly rhyolitic' with a pumiceous texture. They contain rocks of andesitic type and grain size becomes finer from

Zenon is
a/b to a
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Group 1

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+

west to east. The deposit varies in thickness, between 20-40m, and is sometimes covered by fanglomerate or alluvium. Orombelli et al. (ibid.) have suggested that this tuff may be correlated with the rhyolitic tuffs of Nisyros and Jali, two islands situated to the west of the Datça peninsula (Di Pao

Keller (1971, 157) has studied the distribution of deposits belonging to the plateau-tuff of Kos (Fig. 5), in which he suggests that the tuffs of the Datça peninsula are probably of Koan origin. He describes the plateau-tuff (Keller 1969, 157) as containing: ca. 60 wt% pumice, up to ca. 40 wt% leucocratic phenocrysts (up to 1cm dia.), consisting of quartz, sanidine and plagioclase (andesine) and ca. 2 wt% biotite (the only coloured mineral present), with accessory magnetite, apatite and zircon. One of the features of the plateau-tuff, recorded by Keller (ibid.), is the corrosion of the leucocratic phenocrysts. 197.

4. The situation as it now stands

The connection between the prow-stamp fabric and the Zenon fabric provides a positive link with the long-identified Knidian shape (using the evidence from the Hellenistic shipwreck), such that:

Prow-stamp = (fabric) = Zenon = (shape) = Knidian.

Thus, it is possible to confirm Börker's (1986) and Shelov's (1957) suggestions that the prow-stamp amphorae are Knidian. It also places the Zenon amphorae with the early type of stamp to the Datça peninsula. This suggests that between the second half of the 4th century and the early 3rd century either a change in amphora shape had been instigated (this brings to mind the work of Lysippos on Mendean amphorae; Athenaeus XI, 784: and Chian amphorae of the third quarter of the 5th century; Grace 1979, Figs. 44 and 45) or more than one shape of jar was being produced at one time (eg. as in the Corinthian amphorae; Koehler 1981 and 1982). Further work would be needed to trace the time ranges for each of these types of 'Knidian' amphorae.

An Egyptian origin for the Zenon amphorae (of early stamp type), unfortunately, has to be abandoned. On the other hand, it is possible to push back the shape of the Knidian amphora to the early 3rd century. The place of the later Zenon stamped amphorae, if they are related, is not known.

The volcanic material in the prow-stamp (group 1 fabric) and Zenon amphorae appears, on the basis of mineralogical analysis, to match each other and also Keller's (1969) description of the Koan plateau-tuff. The

extent of the Cesmeköy Tuff is not known to me. Its restriction to the western parts of the Datça peninsula are, however, made quite clear by Orombelli et al. (1967). The limited size of the deposit may be the reason for the absence (almost complete) of volcanic material in the later Knidian amphorae. Despite grain-size analysis, it is not clear whether or not the volcanic material in the prow-stamp amphorae is temper. This is quite possible, even though the overall frequency distribution is unimodal. Thus, the absence of volcanic material in later Knidian jars (so far as have been analysed) may be the result of different locations of the production sites (or raw material procurement areas) or it may reflect differences in preparation of the clay bodies used for the later amphorae.

Empereur and Picon (1986) have reported the locations of at least some Knidian amphora production sites on the Datça peninsula. These are situated in the region to the east of the western 'bulge'. It is possible that the Cesmeköy Tuff does not reach this area. The occurrence of a site (I believe) on the isthmus may provide secure evidence for the production of phrourarchoi amphorae made of yellow clay. Neogene deposits in this area are contemporary with certain formations on Rhodes, and phrourarchos amphorae with yellow clay are identical chemically (Grace and Savvatianou-Pétropoulakou 1970, 320 n. 1) with Rhodian (and also very close petrographically, as are certain Rhodian, Koan and Knidian with yellow micaceous fabric). A Knidian amphora kiln has been excavated by Love (1978, 1119) at Mesüdiye, on the southern coast of the western 'bulge'. The known distribution of Knidian production sites, for later amphorae, is to oriented towards the east. It is not known, however, whether Empereur and Picon explored the western-most end of the peninsula.

Also in their investigation of the Datça peninsula, Empereur and Picon (1986) found evidence for the production of mushroom-rimmed amphorae, of the type noted on Rhodian jars at the end of the 4th century B.C. and the beginning of the 3rd. Grace (1971, 84 n. 83) noted that certain prow-stamp amphorae have a 'heavy mushroom rim' and, thus, it may be suggested that Empereur and Picon (1986) have in fact reported the production site(s?) for prow-stamp, or early 'Knidian', amphorae. In this respect it should be noted that fabric group 3 of the prow-stamp class contains no volcanic material, but a large tenor of serpentinite which, geologically, would perhaps put its origin in the eastern part of the peninsula (away from the volcanics and towards the peridotite).

Finally, if the character of the volcanic material in the 'Knidian', ie. prow-stamp and earlier Zenon stamp, amphorae is correctly identified

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Volcanic
- Data -

and particularly if the same characteristics can be identified in the Koan amphora volcanic fragments, it should be possible to confirm Keller's (1971) suggestion as to the origin of the Cesmeköy Tuff on the basis of evidence supplied by stamped amphorae.

5. The application of microprobe analysis

The distinctive feature of prow-stamp and Zenon amphorae is the large quantity of pumice in their fabrics. Microprobe analysis of this glass (polished thin section of prow-stamp amphorae have already been made) would consolidate the connection between the two classes made by mineralogical examination. It would be advantageous to do this owing, on the one hand, to the major archaeological implications of moving the proposed source of Zenon (earlier stamp) jars from Egypt to the Datça peninsula and relating two quite different amphora forms in this process, and on the other, to act as confirmation of the mineralogical results as only very few samples are (or could be made) available.

Examination of a few samples of later Zenon stamped handles (from the British Museum collection?) would, at this stage, perhaps determine precisely their relationship to the earlier Zenon stamped jars, in terms of fabric. This may produce negative results, but if these later jars are of similar, i.e. volcanic rich, fabrics then microprobe analysis would be valuable in the investigation of their relationship.

For two reasons it would be useful to compare the pumice in Koan amphorae with that in the prow-stamp and Zenon jars. Firstly, the occurrence of the same inclusions, both mineralogically and chemically, in quite different series of amphorae is a warning against the application of scientific analysis without regard to archaeological information. It does, however, illustrate the potential for determining origin on a regional basis where several centres are in close proximity, owing to the localised distribution of the pyroclastic material. Secondly, it would be good if the Cesmeköy Tuff (in the amphorae) could be matched by microprobe analysis to the Koan plateau-tuff (in the Koan amphorae), rather than to deposits on the island of Nisyros. This would certainly settle the question of the origin of the Cesmeköy Tuff as an addition to the amphora analysis. Chemical analyses of both the plateau-tuff and tuff deposits are published, and samples of volcanic rock from Nisyros are available in the Fitch Laboratory (Curtis Runnels collection).

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no
abstract?

Mentioned at
end of note 16
as published.

Stamps related (?) to nfr types
not included in article in JSCH Suppl. 13
on Hall. Wreck

M ABC 254 (557.16)



M ABC 260 (557.19)

SS 897

[new cl., n. 8.]



I add two stamp types with similar f

possibly
also found in Egypt: 21, ~~possibility~~ to be read as 18-20; and 22 plus 23,

complementary examples of a type that reads, retrograde, NAK, possibly short for

NAKOPOZ ? and identifying the contents of the amphora as a tithe? We have

no information on the shape or shapes of the amphoras from which 21-23 came.

cf. also RM 205, Rhodes excavation of 1955?
No ϕ , only rubbing, which is on a file card filed
under BRIEF ABBR. under HBU, but it could
read retro, N ϕ P

ca 8th. 84
see note 16
in Hall. Wreck
(15)
value = 1/2
of 15
Korinth
note to John

Nφ₃ etc.

Originally known on amphora = Rhodes MS 464.
It would recur to the mind as puzzling.

On 18. VII. 81 "Possibly Egyptian in Greek letters. cf.
Pow - Nfr., JHS 1980, pp 196 ff."

This is in a discussion about Trincom, and
Pow - Nfr. is a port in or near Memphis. But it
happens that the writer spells it out, instead of
referring to "Pernefer" as others (French?) do.

19. VIII. 81 Emperor said Nefr is a noble ~~title~~
^{in Egypt}
title _{as in Nefertiti}.

Later - "cf. also AJA 85, 1981, p. 219; for Egyptian
nfr referred to average wine, nfr-nfr to better
grade."

I took it that this latter indicated that nfr meant
wine. And if you look at the text in AJA 85,
this is allowed. The text is just the résumé of
a paper at the Christian meetings: "De-re-u-ko
and Mycenae wines"; Phillip (sic) V. Stanley,
San Francisco State University. He is using the
Eg. II for what he sees in a Linear B, reduplicated
to indicate (better quality): "This reduplication is
similar to the way in which the Egyptians ranked

wines: nfr referred to an average wine, while
 nfr-nfr to a better grade. " In the
 resumé he does not mention that ^{in the fact that} nfr means
good. This is clear from the page D. Jordan
 has brought me from the R. O. Faulkner's
Coptic Dictionary of Middle Egyptian, pp.
 131-132.

So, nfr means (all kinds of) good. It is used
 to name wine [and to know that passages —
 write to Stanley?], so, reasonable to know
 a jar so stamped. If we know Egyptian
 or amphoras in the Hellenistic wreck
 — apparently same stamp, as on M² 464, on several jars
 from this wreck — it fits with Zenon Group
 stamps or others from the wreck, as
 suggesting an Egyptian derivation for the
 wreck.

Could we doubt find far more more types that
 could be associated?

with the same infamul from:

(N⁹9)

MABC 221

M ABC 1022

289? (in old res.)

$\{AN\}$

SS 897, 10354 [⊗] Has a suitable sum

[also MABC 227]

$\{N\phi\}$

MABC 624, 1077

Th. 4991

?!
?!

(filed under ϕN)

In fact, through BRIEF ABBREV., that is all
I find.

Try some of the PROBLEM files

(Consonants without vowels, if not Egyptian may
be numbers.)

of notes of 16. XII. 77 in ten fold

2. XII. 84

Term B. Mitford, The Nymphs

[6.05]

① Kafizis, The Described Pottery

Berlin. N.Y. 1920

FOR NK note

QG
52.10

for Hall. Wreck article

I have checked Mitford's Kafizis book
(almost sent to me over the weekend by Nancy
Winter) for instances in his inscription, syllabi-
c and alphabetic, of the use of the word vaKopos.

I hoped to find also some comment on the word.
In Mitford's article in Archaeology of 1952, he
says Ovovakopos describes himself in these
inscriptions as a litigastēs and a va'kēpos.
However, the word ^{vaKopos} seems not to occur in any
of the inscriptions, and there is here no
discussion of it. Perhaps it was a first-try
restoration in some of the restored texts
referring to O. as a Koupeis.

Check Note a "company of Zenon" comes in. But
the date of these inscriptions is in 225-218 B.C.
(see p. 266)
and this Zenon is not of Ramnos but of Lixia
(Nicomachis).

Cypriot syllabary

MST and I have used the descript. in Casson,
Ancient Cyprus (pp 98-107).

But see also J. F. Daniel, AJA 1938, pp 272
ff.; 1939, 102-3; 1941, 249-282, & "Prolegomena"
article. The first 2 of these examine some pithos-
rim graffiti, as to which they do say "Ku-rū" (or
"Dut to crown") The signs are KH V (\pm)
I guess I can't identify anything like this in
"Kourou" stamps.

^(no. 45) 1941
AJA ~~1938~~ p. 249, note 1, says in part: "The
Greek alphabet ^{first} appeared in Cyprus in the 4th cent. B.C.,
and became increasingly common from the 3rd cent. on."

86 of the syllabary (still p. 249): "most of the inscriptions
are in Greek; a few are in a language which is otherwise
unknown, but which may have been spoken by part of
the population of the island in the Bronze Age." --- "clearly
adaptation to Greek of a syllab. wh. was devised for some
other language."

P. 251, he cites my pithos' marks for Lapetia (AJA¹⁹⁴⁰)
in connection with possibility of Cyprian starting in
early Bz. Age.

OTH
note 21, add. to SHMF and VS

6.07

p. 252 Inscr. vases on ^{last} floors of LC IIIA, "but not a single written record" is datable to the 4 $\frac{1}{2}$ century which elapsed between them and the intensification of writing infl. ca 700 B.C. when the Cypriot syllabary re-emerged, together with the Phoenician alphabet. How the syllabary survived during the interim is a major problem of Cypriot archaeology."

17. XII. 97

I got this
from Venturi
& Chiarini.

T. B. Mitford, "Cypriot Writing, Minoan to Byzantine,"
Archaeology 5, 1952, pp. 151-156. This article
speaks of JFD 1941; it does not cite the numerous signs on
the pots from Lapitha Tomb 6A. It is awkwardly written,
one must keep re-reading. Interesting for the Kourou SH:
Mitford and Dikaios's dig at Kafizin near Nicosia. Cave
in a coastal hill ^{where} over 400 inscribed vessels were dedicated
... over a period of 8 years, bet. 224 and 217 B.C. "
most an offering of one Onesagoras, "titan collector and
vākōpos of the Nymphs." Some of the inscr. are syllabic,
but in the Cypro-Arcadian dialect (not in Eteocyprian).
On. apphr collector of tithe for much of central Cyprus;
dedications are out of Equata & of Luseia, Paphos, etc.,
paid by various cities. - - - Fixed cur. of the early
Ptolemies for much of Cyprus.

6.08

Ventin & Chedwick, Dialects in Mysore. Greek,
 Cambridge 1956, pp. 60-66, w. ~~Table~~ (fig. 12), p. 64,
 of the syllabary, discussed pp. 63-⁷⁴ He says that
 Ventin goes ^{the} to the medieval form of the Table. He
 cites also Masson 1954, in Orientalia 23: M. is probably
 right that the syllabary descends directly from the
 Euboean Tablets.

Even V. and Ch. go back to 1956; it wd be
 better to know something more recent. No time to write
 to Ventin.

In Liddell & Scott, 8th edition, there is no
va kopos va ky is a stem
 vakos a fleace

y.t.v. 78

In the 2-~~vol.~~ edition, va kopos is referred
 to va kopos (?), temp. "separated" Na-Davis
 form.

December 2, 1984

6-09

write Dec. 22
Dear Virginia,

This is an early Christmas card because I have been meaning to write you ever since getting yours of November 2nd which came in less than a week. I was so glad to know that you were back at the Stoa and hope that progress has continued. Also that the notes and xeroxes I sent you had provided the necessary references - I thought the Hayes' article was very interesting and learned a lot by my one afternoon's research.

We have had a rather full month beginning with the election (terribly disappointing and embarrassing to N.C. with the reelection of Jesse Helms) and ending with a sudden 5-day trip to London over Thanksgiving because of the failing health of Heinrich's 93 year old mother. We thought it was the end but she is still alive although very weak and sleeping most of the time. She is at home with round-the-clock nurses (very nice young women - one Indian, the other Australian) but rallied some with our visit and we were able to communicate with her. His brother and his new wife also went, but have returned also. It is hard because the sons feel they should go back when the time finally comes and this may happen

at any time. We're thankful we were able to go and talk to her. It's not clear what is the matter with her, but at her age it doesn't matter.

On a more cheerful note - Mary is buying a bigger house ^(4 bedrooms) in Ann Arbor in the same neighborhood and on the way to Annie's school! We have given her some of her inheritance toward this, since now is the time she really needs it. They won't move until after Christmas and are presently working hard to fix up their present house to put it on the market. Until they sell that one they will have two mortgages to meet!

We are planning to go to Ann Arbor for Christmas and then on to Toronto to the meetings if all goes well. I'm rather behind in all my plans at this point. H. is working hard against his January 1st deadline for his book for Oxford - keeps adding references and retyping pages and collecting permissions to publish photos.

Many museums request a copy of the publication - do they realize what it will probably cost? I am currently writing my penultimate chapter but there will be much revising and pictures to collect. Will try to contact some publishers, perhaps at Toronto meetings & Gisela Walberg (whose Ms. I read for her) suggested applying to Getty Trust for a subvention for colored plates. Speaking of color - the slide from which

card was made was taken at Florence last spring when the flower show was set up at the Palazzo Vecchio - this is the base of Cellini's Pedestal in case you don't recognize it. All good wishes and much love from us both - Sally

Answer
Long
Nov. 2

50 Davie Circle

6.11

Chapel Hill, N.C. 27514

October 15, 1984

Dear Virginia,

I have finally called Maggie and gotten her - had a nice chat, and she will probably call you as she hadn't realized the extent and length of your misery. I do hope you are now much better and able to get out (it was about 3 weeks ago that you wrote me from Heinrich's chair). Maggie, it seems, mislaid, lost or threw away by mistake our check which she did receive at the lake, so we are now sending her another. She says it was too much, but we can get no figures. Anyway, she would like us to use it ^(the garsoniera) again, so we'll have to see what we can work out next spring/summer.

Meanwhile, I have gotten the information for you. If you acknowledge help of anyone it should go to Ms. Orly Goldwasser, Jerusalem (currently at Duke). I enclose her report to Prof. Jack Sasson, Religion Department, Univ. of North Carolina. Apparently the important references come from the palace of Amenhotep III at Malkata where many labels, stoppers, etc. were found. I have not looked at her first ref. to M.A. Leahy (at Duke Univ. which isn't easy without car) but I did try the others today in our library. Helck wasn't much use - mostly lists and concordances, but William C. Hayes in JNES 10 is I think what you want - 4 articles on the

inscriptions from Malkata, 1 in each fascicle & the second deals with the types of inscriptions, labels on jars with different commodities, etc. Pp. 88-90 deal with wine and I enclose xeroxes in case ASCS does not have JNES (which I think they do). I suppose it does not matter that Amenhotep III much antedates Hellenistic times - once the Egyptians got on to nfr-nfr, etc. it must have lasted as does everything else in Egypt! (I see you make same point!)

The Darby book with more general information about Egyptian wine was not available - that is it was out, but perhaps the British School has it.

Anyway, I hope this is what you need and that it arrives in good time to meet your deadline.

We are presently involved in political debates, etc. for the coming election - I am wearing a large Ferraro button & H. a Mondale-Ferraro, but it looks as if that Bozo in the White House is unbeatable and knows how to manipulate news and current events like the El Salvador talks of Duarte and the revolutionaries. I hope you are voting absentee.

I will call you again soon but wanted to wait until I got this information.

With much love from us both,

Sally

P.S. Yes, H. does realize Sally Roberts' inadequacies even in r.f. but she did supply him with some information about 2 cup frags. and hence he had to cite her.



S.A. Immerwahr
50 Davis Circle, Chapel Hill, N.C.
27514
Department of Art
The University of North Carolina at Chapel Hill
115 South Columbia Street
Chapel Hill, N.C. 27514



6.13

Air Mail

Miss Virginia R. Grace
American School of Classical Studies
54 Sorvidias
Athens GR 106-76
GREECE

probability that Amenhotep III lived long enough to witness the beginning at least of his 39th year on the throne.

To the evidence of the well-known "Lake Scarabs" that Amenhotep III and Queen Tiy were in residence in the Malkata palace before the end of Regnal Year 11⁸⁷ we may now add that of three jar-labels, two of which are dated to Year 8 (Type 197) and one to Year 9 (Type 1). The labels of the 8th year occur on fragments of oil-jars found in the ruins of what was probably the earliest building of the royal group, the Palace of the King (see Fig. 1). That of Year 9 was written on the shoulder of a wine-jar re-used in Year 34 (?) to contain honey and found in the courtyard of the Amūn temple (No. 209). In view of the complete absence of inscribed jar-fragments dated to Years 2-7 and the extreme scarcity of those bearing dates earlier than Year 30 of Amenhotep III there can be little doubt that the date "Regnal Year 1" occurring on five examples of Label-type 6 refer, not to the reign of this king, but to that of his son and coregent, Akhenaten, who as Amenhotep IV appears to have been elevated to the throne in or about the 28th year of his father's reign.⁸⁸ Since all the labels of this type were found in the so-called Middle Palace, it has been assumed that this large and handsome building was the young pharaoh's residence before his departure to Tell el Amarna.⁸⁹

The contents of the inscribed jars from the palace of Amenhotep III consisted for the most part of beverages, foodstuffs, and unguents of well-known and frequently discussed types.⁹⁰ Predominant among these were wine (285 jars), ale (298 jars),

fat (91 jars), and meat (370 jars), the other identified products (fowl, oil, milk, honey, fruit, and incense) amounting all together to only 134 jars.

The jars of wine, though less numerous than the ale and meat jars,⁹¹ are more evenly distributed over the seventeen regnal years covered by the dated labels, two or more examples existing for every year of the last decade of the reign. *ḥrp*, a word normally denoting the fermented juice of grapes, is the only expression for "wine" occurring in the palace labels.⁹² The superior vintages, imported into the Thebaid often from considerable distances, are usually accompanied by their dates and by the names of the districts from which they came, the latter serving also, as with our modern vintages, to identify the types of wine in question. Sixty-eight jars contained the highly prized "wine of the

⁸⁷ See the references given above, pp. 37-38. To these we may add Junker's detailed treatment of the Old Kingdom offering lists (*Giza II*, 69-96). Montet's *Scènes de la vie privée* Hartmann's *L'Agriculture dans l'anc. Égypte*. Scharff's "Ein Rechnungsbuch des königlichen Hofes ..." (*ZÄS*, LVII, 51-68). Stern's glossary to *Papyrus Ebers* (Vol. II). Breasted's glossary to *The Edwin Smith Surgical Papyrus* (I, 511-76). Reisner's vocabulary of *The Hearst Medical Papyrus* (14-48). Gardiner's *Late Egyptian Miscellany* (*Bibl. Aeg.*, VII). Černý's publications of the Cairo and Deir el Medineh ostraka (*Cat. gén. Mus. Caire*, Nos. 25501-25385, and *Documents de fouilles Inst. fr. Caire*, Vols. 3-6). Erichsen's transcription of *Papyrus Harris I* (*Bibl. Aeg.*, V), and, of course, the five volumes of the *Wörterbuch der ägyptischen Sprache* with the *Belegstellen* for Vols. I and II. The indexes to Breasted's *Ancient Records* (Vol. V) are very helpful in controlling the numerous products named in tomb and temple lists of the Eighteenth Dynasty and later times.

⁸⁸ In sharp contrast to Amarna and other New Kingdom sites where the wine-jars constitute an overwhelming majority of all those found (*Amarna*, Pls. XXII-XXV; *City I*, Pls. LXIII-LXIV; *City II*, Pl. LVIII; *Ramesseum*, Pls. XIX-XXXVIII; *ZÄS*, LVIII, 25-36; etc.).

⁸⁹ I have found no examples of *šdh*, "new wine" (Cf. as at Tell el Amarna and elsewhere (*Amarna*, Nos. 63, 64; *City I*, No. 74; *City II*, Nos. 31, 32; Gard., *On.* A 564; Lucas, *Materials*, p. 37 [*šdh* is the product which Lucas discusses under the heading "Grape Juice"; etc.); nor of palm-wine, date-wine, or any of the other varieties known to the dynastic Egyptians (see Lucas, *op. cit.*, pp. 31-33; Klebs, *Reliefs ... des neuen Reiches*, p. 61).

Western river, a product of the famous vineyards located in the northwest Delta along the lower reaches of the ancient Canopic arm of the Nile⁹³ (Nos. 10, 11, 20, 21, 33, 46, 47, 54, 55, 57, 61, 66); and fifteen others, "wine of Tjel" (*Tjrw*), from the region adjoining the well-known border fortress on the site of modern Tell Abu Šēfah in the extreme northeast corner of the Delta⁹⁴ (Nos. 5, 51, 52, 74, 75, 76). "Wine of Khor" (Syria)⁹⁵ was represented by 8 jars (No. 77), "wine of the Oases"⁹⁶ by 3 jars (Nos. 19, 73), "wine of Per-wesekh" (a locality in the oasis of Kharga?)⁹⁷ by 2 jars (No. 49), and "wine of Per-ḥebyt" (the modern Behbēt el Hagar in the central Delta)⁹⁸ by 3 jars (No. 41). Vineyards in the neighborhood of the great city of Memphis contributed at least 7 jars of wine (Nos. 3, 17, 25, 58) and probably more.⁹⁹ Individual labels list "wine of the New Land" (*ḥ mṣwt*:¹⁰⁰

⁹³ Gard., *On.*, A 405-6; *JEA*, XXXIV, 19-22.

⁹⁴ Gard., *On.*, A 419; *JEA*, V, 242 ff.; VI, 99 ff. The rare tree- or place-name, *pṯ nḥw*, occurring in both examples of Label No. 52, is found also in a wine-jar label from the *Ramesseum* (Pl. XXI, No. 167) and perhaps on an ostrakon from the Dira Abul Naga, now in Brussels (Speleers, *Rec. Inscr.*, No. 187).

⁹⁵ Gard., *On.*, A 567.

⁹⁶ Gard., *On.*, A 568. See also under A 564: *Amarna*, No. 94; *City I*, Pl. LXIII, K; *City II*, Nos. 29, 37; Pap. Boulak 18, XXXIII, 6, 7 (Scharff, *ZÄS*, LVII, 54); Pap. Harris I, 7, 10; Pap. Anastasi IV, ro., 14, 7; Davies, *Tomb of Rekh-mi-Re*, Pl. XLIX; *Tomb of Puyemré*, Pl. XXXI; *Tombs of Menkheperasonb*, ... pp. 8-9, Pls. VI, VIII; Fakhry, *Bahria Oasis*, pp. 14-15; Sethe, *ZÄS*, LVI, 44-54. It is not clear which, if any, particular oasis or group of oases is referred to here. Kharga or Baharia would seem to be the most likely.

⁹⁷ Cf. Gauthier, *Dict. géog.*, II, 73; I, 206; Golénischeff, *Rec. trav.*, XV, 87-88. The puzzling final determinative *ḥ* is clear in both examples of this label.

⁹⁸ Gauthier, *op. cit.*, II, 110-11.

⁹⁹ I.e., those on which Memphis is not specifically mentioned, but which were contributed by well-known Memphite foundations or officials (e.g., Nos. 34, 35, 59, 79). Cf. *Amarna*, Pl. XXV, No. 93; *City I*, Pl. LV, 8.

¹⁰⁰ Gard., *On.*, A 60; Spiegelberg, *ZÄS*, LVIII, 30; Hayes, *Ostraka and Name Stones*, p. 34. Ramesside jar-labels from Kantir in the Delta list "wine ... from the New Land on the west of Pi-Ramesse-mi-Amūn" (Hamza, *Ann. Serv.*, XXX, 43-45).

No. 69), "wine of the abode (*st*) of *ḥ* ..." (No. 26), "wine of the Place" (*pṯ bw(t)*:¹⁰¹ No. 72), and "wine of the orchard (*ḥt*) of Nebmaṛēc" (No. 60);¹⁰² and in many examples the wine is designated as coming from a royal or private estate (*pr*), a temple foundation (*Hwt*), or a particular vineyard (*kṣmw*). Since the estates and foundations produced other commodities besides wine, they are more advantageously considered in a later section dealing with sources in general (below, pp. 96 ff.).

Together with or in lieu of a designation of source, the nature, purpose, or quality of a wine is often indicated by an adjective or adjectival phrase. Nineteen slender, one-handed jugs of Syrian (?) type¹⁰³ contained "blended (?) wine" (*ḥrp smṣ*: No. 85); two jars, dated respectively to Years 24 and 28, "wine for a happy return" (?) (*ḥrp n ḥṣy nfr*:¹⁰⁴ Nos. 2, 4); another, of Year 33, "wine for (lit. of) taxes" (*ḥrp n ḥtr(w)*: No. 29); and nine examples, all probably of Year 38, "wine (for) offerings" (*ḥrp mṣ(w)*:¹⁰⁵ Nos. 62, 63). In twelve cases the wine is described as "good" (*nfr*) and in twenty instances as "very good" (*nfr-nfr*), these notations of

¹⁰¹ *Wb.*, I, 450 ff. Cf. Gauthier, *Dict. géog.*, II, 19, 33-34.

¹⁰² In a second example of this label the word *ḥt* has its usual determinative, *ḥt*. Cf. Hayes, *op. cit.*, No. 129; and for writings of *ḥt* without the genitival adjective, Pap. Anastasi III, ro., 2, 5; 2, 12; Pap. Rainer, 53, 6.


¹⁰³ *City I*, Pl. LI, Type XLI, p. 139; Schiaparelli, *Tomba ... dell'architetto Cha*, Fig. 124; Carter, *Tomb of Tut.ankh.Amen*, III, 149, Pl. L, C; Lucas, *Materials*, p. 28, n. 4. The label in every case is written on the shoulder of the jug at the base of the handle. The three jars containing "wine of the Oases" (Nos. 19, 73) were also of this type.

¹⁰⁴ "Wine for a good going-down" or possibly "wine which goes down well." This curious, though by no means unique, expression is discussed by Peet in *JEA*, XIV, 182. In three of the five occurrences of the phrase known to me (which include one on a wine-jar sealing from the palace and the incomplete example of Label No. 2) the verb *ḥṣy* (or *ḥṣy*) has as its determinative the walking legs *ḥ*. On the use of *ḥ* with the meaning "return (to Egypt)" see my note in *JEA*, XXXV, 48 (h).

¹⁰⁵ *City I*, 162, n. 8; *City II*, 105, Pl. LVIII (17).

quality or grade being applied for the most part to otherwise unidentified vintages (Nos. 28, 86, 87, 88) or to wines donated by private individuals (Nos. 15, 53, 78). Twenty-six jars bearing on their shoulders the single word *irp* presumably contained wine of inferior quality, coming perhaps from local vineyards in the neighborhood of Thebes itself.

The absence of inscribed jars of ordinary beer (*hnkt*) is almost certainly attributable to the fact that this common beverage, undoubtedly consumed in quantity by the inmates of the palace, was produced day by day in breweries attached to the palace itself, making the labeling of the vessels containing it not only unnecessary but absurd.¹⁰⁶ Conversely, we may suppose that another type of brew, *srmt*, for which we possess the fragments of almost three hundred elaborately labeled jars (Nos. 90–117), was not a local but an imported product, made perhaps of ingredients which were not obtainable in the neighborhood of Thebes. One jar of *srmt* (Label 103 var.) was contributed by the mayor (*h3ty-c*) of Tjebu, capital of the Xth Nome of Upper Egypt (modern Ka el Kebir: Gard., *On.*, A 461). Otherwise we have no definite indications of the geographical locations of the various royal and private estates which furnished *srmt*, and can only note that a number of the donating officials—the Vizier Huy, the Steward of Memphis Huy, the Priest and Steward Meryup-tah¹⁰⁷—held office and probably resided in northern Egypt. Among the chief sources of *srmt* were the estates of the queens (see Nos. 94–98, 112),¹⁰⁸ a fact which may indicate that the beverage was

one particularly favored by women. To distinguish it from “beer” (*hnkt*), with which it was obviously closely related (though occasionally stored and served in a semisolid state),¹⁰⁹ I have adopted the arbitrary translation “ale.” In the palace jar-labels the word *srmt* is always determined by the jar *ḥ* and is always followed immediately by the word *dbḥw*, clearly a direct genitive rather than an adjective or a participle, since in no case does it agree in gender with *srmt*, known from other sources to be a feminine noun. I take the construction to be similar to that of *irp m3(w)*, “wine (for) offerings,” and suggest the translation “ale (for) offerings,” or perhaps “ale (as) required offerings,” giving *dbḥw* some of its basic meaning.¹¹⁰ The expression *srmt dbḥw* occurs in two labels from Tell el Amarna,¹¹¹ and in Papyrus Ebers (43, 17) we find the phrase *hnkt ndmt nt dbḥ(w)*, which is not translated in full by Ebbell,¹¹² but which apparently means “sweet beer of (the type prescribed for) offerings.” The very frequent use of *ḥ* as the determinative of *dbḥw* as well as of *srmt* must be an example of what Gardiner in dealing with a comparable use of the word *dbḥw* has termed the “attraction of determinatives.”¹¹³ In one example of Label 105 (Fig. 9) the *srmt* is listed as coming from a building or chamber called *ḥ3t*, a word otherwise unknown to me,¹¹⁴ but obviously equivalent to , “the storeroom,” which replaces it in two other examples of the same label.

¹⁰⁶ Sixty examples in all. See also *Amarna*, Nos. 70, 98.

¹⁰⁹ Gard., *On.*, A 563; Sethe, *Dramatische Texte*, pp. 213–14.

¹¹⁰ See *Wb.*, V, 440–41, especially p. 441, Belegst. 9.

¹¹¹ *Amarna*, Nos. 69, 70. Griffith (p. 34) does not translate *dbḥw*.

¹¹² *The Ebers Papyrus*, 55.

¹¹³ *JEA*, XIII, 77.

¹¹⁴ See, however, *City I*, No. 20.

¹⁰⁶ The same seems to have held true elsewhere, neither Tell el Amarna nor any of the other sites referred to in nn. 18–39 having yielded a single inscribed jar of *hnkt*-beer.

¹⁰⁷ Nos. 103, 92 and 101 (2 examples of each donated by the Steward Huy), 109. See below, pp. 100–101.

compiled by Ms. Orly Goldwasser, Jerusalem

[6.16]

Oct. 9, 1984

Dear Prof. Sasson,

'crp' = "wine"

! $\begin{smallmatrix} \circ & \circ \\ \square & \square \end{smallmatrix}$

note letter F
15.X.84 for
Sally A. Zimmerman

①

size. for 'crp nfr' and 'crp nfr nfr'.

④

M. A. Leahy, Excavations at Malkata, The Inscriptions
(Egyptology Today, No. 2, Vol. IV), p. ~~16~~ 16
no. 60,

Duke library number: Div Sch. p. 30, XI.

q. 932

E 32x

no. 2

vol. 4

and see there bibliography, Hayes, JNES 10;
W. Helck, Materialien zur Wirtschaftsgeichte
des Neuen Reiches, Wiesbaden, 1960-69.

etc.

Journal of Near Eastern Studies

Hayes, Wm. C. "Inscriptions from the Palace of Amenhotep III." JNES 10 (1951), pp. 88-90
for labels of quality "good" nfr, "very good" nfr-nfr (Nos. 98, 86, 87, 88) + Nos. 15, 53, 78

② W. J. Darby; P. Ghalioungui; L. Grivetti: Food;

The Gift of Osiris, 2 vols. London.

Probably in Vol. 2, 551 ff.

general info information about irp.

Orly Goldwasser.

American School of Classical Studies
51 Swedias Street, Athens 106 76, Greece
October 21, 1984

Dr. Phillip Stanley
397 Gravat Dr.
Berkeley, Calif. 94705
U. S. A.

Dear Dr. Stanley:

Thank you very much for your letter of October 4 with offprint of your Archaeological Note (AJA 1982) and photocopies of parts of Professor Lasko's King Tut's Wine Celler (pp. 27-29), and of your article on "Two Thasian Wine Laws."

As I was not sure how to address you, I had also written to ask my friend Mrs. Immerwahr if she could ask some Egyptologist of her acquaintance to find me a reference for the use in Egypt of nfr to qualify wine. She tells me she will be sending me a reference. She also told me she had met you, that you had been in Athens last spring. I was sorry I had not met you myself at that time.

If spared, I will certainly send you an offprint of my article on the Ptolemaic amphoras, and will be much interested in any comment that occurs to you on reading it.

With again many thanks,

Yours sincerely,

Virginia R. Grace

*copy from
my min. lib.
as this is done*

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SCHOOL OF HUMANITIES

October 4, 1984

Virginia R. Grace
American School of Classical Studies
54 Souidias St.

Dear Ms. Grace:

You wrote to me requesting more information about my talk on Mycenaean wines and in particular the Egyptian use of nfr (good) and nfr-nfr (very good) as a qualifier of wine. The talk which I gave at the 1980 meeting of the AIA was published two years later in AJA as a short note (I have enclosed an off-print of it for you). As you will see in the note, my main source of information on the Egyptian reference has come from Professor Lesko who is now chairman at Brown University. He had published a pamphlet on Tutankhamon's wine cellar where he discussed the use of nfr and nfr-nfr. Since this pamphlet is not easily obtained, I have xeroxed the relevant pages for you and enclosed them. Mr. Lesko had also told me about some other passages where this Egyptian word was used to described the quality of wine. He indicated that these ~~word~~^{would} be included in his dictionary of Late Egyptian which I believe by now should have been printed. My understanding from him is that the term is used in this way only in Late (New Kingdom) Egyptian which, of course, would be contemporary with the Mycenaean material.

I have also sent you a xerox of my article on the Thasian wine decrees which appeared in The Ancient World in 1980.

Your mention that NΦΠ may have been used on some Ptolemaic wine jars is fascinating and I would very much like to have an offprint when you have finished. If I can be of any further help, please let me know. I look forward to hearing from you. In the future ~~it~~ might be better to write to me at my home address since the mail service on my campus is very slow at best. My home address is 397 Gravatt Dr.; Berkeley, Calif. 94705.

Sincerely,



Phillip V. Stanley

Archaeological Notes

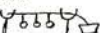
KN Uc 160 AND MYCENAEAN WINES*

Although the text of KN Uc 160 is fragmentary, it nevertheless provides valuable information concerning wine during the Mycenaean period. Lines three and four on the obverse are particularly informative. In line three, the ideogram *131b (ill. 1) occurs, identified as "must," grape juice before and during fermentation.¹ In line four, *de-re-u-ko* appears with the ideogram *131 (ill. 1). This ideogram has been firmly identified as the determinative for wine,² while *de-re-u-ko* has been connected to the Greek γλεῦκος, the word Chadwick translates as must.³ He admits there are certain difficulties in this interpretation: "...if *de-re-u-ko* is 'must,' *131b should have a different meaning..." Chadwick suggests that the difference is attributable to scribal error: the scribe wrote sign *131, intending to write *131b. To correct this error, the scribe added the qualifier *de-re-u-ko*.⁴ His solution would not seem to account for the condition of the tablet. If the scribe made the correction after the tablet had dried, as Chadwick assumes from the fact that *131 was not simply erased and replaced by *131b, then neither could the new word (*de-re-u-ko*) have been written in as it now appears on the tablet. The strokes are exactly like those incised into moist clay and not the surface scratches which are found on tablets that show check marks made after the clay dried.⁵ If the scribe made no correction, then *de-re-u-ko* and the ideograms *131 and *131b need to be reconsidered.

Linear B

*131 *131b 

Egyptian

*M43 

Ill. 1. Ideograms for wine

Chadwick indicated that γλεῦκος (γλυκὺς) is found in

* This note is an expansion of a paper which the author read at the annual meeting of the AIA in 1980 ("De-re-u-ko and Mycenaean Wines"). I particularly wish to thank Dr. A.L.H. Robkin and Ms. Nancy Tersini who discussed with me and read the paper making several helpful suggestions; however, any errors are entirely the author's.

¹ J. Chadwick, *Documents in Mycenaean Greek*² (Cambridge 1973, hereafter *Docs.*) 223, 441. Bennett disagrees with this distinction and sees no difference between ideograms *131 and *131b, even though both are found together in other texts, e.g., PY Un 267: E.L. Bennett, in L.R. Palmer and J. Chadwick eds., *Proceedings of the Cambridge Colloquium on Mycenaean Studies* (Cambridge 1966) 13-15.

² *Docs.* 223; Bennett (supra n. 1) 12.

³ J. Chadwick, "Mycenaean Wine and the Etymology of Γλυκὺς," *Minos* 9 (1968) 197 (hereafter Chadwick, *Minos*). Chadwick correctly takes γλεῦκος to be a variant spelling of γλυκὺς.

inscriptions and literary texts from the 5th century B.C. to the late Roman period, and he refers to three early inscriptions from Gortyn in which this word is found.⁶ To these should be added a 5th century inscription from Thasos, IG XII suppl. 347 I, dated by Daux to 425 B.C.⁷ The first line of this text mentions γλεῦκος and οἶνος as two separate items which cannot be purchased before the first of Plynterion. Since the Thasian month Plynterion should probably be identified with the Attic month Skirophorion (June/July), this prohibition would indicate that the Thasian regulation was instituted to restrict the purchase of wine futures. The purchaser would contract for and buy grape juice at a preharvest date; he would not acquire this juice until after pressing, but probably before storage and fermentation.⁸ In this case, both οἶνος and γλεῦκος were used for must.

The use of two distinct terms instead of a word like πρῦξ for must suggests that the formulators of this regulation had in mind some difference other than fermented versus non-fermented, which would be the distinction if οἶνος is taken as wine and γλεῦκος as must. A similar contrast is found in the inventory lists from Delos. In several inscriptions quantities and values of items held by the various temples on the island are recorded; among the items listed in the same texts are οἶνος and γλεῦκος.⁹ In the texts where both occur, the recorded quantities and values for each indicate that γλεῦκος is scarcer and more valuable than οἶνος, which would be strange if γλεῦκος were only must. Some distinction other than fermented or non-fermented exists between these two terms.

Hesychius defined γλεῦκος as the juice which flowed from the grapes before treading,¹⁰ the first juice which oozes from the ripe grapes naturally. It has a high sugar content and is therefore extremely sweet. In contrast to the total amount of juice produced by pressing, it comprises only a small percentage of the total volume. Ancient evidence indicates that this first juice was used in the making of premium wines. Homer refers to a special wine, Pramian, which was made from the juice acquired before treading.¹¹ Pliny also mentions a prized wine

⁴ Chadwick, *Minos* 197.

⁵ See photographs in Chadwick, *Minos* pl. 3 a and c.

⁶ Chadwick, *Minos* 194. *Inscriptiones Creticae* 4, 77.3; 79.4; 144.4.

⁷ G. Daux, "Nouvelles inscriptions de Thasos," *BCH* 50 (1926) 214.

⁸ For a discussion of this regulation, see Daux (supra n. 7) 214-15; G. Mantzoufas, *La loi thasienne Γλεῦκος μήδε οἶνον sur le commerce du vin* (Athens 1967) 9-19; and P. Stanley, "Two Thasian Wine Laws: a Reexamination," *Ancient World* 3 (1980) 88-90.

⁹ IG XI³ 401.18; 440.62; 445.3-4.

¹⁰ Hesychius s.v. γλεῦκος: τὸ ἀπόσταγμα τῆς σταφυλῆς πρὶν πατηθῆ.

¹¹ Il. 11.639; Od. 10.235. Cf. Dioskorides 5.9; Nikander *Alex.* 163.

from Knidos called by him *protropum*, a sweet wine drawn off before treading.¹² Both of these authors are describing wines made from γλεῦκος, so the term γλεῦκος in the Thasian and Delian inscriptions probably also refers to wines made from grape juice acquired before treading. These various occurrences of γλεῦκος indicate that in antiquity the term could be used to describe either must or a quality wine, a contention supported by other ancient references.

Γλεῦκος was prized because it could be kept longer than pressed juice.¹³ It was fermented,¹⁴ drunk,¹⁵ and used for medicinal purposes.¹⁶ In fact, Nikander implies that it was a type of wine distinct from οἶνος.¹⁷ If the term γλεῦκος was used in this way in succeeding eras, the term *de-re-u-ko* may have been used in a similar fashion in the Linear B text Uc 160: to indicate either the first juice or a quality wine made from it.

Such a use of *de-re-u-ko* would indicate that the Mycenaeans were aware of gradations of wines. Similar rankings also occurred elsewhere during the Late Bronze Age. In Egypt, seals were placed on estate-bottled vintages which would guarantee their quality. Other distinctions were also made; the word *nfr* was used to indicate an average grade of wine while *nfr-nfr* indicated a better quality.¹⁸ The Mycenaeans probably used a similar method of ranking. The use of *de-re-u-ko* plus ideogram *131, as suggested above, most probably indicated the highest grade. The differences between ideograms *131 and *131b need to be reconsidered in light of this ranking.

Both are associated with wine, but the association of *131b with must appears problematical. The two signs are similar except for the reduplication of the lower portion, which in itself does not suggest that fermentation has taken place, the distinction necessary if *131b is taken as must and *131 as wine. Rather, the reduplication appears to parallel the Egyptian use of *nfr* and *nfr-nfr* to distinguish the quality of wine. The Mycenaeans may actually have borrowed this method of distinguishing wines from the Egyptians. The Linear B denominations *131 and *131b may have been first associated with wine because of their resemblance to the Egyptian ideogram for wine (ill. 1): the Egyptian sign depicts a vine on two props and the Linear B signs represent a vine prop.¹⁹ This association of the two sets of ideo-

grams, the Egyptian and the Linear B, provides support for the contention that the reduplicated lower portion of *131, like the reduplication of *nfr*, indicated a better quality of wine than that represented by the unreduplicated sign, *131b. Therefore, ideogram *131b should be understood as a denomination for wine and must, but that of an inferior or lesser quality to that indicated by unqualified *131.²⁰ It appears from this discussion that the Mycenaeans distinguished at least three grades of wine: the best being *de-re-u-ko* *131; second, unqualified *131; and, third, unqualified *131b.

PHILLIP V. STANLEY

DEPARTMENT OF CLASSICS
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SAN FRANCISCO, CALIFORNIA 94132

THE DEATH OF PEDASOS

(Pl. 76)

For Martin Robertson

The large amphora Type B (pl. 76, fig. 1) formerly in the Roß collection was published by Hansjörg Bloesch as his contribution to the *Festschrift* for Ernst Homann-Wedeking.¹ In his article, Bloesch discussed the new restoration of the vase and rightly attributed it to Exekias himself (in its overpainted state, it was judged to be only in his manner²).

On the obverse of this handsome amphora there is a representation of a war chariot to left accompanied by three warriors, one of them in oriental dress, who run alongside the team on its right-hand side. The left-hand trace horse has fallen on its right side, dragging the left-hand pole horse down on its knees. The other two horses, wildly excited by this unexpected event, plunge forward as the charioteer grips the reins tightly trying to keep control. The warrior next to him, on his left, leans forward slightly, holding his round shield (device: a scorpion) and two spears, his left leg bent sharply (his greaved calf appears between the chariot box and the right edge of the panel; his foot extends into the black glaze).

So far this dramatic, tense picture has not been identi-

the first juice acquired before treading, it would be a scarce commodity, since little grape juice is produced in this manner as compared to that from pressing. The rarity of *de-re-u-ko* *131 in the Linear B documents tends to speak in favor of the idea that the commodity was rare, prized and valued.

* I wish to thank M.A. Littauer and D. von Bothmer for reading the manuscript and offering many helpful suggestions for its improvement.

¹ H. Bloesch, "Heilsame Wäsche," *Wandlungen. Studien zur antiken und neueren Kunst* (Waldsassen-Bayern 1975) 84-89.

² *ABV* 147, 5.

¹² Pliny *HN* 14.9.75.

¹³ R.J. Forbes, *Studies in Ancient Technology* 3² (Leiden 1965) 115.

¹⁴ LXX Job 32.19.

¹⁵ Acts 2.13.

¹⁶ Nikander *Alex.* 299; fr. 70.13.

¹⁷ Nikander *Alex.* 178-79.

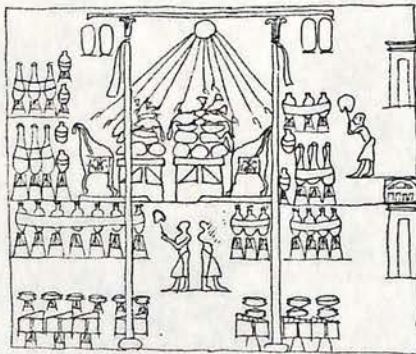
¹⁸ L.H. Lesko, *King Tut's Wine Cellar* (Albany 1977) 22-33.

¹⁹ *Docs.* 35, 130-31.

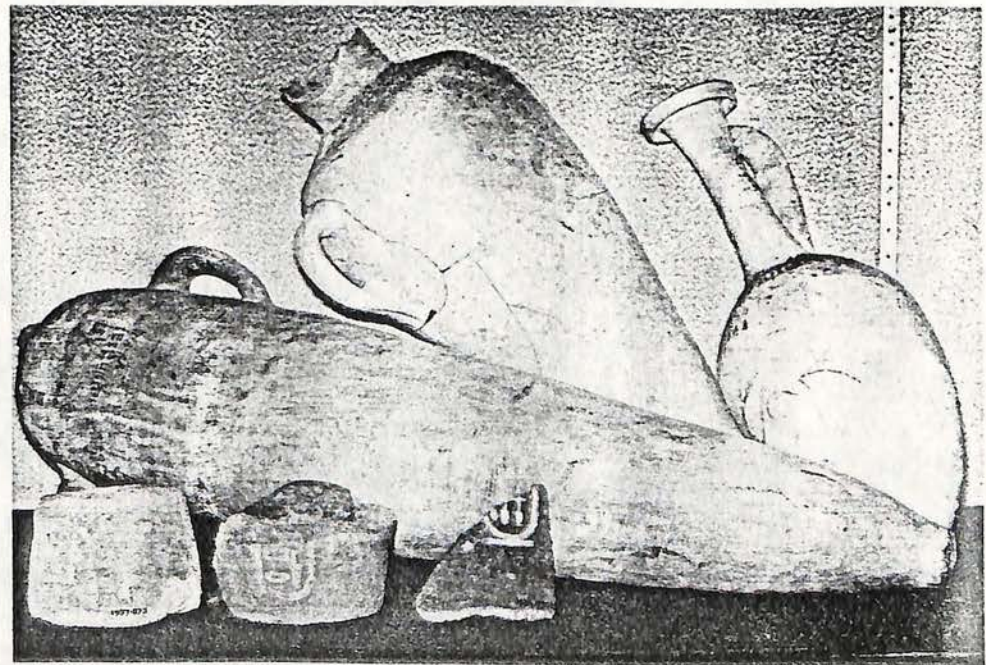
²⁰ The fact that *de-re-u-ko* *131 is found only on one text to date should not argue against the proposed interpretation; in fact, its rarity may actually support the conclusions stated here. If, as has been suggested, *de-re-u-ko* *131 refers to a wine made from

Wine Labels from Tell el Amarna

In Tut's tomb we have unopened bottles of wine. Proof of cellars in other reigns as well is provided by collections of sherds from discarded wine-jars that still have their labels. Of collections of wine labels found at various townsites one of the most important dates to the reign of Tutankhamon's father-in-law Akhenaton (possibly also his older brother). One hundred sixty-five labels were found in several different areas within Akhenaton's capital city and religious center, Akhetaton (modern Tell el Amarna). These labels contain much the same type of information concerning date, beverage (wine or *šdh*), estate, vineyard, and vintner. Additional information from some of these slightly older labels sheds even more light on the Egyptians' labelling practices. Most jars were labelled simply *irp* "wine," but about nine had the designation *irp nfr* "good wine," and eleven had *nfr nfr* indicating "very good wine." Three wines were called *maa* "genuine," and again only four were *ndm* "sweet." One jar was labelled "for merry making" and presumably was not of the best quality.

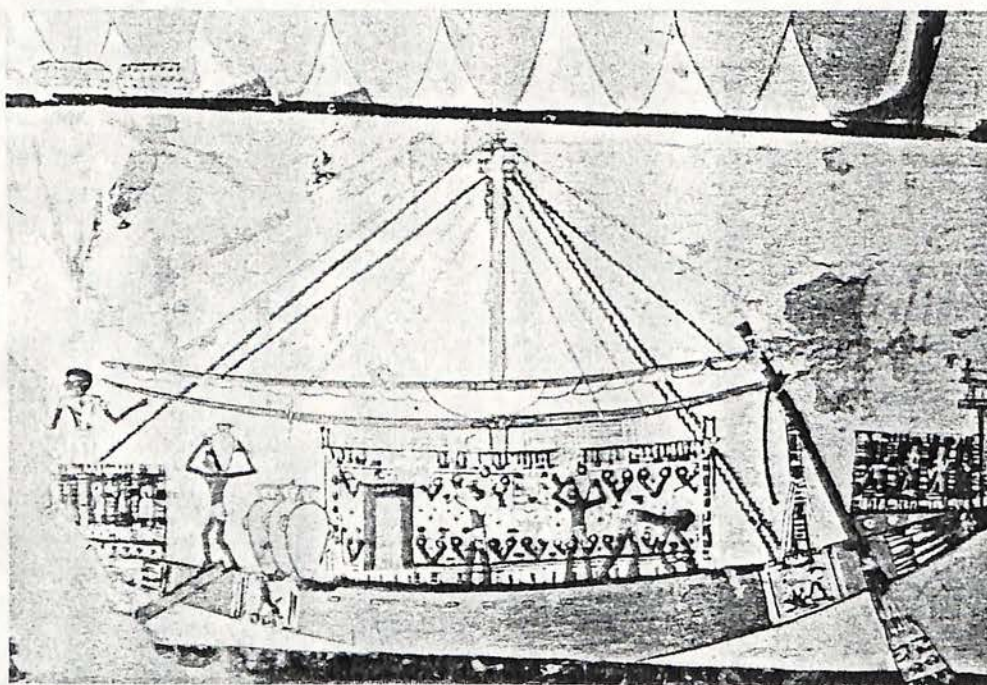


Scene of fanning wine-jars, from the Amarna tomb of Parennefer (redrawn from Norman de Garis Davies, *The Rock Tombs of El Amarna*, Part VI, plate iv).

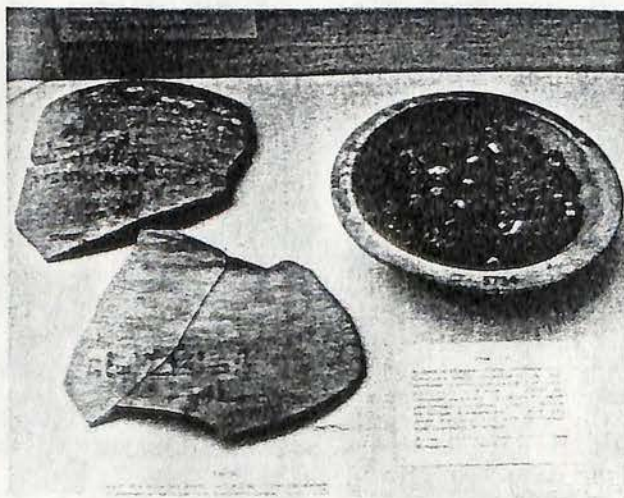


Three different kinds of winejars found at Tell el Amarna, and two clay stoppers. (Reproduced courtesy of the Visitors of the Ashmolean Museum, Oxford).

Twenty-six different estates are represented in this collection of labels. Some of these estates belonged to Pharaoh Akhenaton, his queen Nefertiti, their daughters and successor Smenkhkare, and Akhenaton's father Amenhotep III and his chief wife Ti. The overwhelming majority of wines came from the "Estate of Aton," the estate belonging to the priesthood of the Aton Temple. Most of the wine came from the "Western River" or Canopic branch of the Nile, and several specific basins and vineyards of the Western River area are indicated. A few labels list the



Boat carrying shipment of wine from the north, from Theban Tomb 261.



Two wine-jar labels from Tell el Amarna. One contained a Delta wine and was dated to year 10 (BM 57457) and the other a wine from the southern oasis dated to year 8 (BM 59379). The dried *vitis vinifera* grapes came from a New Kingdom Theban tomb (BM 5734).

Southern Oasis as point of origin, and some have other local designations, but none came from the area of Tell el Amarna. Almost all the wine had to be brought up-stream 300 miles to the capital city. It is interesting to note that many members of the royal family and bureaucracy owned their own vineyards so far away from their residences. Obviously Egypt's best wine-producing areas were located in the Delta and land there became very desirable.

The highest regnal year dates represented in the Amarna finds were years 28 and 30, probably belonging to Amenhotep III, Akhenaton's father. Three other wines with lower years dates (10, 13, and 17) from the "Estate of Amenhotep III" may be dated to Akhenaton's reign, unless wines that were already quite old were brought to this city founded in Akhenaton's fifth year. Two other possibilities are that these jars were also reused with old labels left untouched or that there had been a long coregency between Amenhotep III and Akhenaton as has been suggested on the basis of other evidence.

Almost every one of the seventeen years of Akhenaton's reign is represented on the Amarna labels except his eleventh; and some years are much better represented than others. In spite of the present poor condition of many of the labels, it does seem that there may be some correlation between the years with the greatest representation and the most frequent occurrence of the descriptive "*nfr* (good)," although not every wine of such years is so designated. This could indicate that the Egyptians had vintage years, perhaps dependent upon the height of the annual inundation as much as upon other climatic factors such as wind and rain.

The important difference to be noted between the labels from Tut's cellar and those from Amarna is that while the Tut wines represent the very special selection of wines for a king, the labels from Amarna should be more representative of the varying quality and quantities of wines of different vintages to be found in a capital city of ancient Egypt. It is interesting to note that the number of broken estate bottled wine-jars accumulated at this royal capital during almost twelve years was not that much greater than the number of jars of such wines buried with Pharaoh Tutankhamon, one of Egypt's lesser kings. Wine must have been kept back for special occasions, but even then, to account for the comparatively small number of jars at Amarna, most empty jars remaining intact must have been returned to the estates for recycling.

Two Thasian Wine Laws:
a Reexamination*

The two Thasian laws (I.G. xii suppl. 347 I & II), first published by Daux in 1926 and assigned by him to ca. 425 B.C. and ca. 415 B.C., respectively,¹ established controls over the island's wine industry. Although discussed by Picard in 1949² and Mantzoufas in 1967,³ they have not received the attention that they deserve for elucidating economic practices on Thasos during the fifth century. Both laws illuminate not only economic practices on the island but also the interaction between the economic and political structures and the extent of government control over and involvement in the economy.

These laws contain five separate regulations with an implied sixth one in the text; each has three parts: the legal restriction, the penalty and the procedures for prosecution. However, before proceeding with any discussion of the individual regulations, it would, perhaps, be useful to provide a copy of the text and a translation.

I.G. XII, suppl. (1939), 347, I.

1.

- 1 Γλεῦκος μήδε οἶνον τῷ καρπῷ τῷ ἐπὶ τῆς ἀμπέ[λης ὧν-]
- 2 εσθαι πρὸ νεομηνίης Πλυντηριῶνος· ὅς δ' ἂν π[αραβᾶς]
- 3 πρίηται, ὀφείλειεν στατήρα παρὰ στατήρα, τὸ μὲν ἡ[μισυ]
- 4 τῇ πόλει, τὸ δ' ἡμισυ τῷ δικασμένῳ· δίκη δ' ἔστω κα[τά-]
- 5 περ. τῶν βιαίων· ὅς δ' ἂν ἐμ πίθοις οἶνον πρίηται, τὴν ὧν-
- 6 ἣν κυρίην ἔναι ἂν τὸς πίθος σημῆνται.

2.

- 1 δίκαι καὶ]
- 2 θωιαὶ καὶ ἀπενγύαι ἔστων κατὰ ταῦτά· ἂν δὲ μηδὲς ἀπε[νγυ-]
- 3 αἱ, οἱ (τά) πρὸς τὴν ἡπειρον ἐπιτετραμμένοι δικασάσθων· δι[ε]
- 4 δ' ἂν νικήσωσι, τῆς πόλεως ἢ θωιῇ ἔστω πᾶσα· ἂν δὲ οἱ ἐπιτε-
- 5 ραμμένοι μὴ δικάσωνται πυθόμενοι, αὐτοὶ τὴν θωιὴν διπ-
- 6 λησίην ὀφελόντων· δικασάσθω δὲ ὁ βολόμενος κατὰ ταῦτά,
- 7 καὶ τῆς θωιῆς τὸ ἡμισυ ἰσχύτω, καὶ τὴν δίκην οἱ δημιουργο-
- 8 ἱ δόντ(ων) κατὰ τῶν ἐπιτετραμμένων κα(τά) ταῦτά· μήδε πλοῖον
- 9 θά-
- 9 σιον ξενικὸν οἶνον ἔσαγέτω ἔσω Ἀθ(ω) καὶ Παχείης· εἰ δὲ μή,
- 10 τὰς αὐτὰς θωιαὶς ὀφελέτω ἄσπερ (ὁ)(?) παρὰ τὸν οἶνον ὕδωρ
- 11 παρα-
- 11 χέων, καὶ ὁ κυβερνήτης τὴν αὐτὴν θωιὴν ὀφελέτω· αἱ δὲ δίκ-
- 12 αὶ καὶ αἱ ἀπενγύαι ἔστων κατὰ ταῦτά· μήδε ἐξ ἀμφορέων μῆ-
- 13 δε ἐκ πιθάκης μῆδ' ἐξ ψευδοπίθο κοτυλιζέτω μηδὲς· ὅς δ' ἂ
- 14 ν πώληι, δίκαι καὶ ἀπενγύαι καὶ θωιαὶ ἔστων κατὰ ταῦτά κ-
- 15 ατάπερ τῷ ὕδατος τῆς παραχύσιος.

I. The sweet wine or the wine from the fruit on the vine is not to be sold before the first of Plynterion; but whoever, disobeying, purchases it owes stater per stater, half to the city and half to the initiator of the action. The procedures should be the same as actions for assault. Whoever purchases wine in pithoi, let the sale to be valid, if he stamps the pithos. . . .

II. (. . . the actions,) fines and sureties should be in accordance with the same conditions. But, if someone does not provide sureties, the magistrates charged with relations with the mainland should bring charges. If they prevail, the entire fine belongs to the city. If they, being apprized of the matter, do not initiate proceedings, they will owe double the fine. Whoever may wish can initiate the action in accordance with these conditions and let him have half of the fine. The demiorgoi will give judgement against the magistrates in accordance with the same conditions.

No Thasian ship may import foreign wine between Athos and Pacheie. If this is not obeyed, he [the captain?] will owe the same fines as that for watering wine; also the steersman will be liable to the same fine. The actions and sureties should be in accordance with the same conditions.

No one may sell, by retail, either from amphorae, a cask or a false-pithos. Whoever does, the actions, the sureties and the fines should be in accordance with the same conditions for diluting with water.

i. Regulation 1

The first regulation (I 1-5), restricted the purchase and sale of *gleukos* and wine from the fruit still on the vine before the first of the month Plynterion. Daux argued correctly that this restriction is an example of *emptio spei* and was directed at the large wine merchant who purchased directly from the vineyard. It would limit speculation, establish a specific date before which sale was not valid and permit a more precise estimate of the quality and quantity of the crop.⁴

* I wish to express my personal thanks to Professor R. Sealey who read this article and made several important suggestions and to Sir M.I. Finley for several bibliographical references. However, any errors are entirely the author's, despite their assistance.

¹ G. Daux, "Nouvelle Inscriptions de Thasos," *BCH* 50 (1926) 214-226. (Hereafter quoted as: Daux)

² M.C. Picard, "Θασιᾶκα," *RA* 29-30 (1949) 241.

³ G. Mantzoufas, *La Loi Thasienne Γλεῦκος μήδε οἶνον sur le Commerce du Vin*. (Athens: 1967) p. 3. (Hereafter quoted as: Mantzoufas.)

⁴ Daux, pp. 217-18.

Mantzoufas took issue with this suggestion, pointing out that there is no other evidence outside of the Thasian law itself for such a concept. He went on to state that Greek law of sale stipulated certain conditions: a contract of sale depended on the actual payment of the price and on the existence of the object, i.e., it must be concrete, individualized and corporal. The promise of a future item would not be binding on either the seller or the buyer.

If this regulation is not an example of *emptio spei*, Mantzoufas argued, the stipulation of a specific date, before which the contract would not be valid and after which it would, means that after this date the fruits were considered as moveable objects, separate and legally independent, while physically still attached to the vine and would be turned over to the buyer, after payment of the price.⁵

Primarily Mantzoufas' argument against *emptio spei* is one from silence, which, in this case, is not adequate; the Thasian regulation itself is sufficient proof for the existence of the concept. Furthermore, there is no indication in the regulation that the buyer ever took immediate possession of the fruits. In fact, the regulation does not mention the sale or purchase of fruit, as claimed by Mantzoufas. Instead it is restricting the sale and purchase of two separate and distinct items: γλεῦκος and οἶνος. Hesychius defined γλεῦκος as juice which flows from the grapes before treading.⁶ It was particularly valued because it could be kept longer than pressed juices.⁷ It was fermented,⁸ drunk⁹ and used in medical remedies.¹⁰ The second term, οἶνος, would then refer to what was acquired from the treading of the grapes. The qualifier τὸ κατὰ τὸ ἐπὶ τῆς ἀμπελῆς indicates that the grapes were still on the vine at the time of purchase. Therefore, this regulation limited the sale and purchase of two separate and distinct types of juices. The buyer was not purchasing the fruit itself but rather its product after harvesting and pressing. This suggests that the buyer was not directly involved with harvesting and probably did not have any rights over the fruit before pressing. Since it was the product of the grapes which the buyer purchased and not the fruit itself, Mantzoufas' suggestion is not valid.

As for the date mentioned in the regulation, Daux identified the Thasian month Plynterion with the Attic month of Skirophorion (June/July).¹¹ If this connection is correct, it means that before mid-June it was illegal to sell or purchase grape-juice for wine-making; after that date the contract was valid. Vintage time in the northern Aegean was at the end of summer in September.¹² This vintage date indicates that Plynterion is too early to harvest any grapes for wine since the sugar content in the grapes is not sufficient for fermentation.¹³ In fact, at this time, mid-June, the grapes would just be setting on the vines and could not be picked for several months. This regulation, therefore, limiting the period when it was legal to purchase wine-juice before harvesting the grapes, was a curtailment of speculative buying. After Plynterion such speculations were legal and possible. This limitation indicates that the concept of *emptio spei* was not unknown in ancient Greece, as Daux had already argued. Although suggesting this conclusion, he did not consider the regulation's implications or reasons for passage.

Such purchasing would have been a risk for both buyer and seller. The buyer would hope that a record crop was grown that year, more than justifying his price, whereas the grower, or seller, would sell in order to be assured a profit should the crop fail or be below expectation. If the output was below expectation, the speculator would soon realize that he was going to lose money unless he increased the price of the final product, the wine. This regulation would not eliminate speculative buying but only limit the period for it.

This is not the only ancient example of limitations on such purchases. At Athens there was a limit on the amount of grain that a *sitopoles* could purchase at one time: a limit of 50 measures.¹⁴ This would prevent dealers from hoarding grain, a practice which could result in an artificial shortage and higher prices. The Athenians also established a maximum profit which a *sitopoles* could earn; he was allowed by law to increase his price by no more than one obol per medimnus above the going rate.¹⁵

⁵ Mantzoufas, pp. 9-19. Most of his conclusions are based upon principals defined and established by Pringsheim in *The Greek Law of Sale* (Weimar: 1950). There are many problems and misconceptions in this work. Several of the major issues have been discussed by Finley in *The Use and Abuse of History* (pp. 147-152). Perhaps the most important misconception is Pringsheim's attempt to generalize about economic law in the Greek world; he tended to ignore any differences which may have existed between the various city-states. Mantzoufas has also fallen into this trap when he attempts to fit the Thasian laws into his general concept about Greek laws regulating the sale of commodities.

⁶ Hesychius: γλεῦκος τὸ ἀποστάγμα τῆς σταφύλης πρὶν πατήσθαι.

⁷ H.J. Forbes, *Studies in Ancient Technology* (Leiden: 2nd ed. 1965) III 115.

⁸ Cf. Job 32. 19 where the speaker compares his heart to *gleukos*

seeking a vent and bursting a brand-new wineskin.

⁹ Cf. Acts 2. 13 where intoxication on *gleukos* is mentioned and Lucian *Ep. Sat.* 12.

¹⁰ Nicander *Alex.* 299 and fr. 70. 13. Nicander implies that *gleukos* was distinct from wine in general (*Alex.* 178-9). Cf. Arist. *Mete.* 380b32; *P. Petr.* 3 p. 149; *Dsc.* 5. 6.

¹¹ Daux, p. 217.

¹² Gomme *HCT* III 551 n. 84. 1. Cf. Thuc. 4. 84. 1; Hesiod *O.D.* 612-614.

¹³ For a discussion of wines and wine-making in the ancient world see Pliny *N.H.* 14 and H. Michell, *Economics of Ancient Greece* (Cambridge: 1940) pp. 190-192.

¹⁴ Lysias 22. 5-6.

¹⁵ Lysias 22. 8.

At Delos, a law, assigned to the 3rd century B.C.,¹⁶ controlled the importation and sale of wood and charcoal for fuel. This law required importers to register their goods and prices with the *agoranomoi* and *pentekostologoi* and to sell the items themselves. Importers could sell them at neither a higher nor a lower price than that which was registered. Schulhof and Huvelin correctly suggested that the ability to lower the price would have resulted in a series of speculations and bargainings of which the consumer would incur the expense.¹⁷ Fixing the price and requiring the importer to sell his own wares would have prevented speculative buying; purchasing cheap and selling at an inflated price.

Finally, we should consider the reason for the enactment of this first regulation. Three possible explanations can be proposed. First, the rule was created *ex nihilo*; there were no precedents either actual or legal for it. But such an interpretation is neither reasonable nor plausible. Greek legislation tended to develop out of concrete situations and were designed to regulate, limit or legalize existing practices rather than to create them.

Second, the regulation extended the period when buyers could legally purchase wine futures. Before its passage such purchases were legally restricted to some date after the first of Plynterion. If this regulation extended the period of speculative buying to a date earlier than that of harvest-time, this would mean it was introducing the concept of *emptio spei*. If such were the case, one might expect more details, particularly concerning transfer, possession and delivery of the purchased item. Since there are not, this does not explain its enactment. Furthermore, an extension of time from a date between harvest and the first of Plynterion also does not appear to be valid. The Athenian law on grain speculation, the Delian law concerning wood and charcoal and other restrictive laws, such as Solon's limitation on the exporting of agricultural products out of Attica,¹⁸ were designed to limit, not encourage, activities like speculation. This regulation probably had the same purpose.

Therefore the third proposal appears to be the most plausible: the Thasian regulation limited the period when speculative buying of wine-futures was legal. Before its passage it was not only legal to purchase wine-juice before Plynterion but was actually done.

Such practices probably led to abuses which necessitat-

ed the enactment of this regulation and the government's involvement in a local industry.

After the regulation came the penalty and legal procedures to be followed. The penalty was assessed on the buyer, not the seller, and the buyer was to pay, as a fine, the price of his illegal purchase, half to the city and half to the individual initiating the action. The state, evidently, relied upon informers for enforcement. Unfortunately the regulation does not stipulate any officials to whom violations should be reported.

ii. Regulation 2

The second regulation (I 5-6), stipulated that pithoi, containing wine, must be stamped by the buyer for the sale of the wine to be valid. Pouilloux incorrectly associated this regulation with another Thasian inscription concerning the *karpologoi*.¹⁹ These officials he argued, should be identified with the *eklogeis* of Samothrace and were also responsible for the collection of Athenian tribute, tribute raised from a tax on produce, primarily wine. This regulation, therefore, concerned the collection of that tax and the stamp, referred to in it, was an indication of its payment.²⁰

Gofas, while rejecting the suggestion that the *karpologoi* were responsible for tribute payments, accepted that they collected a produce tax, suggested in this regulation. To support the existence of a Thasian produce tax, he must rely on Ptolemaic documents and a Hadrianic law which, he argued, was modeled on an earlier Athenian one.²¹

There are several major objections to this conclusion. First, there is no indication that the *karpologoi* inscription and the second regulation are connected; neither mentions or implies the other. Second, nowhere in the second regulation, or even in the two wine laws, are taxes mentioned, or even implied. Third, it is more reasonable to associate these later wine laws with an earlier one, ca. 480-470 B.C.²² All three concern the same commodity, wine, have similar language and probably concern the same situation, the sale and production of wine. If this is correct, this regulation did not control the collection of a produce tax, since Herodotus specifically stated that the Thasians did not pay any tax on crops.²³ Nor did he indicate that the situation had changed. Therefore, another interpretation for the second regulation is needed.

Daux suggested two interpretations which he tried to link together. The stamp, placed by the buyer, indicated the transfer of property, guaranteeing the

¹⁶ Durrbach, *Delos* 509; E. Schulhof and P. Huvelin, "Fouilles de Delos," *BCH* 31 (1907) 50-52. (Hereafter quoted as: Schulof and Huvelin)

¹⁷ Schulof and Huvelin, p. 62.

¹⁸ Plut. *Solon* 24.

¹⁹ *I.G.* XII suppl. 349 A and B.

²⁰ J. Pouilloux, *Etudes thasiennes: Recherches sur l'histoire et les*

cultes de Thasos (Paris: 1954) I 129-134. (Hereafter quoted as: Pouilloux.)

²¹ D.C. Gofas, "Les Carpoloques de Thasos," *BCH* 93 (1969) 337-370.

²² *SEG* XVIII 347; D.C. Gofas, "L' *ογκος* νηίδης a Thasos," *BCH* 95 (1971) 245-257.

²³ Hdt. 6.46.

validity of not only the present transaction but also of all future transactions. It would also be used to settle any disputes arising over storage rights. Cato, commenting on Roman practices, stated that if a buyer did not remove his wine from storage before the first of October, the seller acquired ownership of it.²⁴ Daux argued that this was also the practice at Thasos.²⁵ He is correct in suggesting that the stamp indicated a transfer of ownership; however, to link Roman practices with this regulation is going beyond the evidence. The wine industry at Thasos, or in Greece, is still too poorly understood for such an assumption.

Finally, the reason for its passage needs to be considered. There had probably been disputes over ownership of wine, occurring in the spring when the wine was transferred from pithoi to smaller vessels.²⁶ The sale in dispute most likely would have been concluded at harvest time when the wine was stored. This regulation would eliminate such disputes, the stamp serving as proof of ownership. This regulation would also eliminate two type of fraud, to wit, the seller would not be able to sell the same wine twice and would not be able to substitute a cheaper quality of wine.

iii. Regulation 3

The end of the first law and the beginning of the second are not extant; the central area had been reused for a later inscription, ca. 2nd century A.D. Daux indicated that about twelve lines are missing,²⁷ and Mantzoufas would restore at least two other regulations.²⁸ However, the number of regulations erased cannot be determined with any certainty.

The extant portion of the third regulation (II 1-8), begins with judicial procedures, as can be seen from a comparison with the end of the fourth regulation (II 11-12); similar wording is used. Although the regulation itself is not extant, certain conclusions can be drawn from what remains. Since the others controlled the buying and selling of wine, this one probably also controlled some aspect of the wine industry. Also the reference to officials concerned with the mainland suggests that this regulation restricted the purchase or sale of wine in this area or its importation there.²⁹

iv. Regulation 4

The fourth regulation (II 8-12), prohibited the

importing of foreign wines by Thasian merchant ships to the area of Thrace between Mt. Athos and Pacheie.³⁰ Mantzoufas argued that this is an example of protectionism, suggesting that all foreign wines were excluded from the mainland and that the third regulation, which is missing, restricted the importation of foreign wines by foreign ships.³¹ His suggestion while tempting is not proven. It would be necessary to demonstrate that foreign wines were not imported to this area. But until that can be shown, one should consider only what is actually extant and try to understand its purpose and function.

In actuality the regulation limits only two types of importation. First, Thasian ships are forbidden from transporting any foreign wines from the island of Thasos to the mainland. Second, it is not permissible for a Thasian ship to take a cargo of non-Thasian wines at a foreign port and to unload it within the designated area. A Thasian ship with such a cargo must sell it at either another foreign port or Thasos, neither of which were restricted.

This regulation, therefore, is an example of protectionism,³² but more limited than the monopoly proposed by Mantzoufas. The Thasians, desirous of insuring the sale of their wine, restricted what they could actually control. Harbor officials on the mainland, perhaps appointed at Thasos, could inspect the cargoes of Thasian ships unloading there, but it would not be possible to monitor them in foreign ports. Furthermore, the Thasians may not have found it to their advantage to restrict cargoes of foreign vessels whose captains would consider it easier to trade elsewhere.

The individual held responsible for violations is not mentioned in the regulation. However, since the steersman would also be subject to the same fine, this would imply that the captain is the unexpressed person. His absence here suggests that he was referred to in an earlier regulation, perhaps the previous one.

v. Regulation 5

The fifth regulation (II 12-15), forbids the sale of wine in amphorae, casks and pseudopithoi. Daux argued that this indicates that there was, at Thasos, a standard capacity for each vessel type mentioned and that the restriction controlled only traders dealing in bulk, ordinary individuals being able to use any of the

²⁴ M. Cato, *De Agricultura* 148. 2.

²⁵ Daux, pp. 219-220.

²⁶ C. Seltman, *Wine in the Ancient World* (London: 1957) pp. 70-71; V. Grace, *Amphoras and the Ancient Wine Trade* (Athens: 1961) pp. 2-3.

²⁷ Daux, p. 214.

²⁸ Mantzoufas, pp. 27-28.

²⁹ The mention of these officials would indicate that before 415 B.C. the mainland had been returned to Thasian control. For a discussion of the problem about Thasian control of the mainland and for a

bibliography see R. Meiggs, *The Athenian Empire* (Oxford: 1972) pp. 83-87, 570-578.

³⁰ Both references are taken to be on the coast of Thrace; however, the exact location of Pacheie is disputed. See Daux, p. 224 n. 1; Pouilloux, p. 128; and E. Ziebarth, *Der griechische Kaufmann im Altertum* (Munich: 1939) p. 9.

³¹ Mantzoufas, pp. 224-226.

³² Daux has already suggested this, but he did not discuss the extent of protection. Daux, pp. 225-226.

vessels.³³ The reference to pseudopithoi does suggest a contrast between this type of vessel and a standard one; in fact, it is known that the capacity for pithoi at Thasos had been established in earlier legislation.³⁴ However, Daux's suggestion does not explain the reference to amphorae and casks where no contrast between a standard and non-standard type is being made. All that the regulation states is that sale of wine in any of the mentioned vessels is forbidden.

Since amphorae and casks were used extensively in the import-export and local trade of wine, this regulation would have resulted in eliminating the sale of wine in small quantities, making bulk quantities the only legal sale. There are three possible effects of such legislation: First, the primary buyer would now purchase wine in large quantities, bottle it himself in smaller vessels and export it personally from the island. In this way a major portion of the wine would be used in the export trade. A similar situation existed at Delos, importers of wood and charcoal had to sell their own product, being restricted from selling it to another merchant.³⁵ Second, it would eliminate the middleman in the wine trade, the merchant who purchased in quantities, would bottle it and sell it to other merchants, who would either export it or sell it locally. This would reduce the final price of the wine since his profit would be eliminated. Third, it would end the sale of foreign wine on the island. Since wines were usually transported in amphorae, a regulation which forbade the sale of wine in these vessels would stop the sale of foreign wines. It would not stop the importing of them. Such wines could be imported which were to be reexported immediately or to be used personally by the importer.

If, as I suggest, this regulation curtailed the sale of wine in small quantities, its result would be to encourage its export and to insure a constant supply for export. This would strengthen the island's economy: the more that a state exported, the more it could import. At the time of this regulation, Thasian wine was considered among the best and was in great demand;³⁶ therefore, it would be in the state's interest to protect and encourage its production, insuring a continuous supply.

vi. Regulation 6

Both the fourth and fifth regulations refer to a sixth one not extant on the stone, a prohibition against pouring water into wine. Presumably this does not refer to personal use but to commercial practices. Mant-

zoufas suggested that this restriction should be restored in the erased area as the first regulation of the second law.³⁷

There are two possible interpretations of this prohibition. First, it prevented the artificial aging of wine which, according to Pliny, was done by mixing seawater with it.³⁸ Such wine would command a higher price and was prized. Nestor is said to have drunk wine that was ten years old,³⁹ and Athenaeus mentioned wine that was sixteen years old.⁴⁰ Since seawater is not specifically mentioned, it is not likely that this was the intention.

Second, it prevented merchants from diluting the wine, having two results. The merchant could increase his stock and his profit by the amount of water added. But the diluting would also adversely affect its quality, being thinner and losing some of its flavor. Such practices were not unknown in the ancient world; Lucian compared philosophers who sold their lessons to wine-merchants who diluted their product.⁴¹ Since Thasian wine was in demand, diluting would increase the available supply but would eventually cause a decline in demand. Therefore to avoid this, a regulation controlling the quality of Thasian wine, at least before exporting, was passed by the local government.

vii. Conclusion

When both Thasian laws are considered together, they provide important information concerning the way and extent a Greek city-state controlled and interacted with a local industry. The Thasian government was not attempting to either nationalize or completely control a local industry; instead its intent was to establish legal limitations on sales and purchases of wine and to encourage its production. First, the government defined the legal conditions for the transfer of property. Buyers at the winery had to place their stamps on the pithoi for the sale to be valid. Furthermore, speculative buying of wine futures was now restricted to a specific period. These rules established a legal basis for transaction and protected the rights of both buyer and seller.

Second, the state encouraged the production of wine by insuring a market. Limitations on the importation of non-Thasian wine to Thrace insured one outlet for the wine. To protect markets in other areas, the government regulated the quality of the wine and attempted to reduce the cost. Quality was insured by seeing to it that the wine was not diluted before exportation. Cost was

³³ Daux, p. 223. Pouilloux accepted this conjecture and would himself link this regulation with a Thasian capacity law. Pouilloux, p. 213.

³⁴ For a discussion of the regulation establishing the capacity of the Thasian pithos see M. Lang, "A New Inscription from Thasos: Specifications for a Measure," *BCH* 76 (1952) 18-31.

³⁵ Durrbach, *Delos*, 509.

³⁶ *Ar. Pl.* 1022, *Lys.* 196.

³⁷ Mantzoufas, pp. 27-28.

³⁸ Pliny, *N.H.* 14. 78. Artificial aging could also be accomplished by heating the wine. (*Plut. Sym.* 5. 3 and *Athen.* 10. 429c).

³⁹ *Od.* 3. 391.

⁴⁰ *Athen.* 12. 584b.

⁴¹ Lucian, *Hermostimus* 59.

reduced with the elimination of the middleman and his profit.

By encouraging the exportation of wine the Thasian government derived direct financial benefits. In most Greek states there was a percentage tax on goods imported into and exported from the city. An increase in the goods leaving the harbor, generated new revenues, primarily from the export tax, and resulted in more items being imported. Ships, leaving with one cargo, usually did not return empty. In this way revenues from the import tax also increased. These financial gains were also a consideration in the passage of these regulations.

Furthermore, these two laws protected both the consumer and the producer and restricted the activities of the retailer or middleman. The consumer was guaranteed a quality wine, not diluted, at a reasonable price. The producer was provided a stable market, legal

rights with respect to the sale of his product and protection from outside competition. However, the retailer had his activities curtailed. The period of speculative buying was limited; this means that these merchants paid a price closer to the actual cash value of the final product since at the time of sale the yield could be more accurately estimated. The restriction to sale in bulk eliminated the dealer who purchased directly from the winery and sold to other local merchants.

The involvement of the Thasian government in commercial activities was not unique to this island alone. The Athenian regulations over the grain trade and the Delian involvement in the sale of fuel indicate that these cities, like Thasos, were attempting to regulate and stabilize commerce in their respective areas. A closer examination of the extant evidence would reveal that similar actions were implemented by other Greek states.

San Francisco State
University

Phillip V. Stanley

50 Davie Circle

6.30

Chapel Hill, N.C. 27514

October 6, 1984

Dear Virginia,

Yours of September 27th came yesterday - mail service seems improving from Greece! - and your earlier letter of Sept. 21st arrived the day before we left Chelague, which was just a week ago. We are now settled back in Chapel Hill though there is much gardening and clearing up outside to be done before we will look respectable. The interior, however, was well cared for, and we can hardly blame a non-gardening graduate student for allowing the semi-tropical jungle to encroach! Perhaps we should supply a gardener?

I have already gotten on the track of nfr-nfr (which sounds very interesting) and I promise to supply references before the needed date. Incidentally Phillip Stanley (whose name didn't ring a bell at first) was at the ASCS this May, staying in Loring Hall so we saw a fair amount of him at tea. He is an ancient historian at San Francisco State with a degree from Berkeley - a sort of generalist but has worked on Linear B and seems to know Egypt - he had taken a tour group there

before Athens. He is a great talker, youngish, and is probably a better scholar than his manner might suggest (a little like John Fischer?). He is not the person I have consulted, since you had already written him. Perhaps he has answered by now?

I called my friend Jack Sasson in the religion department (he knew your name from the Canaanite amphora article - his field is Ugaritic, Mari, etc. but he is a good productive scholar and bibliographer) and he has turned the quest over to a woman Egyptologist in the area, I believe at Duke. She will do a thorough search, perhaps more thorough than you want!

It sounds as if you were improving. It probably was a flare-up of arthritis of which even osteoarthritis can move around, though the fever must have been something else. Unfortunately, Leslie Day's is rheumatoid arthritis which is much worse and I hope she can get it under control. I was worried about you and called Mimsey to see what she knew, but word from Athens (Richard Burgee, etc.) was reassuring. At least your spirits and will to accomplish remain undiminished.

Thanks for information about Elektra's apartment which we have visited. We might be interested but haven't yet sorted out our plans, what with the

Mount Holyoke reunion for me (May 26th - 28th). I want to get through to Maggie first. Haven't tried from here, but did from Maine shortly before we left. Todd clerk has never been asked. Perhaps we might go in early summer - we really liked her apartment. Love from us both. Selley

28-IX-84

For note of inquiry to add to longfellow
letter to Sally Zimmerman.

^{probably at least a month ago}
I did write, to Phillip Stanley with what address
I could get from the abstract (ASA 1981, P.
219, if I remember right — from papers at
New Orleans) and have had no answer. Do
you know an Egyptologist who knows the
Egyptian language? All my Egyptologists have
died (such as Bill Smith). I just need
a reference for nfr^(gord) applied to wine, and
reduplicated nfr nfr for excellent wine.

^{Stanley}
I assume ~~to find~~ the reference in Egyptian of
the Mycenaean period, ^(where my guess would be Ptolemaic) but in Egypt this
does not seem to matter. A thousand years
in thy sight is but as yesterday when it
is past. Note that nfr = good is easy
to find in the Dictionary of Middle Egyptian.
What I need is the reference to it applied
as qualifying wine.

7
American School of Classical Studies
54 Swedias Street, Athens 106 76

August 31, 1984

Mr. Phillip V. Stanley
Classics Department
San Francisco State University
San Francisco, California, U.S.A.

Dear Mr. Stanley:

I was interested in the abstract of your paper at the Christmas Meetings of 1980 (in New Orleans), see AJA 1981, p. 219. As this was just an abstract, it naturally lacks references. Would you be so kind as to give me, if you can, a published reference for your statement that nfr and nfr - nfr were used by the Egyptians to rank wine? Perhaps you have published the paper and can send me an offprint? In Faulkner's Concise Dictionary of Middle Egyptian, p. 131, many uses are listed for nfr, but none in which it qualifies wine is cited as such.

I would be grateful if you would give me the full title and date of any Egyptological publications you mention in citing the requested reference, as I am not familiar with many of those.

It appears we have some Ptolemaic wine jars marked NQ[P] - that is, there is space for the P but it is not clear to read. If you can help me, and are interested, I will send you an offprint when they are ready.

I would be glad to have an offprint of an article I believe you have written on Thasian wine or wine-containers.

Yours sincerely,

Virginia R. Grace

To go with a NΦ. for

M2 ET very similar to MS 464

What is ET likely to be?

Look in Large Estate:

Etearchos, nomarch, 11 entries.

Nomarch of Damios & ET. ^{Sappho's ident.}
with Philadelphos.

^{DAMIS}
Damios and Etearchos were nomarchs. Their
brother (not a name) was Sotiratos, much involved
with them and with Zenon.

25. XI. 83

See some ΔA types in Early Rhodian
stamp file. Perhaps closest to the
ET stamp is the one on the Kyrenia jar that
has ΔA on the shoulder. — Wd be too early.

9.10.81

ZENON Group

[9.02]

nfr again [cf. M2 464]

See AJA 85, 1981, p. 219, on paper of P. V.

Stanley.

Determination (Nycena) used to

RANIZ coins.

"This reduplication is similar to

the way in which the Egyptian RANIZ coins:

nfr appears to be a very common, which nfr-nfr

is both good. [No ref. here for the Egyptian

language - it is a summary of a X'm meeting talker.]

From the ref. in section of text on Zenon Group

28.10.82

Note association of this type with Zenon Group only because it was impressed on some jars in the Hellenistic period along with numerous jars

marked $\frac{IHN}{\Phi AA}$ - also perhaps because of the Egyptian (?) stamp ^{in Greek} (see above), and we now suppose

that Zenon type amphorae were made in

Philadelphia or somewhere there -

12.10.83

I believe the Egyptian language in Ptolemaic times is to some extent, as present-day Coptic. And to some extent, as Egyptian in Hellenistic times.

240 of 2 enns

Born "at beg. of 3rd conf." Peshawar

Koroni stuff $\begin{matrix} \text{IH/MOS} \\ \text{IH/22} \\ \text{IH}/\phi \end{matrix}$ In 270 he is 30
 In 260 ("earliest ref.") he is 40
 In 240 (latest paper) he is 60

Ptolemy III starts
28 Jan. 246 BC
(his Year 1)

#. VII - 84

11

For the Hell. World

- ref. 8 - Ptolemy's ¹⁹⁸¹ Agust. It. pp.

Date of Zenon

220 ff.

(5)
175.
II)

see "stew
inter" ptolemy
in vol. A

Year 28 = 258/257 B.C.

Zenon in Memphis

[29 = 257/6

See Long Est. pp. 56-7 - "Darius
and Etearchus - before Seleucus"

Year 25 = 261/260

earliest ref. 8 Zenon

26 = 260/259

Zenon about 8 years for
Palestine, where he will
stay until after March ²⁵⁸

Further on, the ptolemy-in-egyptus states he was
born in A. Min. "at the beginning of the 3rd c. B.C.,
is said to have moved in his youth to Alexandria. [at 280.]

Year 8 (of Pto. III) = 240/239 latest dated letter
addressed to Zenon

See pp. 186 etc.

Synthesis - Z's "patrios" - "father"
p. 188 etc.

Long Est. p. 57 "Darius - his brother Etearchus are well
known as the monarchs of the district where Philadelphus
was selected." - see map p. 157

year 26 = 260 B.C.

Date of Hell. Wreck
(by means of J. G. J. J. J.)
D. Jordan being in P. W. Pestman, A Guide to the Zaan Archipelago
Leiden 1981.

Date of Z. of Kaurus

See Pestman, pp. 171 ff. (first see year 23, 25)

- also pp. 195 ff. (first see year 12, 13)

Can't find out how or guess anything about Z.
before 261 B.C. ⊗ But to see for Kaurus,
which must be near site of Hell. Wreck. See
Geography. To go with present idea about
No. 1000 V (name on the Thessalonian jar in the wreck),
which like the words of the say ca. 275 B.C.
O. 12. 7 for different but. IHN stamp, and
I H MOC at stamp at Kaurus.

Pestman is A Guide to the Z. Archipelago, on
⊗ See Hand joined into P. W. Pestman, Guide and
Dumet's Texts for the Zaan Archipelago, Leiden 1980
It states that "Z.", is was born in A. M. in 1st
to beginning of 3rd c. B.C.

Note that in Pestman 1981, the Prosopography is
not in the Indices - Maps vol., but in the Lists - Surveys
(pp. 271 ff.)

Some bibling on Zenon
from D. Jordan

On the telephone, I asked him if he could
give me some titles in which Maggie would be
able to look things up for me, for instance
get some references for persons beginning Pida
(D. said Pida ppor was brought to mind.)

He gave me

1.) ^{Pestman -} ~~POSTNANN~~ ^{PESTMAN}, A Guide to the Zenon Archive,
ca. 1982. (Large book.)

2.) Skeat, The 2. Papyrus in the British Museum
(rather recent?)

I said, Maybe Gerhard wd. let me
borrow Postmann. He said he wd try.
(I am sorry it is no longer.)

Zenon Guy 28, TX 82

Tues.

14

AJA just rec'd this
article by Coulson and ?

on recent work in

Nanotechnology. It

publicizes a few of the

stamps, including a

IIH (calls to Blundin)

25

ZENON GROUP

[114.] This is a very interesting item which provides

a new name in the series combined with Ze(non). On this series, see Hesp. 32, 1963, pp. 319, 320, and p. 331, note 25. Following the revision in 3rd century dates (Ath. Mitth. 1974, pp. 193-200), I am suggesting in a forthcoming article that the Ze(non) in these stamps could be Zenon of Kaunos, manager of the "Large Estate in Egypt", see the volume of 1922 with this title by M. Rostovtzeff; I am not the first to publish this suggested identification. It would be nice if ΑΗΙΘΑ could be ΑΗΙΘΑΑΣΝΙΘΣ Zenon's boss, but then how to understand all the other names he comes with in other stamp types. The letter you took to be an iota is a zeta, regularly so made in this series (cf. Hesp. 31, 1962, pls. 18, 19, nos. 84, 115, 119). The two abbreviated names read in different directions in this type; such things happen.

I should guess that the jars marked with stamp types of the Zenon group were made in Egypt, in the Fayum. Certainly there was, and is, more than one kind of clay in Egypt. Do you have any known Egyptian tested samples with which to compare [114.] etc.?

You did a good job in identifying the two other examples of the types of [114.]. We had on file with this series the one from Gezer, but of course not its reading as now supplied by you. Especially for your

13. VII. 81
6 ARIEL
Sue
PALESTINE
CITY OF
DAVID
[15]

NESTOR



PROGRAM IN CLASSICAL ARCHAEOLOGY
INDIANA UNIVERSITY
422 N. Indiana Avenue
Bloomington, Indiana 47405 U.S.A.

16.019



*Miss VIRGINIA GRACE
AGORA EXCAVATIONS*

~~MICHAEL L. KATZEV
AMERICAN SCH CLASSICAL STUDIES
54, EODS SQUIDIAS GREECE
ATHENS 140~~



PRINTED MATTER
RETURN REQUESTED

conduct with all for King
9 B.V. 80

16.01.6



Do
Cuphara
nothing.

Amphora GH

ΙΗΝ
ΦΙΛΔ

rubbing ✓

16.02

Amphora un. #4

ΙΗΝ
ΦΙΛΑ

rubbing ✓

Amphora NT

-ΗΝ
ΦΙΛΛ

rubbing ✓

Amphora TN

ΙΗΝ
ΦΙΛ

rubbing ✓

Amphora NS ≡ JO

ΙΗΝ
ΦΙΛΔ

rubbing did not
come out, very little
depression.

2
2
2

Dory,
Amphora
rubbingt.

NT



16.04

JN.

2000-2001
L.R. 1000-1001



2000-2001
L.R. 1000-1001



16.05



5.11



unlabelled
#4



16.066



16.076



16.086



16.09b

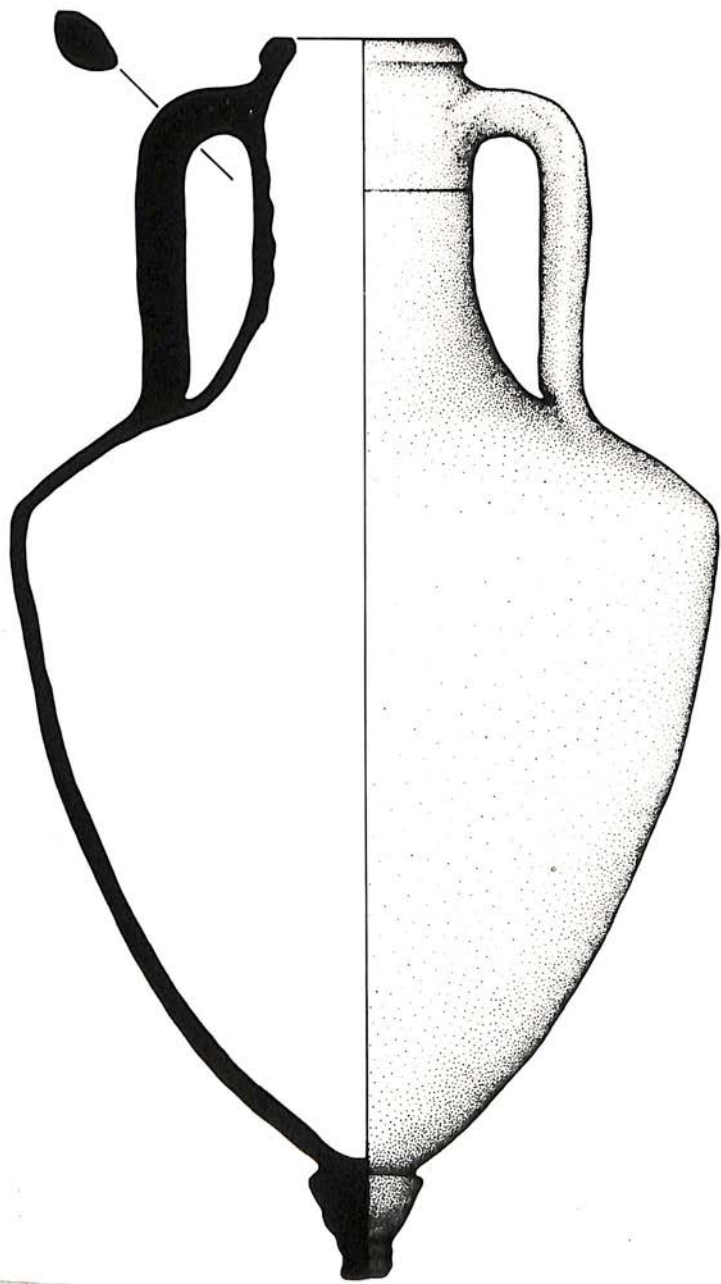


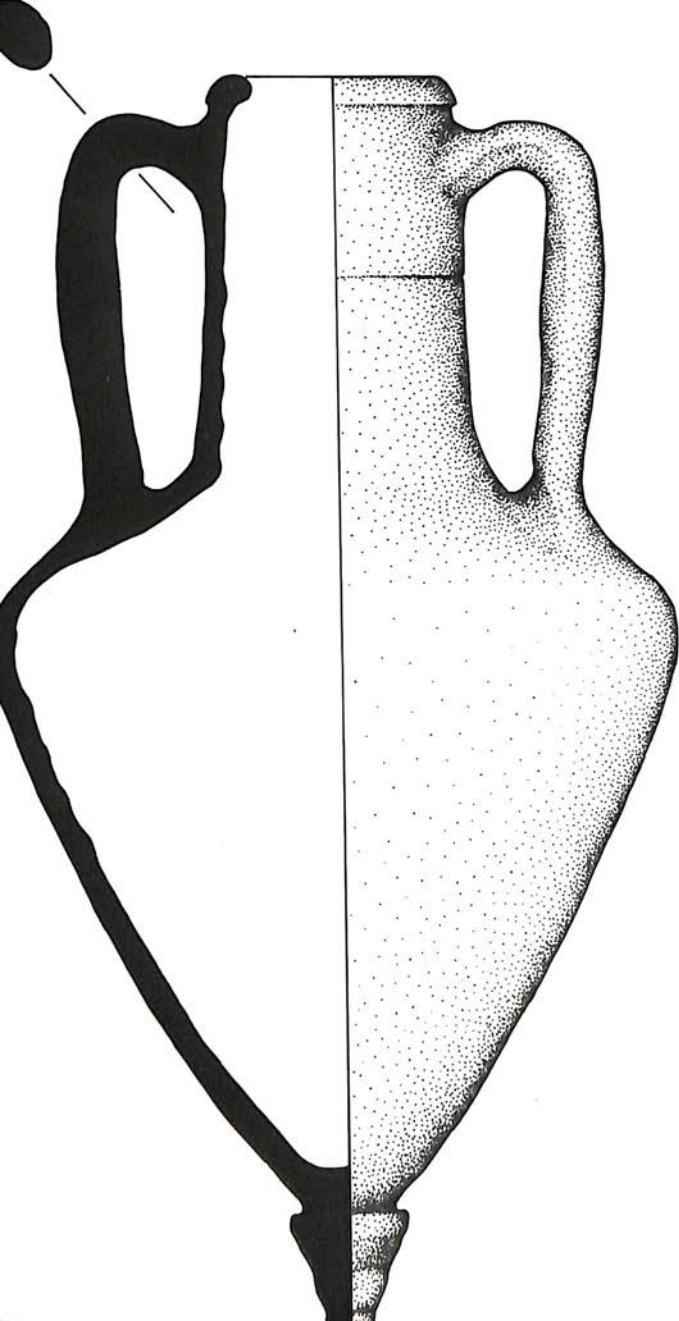
16.106



16.116







SCALE: IN 5 CENTIMETER DIVISIONS



$NS \equiv JO$

= HWA 6



INSTITUTE OF NAUTICAL ARCHAEOLOGY

George F. Bass, *President*
Michael L. Katzev, *Vice President*

P.O. Drawer AU
College Station, Texas 77840
(713) 779-4101

6 May 1980

Dear Virginia,

Many, many thanks for spending so much time with me last Wednesday. It was a most informative and interesting session, and I have now communicated some of our "conclusions" to George Bass.

Enclosed for your files are the photographs of the Knidian amphoras, drawings, photos of stamps, rubbings, and "transliterations" that I received from the 1979 season on the Hellenistic Wreck at Serge Liman.

I would indeed be grateful to receive a photocopy of your English translation of Brashinsky's article on "Standards of Rhodian Amphoras." It could be quite useful in making sense of the Kyrenia Rhodians.

With best regards from Susan and Mudge.

Yours,

Michael

Item of the "Knick" kind - because there were also those of "Phos" kind - rise and rise or drop of branches from ^{upper} attachment.

If Koenig contrast of the 2 - name Zoon Gyp class puts them in 2/4 of 3rd ant. can suppose there may be continuous ^{Zoon of the Lake Estate} ~~made~~ ^{fraction} ¹, perhaps in Knits and in Phos. Can the records be read to support this action?

Note one ~~one~~ of the Zoon types (ABC 2, 71) less the upper part of a Knick-type amples represented as a down. i.e. only upper part was impressed on the single exp.

Notes on Zeno group
in other folders

See the description of ABC items in the folder
BENACHI - NOTES ON MINOR GROUPS

27.VI.68

begin

21

Published mentions of Zenon Group
as such

In Hesperia 32, 1963, pp. 319, 321-2, with
note 9; p. 331 with note 25 (long)

14.V.70 mention in "Sardinian Amphoras", note 88.

18.VIII.81 Going into the Middle Ages article, as there
are some (8) to late times) there /

(to remain clear that not all Mr. B's were on file.)

AD has now first thru.)

3. IV. 63

[22]

"Zn" group

in Benach Collection

DOM H I 11/156

am

From Album with Miscell.

- (1) M/238 } (1)
 (2) M/240 } (2) filed
 (1) M/243 } (1)
 (1) M/244 } (1)
 (3) M/245 (3) new ?
 (1) M/246 (1) }
 (1) M/250 (1) } filed
 ? M/263 ?
 (4) M/302 filed
 ? M/392 ?
 ? M/454
 (2) M/490 filed
 (5) M/525 new ?
 (2) M/537 filed
 (1) M/599 filed
 (6) M/634
 (2) M/648 filed

(1) $\begin{matrix} \text{IH} \\ \text{MOC} \end{matrix}$ 238, 243, 244, 246, 250, 599,

(2) $\begin{matrix} \text{IH} \\ \Sigma \Omega \end{matrix}$ 239, 240, 490, 537, 648

(3) $\begin{matrix} \text{IH} \\ \text{M} \end{matrix}$ 245

(4) IHNONOE 302

(5) $\begin{matrix} \text{IH} \\ \text{M} \end{matrix}$ 525

(6) IHN 634

From Album with Monograms

- (a) Mo/8 filed
 (b) Mo/387 filed
 (c) Mo/507 filed
 (d) Mo/512 filed
 (e) Mo/556
 (f) Mo/573 filed

(a) $\begin{matrix} \text{HI} \\ \text{A} \end{matrix}$ Mo/8

(b) $\begin{matrix} \text{IH} \\ \text{e} \end{matrix}$ Mo/387, 507, 512, 573

(c) $\begin{matrix} \text{A} \\ \text{IH} \end{matrix}$ Mo/556

"Zenon" note type I H
I H H

27.II.63

23.01

Note ~ Zenon Group

for final product of Koroni SAH-arted

Published items:

(Nelson 529, 859 - part. prot. (Eld. ?) (I H / EYA)

Hesp III, no. 3 235 (I H) and 256 (I H)
and 247 I H

Porg. VIII, 1278 (I H)

19 XII, 1, no. 1308 (IX.62 mbl.) (and descr.) (I H)
(Phodis); no. 1393 (" ") I H

Dumont 222, 160 (I H)

Mescaline, Jager, no. 471, fig. 467, no. 25 I H

(19 XII, 1, no. 1306, 2, may be E. Pl. ? I H N
Phi. H) 16.IV.63
Check identity
of stamp. N. 5
over.

+ 1

Horn. p. 112, 242 I H

Items found with Photo - Plot. 1

See Dantes I H w. out. - found in. This with
our first batch of photo-Plot. 1
many in same, suggestion

2 - name types at Koroni w. photo-Plot. 1

23.II.80, ... w. Plot of class B (I H), 1.1.66 -
280-270

Further context (see MSBF summary for what has
been listed)

On C 12: 2, context of SS 5746, Dep. Summary says

"Throughout... a scattering of fragments of 3rd cut. in

Second - Third quarters of 4th cut, dumped in 3rd cut."

But this is not a 2 - name types.

3. IV. 63

(2)

23.02

Add for
last (for ABC
album) mod
of AD was
- & including
ABC total:

(Zeun group)

Provenance A 2-abbrev. types

IH
NA Alps (in B. Mus.) (1)✓IH
AP Alps, Mus. (1)✓(IH
EYA Rhodus (3) Samos)IH
KPATI Alps B.C. (1)✓+ 1 IH
A A Eton (as think this lot's p. Alps) (1)✓OH
H I Alps, Mus. (1)✓+ 4 IH
MOA Alps B.C. (2) Alps Mus. (1)✓
Attenu? (in N. Mus., and in D.)
(38) 11
Prasini+ 3 + 1 IH
ZSL Attenu, Agora (2) Alps Mus. (14) Alps B.C. (1)✓
Prasini; Rhodus (1)✓+ 3 IH
φ (trans) Alps Mus. (1)✓; Prasini (2)✓ + 1

+ 3 + 1 - various unfiled (new?)

14 + 2 = 16

(IH
φ IAA) Alps Mus. (1) Rhodus (1)

Alps Mus. 1 1 1 1 1 + ? Attenu, N. Mus. 1

Alps B.C. 1 1 1 1 + 16 " Agora 11

Alps B. Mus. 1 Parts Repl. (Pras.) 11 11 11

Alps? Eton 1 Rhodus 1

Alps Mus. 28 + 1
Prasini 8
Attenu 3
Rhodus 1
40 + 2 = 42

12 for Alps + 16 +

12

24 of which 8 (or 1/3) for P.R.

12 for Attenu and Rhodus (1)

(3)
(Zero Group)

3.10.63

23.03

Summary of non-2-abbrev. types:

I (or H): 3 ex., Agnes, 7 Wind
 SS 10798 is for Fillon to 7 Sp. Bldg.
 SS 12898 " MSBF (1c)
 Contact times late 3rd and
 Handles look "Kina" and "Rhodes"

IH: 58 counts on file, in both I and O stamps

Althaus 19 22 33 of which 11 are for
 EM (not Postivity)

(Mus., say) 15 (X) (not on file)

Alexander (B.C.) 12 + ? v. prob. not all on file.

(Post.) 1

His 2H type - mostly
 plain - is over 80
 -12
 72

Mamplis 1 (whole 6.)

Pergamon 1 ✓

Labraude 1 ✓

Rhodes 2 ✓ (+ Mr. Doster?)

57 + 1
 15 (not a post.) (Al. Doster)
 72
 72 added, Mr. B.
 144 + 1 total.

Sams 3 ✓

Delos 1 ✓

Santh Puerin 1 ✓ (Homer.)

A wind 2 ✓

24
 38 in A. H.

57 pretty good dealer.

10.63
 (not on file)

Bulgarian 3
 (mixed)
 (62, 63, 64)

⊗ Less than one
 drawn-full.
 There are
 counts indi-
 vidually of
 SMALL GROUPS I,
 II, etc.
 But these
 numbers were
 changed, and
 I don't know
 now which
 is which.

(4)

(4. TV. 63)

23.04

(Zenon Group)

This page, types clearly go with plain IH
not into p. (3).

$\overset{x}{IH}$

Athens 5, incl - SS 5746 fr. Monte Qued C 12:2
(4th ad. file dumped in 3rd aug.)

Delos 1✓

Swiss 1?✓

Alexandre (2+) (subtr. from IH total)

$\overset{\cdot}{IH}$

Athens 1

Alex. B. Al. (4) (subtr. fr. IH total)

$\overset{\text{S}}{IH}$

Athens 2 (1 N.M.)

(Alex., not on file)

$\overset{\circ}{IH}$

Samos 1✓
11

Not Alex. or Athens:

Mamphir	1
Antioch	2
Labraude	1
Pergam	1
Swiss	1?
Plodis	2
Samos	4
Delos	2
South Run	1
Bulgaria	3
	<u>18</u>

S. TV. 63

Assembling figures for plain IH

combined with IH plus x, o, etc. & see

notes above, pp. 3, 4:

On file, plain IH 58

Alex. 13 (file)

Not on file, in Alex. Mus. 15+ →

" 15+

" " " ABC 72 →

" 72

" " " Varna Mus. 3

100+ 100+

on file, IH + marks 11
159

Athens 33+5+1+2 = 41

mixed 18
159

See also Mr. Doutes drawing of a
musthron in attached & notes of
24.V.65.

ZH group

7. VII. 61
begin

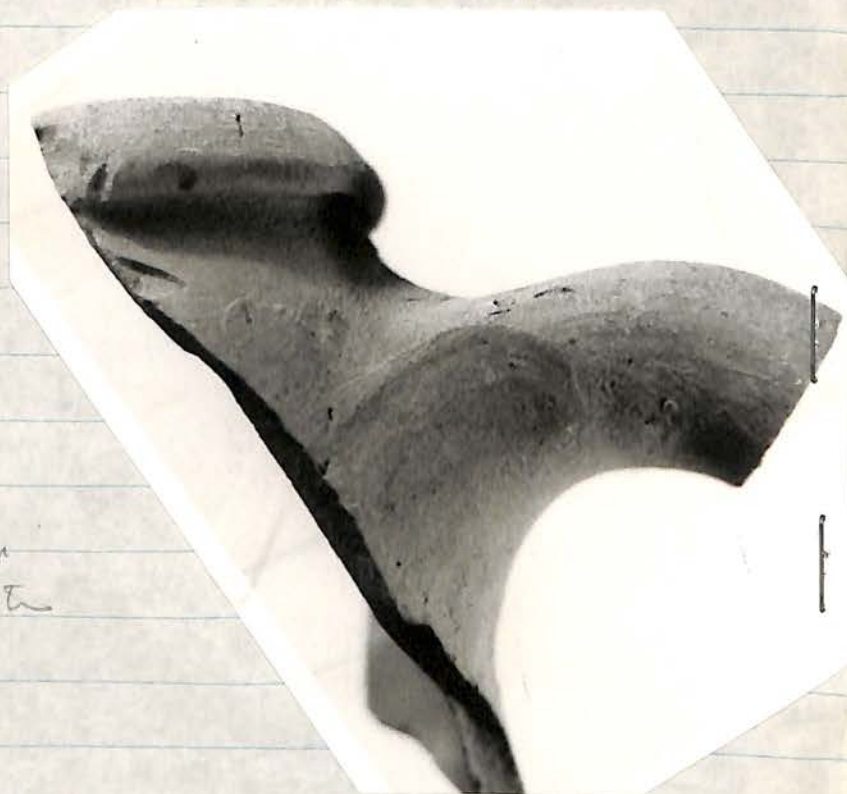
24.01

Shapes of fragments of IH group

Alipandis:

Bumchi M 454

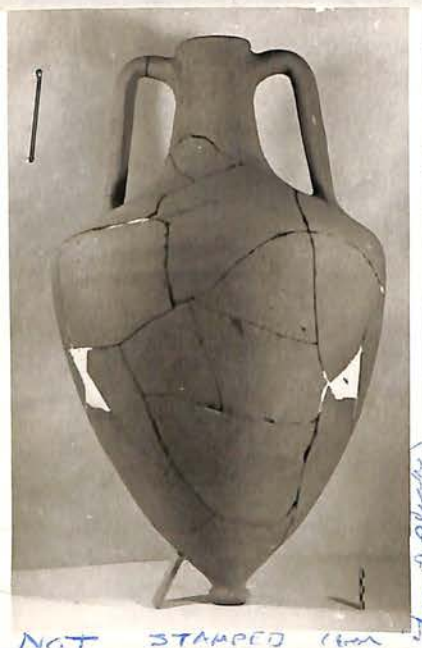
IH
MOZ



4. VII. 62

f. to ampulla top
1962,
no. ④, from the
peninsula.

Yulita (Prasai, Koroni)



NOT STAMPED (then)

Pub. no. 113

PR 73: IH in broad arch
(valley surface) 252

HH 0.195; .043 X .027. (u2 φ)

"Bent drip rim. Short upper part
of handle, "vertical" arm swings out
a little. Micaceous light reddish-buff
clay; fine."



PR 73

PR 87

Pub. no. 117

PR 87
(surface)

IH
—

HH. 0.195; .043 X .025 (u2 φ)

"Vertical part of handle swings out. Micaceous
salmon-red clay with white and dark bits."

See also Mr. Dantes drawing of a
mushroom in attached & notes of
24. V. 65.

ZH group

7. VII. 61
begin
24. 01

Shapes of fragments of IH group

Alvandia:

Benechi M 454

IH
MOZ

14. VII. 62

Cf. to ampullae top
Hesperia 1962,
pl. 20, no. ④, from the
Koroni peninsula.

Porto Raptia (Prasiai, Koroni)

Pub. no. 113

PR 73: IH in beaded circle
(valley surface) 252

HH 0.195; $\begin{matrix} w & \times & T \\ .043 & \times & .027 \end{matrix}$ (n2 f)

"Beaded drip rim. Short upper part
of handle, "vertical" arm swings out
a little. Micaceous light reddish-buff
clay, fine."

PR 73

PR 87

Pub. no. 117

PR 87
(surface)

IH
— 0

HH. 0.195; $\begin{matrix} w & \times & T \\ .043 & \times & .025 \end{matrix}$ (n2 f)

"Vertical part of handle swings out. Micaceous
salmon-red clay with white and dark bits."



ZH
MOZ class

RIM

WITH LB 30.111.60

M/454

Fluor
4 A

Please
identify it

09.11.60

recount with LTL 50

24.026



24.03b

507.19
PR 73587

(SIDES)

NIKO XI 31



NOT STAMPED (from

bottom of jar)

24.046

S.T. 63

Top of Le Group
gas sand below
sandstone & the
brown clay

P 14179

Annuario ^{II} 1916, p. 139

from Rhodes (acquired in Italy)
a little square block, marked

ΙΗΝΟΣ
ΞΕΤΗΡΟΣ

(a votive?)
is associated (by Maury) with cult of
Zeus Soter, which is otherwise attested
in Rhodes, and which he thinks in
2nd - 1st B.C. is not clearly to be
distinguished, in Rhodes, from the cult
of the association of Δίος Ξετυχεσται.

23.IV.60
 If anything to be made of
 connection w. Zenon of Caunus.
 see mm. Swiderate's
 1954 book which she sent.
 French résumé, and
 many refs. in notes.

I H group

30.VIII.55

S.F.61

Don't forget
 time found at
 PRASIAI

MIDDLE STOA BUILDING FILL : Z H G R O U P

SS 854, 985, 11671, 11906, all read **IH** with somewhat varying

stamps, the last-named having a roughly circular one.

SS 12898 reads just **I** or possibly H.

Other types assembled with this group have the two letters with a device,
 or with another abbreviation:

ZH with cross
 " " dots above and below
 " " uncertain devices
 ZH-AN
 ZH-AP
 ZH-EYA
 ZHN -KPATI
 ZH-MO

ZH-MOC
 ZH-ZQ
 ZH-Φ
 ZHN-ΦIAA
 ZHNQN
 ZHNQN in circle

On the early handle
 BAK 8108 in circle
 33 12796
 (B.C. 1941)
 - K 222 in circle
 (B.C. 295)

Context apart from MSBF: SS 5746 (ZH with cross) comes from II0, well at

68/MB, (mouth of well?) This well, VG Deposit 34, ~~for the well mouth deposit~~ has

been dated second half of 4th "with intruded 3rd (small sherds)". SAH include
 good part of earlyish Rhodian jar (ep. ZOXAPHZ), early Rh. Handle, APIETOTANHZ
 with rosette, Corcyrean(?) AE, and uncertain (SS5841). Jar possibly of 2nd quarter
 of 3rd? And SS 255 (ZH-ZQ) comes from A Well at 20/IET (bronze head

well), variously dated 1st half of 3rd by HAT as recently as 1940 publication,
 and "latter 3rd" by GRE. SAH tend to push it past 250 probably, e.g. Thasian of
 BOYAHKPITOTZ (SS139) and some Knidian that may not be so EK. Possibly call it
middle third of third century?

Fabric of the group: the shape is sometimes like Early Knidian, sometimes
 thick and arched like early Rhodian, not the earliest. Note SS 6966 (ZH) with
 section of Rhodian rim. On the other hand, SS 8829 and 11671 have something like
 a fat heavy early Knidian rim. (Both also ZH) The clay could often be taken for
 Knidian, but in some of the "Rhodian" handles it is quite Chian: see SS 6966
 again, which has fine red clay, gray core, and a thin smeary light slip on a dark
 surface. A few other handles noticed as having ZH fabric may be second handles
 on ZH jars: cf. SS 70 and 7634 stamped with ligature EII which are "Rhodian" ZH
 shape, and others with about the same stamp which have been filed as EK.

Date of Zenon of Caunus ca. mid-third? (SEHWW p.358, letter of 254 cited).
 Note he (?) owned a field with one ZOXTPATOTZ - see WINE folder.

23.I.61
 The associated
 abbreviation
 could all be
 names assoc.
 w. Zenon
 of Caunus
 in a large
 estate - but
 not all in same
 vicinity.
 23.IV.60
 Early Rhod?

7.7.61
 Zenon of Kition,
 who can be
 attested in 314
 B.C. in
 a fort. paid to
 him for over
 1500 talents.
 "was in
 Britain from
 SEHWW, p.144"
 29.VII.60
 GRE now calls
 it 34 1/4

29.VII.60
 SEHWW p.350;
 Zenon of Caunus
 in basin in 260

And SS 10933 - 2A, but in closer near con-
 siderable blocks (4th c. B.C. context) (see sq. 143)
 (24 + 25) (Thasian fabric)

rv.63) Note long frag. from A. (see coll.) and 2nd/3rd; and TD 1261 ("disc."
 handle, incl. 2 att. indicates marked contraction of wheel toward mouth. (IH)

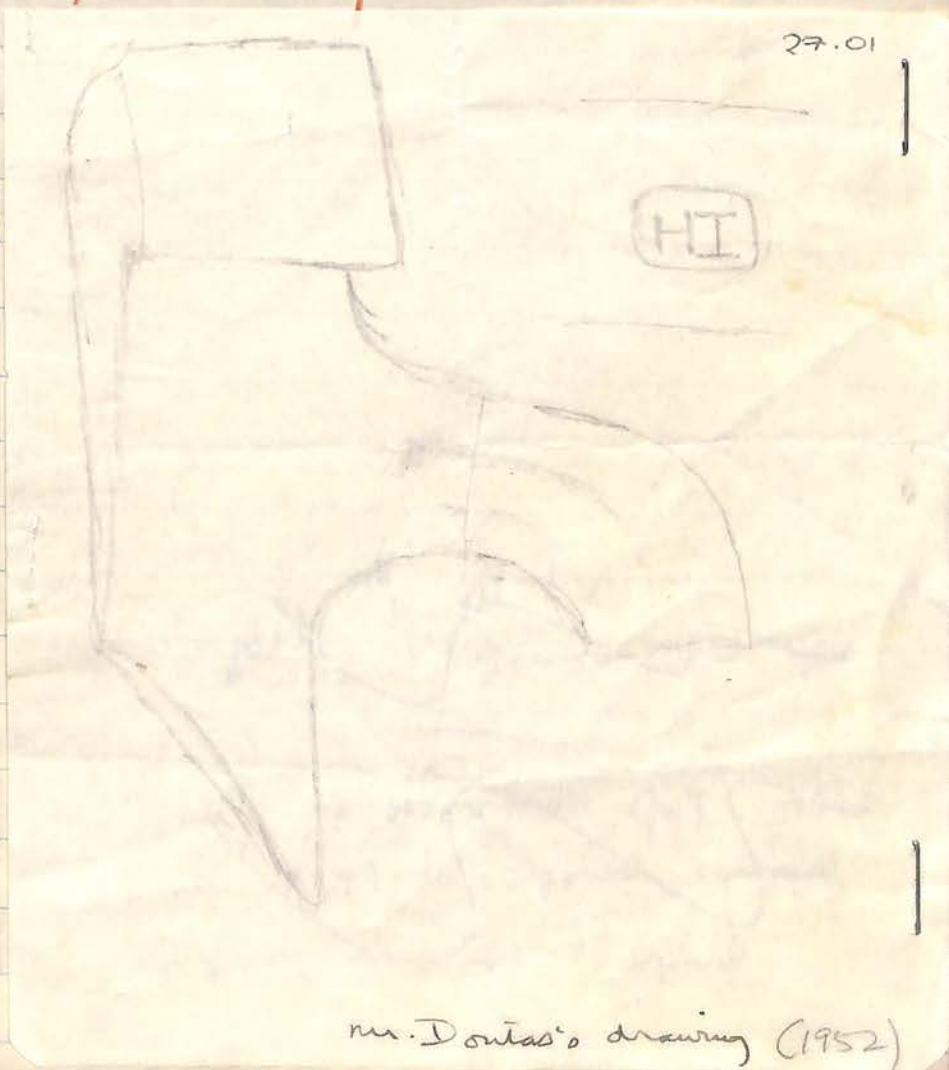
IH Group

See notes in WINE folder, for making JAS Evans article on Wine Production etc. also note in ALEX. MUS. general folder on some items filed for rubings, without any plate or copy. These are being filed as a group, among Small Groups.

Not that Dantas found in Rhodes a large frag. with min ^(X) pres., handle marked IH: see fold of RHODES MS2-S now (23.I.61) attached here

⊗ Looks in drawing like one of those various 4th cent Rh coins!?

This drawing came to me with bulletins on Early Rhodian medals. I do not know if it was found with them, but now P. rasias finds make this seem rather likely.



Mr. Dantas's drawing (1952)

IH Group

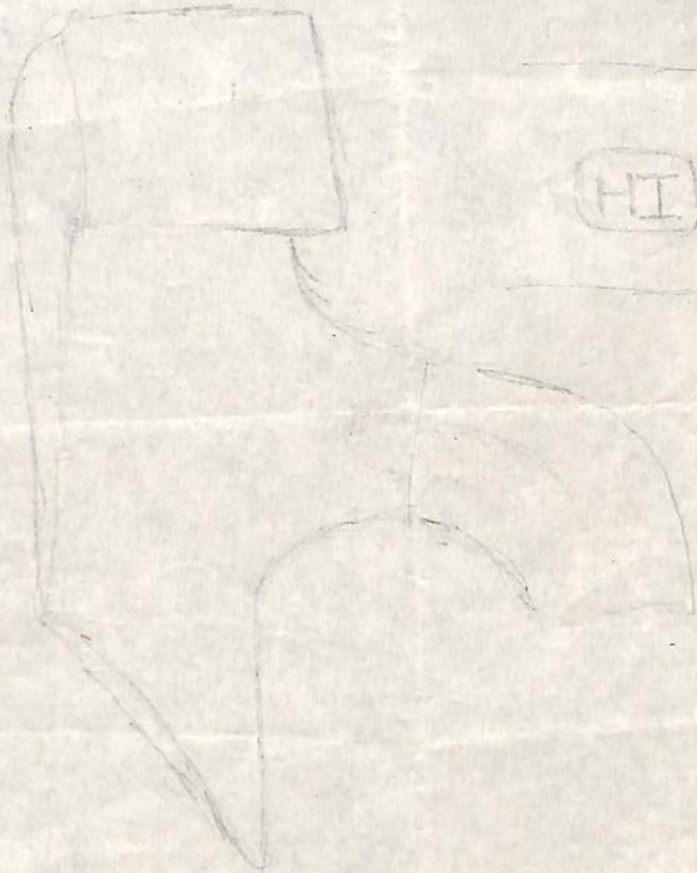
See notes in WINE folder, for noting JAS Evans article on Wine Production etc. also note in ALEX. MUS. general folder on some items filed for subgroups, without any plaid. or copy. These are being filed as a group, among Small Groups.

Note that Dantes found in Rhodes a large frag. with min ^(x) pres., handle marked IH: see folder of RHODES MS2-5 now (23.I.61) attached here

(x) Looks in drawing like one of the various 4th cent
Pl. coins !?

This drawing
can be seen with
bulletins on Early
Plastic necks.
I do not know if
it was found with
them, but now
P. rasini finds
under this seems
rather likely.

27.01



mr. Dantas's drawing (1952)

SOMMAIRE — INHOUD

ÉGYPTE PHARAONIQUE — FARAONISCH EGYPTE

Études — Artikelen

- William A. WARD, The 't hnk, « Kitchen », and the Kitchen Staff of
Middle Kingdom Private Estates 191
- M. L. BIERBRIER - H. DE MEULENAERE - J. QUAEGBEUR, Notes de pro-
sopographie thébaine. Deuxième série 201
- William K. SIMPSON, A Relief of a Divine Votaress in Boston 231

Chronique — Kroniek

- Nadine CHERPION, Autour de la tombe de Raour (6^e dynastie) 236

Livres — Recensies

- Walter F. REINEKE (Ed.), *First International Congress of Egyptology, Cairo, October 2-10, 1976, Acts* (H. De Meulenaere) 241
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titif, qui paraît un peu ambitieux pour le grec de notre stèle (1). Mais, dans le nouveau texte, une construction $\theta\eta\rho\acute{\alpha}\rho\tau\epsilon\varsigma \dots \kappa(\alpha\iota) \dot{\alpha}\rho\rho\epsilon\nu\acute{o}\mu\epsilon\tau\alpha\iota$, au moyen, susciterait une coordination incorrecte : $\kappa\alpha\iota$ y est exclu. Si $\dot{\alpha}\rho\rho\epsilon\nu\acute{o}\mu\epsilon\tau\alpha\iota$ est un passif (et la nouvelle stèle n'exige plus le moyen, qui seul pouvait sauver le $\kappa\alpha\iota$ dans la 1^e stèle), la coordination $\eta\sigma\alpha\rho \dot{\alpha}\nu \kappa(\alpha\iota) \dot{\alpha}\rho\rho\epsilon\nu\acute{o}\mu\epsilon\tau\alpha\iota$ me semble indéfendable (2) : le κ fait donc bien partie, comme le croyait le graveur, du chiffre $\dot{\alpha}\nu\kappa$. Les versions sémitiques peuvent-elles départager 4100 ou 4120 ? On ne nous dit rien à ce sujet, ce qui eût été utile même si elles ne nous aident pas sur ce point. En attendant, je crois que le texte grec fait foi et qu'il n'y a pas divorce fondamental entre le chiffre $\dot{\alpha}\nu\kappa$, 4120, des Bedja déportés, et l'estimation approximative de 22.000 pains, évaluation probablement largement gonflée de ce qui a été mis à la disposition des déportés.

La même prudence dont nous devons témoigner, jusqu'à preuve du contraire, avant d'incriminer la grécité d'un texte périphérique ou tardif (ici les deux « péchés » sont réunis), aurait utilement présidé à l'établissement des lignes 31-33. L'éditeur y lit $\epsilon\zeta \acute{\omicron}\lambda\epsilon\theta\theta\epsilon\acute{\omega}\varsigma \eta \alpha\upsilon\tau\acute{\omicron}\nu \theta \acute{\omicron}\epsilon\text{---}[\acute{\omicron}\zeta] \tau\omicron\upsilon \acute{\omicron}\theta\epsilon\alpha\rho\acute{\omicron}\nu \kappa\alpha\iota \tau\eta\varsigma \gamma\eta\varsigma \acute{\epsilon}\kappa\tau\iota\zeta\acute{\omicron}\nu$. J'avoue ne pas avoir pu débrouiller ce texte, même si l'auteur le traduit (p. 108) : « qu'à sa ruine le même le dieu du ciel et de la terre, radicalement », et le construit un peu contradictoirement (p. 113) en y voyant « une formule de malédiction, exprimée fortement par l'emploi de $\acute{\epsilon}\lambda\mu\iota$ avec un participe ». La planche III m'a d'ailleurs épargné de longs détours puisqu'on y lit $\acute{\epsilon}\zeta\acute{\omicron}\lambda\epsilon\theta\theta\epsilon\acute{\omega}\varsigma$, la deuxième lettre étant clairement ξ et non un sigma lunaire, tandis qu'en huitième position, les restes de la lettre s'expliquent mieux par ϵ que par \omicron . Ce serait d'ailleurs sur ce point hésiter mal à propos, car $\acute{\epsilon}\zeta\acute{\omicron}\lambda\epsilon\theta\theta\epsilon\acute{\omega}\varsigma$ convient parfaitement. L'apparition de ce verbe à Axoum est d'ailleurs intéressante. En effet, le profil d'utilisation d' $\acute{\epsilon}\zeta\acute{\omicron}\lambda\epsilon\theta\theta\epsilon\acute{\omega}\varsigma$ est très particulier (3). Avec ses dérivés et le simple $\acute{\omicron}\lambda\epsilon\theta\theta\epsilon\acute{\omega}\varsigma$ (et leurs paral-

èles en $\acute{\omicron}\lambda\epsilon\theta\theta\epsilon\acute{\omega}\varsigma$ par fausse étymologie), il apparaît avec quelque densité dans la *Septante*. Puis viennent des occurrences sporadiques, rarissimes avant le II^e siècle. Si on veut trouver le mot isolé d'un contexte religieux ou magique dans un texte documentaire, il faut, si je ne me trompe, descendre assez loin dans le temps avec un unique papyrus, une pétition au style ampoulé du VI^e siècle (4). Ceci révèle un manque évident de pénétration du mot dans la langue usuelle. Aussi l'emploi du verbe dans la malédiction des *Res Gestae* est-il peut-être un signe indicatif que la chancellerie d'Aïzanas employait des Grecs chrétiens venus d'Égypte ou de la Palestine.

[Add. : Dans *Bull. épigr.* 1982, 490, Jeanne et Louis Robert proposent aussi la lecture $\acute{\epsilon}\zeta\acute{\omicron}\lambda\epsilon\theta\theta\epsilon\acute{\omega}\varsigma$ (plusieurs rapprochements) et montrent l'intérêt, dans le même contexte, du mot $\acute{\epsilon}\kappa\tau\iota\zeta\acute{\omicron}\nu$, qui lui aussi figure dans la *Septante* et des textes imprécatoires].

18. — ÉGYPTE. Anses estampillées hellénistiques d'origine locale.

Quelques années après le travail de Georges Nachtergaele (2), deux contributions viennent de redire l'intérêt des découvertes d'anses d'amphores en Égypte, mais surtout font connaître des anses estampillées qui sont certainement de provenance égyptienne.

Virginia GRACE et Jean-Yves EMPEREUR (3) dressent un catalogue de 90 anses d'origine locale (4). Elles font connaître sept noms différents. Certains de ceux-ci sont attestés par plusieurs matrices, souvent même de formes différentes, comme c'est le cas pour celles de Donax (au génitif : $\Delta\acute{\omicron}\nu\alpha\zeta\omicron\varsigma$) ou d'Hérieus, tandis que celles de Petôs (au génitif : $\Pi\epsilon\tau\acute{\omicron}\varsigma$) sont toutes rectangulaires (mais l'une d'elles est rétrograde).

pp. 276 et 564. Cf. L. ROBERT, *Hellenica* XIII (1965), p. 266, n. 6 (citant l'amulette chrétienne PGM II P.2a), et p. 268, n. 5 (une épithaphe chrétienne, mais aussi une imprécation attique non-chrétienne attribuée au II^e s.).

(1) *P.Cair.Masp.* I 67002, III 18.

(2) *La Collection Marcel Humbert I* (Papyrologica Bruxellensia 15, 1978) pp. 9-69, Nos 1-26 (ph.). [Sur les anses trouvées en Égypte, p. 15, n. 2].

(3) *Un groupe d'amphores ptolémaïques estampillées*, Bulletin du Centenaire (Supplément au BIFAO 81), Le Caire 1981, pp. 109-126, pll. LVIII-LXII. — Cf. déjà J.-Y. EMPEREUR, *Timbres amphoriques de Crocodilopolis-Arsinoë*, BIFAO 77 (1977), pp. 197-233, pll. XXXIII-XL (= SEG XXVII 1033-1105 ; SB XIV 11746-11840).

(4) Les auteurs annoncent qu'ils ont reconnu depuis lors de nombreuses autres anses, timbrées ou non, de fabrication égyptienne. Elles proviennent pour une grande part du Fayoum. Nous renvoyons aux auteurs pour l'importante étude qu'ils consacrent aux anses et, en général, à l'activité des potiers au Fayoum.

(1) Le mot est mal connu. Dans *SPP* III 95 (VI^e s.), à la ligne 4, $\tau\omicron\nu \dot{\alpha}\rho\rho\epsilon\nu\acute{o}\mu\epsilon\tau\alpha\iota$ figure dans un contexte mutilé. Il est caractéristique de voir le WB lematiser le mot à l'actif comme le *LSJ*, tandis que le *WB. Suppl.* I en fait un déponent. Notons que Littmann a compris le participe de la première stèle comme un passif dépendant de $\acute{\omicron}\tau\iota\tau\epsilon\varsigma$ (grâce à un artifice de traduction), sans se rendre compte que seul un moyen et une autre construction peuvent sauver le $\kappa(\alpha\iota)$ qu'il crée de toute pièce. Or la nouvelle version exclut ces deux échappatoires, comme je le dis plus loin.

(2) La traduction d'Étienne Bernand correspond d'ailleurs à un texte sans $\kappa\alpha\iota$.

(3) Cf., par exemple, W. BAUER - W. F. ARNDT - F. W. GINGRICH, *Greek-English Lexicon of the New Testament and Other Early Christian Literature* (Chicago, 1979²).

Ce manque d'uniformité typologique se retrouve aussi dans la triple forme de la signature d'Hérius : $\epsilon\eta\iota\epsilon\varsigma$ (au nominatif) ou au génitif : $\epsilon\eta\iota\epsilon\omega\varsigma$ ou $\epsilon\eta\iota\epsilon\omega\tau\omicron\varsigma$ (1), qu'il faut reconnaître, à mon avis, dans le limbre circulaire 5d (fig. 12). La coexistence des deux formes du génitif des noms égyptiens en $-\epsilon\eta\iota\epsilon\varsigma$ est banale. Les auteurs situent Hérius au III^e siècle, tandis que les autres anses sont un peu plus récentes.

Lucia CRISCUOLO vient de publier trois anses d'origine égyptienne conservées à Milan (2). 165 ajoute une matrice de plus pour le potier Donax. L'auteur voudrait le situer encore au III^e siècle en raison de recoupements prosopographiques qui ne me semblent pas ébranler la datation proposée par V. Grace et J.-Y. Empereur.

J'hésiterais à placer avec l'auteur à l'époque romaine le 166, ($\epsilon\tau\omicron\upsilon\varsigma$) θ | $N\iota(-)$, car la forme du sigle comme le thêta appellent une datation à l'époque hellénistique. C'est à la même époque qu'il faudrait ramener le 167, de même type, où la date (avec son « epsilon priva del trattino mediano ») me semble devoir être lue : ($\epsilon\tau\omicron\upsilon\varsigma$) $\iota\varsigma$.

19. — ANTINOË (?). Portrait de momie. II^e s. après J.-C.

Une courte inscription peinte sur un portrait de jeune femme semble valoir mieux que l'oubli qui risque de suivre sa publication un peu confidentielle par Klaus Parlasca dans les *Ritratti di Mummie* (Repertorio d'arte dell'Egitto greco-romano, Serie II, 1977), p. 35, n° 273 :

$\epsilon\upsilon\psi\upsilon\chi\iota$, $\epsilon\upsilon\delta\alpha\iota\mu\omicron\nu\iota$.

J'accentue oxyton, puisqu'il s'agit d'un vocatif par chute du sigma final du nominatif. Bien connu à l'époque impériale, ce type de vocatif est utilisé non seulement pour les noms propres masculins (où il s'est généralisé en grec moderne : $\Gamma\iota\acute{\alpha}\nu\eta$, $\Pi\acute{\epsilon}\tau\omicron\varsigma$), mais même au féminin. Cf. précisément Kl. Parlasca, *MDIK* 26 (1970), p. 179, n. 53, qui voit justement en $K\omicron\rho\omicron\upsilon\omicron$ le vocatif du nom propre féminin $K\omicron\rho\omicron\upsilon\omicron\varsigma$ sur une stèle de Téréouthis.

Jean BINGEN

(1) *Ed. pr.* : $\epsilon\eta\iota\epsilon\omega\tau\omicron\varsigma$ | $\iota\tau\omicron\varsigma$ (deux noms?).

(2) *Bolli d'anfora greci et romani. La Collezione dell'Università Cattolica di Milano. Studi di Storia Antica* 6 (Bologna 1982). — Les anses qui nous concernent sont les Nos 165-167, pp. 122-123 et 161 (ph.).

Papyrus littéraires et Documents

Zaki ALY - Ludwig KOENEN, *Three Rolls of the Early Septuagint : Genesis and Deuteronomy*. Bonn, Habelt, 1980. 1 vol. in-4°, XIII-143 pp., dont 57 pll. (PAPYROLOGISCHE TEXTE UND ABHANDLUNGEN, Band 27). — Prix : 78 DM.

C'est avec la collaboration des *Archives photographiques des papyrus grecs et latins* qu'une nouvelle édition photographique intégrale des fragments de la *Septante* de la Société égyptienne de Papyrologie a été réalisée par le Prof. Zaki Aly et a été commentée par Ludwig Koenen. Ce dernier, dans sa préface et son introduction, a également exposé les problèmes posés par la photographie dans des conditions techniques difficiles de rouleaux de papyrus émiettés en d'innombrables fragments. Signalés depuis 1945, ils avaient été l'objet d'une première édition par Françoise Dunand (1966 ; cf. *Chron. Ég.* 44, 1969, pp. 148-150). D'emblée était apparue l'importance de ces témoins directs de la tradition ancienne de la *Septante*. Attribuables par l'écriture au I^{er} siècle avant notre ère, ils contenaient des variantes intéressantes, et l'un d'eux, au moins, présentait la particularité d'utiliser le tétragramme en alphabet hébreu carré pour rendre le nom divin, nom qui a été transcrit ailleurs par $\chi\acute{\epsilon}\rho\iota\omicron\varsigma$.

Aux 116 fragments publiés par Françoise Dunand se sont ajoutés 119 fragments nouveaux qui se subdivisent en trois catégories :

a) 6 fragments qui s'ajoutent aux trois fragments de la *Genèse* connus de la première éditrice ;

b) 64 fragments qui s'ajoutent aux restes plus substantiels du rouleau du *Deutéronome*. Sans modifier les données générales du problème, les nouveaux fragments nous fournissent une image plus riche et plus nuancée des variantes, partant de la place du texte dans la tradition de la *Septante*. Il faut y voir non point un état intermédiaire entre la traduction originale et la tradition manuscrite de la *Septante* qui nous est connue, mais un texte qui présente une tendance à harmoniser la version des *Septante* avec le texte hébreu, un texte donc dont beaucoup de variantes ne nous rapprochent pas de la version originale ;

c) L'apport majeur de cette réédition se trouve dans une découverte inattendue : les restes d'un deuxième exemplaire du *Deutéronome* (immatriculé Rahlfs, n° 847, tandis que le premier rouleau a reçu le n° 848, le n° 942 restant affecté au rouleau de la *Genèse*). Ces 49 fragments souvent très réduits (pll. 50-55) appartiennent à *Deut.* 10,22-11,16 et 31,26-33,27. L'écriture, aux traits généralement un peu plus récents, se situe dans la 2^e m. du I^{er} siècle avant notre ère ou un peu plus tard. Cependant

October 26, 1970

Dear Miss Grace:

I imagine that Mr. Anderson, in his inclosed letter, has mentioned to you that I am a student at the University of California majoring in Greek History and Archaeology. I am particularly interested in the economic history of fifth century Athens. I have recently become interested in the trade relations of the Athenian Empire with the Near East, particularly the Palestinian area. During my recent visit to Israel, I had occasion to speak with a Mr. Stern concerning the Greek material found in Israel belonging to the Persian period. Several red figure vases and sherds have been found; also Athenian coins and imitations have been found. I now would like to acquire some information concerning course ware. Has any Attic course ware been found in the Palestinian area? Is it possible to distinguish Attic products from local ones, and if so, how? I would appreciate any information which you can give me on this topic. I may be reached care of the Classics Department at the University of California at Berkeley. Thank you very much.

Sincerely
Phillip V. Stanley

26 01
UNIVERSITY OF CALIFORNIA
DEPARTMENT OF CLASSICS
DWINELLE HALL
BERKELEY, CALIFORNIA 94720

JKA



Miss Virginia Grace

PAR AVION

VIA AIR MAIL

CORREO AEREO

c/o the American School of Classical

Studies
8805 Sayre St 54

ATTN: GREEK

GREEK



31 ΟΚΤΩΒΡ
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DEPARTMENT OF CLASSICS

DWINELLE HALL
BERKELEY, CALIFORNIA 94720

Dear Virginia

We have a very interesting man here at present, a Mr. Stanley, who is working (with a view to an eventual doctoral dissertation) on contacts between Athens and Persia in the fifth century (other than the usual material ones). He has been travelling in Israel and noticed a good deal of unpublished ^{Athenian} fine pottery — not enough to be of use statistically to show the fluctuations of trade, but enough to make one take notice. He hasn't been able to get any information on coinage waves, and I said that you would know anything that is knowable. So please may I commend him to you? I think he is going to be an unusually good historian, and he also seems rather nice, from what little I have seen of him so far.

A good term here so far, partly the pleasure of teaching a small class of good graduate students, or rather of sitting back and letting them talk about something that interests them and me. And any term seems to be good nowadays that doesn't begin with tear gas and

helicopters. Es. and I object to government by play-actors,
and are seriously considering wrenching up our roots, though we
have put down deep ones, and the children, not being transplants,
still deeper. I have even gone so far as to make Es
type out a sextuplicate application for me, but I don't
know if anything will come of it.

Yours ever

Jack.

EGYPTIAN ; PTOLEMAIC? - ZENON GROUP AND N^o

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