

VRG_Folder_0202

Running translation by Helen Besi taken
by VG directly on the typewriter, with
such modifications of the English as
could be done quickly.

V. Canarache, "Conclusions" (pp. 351, ff.)

Merry Christmas
to Mr. Benadici
from V.G.

3.XII.57

[1-01]

13.VI.2000
found by ME II
among other folders
of Benadici

How you
would
this
before?

The stamped amphoras which are the object of this study have evolved from the earlier non-stamped amphoras which investigators usually consider as being only cult objects. It is true that such amphoras are found in graves and temples. But this is connected with the period in which men were not separating religious ritual from practical life. The riding-horse, ornaments, vessels which would be used during life, animals, food, tools, arms, idols (figurines?) and later ^{the} coins - all had also ritual significance. The amphora with wine was surely used for ritual purposes more than the other objects. All the same, we must not conclude that people wd have used it only for this purpose.

Anyhow, the amphoras which we find - Ionian, Samian, or from Chios - are so numerous that as many as offerings as wd have been made to the temples, and as many Greeks as could be buried with amphoras at the head of the grave, the number cannot be justified. Let us take also into consideration the fact ^{the} remains of hundreds and thousands of amphoras are found by chance or through organized excavations, in ancient habitations of the 6th to the 5th centuries, in ancient strata of material culture, far away from temples and cemeteries.

Let us think also of the dimensions of the vessels. They had a usual capacity of ca. 20 liters (corresponding to the measure of half a metretres). We do not see as possible and as necessary an amphora of this capacity for cult purposes. Not even the marking of the amphoras with non-religious signs can be explained by the hypothesis of the amphora used exclusively as an object of cult. Finally, the shapes of the vessel prove that it had a practical ^{everyday} use, just as we have shown in the introduction.

If in a future which we hope is very near we shall start off to gather with patience all the fragments which we find in the excavations, and if we make scientific registration of each sherd, our point of view will be surely confirmed. For the

what is depots
moment, from ~~how much~~ we know that ~~maximum~~ found in the archaeol. deposits in
Istria and Bucharest, from the published material, discovered in study, and from
discarded
what we know that exists in the heaps of pottery from excavations - we can conclude
the
that a large no. of amphoras as well as the places in which we find them, prove a
general everyday use at quite an early period.

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The same archaeol. remains that we find at Istria, and which ~~proves~~ show the
end of the 7th cent. and later the 6th and 5th cent.s BC, we can find also in Kuyban,
Crimea, ~~and~~ or at Olbia. The same fragments appear also at Tariverdi in the
territory of Istria, at 20 kilom. away from the shore. The remains of amphoras
coastal
show this way markets of consumption not only in the cities, but also in the regions
far enough into the interior.

All these give us the right to say that during the 6th and the 5th cent. BC,
the bounds of exchange between the ancient Greeks and the tribes of the west shore
as well as those from the northern one were not just incidental. [ref. to a Russian
pub. of 1947.] At least 200 years before the stamped amphoras, there was in these
regions an organized commerce. The Greeks established from the 7th to the 6th cent.
BC in the Black Sea needed wine and oil; the local population got also used to using
these products, but the centers of production were in the Ionic world. In other
words, there from where the colonists were coming. These knew the way, they had
money and boats, they had understanding and commercial interest. With them, also
their merchandize penetrated, either on the west coast or on the northern coast, and
with the merchandize, the amphoras. Those who brought the products took at the
same time the local products and transported them to southern regions.

If we put together several types of amphoras from this period found in USSR
and in our country, we shall immediately see that they are on the whole similar,
just as the Ionian, Corinthian and Attic ones are, that are found at Olbia, Panti-
capaeum, Chersonesos, etc. or at Istria and Tariverdi (Fig.53.).

The similarity between the amphoras found in USSR and those found in our
country give immediately the conviction that from the Cimmerian Bosphoros up to

Dobroja, the beginning of commerce in the 7th and 6th cent. BC had the same character; the same centers of production were spreading here the same products, offering them to some consumers that must have had similar conditions of life.

If we examine the unstamped amphoras that are found complete or fragmentary in the depots of the Istria excavations or at the museum of Antiquities in Bucharest, we see that they have the shape of an egg in other words they are less elongated and pointed than the types that start to appear in the 4th cent. The handles are short. The neck is less long. It is in most cases marked with red lines or lines of other colors, sometimes with a single large painted letter. Another category from the same period presents on the belly ~~xxxx~~ either one, two or four horizontal and parallel stripes usually painted in red. The usual ~~types~~ height of vessels varies between 0.68 and 0.72. ~~xxxx~~ These amphoras, typically Ionic, date from the 6th cent. BC.

According to
after the free observation that we have made on the Istria excavation, their number is much greater than that of the published ones. This quantity shows significantly active economic position of Istria even in the 6th cent.

, from the lower strata,

If the material from the old excavations at Istria had been registered in time, we would today be in ~~exposition~~ possession of some dates which would allow us to know more exactly the commercial relations of Istria in this early period.

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What has not been sufficiently studied in our country has been studied in the USSR. In the ~~study~~ study of the excavations made in 1937 [Knipovich . . .] in the cemetery NW of Olbia, are published several archaic amphoras, similar on the whole to those from Tariverdi-Istria. The 14 graves in which were found these amphoras were in the deepest strata, over which there is a later necropolis, dated in the 4th cent. BC. The Soviet archaeologist T. N. Knipovich who did the excavation, attached this material to the beginning of Greek life in Olbia.

Analyzing the burial ritual and the whole material from the 14 graves, Kn. has noticed in the same graveyard and at the same time (the middle of the 6th c. BC) two ethnic groups (Greeks and natives) which shows community of life between the colonists and the natives, even from the historic beginnings of Olbia.

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This is not the only type of amphora anterior to stamping. In 1950 were
NE side
found at Istria under the floor of the Greek temple three rows each of three
whole amphoras, placed (probably for ritual motives) with the mouth down. The
building being well dated in the 5th cent. BC, the amphoras, after ^{thorough} consideration,
have been dated also in the same period. But they have not yet been attributed to
any center of production.

This type is a little similar in profile to archaic Ionic amphoras. The vessels
are lacking the elegant elongation of the lower part. They have short handles and
- what is more noticeable - they present a bulge at the top part of the short neck.
On the neck or belly there are traces made with red paint. The ht varies between
0.65 and 0.75.

Similar amphoras - fragmentary - have been found ~~xxxxxx~~ at another time at Istria
sondages
in many trials/ trenches and excavations, made at points ~~xxxxxx~~ where archaic and
Attic strata have been reached. These fragments are being studied and their presence
among
in such big numbers is interesting. We have followed in the depots and between the
sherds from the heaps of refuse, finding 46 fragments and ~~xx~~ bulged necks whole or
broken.

Not being able to make sure to what center of production these amphoras belong,
our investigators have indicated them only as "Ionic amphoras" [Rum. periodical].
But amphoras of the same type have been found longer ago also in the center of the
south USSR. The archaeologist Max Ebert occupied himself with them in a very detailed
way even in the year 1913, in the report made on the excavations of 1910 [Prae.Zeitung,
etc.]. In 4 of the excavated tumuli he found 12 amphoras of the same type, with
bulging neck.

The other material found there ~~xxxxxx~~ consists of 377 arrowheads of Scythian
type, a quiver, a kylix, a wine jug, two bz knives decorated with gryphons, 2 Scythian
daggers, of the akynakes type, and much Greek archaic pottery, black-figured. The
skeletons, the walls, and the floors of the graves, were painted with white kaolin.
These kurgans from the group of Maritsin have been dated on the basis of the material

- for the end of the 6th cent. BC - the middle of the 5th cent. BC.

Similar discoveries have also been made in the valley of the Kuban, around V.D.I. 1951, pp.110-128 the lake Kazari and Pashkofsky/ [Refer. to Russian pub. ~~1950-51~~ 1951] ; the excavations of 1940-41 brought to light a great number of amphoras with bulge in the neck, dating according to the Corinthian and Ionic vases as well as according to the early redfigured fragments found with them, to the 5th cent. BC. The report of V.F.Gaidukevich on the excavations of Tiritake also reveals 2 similar amphoras which he dates to the 6th -5th cent. BC, and which he attributes to Chios. [V.F. Gaid., op. cit., M. I. A. 1952]. If the amphoras from the south USSR are from Chios, those from Istria must also be from there. It means that after the archaic amphoras of the first series ^{then} have penetrated ^{also into} as well in Istria as in Crimea or on the Kuban, the products of Chios which in that period was ^{renowned} a center of production (Fig.54).

There is another, third, category of early amphoras of reduced dimensions and of completely particular shape, which come from Samos, and the traces of which have already been seen in Istria, as well as in the Greek cities of the northern coast [M. Lambrino, "La Ceramique d'Istria," in Dacia vol.III-IV, 1927-32, p.366]. We ~~would have~~ would have in this case to add a third center of production which exported goods to Istria in the 6th and 5th cent. BC. Finally at the end of the 5th cent BC in the first half of the 4th cent BC start to appear with insistence at Istria as well as in the other Pontic cities, amphoras with much more elegant profile ~~profiles~~, with long handles and with lower part suddenly narrowed under the belly, or another type with the whole profile elongated and finished with more pointed bottom, more elongated. They are the amphoras that come immediately before the stamped ones. They carry only very rarely signs with red paint on the necks and have no decorative element on the body. Sometimes at the place where the lower end of the handle is united to the belly of the amphora, the potter has made 1, 2 or 3 oval impressions from his fingers.

In the museum of the Istria excavations are found several amphoras of this

class. They present 3 different types. Their exact ~~point~~ provenance is unknown. It seems that they were taken from chance excavations made in a funerary tumulus of the Istrian necropolis. Neither have these amphoras been studied. They do not seem to be from the ancient centers of Miletos, Rhodes or Samos, from which they have none of the distinguishing features. According to shape and clay, they don't seem, either, to be from the Asiatic cities nor from the eastern coast of the Black Sea. Probably they come from some island center that is not yet known, but this opinion is not supported by sure arguments. In any case they make up the 4th group of commercial amphoras anterior to stamping. Such amphoras have been found also in the grave of a woman of the Kurgan no.10 from Maritsin, together with late Attic pottery. On the basis of which, M. Ebert dates them in the beginning of the 4th cent. BC (fig.55).

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The presence of the amphoras anterior to stamping in our territory has a special significance for the knowledge of the earlier relations and of the exchange of goods between the south and the young colonies of the west coast of the Black Sea. The study of the imported amphoras of this archaic period wd give us the possibility to get to know many new things also in relation with penetration of the goods in the interior territory of the western Black Sea area, in the middle of the local native populations.

Such a study would have to go beyond the stage of archaeological recording of general character, in the contents of which the material is treated as a simple pottery remains of the archaic period. From occasional observations and from mechanical analogies on the basis of old publications which have not even succeeded in conceiving the existence of the amphora of practical use, outside the religious circle, one must pass to the concentration of investigation with a well-defined scope.

A great amount of material is at the disposal of the investigators, especially at Istria where nobody has yet occupied himself with gathering the material together, of the study of shapes, of the clay, and of the marks. One wd have to identify and to

classify in the first place all the bases, handles, mouths and necks of the archaic amphoras. One would have to collect and to register all the marks with paint on the neck and on the bellies and all the incised marks that are found on the remains of the archaic amphoras from the depots and the heaps of refuse. Then one wd pass to typological the organization of the material, to the placing in time and place of production, to the knowledge of the frequency and the spread of these.

With such an activity supported by the dates of the archaeological context, and with a long investigation of the discoveries made in other parts - especially in the archaeological regions of the south of USSR where the analogy is very abundant - one cd soon reach stabilization of some concrete dates on the conditions in which have developed the relations of exchange in a period so little known in our country.

The study wd have to extend over the whole period anterior to stamping, in other words over the 6th and 5th centuries.

We have touched here this problem only in passing and only in the measure in which we were obliged to have a point of relation of our studies on the commercial st. amphoras of the 4th to the 1st centuries BC, to the shapes and the conditions anterior to this period.

[star]

Let us see now what conclusions can be made from the examination of the 1162 st. handles found at Istria, the subject of our work.

Import of wine and oil to Istria in stamped amph. is certainly documented for the following centers of production: 1)Thasos, 2)Sinope, 3)Herakleia, 4) Chersonesos. 5)Faros, 6)Rhodos, 7)Cos, 8)Knidos (fig.56 - map).

To these we must add also the products from other centers which have not yet been identified, and whose stamps have been collected in Group IX under the title "Various" (Miscellaneous).

Roof-tiles were imported from Sinope, and a very few from Pontic Herakleia. Tiles from Chers. have not been found here.

The proportions in which Istria imported wine, oil, and tiles from the Aegean island centers, from the east coast of the Bl. Sea as well as from the Cimmerian Bosphoros can be followed on the table below, which has been made on the basis of the stamped handles ^{with certainty} surely placed by us. For Rhodes we have reduced the number to half, since the amph. from this center were stamped on both handles.

[table]

*What about
Cnidus??*

The stamps completely restored which we have studied on the basis of analogies with published items known to us, have given the following results:

(hitherto) unknown	38
variants	253
exact (duplicates of known types)	219
probably (ditto?)	25
<hr/>	
the compared items in total	541
duplicates	105
<u>misc.</u>	
various not attributed	82
unrestored	239
classified only ^{typologically} according	195
<hr/>	
	1162 ex.

The general chronology of the material (on the chronological order of each center separately I have spoken in the section on that center) has given us the following indications :

[table]

The symbols for the more important groupings from this point of view (Sinope and Thasos) were put together under an alphabetical index, but have not been looked

EPONYMS.

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 8 ΑΓΕΣΤΡΑΤΟΣ C C C
 9 ΑΓΗΜΩΝ
 14 ΑΓΗΣΙΛΑΣ
 15 ΑΓΗΣΙΛΟΧΟΣ C
 16 ΑΓΗΣΙΠΠΟΣ
 17 ΑΓΗΣΙΣ
 18 ΑΓΛΟΥΚΡΙΤΟΣ
 19 ΑΓΛΟΥΜΒΡΟΤΟΣ C C C C
 20 ΑΓΛΩΧΑΡΤΟΣ C C C C C
 21 ΑΓΛΩΚΡΙΤΟΣ C
 22 PH ΑΓΟΡΑΝΑΞ C C C C C
 23 ΑΓΡΙΟΣ C
 23 B ΑΘΑΝΟΓΟΡΑΣ C
 24 PH^I ΑΘΑΝΑΔΟΤΟΣ C C C C C
 25 ΑΘΑΝΑΔΩΡΟΣ
 26 ΑΘΑΝΟΦΙΛΟΣ
 29 PH^I ΑΙΝΗΣΙΔΑΜΟΣ C C C C
 30 PH^I ΑΙΝΗΤΩΡ C C C
 32 PH^I ΑΙΣΧΙΝΑΣ C C C C C C
 33 PH ΑΙΣΧΥΛΙΝΟΣ C
 36 ΑΚΕΣΤΙΑΣ C
 40 PH ΑΛΕΞΙΑΔΑΣ C C C C C C C C
 41 PH^I ΑΛΕΞΙΜΑΧΟΣ C C C C C C C C
 50 ΑΝΑΞΑΓΟΡΑΣ
 51 PH^I ΑΝΑΞΑΝΔΡΟΣ C C C C C C C C
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 56. PH^I ΑΝΔΡΙΑΣ C C C C C C C C
 58. PH^I ΑΝΔΡΟΝΙΚΟΣ C C C C C C C C C C
 62 ΑΝΤΙΛΕΩΝ C C
 63 ΑΝΤΙΛΟΧΟΣ C C C C C C C
 64 ΑΝΤΙΜΑΧΟΣ C
 66 PH^I ΑΝΤΙΠΑΤΡΟΣ C C C C C C C C
 69 ΑΠΑΤΟΥΡΙΟΣ
 69 B ΑΠΟΛΛΟΔΟΤΟΣ
 73 ΑΠΟΛΛΩΝΙΟΣ C
 74 PH ΑΡΑΤΟΦΑΝΗΣ C C C C C C C C
 76 ΑΡΕΤΑΚΛΗΣ C
 76 B ΑΡΗΣ
 77 ΑΡΙΣΤΑΚΟΣ C C C C C C C C
 78 PH^I ΑΡΙΣΤΑΝΑΞ C C C C C C C C
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 80 PH ΑΡΙΣΤΕΙΔΑΣ C C C C C C C C C C
 81 ΑΡΙΣΤΕΥΣ C C C C
 83 ΑΡΙΣΤΙΩΝ
 84 PH ΑΡΙΣΤΟΒΟΥΛΟΣ C C
 85 PH^I ΑΡΙΣΤΟΓΕΙΤΟΣ C C C C C C C C
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 87 ΑΡΙΣΤΟΔΑΜΟΣ C C C C
 89 ΑΡΙΣΤΟΚΡΑΤΗΣ C
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92. PH¹ ΑΡΙΣΤΟΜ ΒΡΟΤΙΔΑΣ CCCCCC 140 ΔΑΜΟΚΛΗΣ CCCCCC
 94 ΑΡΙΣΤΟΜΕΝΗΣ CC 141 PH ΔΑΜΟΚΡΑΤΗΣ CCCCCC
 96 ΑΡΙΣΤΟΝΟΜΟΣ CCCCCCCCCC 143 ΔΑΜΟΣΘΕΝΗΣ
 97 ΑΡΙΣΤΩΝΥΜΟΣ C 145 ΔΑΜΩΝ CCCCCCCC
 101⁹⁹ ΑΡΙΣΤΟΦΑΝΗΣ CCCC 155 ~~ΔΑΜΩΝ~~ ΔΙΟΝΥΣΙΟΣ CC
 102 PH¹ ΑΡΙΣΤΡΑΤΟΣ CCCCCCCCCC 162 ΔΟΡΚΥΝΙΑΔΑΣ CC
 103 PH¹ ΑΡΙΣΤΩΝ CC CCCCCC 164 ΔΡΑΚΩΝ CCCC
 104 PH ΑΡΙΣΤΩΝΙΔΑΣ CC 169 C ΕΚΑΤΩΝ
 105 PH ΑΡΜΟΣΙΑΔΑΣ CC 172 ΕΞΑΚΕΣΤΟΣ
 109 Β ΑΡΧΕΣΤΡΑΤΟΣ 175 ΕΠΙΧΑΡΜΟΣ C
 110 PH ΑΡΧΕΜΒΡΟΤΟΣ CCCCCCCCCC 183 ΕΣΤΙΕΙΟΣ CCCCCC
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 112 ΑΡΧΙΔΑΜΟΣ CC 188 PH¹ ΕΥΔΑΜΟΣ CCCCCC
 114 PH¹ ΑΡΧΙΛΑΙΔΑΣ CCCCCC 189 ΕΥΔΩΡΟΣ ?
 115 ΑΡΧΙΝΟΣ CC 191 ΕΥΚΛΕΙΔΑΣ ΤΟΥ ΧΑΡΜΕΥΣ
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 124 ΑΦΡΟΔΙΣΙΟΣ C 196 ΕΥΠΟΛΕΜΟΣ CCCC
 125 ΒΑΚΧΙΟΣ
 127 Β ΒΟΥΛΑΓΟΡΑΣ C 202 ΕΥΦΡΑΝΟΡΙΔΑΣ C
 134 PH¹ ΓΟΡΓΩΝ CCCC 203 ΕΥΦΡΑΝΩΡ CC
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 139 ΔΑΜΟΘΕΜΙΟΣ CC 217 ΗΡΑΚΛΕΙΤΟΣ
 222 ΘΑΡΣΑΝΔΡΟΣ

223	ΘΑΡΣΙΠΟΛΙΣ	278	ΚΛΕΟΝΕΜΟΣ
224	PH ¹ ΘΕΑΙΔΗΤΟΣ C C C C C C	279	ΚΛΕΥΔΙΚΟΣ C C C
227	PH ¹ ΘΕΡΣΑΝΔΡΟΣ C C C C C C C	280	PH ΚΛΕΥΚΡΑΤΗΣ C C
229	PH ΘΕΣΤΩΡ C C C C C	281	ΚΛΕΥΤΙΜΟΣ C
230	ΘΕΥΓΕΝΗΣ C	283	PH ¹ ΚΛΕΩΝΥΜΟΣ C C C C C C C
231	ΘΕΥΓΕΝΟΣ C C	284	PH ¹ ΚΛΗΝΟΣΤΡΑΤΟΣ C C C C C C C C
233	PH ΘΕΥΔΩΡΟΣ C C C C	285	ΚΛΙΤΟΜΑΧΟΣ
233 B.	ΘΕΥΛΥΤΟΣ	288	ΚΡΑΤΙΔΑΣ C C
235	ΘΕΥΦΑΝΗΣ C C C C	293	PH ΛΑΦΕΙΔΗΣ C C C C C C C C
238	ΘΗΔΗΤΟΣ	294	PH ¹ ΛΕΟΝΤΙΔΑΣ C C C C C C C C C C
241	ΘΡΑΣΥΔΑΜΟΣ C	299	ΛΥΚΩΝ C
242	ΘΡΑΣΥΜΑΧΟΣ C	300	ΛΥΣΑΝΔΡΟΣ
245	PH ΙΑΣΙΚΡΑΤΗΣ C C C C C	303	ΛΥΣΙΣΤΡΑΤΟΣ C
246	PH ¹ ΙΑΣΩΝ C C C C C C	308 B	ΜΕΤΑΚΛΗΣ
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250	PH ¹ ΙΕΡΩΝ C C C C C C C C C C	314	ΜΕΝΕΛΑΟΣ
252	ΙΠΠΟΚΛΗΣ	320	ΜΕΝΤΑΙΟΣ C
255	PH ΙΣΤΕΙΟΣ C	322 B	ΜΝΑΣ C
259	ΚΑΛΛΙΑΝΑΣ C C C	340	ΜΥΤΙΩΝ C C C
260	PH ΚΑΛΛΙΚΡΑΤΗΣ C C C C C C C C	343	ΝΑΥΣΙΚΟΣ C C C
261	PH ¹ ΚΑΛΛΙΚΡΑΤΙΔΑΣ C C	344	PH ¹ ΝΑΥΣΙΠΠΟΣ C C C C C C
262	PH ΚΑΛΛΙΞΕΙΝΟΣ C C C C C C	350	PH ¹ ΝΙΚΑΣΑΓΟΡΑΣ C C C C C C C C
263	B. ΚΑΛΛΙΦΑΝΗΣ C	355	PH ΝΙΚΟΜΑΧΟΣ C C C C
273	PH ¹ ΚΛΕΑΡΧΟΣ C C C C	357	ΝΙΚΩΝ C
276	PH ΚΛΕΙΤΟΜΑΧΟΣ C C C	361	PH ΞΕΝΑΡΕΤΟΣ C
277	ΚΛΕΝΟΣΤΡΑΤΟΣ C C		

- 363 ΞΕΝΟΣΤΡΑΤΟΣ C 422. ΣΙΜΥΛΙΝΟΣ
- 365 ΞΕΝΟΦΑΝΗΣ CCCC 434 PH¹ ΣΥΜΜΑΧΟΣ CCCCCC
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- C 367 PH¹ ΞΕΝΟΦΑΝΤΟΣ CCCCCC 438 ΣΩΚΡΑΤΗΣ C C C
- 368 PH¹ ΞΕΝΟΦΩΝ CCCC 440 PH¹ ΣΩΣΙΚΛΗΣ CCCCCC
- 371 ΟΝΑΣΑΝΔΡΟΣ C 444 ΣΩΣΙΦΙΛΟΣ
- 384 PH ΠΑΣΙΦΩΝ C C C 446 ΣΩΣΤΡΑΤΟΣ C C C C
- 386 PH¹ ΠΑΥΣΑΝΙΑΣ CCCCCC 452 ΣΩΧΑΡΗΣ
ΤΕΙΜΑΓΕΝΗΣ
- 387 ΠΕΙΘΙΑΔΑΣ 453 ΤΕΙΜΑΓΟΡΑΣ C C C C
- 388 PH ΠΕΙΣΙΣΤΡΑΤΟΣ CCCCCC 454 ΤΕΙΜΑΣΑΤΟΡΑΣ
- 389 B ΠΙΘΙΑΔΑΣ C 455 PH¹ ΤΕΙΣΑΤΟΡΑΣ CCCCCC
- 393 ΠΟΛΙΤΗΣ 456 PH¹ ΤΕΙΣΑΜΕΝΟΣ CCCCCC
- C 394 PH¹ ΠΟΛΥΑΡΑΤΟΣ CCCCCC 457 ΤΕΛΕΣΩΝ C
- 395 ΠΟΛΥΚΛΗΣ C 459 PH¹ ΤΙΜΑΓΟΡΑΣ CCCCC
- 396 PH ΠΟΛΥΚΡΑΤΗΣ C 464 ΤΙΜΑΡΧΟΣ
- 398 ΠΟΛΥΧΑΡΜΟΣ C C 465 PH ΤΙΜΑΣΑΤΟΡΑΣ CCCCCC
- 403 ΠΡΑΤΟΦΑΝΗΣ CCCCC 466 PH¹ ΤΙΜΟΔΙΚΟΣ CCCCCC
- 405 ΠΡΩΤΡΓΕΝΗΣ 468 PH¹ ΤΙΜΟΘΕΟΣ CCCCCC
- 408 PH¹ ΠΥΘΟΓΕΝΗΣ CCCCC 468 B ΤΙΜΟΚΡΑΤΗΣ C
- 409 PH¹ ΠΥΘΟΔΩΡΟΣ CCCCC 469 PH ΤΙΜΟΚΛΕΙΔΑΣ C
- 410 ΠΥΘΟΚΛΗΣ (Ω) 470 PH ΤΙΜΟΚΛΗΣ CCCCC
- 411 ΠΥΘΟΚΡΙΤΟΣ CCCCC 471 ΤΙΜΟΣΘΕΝΗΣ C
- 418 ΣΘΕΝΕΛΑΣ 472 ΤΙΜΟΣΤΡΑΤΟΣ
- 420 ΣΙΜΙΑΣ C C C 474 PH¹ ΤΙΜΟΥΡΡΟΔΟΣ CCCCC
- 476 ΤΙΜΩΝΑΣ C C C
- 477 ΤΙΣΑΤΟΡΑΣ C C C

478 ΤΙΣΑΜΕΝΟΣ C

479 ΡΗ ΦΑΙΝΙΛΑΣ CCCCCC

484 ΦΙΛΙΝΟΣ

487 ΡΗ ΦΙΛΟΔΑΜΟΣ CCCCC

488 ΦΙΛΟΚΡΑΤΗΣ

496 ΦΙΛΩΝΔΑΣ CC

497 ΦΙΛΩΝΙΔΑΣ

500 Β ΦΩΚΙΩΝ

503 ΧΑΡΜΟΚΛΗΣ

507 ΧΡΥΣΑΛΝ CC

509 ΧΡΥΣΑΛΡ CCCCCC

510 ΧΡΥΣΟΣΤΡΑΤΟΣ C

L. A. BENACHI

P. O. B. 268.

ALEXANDRIA.

EGYPT.

after in a special way with regard to analogy because the publications used by us do not have ~~any~~ reproductions for all and hence could not be considered satisfactory.

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About the technique used in shaping the amphs., about the raw clay, as well as about the process of fabrication (the kneading, the firing, and the surfacing, etc.) we have spoken in every separate group. We shall stop here only for one of the technological sides which has occupied many investigators and which has not yet been made clear: of what material was the die made, with which the stamp was applied, who made it, and how was it applied?

Lacking some literary evidence from antiquity, an investigation in this direction is certainly hard, but it shd not be given up: observing in detail certain particularities of the material, we can make some conclusions.

For example a stamp from Thasos, well preserved, from wh. a good phot. cd be obtained (the phot. enl. 4:1, Fig.57, no. 20 in the text).

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In the lateral field of the stamp, covering the dolphin and sometimes cutting the relief of the letters, one can see very clearly a series of parallel lines close together, impressed "without permission" at the application of the stamp. These lines represent without doubt the fibres of the wood of which the die was made.

The stamp on the tile of the astynome Iēokritos of Sinope (enlarged 2: 1, Fig. 58, no.446 in the text) presents the traces of the structure of a sectioned bone.

The same structure can be observed also on a stamp with letters of an unknown writing found at Istria certainly of local, Dobrudja, ~~prxw~~ manufacture (enl. 2: 1, Fig. 59, no.⁷⁸⁹~~761~~ in text).

In the whole quantity of st. frm Istria, we have found another interesting ex. which has given a satisfactory phot. repnod. (Fig. 60, enl. 2: 1, no.32⁹ in text).

[Fig.60 - Stamp on wh. have been at first drawn strt. lines for the marking of the rows.]

On this stamp of Sinope, one can clearly see how the engraver has first pulled straight lines to mark the rows. Observed with attention with a magnifying glass, the marking lines (esp. the 3rd line, at the bottom) allow to be seen here too the

wood fibres which go parallel with the rows on the whole width of the stamp. In other stamps also of Sinoean make (Fig.61, no.321 and 376 in text, enl. 2:1), the lines for the marking of the rows are missing and the writing is v. irregular, the ~~the~~ letters and the rows overlapping on each other.

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Not even at Chers. (Fig.61 c, enl. 2:1, no.492 in text), as can be seen in the st. of Nanon, was the die ruled, and the writing appears v. irreg., but here the size of the letters, their spacing, and a certain cursive character, still give to the writing special elegance. Here too one can see the granulated ^{texture} ~~xxxxxxxx~~ characteristic of sectioned bone.

In relation to the hypothesis of the making of dies from bone, we mention the fact that at Mangalia, at the occasion of the excavations of 1949 in front of the barracks of the frontier guard, between the shore and the highway, a die was found that was made of a bone slab plaque, 0.015 thick, obtained by cutting in section of a knucklebone of a cow (the design in natural size in Fig.62). On the die appears the name AIAC ^{left to right} ~~retrograde~~; in the impression the writing wd come out reversed and in relief.

From these ex. we must conclude that dies of wood and bone were made. Which does not mean that this was the general rule; in other centers of production the die could be of terracotta or - less probably - of metal. On the die with wh. the printing was done, the writing was incised from rt to left so that it wd appear (in relief) from left to rt. on the amph. Stamps with ^{reversed} ~~xxxxxxxx~~ legends are however numerous enough (no.596, 628, 54 727, 738, and 357 in text). The reversed writing is explained by the fact that the dies were originally wrongly incised, in other words w. writing l. to r., so that the text appears reversed, so as is seen in several cases (Fig.63).

The general opinion is that the dies were made by the potters themselves. But we must ^{remember} ~~think~~ that not ^{every} ~~any~~ potter could write in those days, and in any case not so correctly or beautifully. If we analyze some of the symbols, we notice that we have to do with the real works of sculptural art. It is more probably that control ad-

ministration (the astynomes, the prytanies, or the eponymous priests) had engravers, at as we know that they had them ~~near~~ the mints. In the centers of production where authorized employed masters/ engravers who very probably made the stamps under the control of the city administration; the latter ~~was~~ received and held them, the stamp being re-made by the administration. To this conclusion we are obliged to come also by the fact that the st. include the city emblems and name, or the title and the name of the magistrate.

That the master engravers ~~were~~ formed a real organized group is proved also by the fact that the stamps of the same magistrates or with the name of the same potters are made by different engravers. The character of the letters, the symbols, as well as the dialect forms, are different in "the same stamps;" the following stamps from the text can be compared: [list]

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[No. 609, 610, 611 Agoranaktos in which also the ends are in 3 different forms]
(end of list)

Maybe it is the case to review completely the old opinions on private production and to attribute to ~~state~~ state production all the amphoras that carry stamps with an emblem and an eponymous magistrate (Sinope, Thasos, Rhodes). If we consider that the name without title must be of one of the producers, it can be only of the chief of the workshop responsible for the technical execution of ~~the~~ shipping amphoras, or of the producer of the merchandize. The amphoras that don't carry the name of the eponymous magistrate, emblem, or ethnic, but only plain names are the only ones that can be attributed to private centers of production (Cos and most of the stamps from the "Miscel." group).

In this order of idea one must bring up the fact that ~~as well~~ at Istria as at other centers of consumption there are found a v. great number of commercial apph.s of different types, without st. and without any mark. They are certainly of foreign origin and were imported with wine and oil from unknown centers, surely centers with commerce not organized by the state. According to all typological and technological characteristics, as well as according to the archaeological context in wh. they are found, they belong to the 4th-1st cent.s BC. They were imported therefore at the

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same time as the stamped amph.s which we think belonged to a state production. From this we must conclude that Istria and its territories as well as the regions in the south USSR where the situation is the same were receiving in the Hellenistic period goods from the city states with wh. they had surely economic agreements as well as from private producers.

From where ^{came} the goods in the unstamped amph.? At the stage of our knowledge to-
beside
day, this cannot be answered. We know merely that ~~except for~~ the production centers identified in this study another 20 towns and islands produced large quantities of wine and oil for export. In the period in which the commercial amph. were st., there were found among these centers of production the cities: Lesbos, Byblos, Chios, [✓] Samos, etc., the stamps of which are not yet known.

We can also ask ourselves in what quantities and under what form the goods without stamp certificate succeeded in entering ^{into export} ^{commercial} the competition with export organized on a state basis.

The rooftiles which we have registered in Series 3 of ~~the~~ Group II are, as we have shown, of Sinopean origin. Until ~~now~~ recently other centers of production that exported stamped tiles have not been known. Today things are different. The stamp with the name ETYMOZ found at Istria and published by us as no.453 proves that also Herakleia exported tiles to the west coast of the Bl. Sea.

The Soviet scientists [Akhmerov, in V.D.I.] have proved that also Chersonesos along with developed production of stamped amphoras had a production of rooftiles on which were ~~stamped~~ applied stamps with the names of local astynomes. In the depots of the museum at Kerch there are 36 tiles with stamps with exactly the same shape, the same dimensions, and the same names of astynomes, as on the 2000 amphoras with the stamps of the astynomes of Chersonesos. But Chersonesos had not always produced ^{1st middle} tiles. At least till the ~~half~~ of the 4th cent., we know for sure that they were not making them. For in the material from the arch. excavations in Chers. dated in this period were found numerous rooftiles, whole and fragmentary, with clear stamps from Sinope and Herakleia.

*Michaelovskii
views these as
imported supplies*

Only later in its period of economic expansion (the end of the 4th cent. - the beginning of the 3rd cent.BC) Chersonesos passed to the mass production of rooftiles, exporting significant quantities also to the other centers of the region of the Cimmerian Bosphoros (tiles with stamps of the astynomes of Chers. have been found also in the arch. excavations of the Bosphoros, Panticapaeam, and Neapolis). For the moment there are no sure proofs of the diffusion of these products in more remote territories. But it is possible that some of the tiles found at Istria that have fragmentary stamps or worn ones, and the clay of which is not similar to that from Sinope and Herakleia, could be of Chersonesos origin. For sure, we know only that at Istria were imported in big quantities ^{tiles} from Sinope, and very few from Herakleia. Let us investigate some characteristics of these styles.

One of the most frequent symbols on the tile stamps is the osprey ["sea vulture"] with spread wings and claws grasping a dolphin which he is picking on the head (the same symbol appears ~~much~~ much more rarely also on the amph. stamps).

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This symbol is known to the historical investigators not only at Istria but also at Sinope and Olbia. It was so widespread in these cities that in certain periods it became the official emblem of the respective cities. The coins of these 3 cities also have as a principal representation the ^{eagle} ~~mixtum~~ and dolphin.

The problem of an identical symbol in 3 separate cities of the Bl. Sea basin, cities of the same Milesian origin, ^{investigators} preoccupies especially, for a long time. This identical iconography can be interpreted as an expression of the political and economic community that has been without doubt (along with the cultural one) at the basis of the connection between the sister cities.

But it is not the place here to analyze this problem ^a of general historical kind. From On this problem in general we retain only those aspects that can interest us in the investigation of our subject.

Similar stamps on tiles of the same shape and type of fabrication are found also at Varna (Odessos), at Balchik (Dionysopolis), at Mangalia (Callatis), at Istria, very many at Cetatea Alba (Tyras), at Nicolaev (Olbia), in most of the Greek cities

of the Bosphoros, and especially in the cities of the Tauric Chersonesos.

c Lacking sufficient dates as well as an exact determination of the material, some investigators use to believe that the rooftiles and those for the graves were of local make: Olbia, Tyras, Odessos, Istria, Callatis, etc. To support this affirmation were brought forward a series of arguments.

It was said that such a good product without particular value could have been easily produced in our regions because it ~~was not~~ demanded only earth and wood to burn. Therefore it did not have reason to be imported from such great distances, Taking into consideration the fact that the distance and the ~~manipulation~~ ^{transportation} ~~were~~ made the product much more expensive.

where

It is true that at Istria and at Callatis there have been found an even larger quantity of tiles and st. amphoras, the stage of economic development in general and especially the existence of a true pottery industry allowed without a special effort the fabrication of common rooftiles on the spot, so that the city would not continue to be dependent. Tiles of the best quality, well-shaped and well-baked, pithoi of great capacity (500 to 1000 liters), huge quantities of pipes for well-studied ~~manipulation~~ water channels, with good dimensions and well baked, endless categories of pottery and especially that of everyday use, receptacles of all sizes, different well-shaped tools of terracotta, and artistic figurines of Tanagra type, are so many products of the local industry that we find at every step in the cities above-mentioned. Why did these centers, with such developed industries and fine pottery and fine ceramics, not produce also rooftiles?

(9.XII.57)

As for the st. amph., the explanation is simple: the centers from Greece and A. Minor that produced wines and oil make an organized and constant export to the cities to the north and west of the Pontus, where, as we have already shown, there was no oil production and the local wine production was insufficient for the needs of the Greek and native population. The better quality wine and oil sent from Greece had to come in special vessels in a particular packing. But the usual

amph. for ~~the~~ daily use surely also in our parts were of local fabrication and had no stamps (in no city from the NW that we remember, except for Chersonesos, are stamps known on the local pottery).

The eagle with the dolphin that appears on the tile stamps (as well as the presence of this symbol on the autonomous coins) could as well justify the theory of a local production. All the same, from the examination of the whole complex of items that the problem presents, it clearly results:

existence of the

1) At least at Istria the astynomia has not been established;

2) Nearly the whole total of numbers of astynomes and producers on the tiles are found also on the amphora handles surely imported from Sinope and Chersonesos;

3) The name of ΣΙΝΟΠΙΩΝ and of ΑΡΧΕΝΤΟΑΕΜΟΖ, ΠΡΥΤΑΝΙΣ, ΓΟΑΑΣ, ΚΥΡΟΣ, which are the most frequent on the tiles, are not found in the onomastica from Isthmia and Olbia. In the same way, neither ΔΙΟΠΑΝΤΟΣ as astynome on the stamp of ΑΡΧΕΝΤΟΑΕΜΟΖ.

4) Stamps of the same astynomes and producers on the tiles having as emblems the eagle with the dolphin are found also in the other cities along the coast, cities which did not have this emblem.

In Pridik's tables, out of nearly 400 stamped tiles having the emblem of the eagle with the dolphin, we find 23 different astynomes and more than 40 different producers. Comparing this proportion of tiles with eagle and dolphin found in the Gk. cities of south Russia, at Istria we have found out of a total of 30 tiles only 3 with the eagle and dolphin. In the same way, we have found 2 with eagle and dolphin on amphoras. Such a small number at Istria cannot in any way support the appearance of this symbol in the local production.

Let us add that the stamped tiles found at Istria and at Mangalia have a clay completely different from that of the local ones. The technique of manufacture justifies us also to tend to believe in imported merchandize; the clay is not homogeneous, the tile is formed of an interior thick layer of inferior quality of a light brick color and many times ash-grey, on which was put on both sides a thin layer of fine clay, bright red, well-levigated and well spread. Through

firing at a moderate temperature and therefore inexpensively, there has been obtained
amalgamation
the ~~amalgamation~~ of the two finer strata with the thicker one, which has given a
tile formed of three combined layers, which has particular resistance although it
has not been submitted to firing at a very high temperature.

The conclusion which we reach is that the tiles were import goods: not only
the roof tiles but also those used on graves were from Sinope.

Let us look now at the reasons for which this import was made into regions in
which there existed the conception and tradition of fabrication, as well as the raw
material and the main d'oeuvre for such production.

The earliest stamped roof tiles are dated ~~to~~ ⁱⁿ the middle of the 4th cent. BC.

Apart from the characteristics of the writing that take us to this period,
we have to consider, for the group of ~~xy~~ the tiles, also the fact that some of them
(no. 438-9, 445, 450, etc., in our country, and numerous others from Pridik) present
names with the genitive in omicron instead of omicron upsilon according to the
Ionic dialect. This takes us to the years 350-330 B.C., the last period in which
there can still be found both forms of genitive simultaneously, after wh. date only
the one in -OY is used.

Not much later after this date, Istria had entered into the game of trouble
which took her to her repeated destructions. If we count only the big known moments
on the basis of historic documentation: Philip II, Alexander the Great, Lysimachos,
and the invasion of the Gauls (without counting either historical remains ^{also} as well
the many archaeological data from excavations), we already have in a very short
time a ~~xy~~ whole series of big destructions, starting from the middle of the 4th
cent. BC.

After each of these events, the city was certainly exhausted and made great
efforts to stand up again. It is without doubt that after each withdrawal by the
invaders, the city used to start life again (we know an undoubted continuation
documented both archaeologically and historically). The constr. of public buildings,
dwelling-places
~~houses~~ in process of being rebuilt, as well as the burials in ~~pk~~ level cemeteries,

in which were used the sarcophaguses improvised from tiles, ~~xxx~~ demanded without delay this important construction material. In those moments the tile-producers from A. Minor, who knew of old the commercial ways of the Bl. Sea towards our cities, were finding conditions favorable to the placing of their goods. Evidently the cost of transportation from such a large distance must have made things perceptibly more expensive but probably the boatmen brought the tiles more as ballast in the bottom of the boat, the principal purpose of the transport being really the loading on return with all the local good products: wheat, animals, skins, honey, ~~and~~ slaves, etc.

In future excavations, especially in the ^{late} Attic ~~xxxxx~~ and "Hellenistic" levels, as well, as in the graves of the same periods, it might be possible to find (that) more stamped roof tiles which through detailed registration would lead to exact documentation for future historical studies.

The Transportation and commercialization of wines and oils in the Greek harbors in our country still presents some aspects not yet clear. In this way, we do not yet know whether these goods were brought in amph. or if commerce was made that we can call bulk commerce, in which case the goods would have been brought in vessels of great capacity.

p. 369 It seems that wooden barrels were not used much in early Gk period to wh. our study refers. Neither from the remains of archaeological excavations nor from the plastic representations do we know in our country such barrels, except in a much later period at the beginning of our era at the same time as the Roman economic expansion. This is surely explainable through the fact that wood was scarce enough in Greece and especially in the islands and as much as could be found, all the small quantities that could be imported were used preferably for the constr. of ~~the big~~ ships and boats, for roofs, and for floors, etc.

For the handling of the wine in the so-called ambulant sales, by retail, ⁱⁿ they used sheepskins ~~that took the~~ place of smaller receptacles, and cowhides in place of "barrels" of big capacity.

We know of plastic representations in which are seen 1 or 2 skins of cow or ox in carriages pulled by horses, skins which are supplied with taps of drainage for making easier the handling of the liquid.

It is a ^{one} ~~different~~ thing, retail commerce, and a completely different thing wholesale commerce, our harbors becoming in this case transit depots and intermediary factors . . . The businessmen from here shared the profits with the producers and the importers, in a much larger way than if they had remained at the plain commerce of buying and selling of a fixed and limited unity, of sealed and stamped amphoras. We have proofs that at least in the principal harbors of the NW of the Bl. Sea ~~there~~ ⁱⁿ there has existed, along with the very developed commerce of wine and oil in st. amph. also a commerce of wholesale. Investigations and studies on this economic side have not been made in our country or in other parts, but it is to be wished that they will be made because the following of this aspect of the local economic life can give us interesting things in respect to the relations of import and export with the producing and consuming centers.

At Istria and at Callatis have been found many pithoi (big jars of the shape of a barrel, with capacities varying from 300 to 1000 liters; see fig. 65). [Caption: Pithoi found in the last excavations at Istria, 1950-53. a) in the economic section of the S side of the city, 4 pithoi in a single room, buried to the mouth; b) In the same section, in another enclosure, a pithos buried only to the half (next to it a mortar and pestle); c) The excavation of another pithos in the W side of the same section (belonging to a later period); d) A pithos from the old excavations, in front of the museum of the excavations (probably from a better period). Many of these pithoi that we find also in the villages ⁱⁿ ~~from~~ the interior of the territory in which are found ancient traces of human settlements, ~~they~~ have been used for holding drinking-water, and especially for storage in good conditions of grains. But on the bottom of some have been found also de-alcoholized remains of wine, remains of oil, or remains of salted fish. Therefore they were used also for these purposes.

We can say that the total of these jars are of local fabrication. Each center, small as it may be, on the basis of the pottery tradition, and of their own resources, made such vessels, fired in individual ovens usually dug out in the earth. The discoveries of today prove that the receptacles were buried in yards and even in houses. Numerous storerooms with stone walls and with special ventilation in the walls have been found during the excavations of Istria, especially in the S part of the city. In one of these deposits were found 4, in another 7, pithoi.

From a late period (the end of the Hellenistic and especially the Roman imperial period) Dobrudja has known many discoveries - by chance - of such receptacles of local fabrication and use. Some of them have on the neck or on the belly, incised "in cold" [after firing??], various letters and various figures that indicate the name of the owner and the capacity of the vessel. At Callatis have been found several fragments of pithoi with inscriptions. In the deposit of ancient material from Istria have been found fragments from the lip or from the body of large jars, having various letters and signs incised or stamped in relief before firing. We have found (enceinte) the remains of two pithoi in the lower level excavated in 1950 in the enclosure of Istria. The jars were found at a depth of 3.20 m., under the last level of the Byz. period. One of them shows that it had a ^{greatest} diam. of 1.30. Both had ^{horizontal} bands in high relief, giving the impression of the bands that hold barrels. The vessel was wheel-made. The clay was of light ash-color, well levigated, differentiates completely from the red clay of the pithoi of late period from the ^{commercial} economic section of this settlement.

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Also at Istria, Vassily Purvan mentions the existence of even older pithoi, of which we wd have learned many details, if ^{we} they had not had the misfortune that the manuscript of Istria V was lost after the death of the great scholar. Here is what V. Purvan ~~written~~ wrote in 1923 [~~xxxxx~~ La Penetration Hellenique et la Vallee du Danube, in a Rumanian publication] 1923, p.23] in reference to these pithoi: "... In fact, in the square well ~~xxx~~ on the SE side of the acropolis containing exclusively Gk vases of the 6th cent BC, we have found - as did Stern at Berezan - fragments of indigenous vases, this time very large, in the shape of

pithoi, handmade without wheel, of coarse clay badly levigated and badly fired, and decorated with big horizontal bands in relief that ~~were~~ completely surrounded the vessel like the circles of a barrel, incised in turn with small oblique depressions imitating the structure of thick hemp ropes."

There are also jars, whole or in frgs., that have a different shape from that mentioned above, different dimensions, different clay, and a special technique of manufacture and firing. These are found in the older levels of the excavations, organized or by chance, that are made in the interior of the ancient cities of the Bl. Sea coast.

It is almost without doubt that the remains pertain to the earthenware "barrels," in which were brought, during the Hellenistic period, on ships large quantities of wine and oil to Istria and Callatis. For the moment we don't have concrete indications to show the provenance of these arch. remains. It could be that these pithoi were not stamped, or that the stamped fragments were not found, or that they have passed unobserved. The idea of the existence of ^{wholesale} commerce is sustained also by the discoveries made in some Gk cities of the south of USSR, where the aspect of the developed commerce of wines and oil of import in sealed and stamped amphoras is the same with that found in our country. R. B. Ahmerov says in Vestnik Drevnii Istarii, 1949, 4, that in the course of the arch. excavations of Chersonesos, the lips of 2 pithoi with the stamp of the astynome from Sinope were found.

~~At least by the center of production of Sinope was practised a wholesale commerce,~~

At least by the center of production of Sinope was practised a wholesale commerce, on the basis of which oil and wines were brought on ships in containers of 500 to 1000 liters, discharged in the N Pontic harbors and sold in large quantities to the intermediary local business men. Surely, ~~that~~ ^{big} after emptying them, the jars were taken off the ships and left on the spot, so that the vessel could load on the way back other goods. Now the trader came in, who had to store the goods in good condition before passing to the retailing commerce. It is very probably that the wines and oils were transferred to amphoras of local fabrication, on the basis of the local standard of capacity in use, and were resold to the provincial traders who took them to the interior.

GK

Maybe also throughout the cities of the Bl. Sea was developed a retail commerce without packing, in other words without amphoras, the goods being served to the buyer in his own containers or in jugs, at certain places of unpacking for the local use. To support this hypothesis, we have also some material evidence. Among the arch. remains from the depots of Istria, coming from the old excavations, uninvestigated and unpublished, ^{was} ~~has been~~ found, a few years ago, a frg. of a small pot enlightening for the evolution of the economic life within the city. It is a vessel which, acc. to a calculation based on the fragment which has reached us, must have had a Ht. of ca. 0.15, and which certainly made part of a measure. On the remaining fragment, (Fig. 68) [caption: The commercial measure for the sale of wine and oil in retail, having the stamp of the agoranome ANOAAENIOZ (from the old deposit of Istria material, without knowing the place and condition of finding, noticed by V. Zira.)) we find at 0.03 below the lip a rectangular stamp applied to the soft clay, on which we read:

AGOPANOMOY
ANO[AA]ENIOY
[TOY IEPO]NYMOY

10.XII.57)

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Acc. to the aspect that is presented by the dark ashy clay, the small vase must be of local fabrication. It could not even be otherwise because it was not usual to import vases of inferior category in shapes, execution and material, since Istria had industry that was enough developed for such pottery that had no special artistic value. On the other hand, the stamp gives us the name of an agoranome. On the other hand, in the whole of more than 1000 imported amphoras that we now have at Istria, we have only names of ~~magis~~ astynome magistrates from Sinope and Chersonesos, the eponyms from Rhodes, and names without title from Thasos.

Agoranomes we have never found, except only on an amphora from Herakleia. Anyhow for the existence of a commerce by retail, there was no sense in bringing into the city of Istria a standard vase of small size, on which would figure the name of a foreign magistrate, not from the city. It is therefore very probable that we have to do with ~~in~~ a unit of measure made at Istria and used on the local market for retail commerce of oil and wine.

For the history investigators, the appearance of the agoranome ΑΓΟΡΑΝΟΜΟΣ ΤΟΥ ΕΡΕΝΥΜΟΥ will be of interest, just as it is for us to observe that from the 2nd to the 1st cent. BC (in wh. the stamp ed be placed) the agoranomia was functioning. The retail commerce on the local market was therefore controlled and guaranteed, having corresponding development to this organization. A similar case to this one from Istria is presented by Staerman []. It is about a small jug found at Tyras, in which appears the stamp and title of an agoranome: ΗΥΘΟΚΡΙΤΟΣ ΑΓΟΡΑΝΟΜ . . .

Also at Chersonesos has been found during the excavations a small jug that had on the handle a stamp with three lines:

ΑΣΤΥΝΟΜΟΥΝΤΟΣ
ΦΟΡΜΙΩΝΟΣ
ΤΟΥ ΗΥΘΙΩΝΟΣ

So that also at Chersonesos we meet a unit of measure for the local retail commerce, but with the name of an astynome not an agoranome as in our country [Ahmerov, V.D.I. 1949, no.4, p.99-123.] and as at Tyras.

The stamp on this jug clearly indicates the local provenance: Phormion son of Pythion is a Chersonesos astynome and belongs, acc. to the Soviet scholars, to the 3rd chron. grp., in other words he ~~was~~ ^{was} in function around the years 200 BC. Ahmerov considered that the stamp with the name of the astynome on a jug of such small size was the only case known up to 1949.

What is for the moment certainly taken to advantage from what has been said above, is the ~~dist~~ ^{on} establishment that while at Istria and at Tyras retail commerce at the local market was guaranteed by the local agoranomes, at Chersonesos this function was filled by the astynomes.

We regret that both Ahmerov and Staerman have no reproductions of the jugs from Chersonesos and Tyras with the stamps of ast. and agoranomes. We have not even indications on the capacity of the vessels. It wd have been interesting to know these data which could have made clear the problem of the system of measuring liquid goods in the region of the NW Pontus, and especially in that of Istria. If we cannot now make this investigation

p.374 in a complete way, we shall at least try some deductions on the basis of the material that we have at hand.

A unit of measure of the capacity existed, certainly in our Pontic cities, and almost certainly in the whole extent of the territory that was in economic relations with the Greco-Romans, in whose countries it was based on the measure "etalon" [talent?] This appears as above without doubt after a simple look at the whole of other matters of [their numbers?] economic practice. The Gks on the coast knew the numeral system, the measuring of surfaces, of height, etc., as well as the weighing system. These helping elements of the development of the economic and social life penetrated even from the 5th c. BC into the world of the natives from both sides of the Danube. We can understand this following with much attention the remains of the material culture that can illustrate the reality of the past: coins, weights marked and unmarked, receptacles of standard types, tiles, stone blocks, boundaries of agricultural places, house foundations, etc. Without doubt also capacity measuring was under an organized system.

Checking over whole series of imported amph. from Rhodes, Thasos and Sinope, that have reached us complete, we have taken into the study also a number of different older types of amph., from the period anterior to stamping, and we have measured their capacities.

The amphoras with bulge on the neck, found under the floor of the temple at Istria, that we attribute to Chios, which have been dated in the 5th - 4th c BC, have a capacity of 21,500 liters. The unstamped amph. of small size but with spreading belly, with neck and handles high, with short, pointed base, found by chance in some graves dated in the 4th c, have a capacity of 20 liters (without the neck).

The commercial amph. from the period before stamping that followed those from Chios and about wh. we have spoken above (Fig.55), found in the Museum at Istria, contain half a metretes (20 liters).

All the imported amph. in our country from Rhodes in the earliest period (the beginning of the 3rd c BC) have 20 liters, in other words half a metretes.

Those from Herakleia are of 10 liters, corresponding to a quarter metretres.

Sinope as well as Thasos sent amph. of two different capacities. For Thasos, counting acc. to the thickness of the handles and the size of the stamps, ca. 60 per cent indicate large amph. and only 40 per cent small amph. At Sinope the proportions seem to be respectively of 40 per cent and 60 per cent.

As we have shown, there were found at Istria not long ago in the depot of the excavations a whole stamped amphora from Sinope. It is the first whole Sinopian amph. known in our territory. examining this important monument we have proceeded also to the measure of its volume. The result obtained was astonishing: only 17,500 liters, as compared to the 20 liters that we were expecting, judging by the volume of the Rhodian amph. The capacity of the Sinopean amph. does not correspond anyhow, not even to that of the amph.s from the period before stamping, which are usually somewhat larger than 21 liters. It would result from this that official unit of measure was one way at Sinope and completely different at Rhodes, although the majority of amph.s belong to the same period.

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It wd be to be expected that at least the Thasian amph.s wd have a capacity similar to that from Rhodes, it being given that these 2 centers of production, although far from one another, were part of the same Hellenistic world, while at the same time Sinope, remote and somewhat isolated from this world was leading a life apart, in wh. it is natural to find a particular aspect also in the economic domain such as we find in the political and religious ones. With all this, we could find out (after we have made a measuring of the Thasian amph.s from Jurilovca) that the amphoras from Thasos spread on our territory as well as on that of the S of USSR have a capacity of 8,700 liters, in other words half of the capacity of the Sinopean amph.s.

It is clear that Sinope used a unit of capacity corresponding to 17,500 liters, and that Thasos had the same unit (the Thasian amph.s known in our country representing half of this measure). Also the influence of Thasos on the commerce of pottery from Sinope is easily noticed also in the shape of the stamps, in the multitude and variety of the symbols, and even the disposition of the 3 and 4 rows of the legends in some

of the stamps on tiles.

One may say that the metretes of 40 liters was valid only in the Aegean-Asiatic world, (with amph.s of half a metretes each of 20 liters) and that the region of Thrace as well as Pontus used other units of measure "the metretes" of 35 liters [in amphoras of half a measure each of 17,500 liters at Sinope and quarters of measures each of 8,750 at Thasos).

In relation to the problems of the unit of capacity measure, we may also take into consideration an interesting measure-etalon found in the walls of the castle III Schuchhardt in the valley of Pallas. It is true that the monument is referred to a much later period (the 2nd - 3rd c. AD) but and that it has been used especially as a capacity for grain. Anyhow, lacking other material elements, this also can be of use in our investigation [T. Sauciuc-Saveanu, Rumanian pub.].

The etalon is made of a marble block of parallelopiped form in which are two hollows of conical shape with depth of 0.445 m and diameter of 0.400 m at the mouth. The interior is perfectly smoothed and in the rounded bottom there is in each a hole for drainage (Fig. 69).

On both sides of the block is an inscription as follows: on one is written (of Sauciuc-Saveanu):

ΕΙΣ ΔΙΜΟΔΙΑ ΕΚ
ΕΣΗΝΑ ΠΑΚΙΝΙΝΕΙΘΥΝΑΚ
ΕΝΤΙΑΝΟΕ ΚΑΙ ΤΗΝΤΩΝ
ΚΑΙ ΗΚΙΣΤΑ ΠΑΡΕΑΒΗΝ

On the other side the inscription is shorter:

ΔΙΜΟΔΙΑΝ ΕΚ ΔΙΜΟΔΙΑ

It is known that in the 2nd and 3rd c AD there was functioning at Tomis (and surely also in the rest of Dobrudja) ^a measure of capacity that had as its basis the Roman measure known as modius (8,751 liters). The measure shown to us in the marble monument at Costanza has written in Greek on both sides: dimodia, which indicates a measure equal to twice a modius, in other words 17,502 liters. As such a unit of capacity was not used by the Romans, it must be considered as pertaining to the local system of measures and weights, as compared to the Roman unit of 8.751 liters. Why did the Greeks make an

p.377 etalon of 2 modii, and why did they not use the Roman one? They were still used, from the late Hellenistic period, to a Greek measure of 17,500 liters, such as was contained by the amph.s of wine and oil imported here from Sinope and Thases.

This is possible, if we consider that - although the Greeks adopted in the Roman period various forms of the new culture - the basis remained the same.

star

the

We have analyzed up to now various aspects of the ~~stamped~~ problem of import ~~interritoriality~~ of st. amph.s to Istria. But it is as interesting to investigate also the penetration of these amph.s into the interior, in other words to follow their area of expansion beyond the points on the sea coast.

St. handles have been found in many centers in the interior. A large enough investigation in this direction is hard to make now, because the material has not been ~~finished~~ studied in the place of finding, and as much as has been found has not been collected and stored in scientific conditions.

There are numerous small localities that do not figure in the archaeological map of Dobrudja, although it is known that from there come many st. amph. handles, found in private collections or in various provincial museums, without precise data on the conditions of finding.

We hope that in the near future we or others will occupy themselves also with the Hellenistic amph.s, of which the traces are found in the context of life of the native population, far from the sea harbors in which the goods were unloaded.

For the moment, we can merely notice, with for information, some of the centers, trying also some conclusions in relation to the problems that they bring forward:

Razboieni, formerly Alifaci, W of Babadagh, where have been found several amph.s among which a whole one from Pontic Herakleia, with stamp in ^{incuse} relief of square shape on the neck. ^{It is} ~~They are~~ in the museum of Tulcea under the number 540;

Malocci, a locality with many arch. remains. From here has come into the Tulcea museum a whole amph. from Rhodes with stamps on both handles;

ΔΥΟΚΑΒΙΑΣ

4

in a rectangle with stars in the corners, and on the other stamp:

ΕΠΙ[ΡΥΘ]Ο
ΔΟΡΟΥ
ΠΕΔΑΓ[ΕΙΤΝΙΟΥ]

(under inventory no. 9, in the Tulcea museum).

Also at Malcoi (under no. 8 and 11) other two amphoras from Thasos with ^{wornout} stamps.

Meidanchioi, near Macin, an amphora (with the stamp of the astynome illegible) of late period (probably the 1st cent.) and an amph. from Thasos (under no. 96 in inventory of Tulcea museum).

Mahmudia, numerous SAH found in the field, in the ploughed earth. ~~They have been~~ The plain sherds without value have been dispersed by the local people.

p.378 Murughiol, much Hellenistic material and numerous st. handles from the 4th to the 2nd c BC, scattered around and not yet picked up. (Some have been picked up by V. Zira.)

~~They have been~~

We shall not return over the localities Baia-Hamangia, Sinoe, Tariverdi, Vardul - Caraharman, of which the stamped amph. have been registered in the present work and also not on the localities on the right side of the Danube (Cernavoda - Hinog, Hirsova, Ostrov, etc.) of which we have already spoken.

It is not the place to speak now also about the whole ~~xxxx~~ or broken amph. with or without stamps found during the works on the way to Medgidia - Navodari, material that has not been registered and collected with care.

In the south part of Dobrudja outside the enclosure of Tomis and Callatis at considerable distances, have also been found stamped amph.s. The localities Tuzla-Far, Vama-Veche, Albesti, Peceneaga, etc., must also be added. A great number of amph. stamps have been found at Costinesti (Mangeapunar) [Rumanian publ.].

Along with the Thasian stamps at Costinesti have been found also some with incuse stamps on the neck, belonging to Herakleia.

In the summer of 1956, the Institute of Archaeology of the Academy of R.P.R. [Rumania] gave us the assignment to investigate and make trial trenches in the locality Costinesti and surroundings, where chance discoveries have brought to attention the remains of human settlements.

We made 6 trial trenches around Costinesti and in the village Schitul, as well as at 2 kilometers toward V near the highway Costanza-Mangalia. With this occasion we have made sure the existence of two wide-spread settlements of the Hellenistic period above which were Romano-Byzantine settlements.

At the eastern extremity of the village Schitul, we discovered the ~~dams~~^{dikes} of an ancient harbor dug in the rock, and at the NW end of this harbor, an agglomeration of pottery fragments in which remains of amph.s predominated.

What interests us in a special way in this short report on the archaeological focus of Schitul-Costinesti, is that, as both in the agglomeration above-mentioned, and in the points tested near the highway, we have found stamped amphora handles coming from Thasos, Sinope, and Rhodes (to these are added also those from Herakleia found longer ago at Costinesti, mentioned above).

15.XII

We must say now that Dr. H. Slovozianu has gathered here ca 20 stamped handles, ^{aeol.?} and that the architect H. Doicescu and the writer G. Naum have also found some stamped handles. We have information that at some of the inhabitants of Schitul-Costinesti, at the school, and in the private collection of some amateurs, are found also many examples.

p.380 We have given several details about the recent discoveries at Schitul-Cost. in order to bring out the importance of this new focus, in which the abundance of st.amph.s shows the probability of a commercial center of import based on the harbor of Schitul. (It is possible to find here the ancient city of Parthenopolis mentioned in the ancient sources as between Tomis and Callatis.)

In this problem of the diffusion of amphoras in the interior of Dobrudja, we must mention especially the fact that in 1955 a chance discovery made at 2 kilometers NW of the village of Jurilovca behind the promontory of Dolejman, has brought to light very int. things. In the fields, a round a burial placed under the center of a tumulus were found not less than 100 amphoras, placed in a regular circle around the grave. The amphoras were whole when the villager let the plough sink into (freshly turned earth).

The 100 amph.s are divided into 2 types:

1. Unst. amph.s characterized by their large and massive bases; the body is tall and thin,

and thin. The height is 0.97 m (see fig. 55, the amph. on the right, and Fig. 70 the amph. on the left).

2. Small amph.s from Thasos, of average Ht. 0.65 m, of the type of the quarter of a metretes, having small stamps on one of the handles. The stamps are of the type of those with representing the kneeling Herakles, drawing his bow, or with a long-stemmed flower. 2

The material belongs to the 1st half of the 4th cent. BC. It is dated by the small early stamp from Thasos, which in turn dates the other unst. tall amphoras.

The richness of amphoras placed in a grave in the Istria territory presents the biggest interest. The same great interest is presented also by the burial ritual unknown till now in our country. It is understood that the discovery wd. have been of even greater value if the grave had been undisturbed and the circle of amphoras had not been taken apart.

The amphoras were placed obliquely, close one to the other, with the mouth ca. 30 degrees up, with the base deep into the ground, and alternating a large one with a small one. Surely the ~~po~~ tipping position indicates that the amph.s were full when the burial was made. Anyhow, some of them still have on the bottom solidified residues.

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Following the different rituals of burial which have ~~been~~ ^{revealed} ~~developed~~ by the archaeol. discoveries in the S of USSR, we find out that in the series of Kurgans dug at near Chersonesos, of which Max Ebert makes a full report [M.E., Preah.Zeit. 1913], have been found graves that contain 5, 7, 8, 9, and 15 amph.s in specially dug out niches. Acc. to their position, the amph.s could have been placed in the graves full. in the trench of the deceased. So that the practice of burial with a large no. of amph.s was known, although under another shape, also among the native tribes in the S of USSR. Also in these graves are two types of amph.s: some belonging to Herakleia with incuse stamps on the neck; others are longer (0.97 m) and not stamped, and resemble to the point of identity those found at Jurilovca.

A kylix with glaze, a lekythos with redfigured dec., a bronze bell, and other objects found in the tumuli from near Chersonesos, have made Max Ebert take the amph.s as of the 4th c BC. We note that similar groups, each of 15 amph.s (14 in the niches and one at the head of the dead) have been found in graves from Chersonesos. In the grave no.6, on the

neck of an amph. we note an incuse stamp with large letters, written in two rows: ^{deepened}

ΔΙΩΝ
ΥΞΙΟ(Σ)

A similar stamp we found also on an amph. frag. from Istria ^{shd. say no.732} (in text no.427) but with retrograde legend.

The resemblance between the burial ritual of Jurilovca and Chersonesos is only in respect to the large number of amphoras in the grave. At Jur. the amph.s formed a circle around the grave, while in . . . Ebert's, they are placed inside the grave, in specially made niches.

V.F.Gaidukevich has recently published [pub. of 1955] the picture of a grave excavated at Olbia, in which are placed in rows several tens of amph.s from Herakleia and Thasos, dated in the 4th cent. BC. [Apparently Fig. 74 was]

But bear in mind that also at Olbia was found a circle of amph.s, in a grave discovered by B. Pharmakovski in the Hellenistic necropolis, and described by him under no. 78 in a report of 1912 [Pharm. in Arch. Anz. XXVI, 1912, p.351, fig. 31.]. The grave was surrounded by 17 amphoras of different types placed - as at Jur. - in a nearly perfect circle. The position of the amph.s is however reversed from those in Jur.: in our country the amph.s are placed with the mouths in, but in Olbia with their bases in. [Fig. 75]

In his report Pharm. does not investigate the types and provenance of the amph.s, he only mentions that it is about the Hellenistic period.

We have insisted a little bit more about the information of archaeological order bound to the discoveries of st. amph.s in the Dobrudja territory, from the midst of the native population because this side of the problem had not been investigated, although it deserves special attention, and any new ^{data} ~~data~~ may enlarge the possibilities of our knowl. The natural question which now arises: how far into the interior did the Greek goods in amphoras penetrate? Did they remain only in the territory of today's Dobrudja, or did they also cross the Danube?

The stage of our knowledge today can lead us to interesting conclusions. Some organized excavation, as well as chance discoveries, have brought to light amph. fragments with stamps not only at Tariverdi and in other places in Dobrudja, but also across the

Danube far into the Carpathians and in the N of Moldova.

In the ^a plains of the Ciură, the Iasi district, has been found a lot of more than 100 stamps [Prof. V. Tudor has put at our disposal his manuscript, as well as his corresponding plates, for the plain of Ciura and Stăienesti-Cimpulung. We have also used his communication from the 1954 session of the academy of R.P.R. (Studies and References concerning the history of Rumania, Buch. 1954, I, p.8 ff.)], all from Rhodes and Knidos, belonging to the 3rd - 1st c BC (not a single stamp with the name of an astynome, and none from Thasos). Also from Rhodes and Knidos we have at Stăienesti-Cimpulung-Muscel. At Plesești, the Falticeni section, we have Rhodian stamps [The Rhodian st. from Ples. ^{sic} is kept in the museum of Turnu-Severin.] At Schitul of Tîrgoviste, at Poiana- on the Siret - at Popești on the Argeș, at Spantov, Gumelești, Gradistea, Fundul Chiselet, Piscul Crasalinor, have also been found different Greek stamps. At Tinos have been found double handles, of the type of Cos, and $\frac{1}{2}$ a Sinopean handle with the name of the astynome. G. Cantacuzeno published, longer ago, [G. Cantac., "Timbres amphoriques inédits tr. en Roumanie," in Dacia III, 1927-32, p.612 ff.] a Sinopean stamp with the name of the astynome AIXINOY and of the producer MIOPIAATHE, found by D. Butculescu at Cetatea Dimbovitei near Cimpulung.

Also Rhodian stamp has been found at Runcu in the neighborhood of the monastery Tismana. It is a stamp of circular shape with the flower of Rhodes in the middle - We read: EHI EY@ANEY(2). The month cannot be read. [Rum. pub.] The stamps from Stăienesti-Muscel bring interesting things. Out of the number of 60 Rhodian stamps found here and studied by Prof. D. Tudor, only 5 have a relative resemblance with some of the 150 stamps found at Istria: 45 are of another type, and 10 are dubious. Not even the stamps from Knidos discovered at Stăienesti (25 in number, of which 10 are restored by Prof. D. Tudor) are found among those from Istria. The same way the single ex. from Rhodes found at Baia De Fier by C. Nicolaescu-Plopsor is not known in another place in our country [Nic.-Pl. has brought both stamps to our notice even from the year 1954.].

The area of diffusion of Greek goods enlarges itself this way very considerably. Until now we knew only of the penetration into the depths of the territory of the coins

of Philip and Alexander, of those from Thasos and Dyrrachium, but the way of these was in no case through Dob. or through the mouth of the Danube, but directly through Thrace.

If the Knidian stamps and those from Rhodes found in Moldova, at Stoienesti and in Gorj, are of other magistrates and producers than those we have noticed at Istria, it means that their provenance is from transport that did not pass through the intermediate of Istria. One puts forth therefore the hypothesis of some direct relations between the Rhodian or Knidian producers and the Geto-Dacian consumers of the sub-Carpathian regions. If we admit such a hypothesis, three would be the ways by which the goods could penetrate to the Geto-Dacian land of sub-Carpathia.

1. The native traders used to go with ^{carts} ~~thuxsarringes~~ to Istria or to other harbors of the Black Sea, they used to take their products and brought from there the Greek imported goods. There ^{was} ~~is~~ without doubt a considerable number of native traders used to carriage ^{cart} transport, with the long journeys, with the risks, and the inclement weather (which was not the case with the Greeks, at least in the beginning). Eager to ^{for gain} ~~win~~, the possessors of "capital" or of barter goods, these traders bought in the harbors the wine and oil which is made sure by the remains of amphoras in their home districts, they surely bought also fine clothes from the Orient, scents, and other goods that they transported with their "samaris" and carts.

2. The second way, much more important than the first: the Greeks coming by sea did not stop at Istria or another port, but ~~entered~~ ^{entered} the mouth of the Danube and went up the river to the small stations on the riverside, which were owned directly by the natives. Here the goods were unloaded and waited for the native traders who continued the transport by land.

Sailboats filled with goods went high enough up the Danube: remains of Greek settlements or of Greek culture in native settlements have been found in suff. quantity but especially on the right bank of the river. We know for later in the imperial period also an association with boats at Axiopolis (Cernavoda). On the left hand of the Danube near Galati, then at Zimnicea, Balanocia (near T. Magurele), on the Mostistea, etc exist remains of the Greek penetration into the local medium. At Barbosi was found a

sculptured marble sarcophagos of more than 3000 kilograms wt. probably of Asiatic prov. The studies of other investigators [G. Tocilescu, Dacia before the Romans, Buch. 1880, pp. 343-410, 413-533; V. Parvan, La Penetration, etc. (d'apres les dernieres decouvertes archaeol.", in B.S.H.A.R. X, 1923, pp23-48; idem, G. Cantacuzeno, . . . Dacia III, 1927-1932, p.612.] treat in a large way some of the steps of the penetration of the Greek goods and cultures beyond the Danube.

Framed in the whole of other news that we have in most recent times, what was made clear by the older historians make the idea stronger that also in the Hellenistic period, not only in the Roman, there existed along the Danube port centers and Greek or Greco-native settlements, in which the boatmen brought their goods in order to be nearer the place of retail selling unpacking of the Geto-Dacian world.

3. If at the beginning the Greeks were afraid to go far from the Danube harbor, certainly with time they became more daring, and started to enter the tributaries of the river, on the Siret, Prut, Arges, Dimbovita, and Olt, which were navigable in antiquity at least for light craft.

Remains of the Greek penetration on the course of the tributaries are found in several places, of which we name also Poiana-Tecuci on the Siret. From the shore of the last navigated water, the amphoras were taken further with the packs samar or with carts. The appearance of a stamp in the cave of "Woman of Gorj" (near Baia De Fier) and of another near the monastery of Tismana, indicates unconditionally land transport (even if the Jiu was in antiquity navigable for light craft, anyhow from here up to the point where st. handles have been found, transport had to go over several kilometers by land).

Such were the beginnings of ^{Greco-Geto-Dacian} interpenetration ~~afkkm~~. The relations started at least from the middle of the 4th c BC and continued nearly 3 centuries increasing continually as is seen from the Rhodian amph.s at Iasi, from the end of the 3rd cent.

Bringing in one way or another the goods near the consumers, without a very great surplus of expense/ (in fact only a surplus of time) the Greeks received much ^{higher} ~~greater~~ prices than at Istria, Callatis or Tomis. But there is also another motive that favors the small centers of the Danube shores against Istria. The authority in the city states

on the sea coast had the most severe customhouse regime. Coming into the harbor, the boats were submitted to a first tax of entrance, then came the taxes of unloading, those of storage, taxes ^{passing to} ~~of~~ for ~~crossing~~ the city itself, and at last the taxes of exit for goods that went into the interior.

Judging from the situation in the harbors from which we have information, the taxes were established on the value of the goods, reaching in some cases a quarter of their value. For what concerns the value of taxes for exit from the city, we do not have suff. information, but surely they were quite sufficiently high also.

Entered through the mouth of the Danube and ^{making stops} ~~stopping~~ in the small centers without administrative and fiscal organization of Greek type, the traders had from the beginning an important difference in earnings. Their interest was enlarged to the double, if we suppose that goods of local production with which they returned offered the same advantages not returning through the grasp of the Istria customhouse. To this can be added also the difference of price that the traders used ^{made} ~~to make~~ buying the goods directly from the producer or in his neighborhood. The roads to the Bl. Sea harbors was hard and the population was pleased with the existence of a constant ~~and~~ buyer who would knock at its door with ^{his} ~~its~~ own means of transportation.

Thanks to these commercial relations bringing advantageous conditions, the native Goto-Dacians were encouraged to increase agriculture and animal husbandry, the production of Honey, cheese and fat, to prepare hides, to gather and condition plants and hay, to cut forests, to shape and sell wood for the constr. of boats.

As we have seen, the advantages of both sides were much larger ~~when~~ the boats came up the tributaries which we have shown often happened.

The above ~~re~~ remarks seem to oblige us to change our opinion on the role and importance of the Greek colonies in the development of the economic and social life of the native tribes from the Muntenian plains, from Moldavia, and even from beyond the Carpathians. The native traders coming in contact with the civilized world, became simultaneously also agents that brought home also the more advanced ideas, refined tastes, and the desire to become more wealthy that were developing fully among the Greeks of the coast.

Let us see also another aspect of the problem. Having before them the model of the Greek amphoras, it would not be understandable that the Geto-Dacians wd not try also to manufacture amph.s. In the 3rd to the 1st c, the local tribes had their own coinage (based on the imitation of a prototype). In the same period we know that they had also kilns for pottery and their own moulds(?), and that splendid Delian cups were ^{imitated.} ~~made~~ Especially instructive is one of these Delian cups of local fabrication, found in 1938 at Snagov (Fig.76). [Rum. pub.]

All around the vase and on the bottom are reproduced Geto-Dacian coins ^{with} ~~imitated~~ of the Macedonian type. ~~For sure~~ ^{certainly} The potter used Geto-Dacian coins for the ornamentation of the cup. The reproduction of the coins confirm once more the local fabrication and ~~this~~ shows a desire to affirm himself by the Geto-Dacian producer. In the same way, it confirms the date of this production and of the Dacian coin of early type. [F. Courby, Les Vases Grecs a Relief, Paris 1922, dates the Delian cups with vegetable ornament and copies after ~~children~~ ^{from} Greek and Roman Republican coins, ~~in~~ the middle of the 2nd c to the beginning of the 1st c BC.]

In the series of imitations that the Geto-Dacians made in the 3rd to the 1st c BC after Greek ~~models~~ models: coins, amphoras, stamps, Delian vases, etc., we must add also the last discoveries from Sincraieni [Rumanian? pub.] [or Hungarian?] beyond the Carpathians, in the region Sf. Gheorghe - near Miercurea Ciucului. Among the silver drinking bowls for wine from ~~these~~ treasures, we find copies in metal nearly identical with Hellenistic kantharos types (Fig.77).

The imitation of Greek amph.s by the Geto-Dacians is in this way not a chance and isolated phenomenon. The fact is integrated in the complex of the great process of interpenetration and gives us material documentation on the basis of which we can follow the shapes and the period of the economic movement in the midst of the native population.

The problem on the whole is much ~~larger~~ too large for this work, but we cannot overlook some of its aspects that are directly connected with the amphora and its role in the Geto-Dacian economic life.

In the ~~aspects~~ of archaeol. material from Istria we have found a catalogued amph. depot

17.74.57
[1.42]

handle registered in Group IX "miscellaneous" under no.759. It comes completely out of the common through the composition of its clay, and especially through the amazing character of the "inscription". At first sight we think we are in front of a Rhodian st. The round handle is bent after ca. 0.05, and as much as is preserved shows a bend of nearly a right angle, just like Rhodian handles. The rectangular stamp in relief is impressed on the top of the handle with the usual process used for stamping Greek amph.s of the Hellenistic period. The very granular clay is of bright brick color. Not a single trace of slip(?).

But only at first sight does the frg. give the impression of a Rh. handle. Seen from closer, the unusual features of the clay make us conclude it is a local product, and a sufficiently careless one. The three rows in the stamp include a series of signs that are neither Greek nor Latin, and give a cuneiform impression. Such an inscription has never been seen on the territory of the Gk cities of the Bl. Sea. Although in general the stamping of amphoras with barbarian ^{writings} ~~languages~~ is unknown to us, we cannot exclude the possibility of a stamped handle of Asiatic origin!

Similar round amph. handles with rect. st. without legend that can be read, and having only two or three rows of ununderstandable signs, have also been found at Stoienesti near Cipulung ^m Muscel, and have remained nearly 50 years in a collection in Cimpulung without getting any attention from the investigators. Only last year this col. has been taken for investigation, and remains to be published in the near future. [Fig 78]

p.389 Similarly, there have also been found, by Dinu V. Rosetti in the excavations of 20 years ago in the Getic settlement from Popesti on Ardes, more than 20 amph. handles in appearance Rhodian, but in reality of rough local fabrication, on which are stamped in rectangular frames stamps which cannot be interpreted. And in the recent excavations of the Academy of R.P.R. have been found at Popesti such stamps [Rum.pub. 1955]. Among the amphoras of local production from Popesti, another category characterized by double handles similar to those from Cos. [Fig 79]

p.390 Also at Popesti have been found some halves of amphoras having such stamps. The material is found in the depots of the museum of the city of Bucharest, unpublished.

Here is a series of interesting discoveries, closely related one to another, and ~~very~~ close enough to the stamp from Istria.

We must admit that the above amph.s are of local fabrication, imitating by their shape and stamps amph.s from Rhodes and Cos. ^{Amphoras from Rh. and C.} ~~which were~~ circulating in that period so freely have been used as prototypes for local production. We think that there was not enough insistence on the signs on the stamps; they were considered ornamental. These signs are curious; although they seem to be varied enough, all the same they repeat themselves. It is to be remarked that the same signs are to be found also partly on the "eto-Dacian coins. It is a problem that remains to be cleared in the future.

star

We have studied the import of commercial amphoras into Istria. We have seen their origin, what goods they contained, what commercial ties the city had with the big Asiatic ^{-Greek} and Aegean centers.

p. 391 Going further from the coast of Pontus, we have followed the amph.s into the interior of Dobruja; we have passed with them beyond the Danubă, and we have followed them along the rivers that furrow the district from N to S. We have seen the infl. that was exercised by the Hellenistic civilization on the local populations, thanks to the goods introduced here. We have followed the fabrication of local amph.s in close relation to the Greek amph.s that served as prototypes.

Let us now make some conclusions imposed by the study of imported and local amph.s which we have seen still in such close relation:

1. In the 6th and 5th c BC Istria maintained stable commercial relations with most Greek centers of production, especially with Miletos, Rhodes, Samos, Chios, and Thasos. The import of wines and olive oils is proved in this early period through numerous unstamped amph.s of commercial type from these centers. But there can also be found amph.s of unidentified source.

There are no indications for this period of an import of such goods from Attica.

2. A series of commercial amphoras found at Istria and surroundings, differentiated

in type from the archaic ones mentioned above, prove the existence of massive import of wine and oil at the end of the 5th c and at the beginning of the 4 c BC.

3. The commercial amph.s of great circulation with "certificate of origin" ⁱⁿ under the shape of stamps impressed on the handles, start to penetrate at Istria in the 1st decades of the 4th c BC (the years 390-350).

~~Also~~ In this period one can notice also the beginnings of a massive import of stamped rooftiles.

4. The import of amphoras with wine and oil, as well as that ^{of} with rooftiles, continued for more than 3 centuries, till nearly the beginning of our era/ (from this date the amphoras and rooftiles imported into our country no longer have stamps).

The period in which the stamped amph. import reached its maximum of intensity is placed approx. between 250 and 70 BC. The great majority of stamped amphoras is placed in this interval. Before this period are only some amph.s from Herakleia, a number also small, from the first period of stamping at Thasos, and a reduced number of Sinopean st. from the chronological groups I and II.

5. The centers of production, ^{that are} surely determined and that ~~have~~ exported goods in st. amph.s to Istria are: Thasos, Sinope, Herakleia, Chersonesos, Rhodes, Paros, Cos and Knidos.

6. Of the total of stamps, nearly 80 per cent have been restored) ^{(read or} providing several new names of magistrates and producers as well as numerous variants of stamps already known. The shapes of the imported amph.s have been in large number well/defined. We think that it could be established that the dies were made of wood or bone.

We have struggled to determine types and technological features of the different centers of production, the capacity of the vases, their chronological position, as well as the commercial ways by which the goods came.

7. The material studied proves from the point of view of imported quantities, that Sinope keeps in front of the other centers followed immediately by Thasos.

8. The large number of amphorastamps found at Istria makes up a good indication on the volume ~~that~~ reached by the wine and oil import in our harbor. We must take into

consideration that apart from the 1162 stamps here studied, a very large number were taken to Germany during the 1917 war, many are still scattered in various collections, without being counted, others wait to be excavated (not even 10 per cent of the surface and depth of Istria has been investigated up till now).

9. In the measure in which the import of wine and olive oil in st. amph.s was exceeded by the increasing demands of the consumers' market, Istria imported large quantities of such goods also in jars of 500 to 1000 liters each. In this case the wines and oils stored at Istria were decanted into small amphoras of 10 and 20 liters, probably of local make and unstamped, with which the trade was carried further.

10. Nearly all the stamps in our country are found also in the Greek colonies on the Thracian coast or on the N coast of the Bl. Sea in S USSR up to a great distance from the respective harbors. Even the archaic unstamped amph.s from the 6th c BC are found identically in settlements in south USSR.

It results that Greek centers of prod. used for the expansion of their commerce the whole line of the NW coast, as in a single market of unpacking for the same categories of goods.

statistical

We give below a succinct table on the import of wines and oils to various places in this large territory, in order to show the frequency ~~of the stamps from Istria~~ by centers of production of stamps found at Istria (RPR), Olbia, Tyras, Mirmekion, Tiritaki, Odessos (R.P.Bulgaria).

[table]

12. Part of the goods unloaded in the harbor of Istria were taken over by intermediary traders who went to the market in the interior. Numerous remains of st. amph.s are found in the interior of Dobruja, and along the rt bank of the Danube.

13. On the left territory of the Danube, goods penetrated carried by the river and the navigable tributaries, by Greek traders who came up to the subCarpathian region and Moldova. A large number of st. amph.s from Rhodes and Knidos near Iasi, near Falticeni, at Poiana on the Siret, at Cimpulung-Muscel, at Baia de Pier, and at Tismana in Gorj, as well as in numerous centers on the Mostisea, and from near Bucharest.

14. The Geto-Dacians imitated amph.s of Rh. type and Coan. They also imitated stamps of these amphoras, replacing the Greek letters with signs that have not yet been deciphered.

15. The area of diffusion of Greek goods and Greek culture proves the great infl. exercised by Gk. civiliz. on the native Geto-D. tribes. We can now speak in the Carpatho-Danubian districts of the existence of a superposed class that knew how to appreciate to the sweet and heavy wines from Rhodes and Knidos, that preferred the local fats to the fine oil gathered in the olive groves of the S., that found the sipping of drinks from silver cups *... ..* after the foreign model, and who disposed of the material possibility of being able to procure himself such expensive refinements.

ROMANIA

30. XI. 60

Mr. Parastumardyn / is taking today
the translation of ~~the~~ "Conclusions" to original,
which is the only one [⊗] I can find

Return

29

I. 6.3

Does P. Fraser perhaps
have copies?

Canaradi's book

text

The ~~same~~ introduction
in THASIAN section
of the catalogue has
also been translated.

.57 still

the
Canaradi's

The original is in
a THASIAN folder,
an ^{carbon} copy has been
sent (indirectly given)
to Mr. Leung, as the
French Sd. has a copy
of the book. The
other is being sent to
Bon.

16 IV. 58

For transl. of section
on Canaradi's COAS folder
copies of all 3 bgs sent to

Canarodius book

Text

The ~~series~~ introducing
to Thasian section
of the catalog has
also been translated.

The original is in
the THASIAN folder,
one ^{carbon} copy has been
sent (probably given)
to Mr. Leung, as the
French Id. has a copy
of the book. The
other is being sent to
Bon.

16 IV. 58

For transl. of section
on Coan, see COAN folder
Copies of all 3 being sent to

Be now, the thine
 for the second time,
 to use in writing.

T E T A P T H

27

331 N O E M B P I O Y 034

Σελήνη 6 ήμ. Ἄν. ἡλίου 7.21—Δ. 5.05
 Ἰακώβου τοῦ Πέρσου, Ρωμανοῦ ὁσίου

3.01

5.84.57 start

rubbing documenting
correction in Canabache's
catalogue

3.02



1934-1935

ROMANIA

30. XI. 60

Mr. Parasteniuc is taking today
 the transcripts of ~~the~~ "Concluziuni" to original,
 which is the only one [⊗] I can find

return

⊗ 21. I. 63 Don P. Fraser perhaps
 still have the carbon copies?

Transl. of Cananda

Today Mrs. Adossides brought her daughter-in-law Ann-Marie, Alek's second wife, who would like to try translating some Pumanian.

She has taken the book, also some paper (for original and 1 copy), and is to translate ^{general} the Introduction, or as much as she finds she can. I showed her about putting in page numbers ^{& sp}, and footnote numbers above line.

30. I. 63

She later telephoned and said she was going for 3 weeks to England and would be with book and completed transl. I asked her to leave it with Mrs. A.

26. VI. 63

One day last week, Ann-Marie and Alek called and brought back the book (which I had called up to ask for) and the translation.

Notes on Russell Express - Translation, of 1957, indicate that payments to Helen Best for translation at 60 dr. an hour came to 24 printed pages per hour and so, say, 25 dr. per printed page. (See notes in t.c. pencil on back of the Russell Expr. page. No. of pages covered can be found because ~~dates~~ ^{dates of work} are indicated in the running transl.)

But this was for just reading to me, which I typed,

whereas Anne-Marie has produced typed version, with carbon. However, apart from spelling peculiarities, it is not ~~quite~~ exact, e.g. paragraph breaks seem to be ^{more or less} ~~always~~ ^{often} wrong (I find 7 on 12th page), and she says she cut a little of the Commercials.

27.VI.63

I have now read through the typescript, and entered several of the breaks, and noted such omissions as were clear to me. Yesterday also Helen Best (who is now learning to draw) translated ^{independently, orally} parts of the section in the typescript. From this I saw not only that there are minor omissions which would escape me — but also that the ~~text~~ ^{text} makes slow & difficult work, and ^{and} the Adonis version, despite its faults, has quality as an adaptation.

However, I do ~~not~~ need a dull straight complete translation, if any; and it will be best after this to type such myself, extracting them from whole text loggelly from the translation.

No. of printed pages transl. by Anne-Marie:

pp. 5, 6, 7, 8, 12, 13, 15 (short, and is fine)
16, 17, 18 (not much done), 19 (not much done), 20,
21 (both ends), 22

— say 12 ^{wanted} pages (it is rather less) @ 40 dr.
her page 1 — shall offer her 500 dr.

MANIA — ISTRIA

for SITE CARD

28.IV.60

44 found in Istria (Canarache publication)

classification

Table p. 359

288

288

323

33 Tiles

357

33

34

37

37

⁴
299

⁴
141*

23

22

Knidian

37

← * →

54

Miscellaneous

60

85

Boeotian

¹⁰
8

1022

Abydos

1

Chian

1

Roman

1

1148
1150

* p. 359 "for Rhodes we have reduced the number to half..."

4.V.60

* Write to Canarache — on way to get more text translated — to see if collection of illegibles will explain disparity between number of Knidian stamps published and number of "finds" listed in Table p. 359. (He should actually have divided by two with the Knidian as well as with the Rhodian.)

21. I. 63

6

Corrections of Camacho,
Doherty, and notes for
SITE CARD

RUMANIA — ISTRIA for SITE CARD

7-01

28.IV.60

SAH found in Istria (Canadian publication)

New Classification

Thasian:	288		<u>Table p. 359</u>	288
Sinopian:	323	}		
Sinopian:	33 Tiles			357
Heraclian	33			34
Chersoneso	37			37
Parian	4			4
Rhodian	299			141*
Koan	23			22
Knidian	37	← *	→	54
Miscellaneous	60			85
Boeotian	10			<u>1022</u>
Abydos	1			
Chian	1			
Roman	1			
	<u>1148</u>			
	1150			

* p. 359 "for Rhodes we have reduced the number to half..."

4.V.60

* Write to Canadian — or try to get more text translated — to see if a collection of illegibles will explain disparity between number of Knidian stamps published and number of "finds" listed in Table p. 359. (He should actually have divided by two with the Knidian as well as with the Rhodian.)

SAH found in Istria (Karanache publ.)

	<u>Take out</u>	<u>Add</u> - see here	<u>Total</u>
<u>Thasian</u> : 288	no. 9 (Unknown)		287 + 1 (no. 795) 288
<u>Chersonesos</u> : 36	no. 497 (Rh.),		35 + 2 (no. 732) 37
<u>Rhodian</u> : 281			281 + 18 (no. 729, 736, 742, 745, 746, 760-62, 765, 767, 774-76, 778, 781, 791, 799, 834) 299 298
<u>Knidian</u> : 43 (nos. 723-758)	no. 727 (Apr.), 728 (Chian?) no. 729 (Rh.) 732 (2 ex. Chers.) no. 736 (Rh.) 742 (Rh.) 745 (Rh.) no. 746 (Rh.) i.e. subtract ⁴³ 9 34		34 + 3 (763, 777, 779) 37
<u>Miscellaneous</u> 84 (nos. 759-840)	no. 760-762 (Rh.), 763 (kn.) 765 (Rh.) 767 (Rh.) no. 774-776 (Rh.) 778 (Rh.) 781 (Rh.) no. 793 (Abydos) 795 (Th.?) 801 (Bos.) 803-808 (Bos.) 839 (Rh.) 840 (Latin) 779 (kn.) 777 (kn.) 770 (Rh.) i.e. subtract ⁸⁴ 26 58		58 + 2 (no. 792) 60
<u>Bosporian</u> : (8)	732 (2 ex), 801, 803-4, 805 (2 ex), 806-808		10 8
<u>Abydos</u>	(793)		1
<u>Chian</u>	(728)		1
<u>Latin</u>	(840)		1

ME II

27. IV. 60

SAH found in Istria (Carnaroche publ.)

			Labels p. 359
<u>Thasian</u>	1-211 ^(listed) + 50 (illig. ^{p. 84} ?) + 27 (dupl.) =	288	288
<u>Sinopean</u>	(no. 212-437) = 226 (listed) + 50 (illig. ^{p. 163} ?) + 47 (dupl.) =	323	357
<u>Tiles</u>	(no. 438-457) 20 (listed) + 12 (illig. ^{p. 173} ?) + 1 (dupl.) =	33	
<u>Herakleian</u>	(no. 459-483) 26 (listed) + [5 illig. [?]] + 2 (dupl.) }	28	54
	On p. 191 (see translation p. 4) the total is 33 ex.	[33]	
<u>Chersonesean</u>	(no. 484-500) 17 (listed) + 10 (illig. ^{p. 214} ?) + 9 (dupl.)	36	37
<u>Parian</u>	(no. 501-502) 2 (list) + 2 (dupl.)	4	4
<u>Rhodian</u>	(no. 503-711) 209 (listed) 48 (illig. ^{p. 272} ?) + 24 (dupl.)	281	141
<u>Koan</u>	(no. 712-722) 11 (listed) 11 (illig. ^{p. 281} ?) + 1 (dupl.)	23	22
<u>Knidian</u>	(no. 723-758) 36 (listed) [?] + 7 (dupl.)	43	54
<u>Unknown</u>	(no. 759-840) 82 (listed) [?] + 2 (dupl.)	84	85
		1148	

See new classification

(1)

27. IV. 60 7.04

More than 1 ex. in Panamache publication

Thasian; 97Sinopcean; 47Sinopcean

no. 13 - +1

no. 213 - 1 1

no. 290 34

20 - 2

214 1

no. 290 1

23 - 4

215 1 ?

308 1

24 - 1

217 1

310 1

45 - 1

218 1

316 1

47^v 1

225 2 ?

323 1

52^v 1

226 1

324 1

53^v 2

227 1

336 1

56^v 1

234 2

337 1

62^v 1

236 1 ?

341 1

68^v 1

245 1

357 1

73^v 1

246 1

374 2

77^v 1

248 4

374 1

79^v 1

249 1

47

80^v 1

251 1

85 2

256 4

86 2

257 1

97 1

262 1

178 2

271 1

187 1

272 1

27

273 2

278 1

287 1

288 1

289 1

2

34

(2)

Sinopean (Tiles) : 1

no. 443 - 1

Herakleian : 2

no. 459 - 1

467 - $\frac{1}{2}$ Chersonesus : 9

no. 490 - 4

no. 492 - $\frac{5}{9}$ Rhodian : 24

no. 512 - 2

515 - 4

516 - 2

518 - 1

539 - 1

554 - 2

586 - 1

607 - 1

608 - 1

618 - 1

621 - 1

637 - 1

Rhodian (cont.)

no. 641 - 2

643 - 1

649 - 3

24Knidian : 7

no. 732 - 1

733 - 1

740 - 2

749 - 3

7Unknown orig. : 2

no. 805 - 1

no. 839 - 1

2

Corrections in Copernicus's books

Kindian section (pp. 285 ff.)

723 to be corrected

724 "

(726, which of 2 connected types is this)

727 apparently not Kindian

728 " " " :orian?

729 probably Rhodian known type

733 to be corrected

734 " "

735 " "

736 it the same type as 737?

737 to be corrected

739 " "

740 " "

741 " "

742 probably Rhodian known type

743 to be corrected

744 " "

745 probably Rhodian known type

746 " " "

750 to be corrected

751 give him the reading

754 " " "

758 " " "

No. 614 Ἀριστοδ[Rhodian?

No 675 Ἀφείρων?

No 620 Α[ριστ[?

No 654 [ο ε ο ι] ?
rose

No 655 Ἐπι Γόργωνος? []ινδίου Ο
rose

No 657 Ἐ[π[] []ιν
rose

No 662 [?] ©
rose

No 663-669 unread

No 670 ?]εως
Θεομ[οφορίου

No 671 Επι α ?
μο[]τ

No 672 Ἐπι []
δαμου
δαχίου

No 673 - 674

Notes on Evolution of Ceramics

pp 5, 11.

p. 5

Imp. of amph. in ancient economic life.

Artifacts of daily life found all about. Above all predominate pottery. Worked in antiquity with more care than today. clay, slip (solution of kaolin). Fired at temp. is up to 1000°, for desired toughness and impermeability.

Agricultural rhythm and organization; later, commerce.

Need for receptacles: for grain, fish, meat, milk, grapes, fruit, olives, oil, wine, etc. Also water. Wood was scarce in southern centers, metal too poor quality, and unavailable to poor. Pottery most suitable. Instead of burned holes, starts in prehistoric period the pithos vessel.

Pithos held surplus goods, which may be exchanged. Ht. of a man. Capacity average 4 to 500 liters. With mouth, for drawing. Oval bottom not very pointed, pointed bottom for firing. Lids. Stationary.

In primitive stage of boats, not used to circulate. But they were also loaded on ships for transport.

Small receptacles, ^{with handles,} used for transport. It becomes more elongated, until it reaches the ideal shape for lifting and carrying without risk.

The amphora is born of needs of new economic and social progress.

(The latter term about described amphora of finer ware, products of a more sophisticated society [Athens])

The amphora ^{part} called kylix (cup). In Homer, kylix. 7th-6th B.C. - already common - kylix. A new shape in early 7th, good for pointed ground receptacles.

p. 7

The 2 handles get elongated, and the base ^{of the h.} is no longer on the neck but on the belly. Now swelling, according to what the contents are & h. - - -

p. 8 A big cork of cork, or wood, ^{or clay} or pumice, fixed with wax or tar sealed the mouth. Later, but before the invention of the amph., the low belly became so much more elongated, that the front is made pointed, and the jar won't stand up alone. In the house, it is vertically, etc. on a support of t.c., wood, or metal. The Roman who took the jar to Gaul, called it "vintage."

In 6th - 5th BC, amphora the receptacle of usual commercial, transport and domestic use. Can & wine economic life in antiquity: in Attica *ἀμφόρεος* is a measure of capacity equal to the *μεσσηνίος*. So for the Romans there was placed in the capital an amphora-italian [*amphora capitoline*, used for verification of ^{commercial} business measures.] Large capacities were measured by

p. 12 amphorae. Hook, or big bowl in [Delphi.] *τράγγη* expressions, now when the ship was carrying human or other goods [numerous ref. to ancient authors.]

Variations. Expansion continued into feudal Europe, when it became short and squat.

Features of the amphora. Why not a base to stand on? But the ancient persisted in a flat amph., for nearly 3000 years. So it had ^{irreplaceable} qualities. The pointed base far from being inconvenient is practical: jar can be embedded, - only ca 10 cm. and it will stand. Its thought-out proportions. Wt of ca 24 kilograms, which

(p. 13)

an average man can handle. Carry 8 to ship.

On by means of a rope ¹/₁₈ between 2 men, 2 or 1 horse.

Pouring, ^{on ground,} Pulling down partly resting on muzzling of body.

In collars, in rows, partly sunk in the cold sand. Kept

(better this way. In ships also, ^{partly} ~~buried~~ in sand, so they would not be shaking, or collide. They ^{just} moved with the movement of the ship. [muzzles unclipped, called out]

4th BC 15000-anphs, nearly 50 tons. 10000 amphians

carried, partly from the Cyclades, partly from Naples district-
etc.

Introduction

On our country's territory where thousands of years ago it was full of boiling life in the different settlements, chiefly in the endless number of villages, signs of which can be found everywhere in the valeys, near on remote hill tops or in the plain, everywhere you can find scattered material evidence of the old culture.

We find craftman's tools, cutlery, stones with inscriptions objects of worship, coins and arms, but above anything else in the archeological finds there are the ceramics. The whole or only fragments. The vases of baked clay were preserved through the ages better than wood, metal or limestone. In ancient times ceramic was treated with great care not the way regular pottery is done in our days. The soil (clay) was chosen with great care, washed and drained after that it was well kneaded and mixed with the right amount of the necessary ingredients. A liquid mixture of very fine caolin Angoba, special varnishes of many colours covered the vase's surface, then it was worked on the potter's wheel. After it was given its shape the jar was put in special kilns where the heat could be brought up to 1000 centigrades. In this way the jars acquired a big resistance and according to their future use they were made either porous or impermeable.

That's how it can be explained that after thousands of years we still find the vases or only fragments without a deterioration of the clay or of the colour and shape. Ceramic under any sort of form has held a most important place in economic life as well as in everyday life and its manufacturing was one of the principal industry in ancient times production.

Enormous quantities and endless number of different types in shape and size which were found in settlements shows us how important the work of ceramic was. It couldn't have been different. The growing rhythm of wine production and the preparatory processing of olives for the production of olive oil, the need of organised transport of milk and honey, and also later on the growth of external trade by sea in the era of colonial expansion, imposed a constant increase of means to gather, store and transport the goods. People were in need of containers to gather, collect transport and store goods like: cereals, fish, salted meat, milk, cheeses, grapes and olive oil. We should add that even the water had to be transported and held in containers with a wide or narrow mouth. Around the households fire place there were many jars for the use of the house. If we think that wood was very scarce in the Southern production centers of antiquity, metal containers couldn't be used on a large scale because of the inadequate quality and their high price. So the best of all was the baked clay container.

Since the Prehellenic era instead of finding the storage wells in the earth we start finding the big clay vase, at the beginning made by hand and later, on the potter's wheel.

P. 7.

People start having in their households ceramic jars in which they store the products in order to exchange them later on for different other goods. ^{no #} The name of this container is known from ancient Greek pithos. The pithos was egg shaped had the height of a human being and could hardly be encircled by three men holding hands. Its average capacity was 400-500 l. A very wide mouth allowed to a person to get in and clean it. Its bottom was oval and ending with a pointed nose. This allowed to stick the vase into the soil. A cover made of clay or stone, closed the mouth of the pithos which wasn't to be removed from its initial place. ^(no #)

^{half an century}
In the early stages of trade it wasn't necessary to move the pithos. Sometimes the pithos was loaded on boats which carried the merchandise away. That kind of vase a real storeroom has been found in great number in Cnossos ⁽⁵⁰⁰⁻³⁰⁰⁾ and other archeological sites. With the increase of production and the fact that the merchandise had to be sent further and further, people needed smaller containers in order to transport their products. From the initial big pithos without handles they made a smaller pithos with two handles, in the beginning its shape was oval or round and later it became more and more elongated ⁽⁵⁰⁰⁻³⁰⁰⁾ being easier to lift it without difficulty and risks. The amphora was born with the increase of production and as an absolute necessity of the new economic and social progress. We will not study the small, spheric painted and coloured amphoras which existed since the very beginning till slavery was abolished. Those amphoras as well as many other types of artistic vases had almost never practical purpose. They were just a decoration in rich Homes or were brought as offerings in temples, tombs or given as prizes in competitions. About those amphoras which have to be considered to have only a ritual or luxury character we will not talk. Our study is only about the commercial amphoras. In the beginning the name of this sort of amphoras was Keramis from Keramos which means clay. In Homer's time it was known under the name of amfifores but during the VII - VI B.C. it had already acquired a commercial character and was named amphora. Around VII B.C. the amphora changes its shape and becomes more adequate for the purpose of a container of general practic use. The two handles which are the main characteristics of the object start to be more elongated and their lower end is not any more immediately after the neck but on the amphora's body and at the middle of its height. The neck becomes longer and narrower, or larger and rounded according to what it was supposed to contain. The body becomes allongate in both ends, its middle reamining round and swollen.

P.8.

A stoper made of cork, clay, wood or lava cement ^(no #) well fixed with wax or tar was ermatically closing the mouth of the container. In a more advanced stage of development of the amphora its bottom became so pointed that it couldn't stand any more. That is why when used in houses in order to be kept in a vertical position it had a stand made of clay, wood or metal. ^{no #}

The Romans who have inherited this auxiliary part of the amphora from the Greeks have named it Incitega.

In VI - V B.C. the amphora becomes practically the only container used in trade, transports and households. We can see how important the amphora became in the economic life of antiquity from the fact that in Athens Amphoreus was the name of standard measure for capacity equal to the Metret. In the Roman Capitol there was a standrad amphora: the amphora Capitolina which served to check the measures used by the merhhants. The capacity of big vases at the Greeks and the Romans was based on amphoras. An enormous silver crater in Delphes contained 600 amphoras. The standard measure for boats was the amphora. The same way as we use to-day the ton. A boat of 1000 amphoras, the boat which left with 500 amphoras. Such indications are found in may ancient authors. Even when the boat even carried amphoras with wine or oil, but people and any other type of merchandise. With small varieties in the compond, shape and capacity imposed by culture and economic life in different productive centres the amphora was to be found all over ancient world and it even outlived those times. Indeed we find it during European Peudalism when its shape changes. It becomes shorter and rounder its byttom is less elongated.

We shall try to analyse the particularities of this container to see which are its basic qualities which make this very simple clay vase to be used on such a large scale in ancient times. At first look the pointed amphora looks inconvenient. We expect a flat buttom which would make the container stand. Nevertheless we see the ancient people so practical and inventive didn't change its shape. The pointed amphora has lasted almost 3000 years in their economic and social life of the war. It means that its shape presented qualities which could not be found in other sort of containers. The pointed buttom far from being inconvenience played a very important part. Thanks to this shape the amphora was sunked in earth or sand. With all its height and apparent stability stuck only 10 cm it stood straight without any other prop. One of its main qualities was its good proportions. Its average height 80 cm. for the big ones and its capacity of 10-20 l. gave the amphora a maximum weight of 24kgs. which was easily manipulated by one person. Tied with a cord it would be carried on the shoulders of two men for long distances.

P. 13.

Two amphoras tied together could be carried on donkey or horseback. The two handles made it still easier to manipulate the jar. Holding with the left hand one of the handles and with the right one the pointed buttom the jar was emptied fast or slowly, as needed, without effort and without troubling the liquid. The full amphora when on the floor, rested on its body and pointed buttom. In this way the upper hand of the amphora was in an elevated position so that the liquid could not spill. But this is not the only reason for the pointed buttom. In the cellars where the amphoras were stored in a row half or completed sunken in a cold sand which kept their contents were preserved. Even on the boats going on the Black Sea in Spain Brittan and Gallia there were thick beds of sand in which the amphora were stuck. In this position the amphoras did not touch each other they could not turn over or break and their contents did not trouble.

P. 15.

We shall study now an other aspect. Until VI B.C. the amphoras

p. 8 : ① Horace

p. 12 : ①

p. 15 : ①

Columella

And. Aug. 1865, 51

long. note

on Marseille which

P. 16.

had on their neck either one or two small circles or stripes and coloured letters. ^{incised?} Starting the period we find those stamps on one or two ^{with} of the handles. The stamps were round, square or oblong. On them it was written in Greek the name of the place and the name of the person who was in charge of the commercial introduction control. In some towns especially on the Asiatic coast of the Euxim Pontus clerks with special appointments bear the title : Astinomi, Agoranomi, Frurarchi etc. In Rhodes and Cnidos and sometimes in Heraclea the name of the magistrates or priests is preceded by the word Epi which means "during" or "being" priest or magistrate whose name was following. In this way the date when the stamp was marked was certified. ¹ On most stamps besides the name of the Eponimic priests or that of the clerks who guarantee the quality and quantity of products we start finding the names of the potters or producers or even tradesmen. On some stamps from Rhodes, we often find the name of the month. ⁹ Of-course the stamp was marked while the clay was soft before drying and baking it. The potters made the amphora on order. They respected the shape quality and capacity of amphoras and delivery conditions. The person who ordered the jars (state, town, magistrate, association, producer or merchant) had the stamp marked under his own control and the name of the month was mentioned on the stamp besides the name of the magistrate or the producer. The marking of the month on the jar probably referred to the period when the wine was being drawn and shipped and this is justified because of quality and resistance of wine often depended from the moment it was drawn from the barrel. Its resistance depended also on the season when transported.

An other probably reason for this marking was for fiscal reasons (duty taxes were applied on each amphora coming out of store-houses or loaded on boats). In any of these two theories we have some references on an inscription from Thassos about the rules concerning the handling and sale of wine in the different months of the year. ¹ In some centres like Geraclea Pontica they had carved in stamps and not in relief. The stamps were not on the handles but on the neck of the amphora. On many stamps we find the town's effigy, some others are decorated with different symbols deities, human figures, arms, flowers, fruits, animals etc. representing a sort of merchant's seal or the magistrate's symbol.

During the Imperial Roman Era the stamps on handles become scarce due to the loss of autonomy of towns and because navigation and Sea control and destination ports were in the hands of Romans. At this stage the amphora for wine has a tag hanging on its neck on which is written the capacity the name and age of wine and the merchant's name. ² The name of the place from where the goods came disappears in time. ¹ The marking on the wine amphoras with the so called certificate stamp as a guarantee title shows us what form and proportions the economic life had in production centers and in consuming centers. The purchase of the goods by the consumer was dependent on these guarantees which meant that neither the quality or quantity was ignored. — no H —

- ① G. Damp BCH 1926
- ② Horace, etc., . / .

P. 17. ^{no H} Even in the nonhellenic war ^{would?} where the majority of the buyers were established. ^H Ports and towan on the European Coast of the Black Sea starting with Russian Bosphorus all the way down to the big Rivers too Caucasus coast where the most active importing centers of wine and oil brought by boat from the Greek islands and from their productive centers of the Asiatic Coasts. The most important buying towns either for their own consumption or for trading it further inland to smaller towns were on the northwest coast of the Black Sea as follows: Istria, Callatis and Tomis on the Rumanian Territory, Apollonia, Mesembria, Odessos, Dionysopolis, Bizone in Bulgaria and Tyras Olbia Chersonesos, Panticapaion Phanagoria, Nymphaion and also smaller ones on the Eastern Part on the Asov sea and on Russian land. ^H In the limits of our three towns or even further away from Istria and Callatis we found during the excavations or just by luck many amphoras necks, handles and bottoms with inscriptions. (The handles be more solid were preserved better). Whole amphoras ofcourse are rare. Whole amphoras or only fragments and handles ^{represent} different colours, shapes and also interesting typological and technological characteristics.

By their study we can know the itinerary of the boats and sometimes after their unloading we can follow their trip on land. We can clarify the relation between their production center and the human settlements where we find them. We can see the place where the amphora was made, where it was filled up, we can even say what the area from where they came was mostly producing. Arriving finally at the place of their destination we discover the consumers. By this way we also discover details on the inhabitants' life and their ties with the civilized ^{would} war of that time.

^H We have shown that most handles are found on the Black Sea Coast and in the different settlements outside the towns. ~~The b~~ ^{no H}

The bourgeois science in our Country did not give any attention to this problem. We have not one single study on this subject. During the excavations very few handles with stamps have been gathered and scientifically registered. Most of them have been thrown away. Not even the ones which were kept, were clean, deschiphered and evaluated. Even the place and time they were found was not mentioned. During the 1917 war the German troops took away from Istria to Germany a great number of inscriptions and art monuments and according to K. Skorpil the Germans had also taken away a great number of whole amphoras with stamped handles, about which we know nothing. ^H Actually we have more than 5000 such documents which are stored away in Museums and private collections without being registered. ^H Vasile Parvan has published 14 amphora stamps. There are some other 200 in the Dasia Magasine in the Callatis reports. ~~no H~~

P. 18 ^H Mr. Gr. Arachian, P. Nicorescou, or Tafrali and D. M. Teodorescu have published some stamps without explaing them. ①

P. 17, ① In *Izvestia*, Sofia, VIII (1934), p. 24-43

P. 18, ① V. Parvan (etc.)

(2)

P. 18.

Only one researcher G. Cantacuzinos has studied a little more this problem. He has studied about 200 stamps on amphoras and in a communication held in Zurich in 1939 as well as in other publications he has set the problems of their historical interpretation. He even dared to propose a collaboration with Russia and Bulgaria.

This proposition wasn't accepted in Zurich or Bucharest. In the beginning of our century two Russian scientists E. Pridik and I. Mahov after 10 years of work they grouped and organized the material which can be used by the archeologists from all over the world.

The Russian scientists have clarified a lot of things. Up to yesterday the only known production centers were Rhodes, Thassos and Cnidos without having established the date of the respective stamps and many stamps with the Astinom's names and other indications were listed under unknown amphoras. The Russian archeologists have now discovered new production centers: Sinope, Heraclea and Chersonissos.

P. 19.

P. 20.

This is the place to say that compared to the Russian researches the bourgeois science did not enlighten us any more with the exception of one single book written by A. Dumont - 1871- no

Dumont has worked on 6000 amphora stamps found in different collections and Museums in Athens and has published half of them. This book continues to be helpful but it is by far surpassed by the knowledge of the Russians brought to us. Dumont's book has not even partially the study on amphoras from Pontus Euxin. We can take in consideration two other limited works by F. Bleckmann and M. Nilsson. We have to say that in these last four years archeologists belonging to the French and American Schools have started studies for future publication on Cnidos Thassos and Rhodes. Last year A. Bon was working on stamps from Thassos and Virginia Grace was working for Rhodes. Following an agreement in Athens between the two Schools, work is done together for a Corpus on Cnidos stamps. (2)

The origin of the materials and our method of work.

It is difficult to initial reconstructive work on account of the lack of documentary material on the 5000 stamps instored on which we have no data. At this moment it is impossible to study the problem and to put in full value the existing material. The proportions of this work is beyond our possibilities for the time being. In view of the above problems we will limit ourselves only to the study of amphora handles from Istria and its immediate neighbourhood: Tariverdi, Sinoe and Baia Hamagia. - no

We have gathered all the handles cleaned and glued them and now we have listed them having all of them, in the national Museum of Antiquities in Bucharest. no

P. 21.

The handles are being inventoried starting with number V, 2001. The total number of handles is 1162.

P. 18, (2) G. Cantacuzinos, in Dacia III, - IV, - VII-VIII,

→ Revue historique du Sud-est Européen (Bucharest) X-XII, 1935,
p. 1 ff.; see also journal, 1939

(p. 21)

	Determined	Duplicate & illegible	Total
1.- From old excavations in Istria 1915-1940 found without any inscriptions and stored in the workshop in Istria	380	171	551
2.- Same as above, brought from Istria at the faculty of history at the University I.C. Parhon scattered during bombing in 1914 and recovered later	267	120	387
3.- Coming from excavations in Istria by the Rumanian Academy 1949-1955	106	18	124
4.- Same, from excavations in Traverderi (20kl. west from Istria) 1952-1954	10	4	14
5.- Same, from excavations in Sinoe - Zmeica (15 kl. north of Istria) in 1952	43	8	51
6.- From Baia Hamangia (25kl. northwest of Istria) by Mr. I. Mititelu	5	-	5
7.- From lake Sinoe, area of Tomb hills	4	-	4
8.- From Passim near the Castle	12	-	12
9.- Published by V. Parvan in Histria IV and VII	14	-	14
T o t a l	841	321	1162

Based on all this material we are going to study when and how the trading of merchandise was done in antiquity on to-day's Rumanian territory. Connections between local people and Greek colonialists settled on the west coast on the black Sea since VIth century had a great influence on the development of social and economic life of the local people as well as for the Greeks. In order to clarify the amphoras we have first taken into consideration their shape but this is insufficient. During the centuries the shape has changed. Sometimes analysing the clay helps but it is not always possible because by baking it most of its particularities have disappeared. Chemical analyses are not of great help, it is more helpful to have mechanical analysis and most important of all it is to compare a great number of fragments which can be grouped by colours, shades, proportions of granulation of the soil, oxides, sand, chelle, mica, limestone.

P. 22.

All this can constitute after long constant efforts good constructive criteria. This is helpful but not absolute, not even with the laboratory analysis. Of-course for Rhodes this is not risky. An amphora from Rhodes can be recognised immediately by the characteristics of its clay and Angoba. One can see in the fragments of Rhodesian provenience that the ceramic has a pale pink colour although it was baked at 1000°. In the Rhodesian fragments the paste is compact, almost pure without sand, coll or little stones. On the contrary, in those from Cnidos we find at least 10

(p. 22)

different types of clay and many methods of working the pottery. Here the amphora's shape as well as the stamps' shape shows a great variety so that when they do not mention the name of the town, magistrate, or symbol it is very hard to determine them. A Thassos has a soil with many iron oxides. The clay is red and it is easier to determine it.

A There were some other production centers where they did not wash the soil and the pottery was baked at only 600° - 700°. In those centers they did not stamp the amphoras. A It is simple to identify the amphoras with the Astinomos stamps as these are made of a clay with very much caolin and the colour is gray, sometimes pink gray made from clay which doesn't exist in the islands. It is very rare to find the amphora with the Astinomos' name on it, of red brick colour and rugged consistence containing iron oxides.

The most important criterium is the stamp. Even the shape of stamps is important. The stamps has more value if it still has the marks of its frame or inscriptions. The name of magistrate and manufacturer can become determining factors for certain areas only after they have been identified for sure and after it has been assessed that they are linked up with at least one of the following criteria: shape of jar, clay, shape of stamp, badge, name of town, title of magistrate.

no A In general only the name, entire or reconstructed is not enough to clarify the amphora because these names are universally known.

(same A continues)

Introduction

On our country's territory where thousands of years ago it was full of boiling life in the different settlements, chiefly in the endless number of villages, signs of which can be found everywhere in the valeys, near on remote hill tops or in the plain, everywhere you can find scattered material evidence of the old culture.

We find craftman's tools, cutlery, stones with inscriptions objects of worship, coins and arms, but above anything else in the archeological finds there are the ceramics. The whole or only fragments. The vases of baked clay were preserved through the ages better than wood, metal or limestone. In ancient times ceramic was treated with great care not the way regular pottery is done in our days. The soil (clay) was chosen with great care, washed and drained after that it was well kneaded and mixed with the right amount of the necessary ingredients. A liquid mixture of very fine caolin Angoba, special varnishes of many colours covered the vase's surface, then it was worked on the potter's wheel. After it was given its shape the jar was put in special kilns where the heat could be brought up to 1000 centigrades. In this way the jars acquired a big resistance and according to their future use they were made either porous or impermeable.

That's how it can be explained that after thousands of years we still find the vases or only fragments without a deterioration of the clay or of the colour and shape. Ceramic under any sort of form has held a most important place in economic life as well as in everyday life and its manufacturing was one of the principal industry in ancient times production. Enormous quantities and endless number of different types in shape and size which were found in settlements shows us how important the work of ceramic was. It couldn't have been different. The growing rhythm of wine production and the preparatory processing of olives for the production of olive oil, the need of organised transport of milk and honey, and also later on the growth of external trade by sea in the era of colonial expansion, imposed a constant increase of means to gather, store and transport the goods. People were in need of containers to gather, collect transport and store goods like: cereals, fish, salted meat, milk, cheeses, grapes and olive oil. We should add that even the water had to be transported and held in containers with a wide or narrow mouth. Around the households fire place there were many jars for the use of the house. If we think that wood was very scarce in the Southern production centers of antiquity, metal containers couldn't be used on a large scale because of the inadequate quality and their high price. So the best of all was the baked clay container.

Since the Prehellenic era instead of finding the storage wells in the earth we start finding the big clay vase, at the beginning made by hand and later, on the potter's wheel.

People start having in their households ceramic jars in which they store the products in order to exchange them later on for different other goods.

P. 7.

The name of this container is known from ancient Greeks pithos. The pithos was egg shaped had the height of a human being and could hardly be encircled by three men holding hands. Its average capacity was 400-500 l. A very wide mouth allowed to a person to get in and clean it. Its bottom was oval and ending with a pointed nose. This allowed to stick the vase into the soil. A cover made of clay or stone, closed the mouth of the pithos which wasn't to be removed from its initial place.

In the early stages of trade it wasn't necessary to move the pithos. Sometimes the pithos was loaded on boats which carried the merchandise away. That kind of vase a real storeroom has been found in great number in Knossos and other archeological sites. With the increase of production and the fact that the merchandise, had to be sent further and further people needed smaller containers in order to transport their products. From the initial big pithos without handles they made a smaller pithos with two handles, in the beginning its shape was oval or round and later it became more and more elongated being easier to lift it without difficulty and risks. The amphora was born with the increase of production and as an absolute necessity of the new economic and social progress. We will not study the small, spheric painted and coloured amphoras which existed since the very beginning till slavery was abolished. Those amphoras as well as many other types of artistic vases had almost never practical purpose. They were just a decoration in rich Homes or were brought as offerings in temples, tombs or given as prizes in competitions. About those amphoras which have to be considered to have only a ritual or luxury character we will not talk. Our study is only about the commercial amphoras. In the beginning the name of this sort of amphoras was Keramis from Keramos which means clay. In Homer's time it was known under the name of amfifores but during the VII - VI B.C. it had already acquired a commercial character and was named amphora. Around VII B.C. the amphora changes its shape and becomes more adequate for the purpose of a container of general practice use. The two handles which are the main characteristics of the object start to be more elongated and their lower end is not any more immediately after the neck but on the amphora's body and at the middle of its height. The neck becomes longer and narrower, or larger and rounded according to what it was supposed to contain. The body becomes elongate in both ends, its middle remaining round and swollen.

P.8.

A stopper made of cork, clay, wood or lava cement. Poma well fixed with wax or tar was automatically closing the mouth of the container. In a more advanced stage of development of the amphora its bottom became so pointed that it couldn't stand any more. That is why when used in houses in order to be kept in a vertical position it had a stand made of clay, wood or metal.

The Romans who have inherited this auxiliary part of the amphora from the Greeks have named it Incitega.

P. 9.

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P. 16.

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During the Imperial Roman Era the stamps on handles become scarce due to the loss of autonomy of towns and because navigation and Sea control and destination ports were in the hands of Romans. At this stage the amphora for wine has a tag hanging on its neck on which is written the capacity the name and age of wine and the merchant's name. The name of the place from where the goods came disappears in time. The marking on the wine amphoras with the so called certificate stamp as a guarantee title shows us what form and proportions the economic life had in production centers and in consuming centers. The purchase of the goods by the consumer was dependent on these guarantees which meant that neither the quality or quantity was ignored.

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Even in the nonhellenic war where the majority of the buyers were established. Ports and towan on the European Coast of the Black Sea starting with Russian Bosphorus all the way down to the big Rivers to Caucasus coast where the most active importing centers of wine and oil brought by boat from the Greek islands and from ther productive centers of the Asiatic Coasts. The most important buying towns either for their own consumption or for trading it further inland to smaller towns were on the northwest coast of the Black Sea as follows: Istria, Callatis and Tomis on the Rumanian Territory, Apollonia, Mesembria, Odessos, Dionysololis, Bizone in Bulgaria and Tyras Olbia Chersonesos, Panticapaion Phanagoria, Nymphaion and also smaller ones on the Easterns Part on the Asov sea and on Russian land. In the limits of our three towns or even further away from Istria and Callatis we found during the excavations or just by luck many amphoras necks, handles and bottoms with inscriptions. (The handles be more solid were preserved better). Whole amphoras ofcourse are rare. Whole amphoras or only fragments and handles represent different colours, shapes and also interesting typological and technological characteristics.

By their study we can know the itinerary of the boats and sometimes after their unloading we can follow their trip on land. We can clarify the relation between their production center and the human settlements where we find them. We can see the place where the amphora was made, where it was filled up, we can even say what the area from where they came was mostly producing. Arriving finally at the place of their destination we discover the consumers. By this way we also discover details on the inhabitants' life and their ties with the civilized war of that time. We have shown that most handles are found on the Black Sea Coast and in the different settlements outside the towns.

The bourgeois science in our Country did not give any attention to this problem. We have not one single study on this subject. During the excavations very few handles with stamps have been gathered and scientifically registered. Most of them have been thrown away. Not even the ones which were kept, were clean, deschiphered and evaluated. Even the place and time they were found was not mentioned. During the 1917 war the German troops took away from Istria to Germany a great number of inscriptions and art monuments and according to K. Skorpil the Germans had also taken away a great number of whole amphoras with stamped handles, about which we know nothing. Actually we have more than 5000 such documents which are stored away in Museums and private collections without being registered. Vasile Parvan has published 14 amphora stamps. There are some other 200 in the Dasia Magasine in the Callatis reports.

Mr. Gr. Arachian, P. Nicorescou, or Tafrali and D. M. Teodorescu have published some stamps without explaing them.

P. 18. Only one researcher G. Cantacuzinos has studied a little more this problem. He has studied about 200 stamps on amphoras and in a communication held in Zurich in 1939 as well as in other publications he has set the problems of their historical interpretation. He even dared to propose a collaboration with Russia and Bulgaria. This proposition wasn't accepted in Zurich or Bucharest. In the beginning of our century two Russian scientists E.

P. 19. Pridik and I. Mahov after 10 years of work they grouped and organized the material which can be used by the archeologists from all over the world. The Russian scientists have clarified a lot of things. Up to yesterday the only known production centers were Rhodes, Thassos and Cnidos without having established the date of the respective stamps and many stamps with the Astinom's names and other indications were listed under unknown amphoras. The Russian archeologists have now discovered new production centers: Sinope, Heraclea and Chersonissos.

P. 20. This is the place to say that compared to the Russian researches the bourgeois science did not enlighten us any more with the exception of one single book written by A. Dumont - 1871 -

Dumont has worked on 6000 amphora stamps found in different collections and Museums in Athens and has published half of them. This book continues to be helpful but it is by far surpassed by the knowledge of the Russians brought to us. Dumont's book has not even partially the study on amphoras from Pontus Euxin. We can take in consideration two other limited works by F. Bleckmann and M. Nilsson. We have to say that in these last four years archeologists belonging to the French and American Schools have started studies for future publication on Cnidos Thassos and Rhodes. Last year A. Bon was working on stamps from Thassos and Virginia Grace was working for Rhodes. Following an agreement in Athens between the two Schools, work is done together for a Corpus on Cnidos stamps.

The origin of the materials and our method of work.

It is difficult to initial reconstructive work on account of the lack of documentary material on the 5000 stamps instored on which we have no data. At this moment it is impossible to study the problem and to put it in full value the existing material. The proportions of this work is beyond our possibilities for the time being. In view of the above problems we will limit ourselves only to the study of amphora handles from Istria and its immediate neighbourhood: Tariverdi, Sinope and Baia Hamagia.

We have gathered all the handles cleaned and glued them and now we have listed them having all of them, in the national Museum of Antiquities in Bucharest.

P. 21. The handles are being inventoried starting with number V, 2001. The total number of handles is 1162.

	Determined	Duplicate & illegible	Total
1.- From old excavations in Istria 1915-1940 found without any inscriptions and stored in the workshop in Istria	380	171	551
2.- Same as above, brought from Istria at the faculty of history at the University I.C. Parhon scattered during bombing in 1914 and recovered later	267	120	387
3.- Coming from excavations in Istria by the Rumanian Academy 1949-1955	106	18	124
4.- Same, from excavations in Travideri (20kl. west from Istria) 1952-1954	10	4	14
5.- Same, from excavations in Sinoe - Zmeica (15 kl. north of Istria) in 1952	43	8	51
6.- From Baia Hamangia (25kl. northwest of Istria) by Mr. I. Mititelu	5	-	5
7.- From lake Sinoe, area of Tomb hills	4	-	4
8.- From Passim near the Castle	12	-	12
9.- Published by V. Parvan in Histria IV and VII	14	-	14
T o t a l	841	321	1162

Based on all this material we are going to study when and how the trading of merchandise was done in antiquity on to-day's Rumanian territory. Connections between local people and Greek colonialists settled on the west coast on the black Sea since VIth century had a great influence on the development of social and economic life of the local peoples as well as for the Greeks. In order to clarify the amphoras we have first taken into consideration their shape but this is insufficient. During the centuries the shape has changed. Sometimes analysing the clay helps but it is not always possible because by baking it most of its particularities have disappeared. Chemical analyses are not of great help, it is more helpful to have mechanical analysis and most important of all it is to compare a great number of fragments which can be grouped by colours, shades, proportions of granulation of the soil, oxides, sand, shells, mica, limestone.

P. 22.

All this can constitute after long constant efforts good constructive criteria. This is helpful but not absolute, not even with the laboratory analysis. Of-course for Rhodes this is not risky. An amphora from Rhodes can be recognised immediately by the characteristics of its clay and Angoba. One can see in the fragments of Rhodesian provenience that the ceramic has a pale pink colour although it was baked at 1000°. In the Rhodesian fragments the paste is compact, almost pure without sand, coll or little stones, while on the contrary, in those from Cnidos we find at least 10

different types of clay and many methods of working the pottery. Here the amphora's shape as well as the stamps' shape shows a great variety so that when they do not mention the name of the town, magistrate or symbol it is very hard to determine them. Thassos has a soil with many iron oxides. The clay is red and it is easier to determine it. There were some other production centers where they did not wash the soil and the pottery was baked at only 600° - 700°. In those centers they did not stamp the amphoras. It is simple to identify the amphoras with the Astinomos stamps as these are made of a clay with very much caolin and the colour is gray, sometimes pink gray made from clay which doesn't exist in the islands. It is very rare to find the amphora with the Astinomos' name on it, of red brick colour and rugged consistence containing iron oxides.

The most important criterium is the stamp. Even the shape of stamps is important. The stamps has more value if it still has the marks of its frame or inscriptions. The name of magistrate and manufacturer can become determinating factors for certain areas only after they have been identified for sure and after it has been assessed that they are linked up with at least one of the following criteria: shape of jar, clay, shape of stamp, badge, name of town, title of magistrate.

In general only the name, entire or reconstructed is not enough to clarify the amphora because these names are universally known.

Running translation by Helen Besi taken
by VG directly on the typewriter, with
such modifications of the English as
could be done quickly.

Please return
to VG

3.XII.57

13.01

V. Canarache, "Conclusions" (pp. 351, ff.)

The stamped amphoras which are the object of this study have evolved from the earlier non-stamped amphoras which investigators usually consider as being only cult objects. It is true that such amphoras are found in graves and temples. But this is connected with the period in which men were not separating religious ritual from practical life. The riding-horse, ornaments, vessels which would be used during life, animals, food, tools, arms, idols (figurines?) and later ^{the} coins - all had also ritual significance. The amphora with wine was surely used for ritual purposes more than the other objects. All the same, we must not conclude that people wd have used it only for this purpose.

Anyhow, the amphoras which we find - Ionian, Samian, or from Chios - are so numerous that as many ~~xx~~ offerings as wd have been made to the temples, and as many Greeks as could be buried with amphoras at the head of the grave, the number cannot be justified. Let us take also into consideration the fact ~~the~~ ^{the} remains of hundreds and thousands of amphoras are found by chance or through organized excavations, in ancient habitations of the 6th to the 5th centuries, in ancient strata of material culture, far away from temples and cemeteries.

Let us think also of the dimensions of the vessels. They had a usual capacity of ca. 20 liters (corresponding to the measure of half a metretes). We do not see as possible and as necessary an amphora of this capacity for cult purposes. Not even the marking of the amphoras with non-religious signs can be explained by the hypothesis of the amphora used exclusively as an object of cult. Finally, the shapes of the vessel prove that it had a practical ^{everyday} use, just as we have shown in the introduction.

If in a future which we hope is very near we shall start off to gather with patience all the fragments which we find in the excavations, and if we make scientific registration of each sherd, our point of view will be surely confirmed. For the

what is depots
moment, from ~~newxxxx~~ we know that ~~xxxxxx~~ found in the archaeol. deposits in
Istria and Bucharest, from the published material, discovered in study, and from
discarded
what we know that exists in the heaps of pottery from excavations - we can conclude
the
that a large no. of amphoras as well as the places in which we find them, prove a
general everyday use at quite an early period.

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The same archaeol. remains that we find at Istria, and which ~~xxxxxx~~ show the
end of the 7th cent. and later the 6th and 5th cent.s BC, we can find also in Kuxban,
Crimea, ~~xxxx~~ or at Olbia. The same fragments appear also at Tariverdi in the
territory of Istria, at 20 kilom. away from the shore. The remains of amphoras
coastal
show this way markets of consumption not only in the cities, but also in the regions
far enough into the interior.

All these give us the right to say that during the 6th and the 5th cent. BC,
the bounds of exchange between the ancient Greeks and the tribes of the west shore
as well as those from the northern one were not just incidental. [ref. to a Russian
pub. of 1947.] At least 200 years before the stamped amphoras, there was in these
regions an organized commerce. The Greeks established from the 7th to the 6th cent.
BC in the Black Sea needed wine and oil; the local population got also used to using
these products, but the centers of production were in the Ionic world. In other
words, there from where the colonists were coming. These knew the way, they had
money and boats, they had understanding and commercial interest. With them, also
their merchandize penetrated, either on the west coast or on the northern coast, and
with the merchandize, the amphoras. Those who brought the products took at the
same time the local products and transported them to southern regions.

If we put together several types of amphoras from this period found in USSR
and in our country, we shall immediately see that they are on the whole similar,
just as the Ionian, Corinthian and Attic ones are, that are found at Olbia, Panti-
capaeum, Chersonesos, etc. or at Istria and Tariverdi (Fig.53.).

The similarity between the amphoras found in USSR and those found in our
country give immediately the conviction that from the Cimmerian Bosphoros up to

Dobroja, the beginning of commerce in the 7th and 6th cent. BC had the same character; the same centers of production were spreading here the same products, offering them to some consumers that must have had similar conditions of life.

If we examine the unstamped amphoras that are found complete or fragmentary in the depots of the Istria excavations or at the museum of Antiquities in Bucharest, we see that they have the shape of an egg in other words they are less elongated and pointed than the types that start to appear in the 4th cent. The handles are short. The neck is less long. It is in most cases marked with red lines or lines of other colors, sometimes with a single large painted letter. Another category from the same period presents on the belly ~~singly~~ ^{height} either one, two or four horizontal and parallel stripes usually painted in red. The usual ~~types~~ of vessels varies between 0.68 and 0.72 ~~inxh~~. These amphoras, typically Ionic, date from the 6th cent. BC.

According to
~~after~~ the free observation that we have made on the Istria excavation, their number is much greater than that of the published ones. This quantity shows significantly active economic position of Istria even in the 6th cent.

, from the lower strata,
If the material from the old excavations at Istria had been registered in time, we wd today be in ~~exposition~~ possession of some dates which wd allow us to know more exactly the commercial relations of Istria in this early period.

p.353 What has not been sufficiently studied in our country has been studied in the USSR. In the ~~study~~ of study of the excavations made in 1937 [Knipovich . . .] in the cemetery NW of Olbia, are published several archaic amphoras, similar on the whole to those from Tariverdi-Istria. The 14 graves in which were found these amphoras were in the deepest strata, over which there is a later necropolis, dated in the 4th cent. BC. The Soviet archaeologist T. N. Knipovich who did the excavation, attached this material to the beginning of Greek life in Olbia.

Analyzing the burial ritual and the whole material from the 14 graves, Kn. has noticed in the same graveyard and at the same time (the middle of the 6th c. BC) two ethnic groups (Greeks and natives) which shows community of life between the colonists and the natives, even from the historic beginnings of Olbia.

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This is not the only type of amphora anterior to stampang. In 1950 were
NE side
found at Istria under the floor of the Greek temple three rows each of three
whole amphoras, placed (probably for ritual motives) with the mouth down. The
building being well dated in the 5th cent. BC, the amphoras, after ^{thorough} consideration,
have been dated also in the same period. But they have not yet been attributed to
any center of production.

This type is a little similar in profile to archaic Ionic amphoras. The vessels
are lacking the elegant elongation of the lower part. They have short handles and
- what is more noticeable - they present a bulge at the top part of the short neck.
On the neck or belly there are traces made with red paint. The ht varies between
0.65 and 0.75.

Similar amphoras - fragmentary - have been found ~~elsewhere~~ at another time at Istria
sondages
in many trial~~s~~ trenches and excavations, made at points ~~reached~~ where archaic and
Attic strata have been reached. These fragments are being studied and their presence
among
in such big numbers is interesting. We have followed in the depots and between the
sherds from the heaps of refuse, finding 46 fragments and ~~as~~ bulged necks whole or
broken.

Not being able to make sure to what center of production these amphoras belong,
our investigators have indicated them only as "Ionic amphoras" [Rum. periodical].
But amphoras of the same type have been found longer ago also in the center of the
south USSR. The archaeologist Max Ebert occupied himself with them in a very detailed
way even in the year 1913, in the report made on the excavations of 1910 [Prae.Zeitung,
etc.]. In 4 of the excavated tumuli he found 12 amphoras of the same type, with
bulging neck.

The other material found there ~~presents~~ consists of 377 arrowheads of Scythian
type, a quiver, a kylix, a wine jug, two bz knives decorated with gryphons, 2 Scythian
daggers, of the akynakes type, and much Greek archaic pottery, black-figured. The
skeletons, the walls, and the floors of the graves, were painted with white kaolin.
These kurgans from the group of Maritsin have been dated on the basis of the material

- for the end of the 6th cent. BC - the middle of the 5th cent. BC.

Similar discoveries have also been made in the valley of the Kuban, around V.D.I. 1951, pp.110-128 the lake Kazari and Pashkofsky/ [Refer. to Russian pub. ~~1950-51~~ 1951] ; the excavations of 1940-41 brought to light a great number of amphoras with bulge in the neck, dating according to the Corinthian and Ionic vases as well as according to the early redfigured fragments found with them, to the 5th cent. BC. The report of V.F.Gaidukevich on the excavations of Tiritake also reveals 2 similar amphoras which he dates to the 6th -5th cent. BC, and which he attributes to Chios. [V.F. Gaid.,op. cit., M. I. A. 1952]. If the amphoras from the south USSR are from Chios, those from Istria must also be from there. It means that after the archaic amphoras of the first series, ^{there} have penetrated ^{also into} as well in Istria as in ^{to} Crimea or on the Kuban, ^{renowned} the products of Chios which in that period was a center of production (Fig.54).

There is another, third, category of early amphoras of reduced dimensions and of completely particular shape, which come from Samos, and the traces of which have already been seen in Istria, as well as in the Greek cities of the northern coast [M. Lambrino, "La Ceramique d'Istria," in Dacia vol.III-IV, 1927-32, p.366]. We ~~would have~~ would have in this case to add a third center of production which exported goods to Istria in the 6th and 5th cent. BC. Finally at the end of the 5th cent BC in the first half of the 4th cent BC start to appear with insistence at Istria as well as in the other Pontic cities, amphoras with much more elegant profile ~~profile~~, with long handles and with lower part suddenly narrowed under the belly, or another type with the whole profile elongated and finished with more pointed bottom, more elongated. They are the amphoras that come immediately before the stamped ones. They carry only very rarely signs with red paint on the necks and have no decorative element on the body. Sometimes at the place where the lower end of the handle is united to the belly of the amphora, the potter has made 1, 2 or 3 oval impressions from his fingers.

In the museum of the Istria excavations are found several amphoras of this

class. They present 3 different types. Their exact ~~provenance~~ provenance is unknown. It seems that they were taken from chance excavations made in a funerary tumulus of the Istrian necropolis. Neither have these amphoras been studied. They do not seem to be from the ancient centers of Miletos, Rhodes or Samos, from which they have none of the distinguishing features. According to shape and clay, they don't seem, either, to be from the Asiatic cities nor from the eastern coast of the Black Sea. Probably they come from some island center that is not yet known, but this opinion is not supported by sure arguments. In any case they make up the 4th group of commercial amphoras anterior to stamping. Such amphoras have been found also in the grave of a woman of the Kurgan no.10 from Maritsin, together with late Attic pottery.

p. 357 On the basis of which, M. Ebert dates them in the beginning of the 4th cent. BC (fig.55).

The tell one is obvious

The presence of the amphoras anterior to stamping in our territory has a special significance for the knowledge of the earlier relations and of the exchange of goods between the south and the young colonies of the west coast of the Black Sea. The study of the imported amphoras of this archaic period wd give us the possibility to get to know many new things also in relation with penetration of the goods in the interior territory of the western Black Sea area, in the middle of the local native populations.

Such a study would have to go beyond the stage of archaeological recording of general character, in the contents of which the material is treated as a simple pottery remains of the archaic period. From occasional observations and from mechanical analogies on the basis of old publications which have not even succeeded in conceiving the existence of the amphora of practical use, outside the religious circle, one must pass to the concentration of investigation with a well-defined scope.

A great amount of material is at the disposal of the investigators, especially at Istria where nobody has yet occupied himself with gathering the material together, of the study of shapes, of the clay, and of the marks. One wd have to identify and to

classify in the first place all the bases, handles, mouths and necks of the archaic amphoras, one would have to collect and to register all the marks with paint on the neck and on the bellies and all the incised marks that are found on the remains of the archaic amphoras from the depots and the heaps of refuse. Then one wd pass to the ^{typological} organization of the material, to the placing in time and place of production, to the knowledge of the frequency and the spread of these.

With such an activity supported by the dates of the archaeological context, and with a long investigation of the discoveries made in other parts - especially in the archaeological regions of the south of USSR where the analogy is very abundant - one cd soon reach stabilization of some concrete dates on the conditions in which have developed the relations of exchange in a period so little known in our country.

The study wd have to extend over the whole period anterior to stamping, in other words over the 6th and 5th centuries.

We have touched here this problem only in passing and only in the measure in which we were obliged to have a point of relation of our studies on the ^{commercial st.} amphoras of the 4th to the 1st centuries BC, to the shapes and the conditions anterior to this period.

[star]

Let us see now what conclusions can be made from the examination of the 1162 st. handles found at Istria, the subject of our work.

Import of wine and oil to Istria in stamped amph. is certainly documented for the following centers of production: 1)Thasís, 2)Sinope, 3)Herakleia, 4) Chersonesos. 5)Fáros, 6)Rhodís, 7)Cos, 8)Knidos (fig.56 - map).

To these we must add also the products from other centers which have not yet been identified, and whose stamps have been collected in Group IX under the title "Various" (Miscellaneous).

Roof-tiles were imported from Sinope, and a very few from Pontic Herakleia. Tiles from Chers. have not been found here.

p.359 The proportions in which Istria imported wine, oil, and tiles from the Aegean island centers, from the east coast of the Bl. Sea as well as from the Cimmerian Bosphoros can be followed on the table below, which has been made on the basis of the stamped handles ^{with certainty} surely placed by us. For Rhodes we have reduced the number to half, since the amph from this center were stamped on both handles.

[table]

The stamps completely restored which we have studied on the basis of analogies with published items known to us, have given the following results:

(hitherto) unknown	38
variants	²⁵⁹ 253
exact (duplicates of known types?)	219
probably (ditto?)	25
	—
the compared items in total	541
duplicates	105
misc.	
various not attributed	82
unrestored	239
classified only ^{typologically} according	195
	—
	1162 ex.

The general chronology of the material (on the chronological order of each center separately I have spoken in the section on that center) has given us the following indications:

[table]

The symbols for the more important groupings from this point of view (Sinope and Thasos) were put together under an alphabetical index, but have not been looked

after in a special way with regard to analogy because the publications used by us do not have ~~any~~ reproductions for all and hence could not be considered satisfactory.

p.360 About the technique used in shaping the amphs., about the raw clay, as well as about the process of fabrication (the kneading, the firing, and the surfacing, etc.) we have spoken in every separate group. We shall stop here only for one of the technological sides which has occupied many investigators and which has not yet been made clear: of what material was the die made, with which the stamp was applied, who made it, and how was it applied?

Lacking some literary evidence from antiquity, an investigation in this direction is certainly hard, but it shd not be given up: observing in detail certain particularities of the material, we can make some conclusions.

For example a stamp from Thasos, well preserved, from wh. a good phot. cd be obtained (the phot. enl. 4:1, Fig.57, no. 20 in the text).

p.361 In the lateral field of the stamp, covering the dolphin and sometimes cutting the relief of the letters, one can see very clearly a series of parallel lines close together, impressed "without permission" at the application of the stamp. These lines represent without doubt the fibres of the wood of which the die was made.

The stamp on the tile of the astynome Iēokritos of Sinope (enlarged 2: 1, Fig. 58, no.446 in the text) presents the traces of the structure of a sectioned bone.

The same structure can be observed also on a stamp with letters of an unknown writing found at Istria certainly of local, Dobrudja, ~~proven~~ manufacture (enl. 2: 1, Fig. 59, no. ⁷⁵⁹761 in text).

In the whole quantity of st. frm Istria, we have found another interesting ex. which has given a satisfactory phot. reprod. (Fig. 60, enl. 2: 1, no.32^g in text).

[Fig.60 - Stamp on wh. have been at first drawn strt. lines for the marking of the rows.]

On this stamp of Sinope, one can clearly see how the engraver has first pulled straight lines to mark the rows. Observed with attention with a magnifying glass, the marking lines (esp. the 3rd line, at the bottom) allow to be seen here too the

wood fibres which go parallel with the rows on the whole width of the stamp. In other stamps also of Sinopean make (Fig.61, no.321 and 376 in text, enl. 2:1), the lines for the marking of the rows are missing and the writing is v. irregular, the letters and the rows overlapping on each other.

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Not even at Chers. (Fig.61 c, enl. 2:1, no.492 in text), as can be seen in the st. of Nanon, was the die ruled, and the writing appears v. irreg., but here the size of the letters, their spacing, and a certain cursive character, still give to the writing special elegance. Here too one can see the granulated ~~xxxxxxx~~ texture characteristic of sectioned bone.

In relation to the hypothesis of the making of dies from bone, we mention the fact that at Mangalia, at the occasion of the excavations of 1949 in front of the barracks of the frontier guard, between the shore and the highway, a die was found that was made of a bone ~~slab~~ plaque, 0.015 thick, obtained by cutting in section of a knucklebone of a cow (the design in natural size in Fig.62). On the die appears the name ALAC ~~retrograde~~; in the impression the writing wd come out reversed and in relief.

From these ex. we must conclude that dies of wood and bone were made. Which does not mean that this was the general rule; in other centers of production the die could be of terracotta or - less probably - of metal. On the die with which the printing was done, the writing was incised from rt to left so that it wd appear (in relief) from left to rt. on the amph. Stamps with ~~inverted~~ legends are however numerous enough (no.596, 628, 54 707, 758, and 357 in text). The reversed writing is explained by the fact that the dies were originally wrongly incised, in other words w. writing l. to r., so that the text appears reversed, so as is seen in several cases (Fig.63).

The general opinion is that the dies were made by the potters themselves. But we must ~~think~~ ^{remember} that not ~~any~~ ^{every} potter could write in those days, and in any case not so correctly or beautifully. If we analyze some of the symbols, we notice that we have to do with ~~the~~ real works of sculptural art. It is more probably that control ad-

ministration (the astynomes, the prytanies, or the eponymous priests) had engravers, as we know that they had them ~~near~~ ^{at} the mints. In the centers of production ~~were~~ ^{authorized} employed ~~masters~~ engravers who very probably made the stamps under the control of the city administration; the latter ~~were~~ received and held them, the stamp being re-made by the administration. To this conclusion we are obliged to come also by the fact that the st. include the city emblems and name, or the title and the name of the magistrate.

That the master engravers ~~were~~ formed a real organized group is proved also by the fact that the stamps of the same magistrates ~~or~~ with the name of the same potters are made by different engravers. The character of the letters, the symbols, as well as the dialect forms, are different in "the same stamps;" the following stamps from the text can be compared: [list]

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[No. 609, 610, 611 Agoranaktos in which also the ends are in 3 different forms]
(end of list)

Maybe it is the case to review completely the old opinions on private production and to attribute to ~~state~~ state production all the amphoras that carry stamps with an emblem and an eponymous magistrate (Sinope, Thasos, Rhodes). If we consider that the name without title must be of one of the producers, it can be only of the chief of the workshop responsible for the technical execution of ~~the~~ shipping amphoras, or of the producer of the merchandize. The amphoras that don't carry the name of the eponymous magistrate, emblem, or ethnic, but only plain names are the only ones that can be attributed to private centers of production (Cos and most of the stamps from the "Miscel." group).

In this order of idea one must bring up the fact that ~~as well~~ at Istria as at other centers of consumption there are found a v. great number of commercial amph.s of different types, without st. and without any mark. They are certainly of foreign origin and were imported with wine and oil from unknown centers, surely centers with commerce not organized by the state. According to all typological and technological characteristics, as well as according to the archaeological context in wh. they are found, they belong to the 4th-1st cent.s BC. They were imported therefore at the

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same time as the stamped amph.s which we think belonged to a state production. From this we must conclude that Istria and its territories as well as the regions in the south USSR where the situation is the same were receiving in the Hellenistic period goods from the city states with wh. they had surely economic agreements as well as from private producers.

From where^{came} the goods in the unstamped amph.? At the stage of our knowledge to-day, this cannot be answered. We know merely that ~~beside~~ the production centers identified in this study another 20 towns and islands produced large quantities of wine and oil for export. In the period in which the commercial amph. were st., there were found among these centers of production the cities: Lesbos, Byblos, Chios, Samos, etc., the stamps of which are not yet known.

We can also ask ourselves in what quantities and under what form the goods without stamp certificate succeeded in entering ^{into export} ~~the~~ competition with ^{commercial} export organized on a state basis.

The rooftiles which we have registered in Series 8 of ~~the~~ Group II are, as we have shown, of Sinopean origin. Until ~~now~~ recently other centers of production that exported stamped tiles have not been known. Today things are different. The stamp with the name ETYMOZ found at Istria and published by us as no.453 proves that also Heraklêia exported tiles to the west coast of the Bl. Sea.

The Soviet scientists [Akhmerov, in V.D.I.] have proved that also Chersonesos, along with developed production of stamped amphoras, had a production of rooftiles on which were ~~stamped~~ applied stamps with the names of local astynomes. In the depots of the museum at Kerch there are 36 tiles with stamps with exactly the same shape, the same dimensions, and the same names of astynomes, as on the 2000 amphoras with the stamps of the astynomes of Chersonesos. But Chersonesos had not always produced ~~its~~ ^{middle} tiles. At least till the ~~half~~ of the 4th cent., we know for sure that they were not making them. For in the material from the arch. excavations in Chers. dated in this period were found numerous rooftiles, whole and fragmentary, with clear stamps from Sinope and Herakleia.

Only later in its period of economic expansion (the end of the 4th cent. - the beginning of the 3rd cent.BC) Chersonesos passed to the mass production of rooftiles, exporting significant quantities also to the other centers of the region of the Cimmerian Bosphoros (tiles with stamps of the astynomes of Chers. have been found also in the arch. excavations of the Bosphoros, Panticapaeam, and Neapolis). For the moment there are no sure proofs of the diffusion of these products in more remote territories. But it is possible that some of the tiles found at Istria that have fragmentary stamps or worn ones, and the clay of which is not similar to that from Sinope and Herakleia, could be of Chersones. origin. For sure, we know only that at Istria were imported in big quantities ^{tiles} from Sinope, and very few from Herakleia. Let us investigate some characteristics of these ^{tiles} styles.

One of the most frequent symbols on the tile stamps is the osprey ["sea vulture"] with spread wings and claws grasping a dolphin which he is picking on the head (the same symbol appears ~~on the~~ much more rarely also on the amph. stamps).

p. 366 This symbol is known to the historical investigators not only at Istria but also at Sinope and Olbia. It was so widespread in these cities that in certain periods it became the official emblem of the respective cities. The coins of these 3 cities [?] also have as a principal representation the ^{eagle} ~~mixure~~ and dolphin.

The problem of an identical symbol in 3 separate cities of the Bl. Sea basin, cities of the same Milesian origin, preoccupies ^{investigators} especially, for a long time. This identical iconography can be interpreted as an expression of the political and economic community that has been without doubt (along with the cultural one) at the basis of the connection between the sister cities.

But it is not the place here to analyze this problem ^a of general historical kind. ~~From~~ On this problem in general we retain only those aspects that can interest us in the investigation of our subject.

Similar stamps on tiles of the same shape and type of fabrication are found also at Varna (Odessos), at Balchik (Dionysopolis), at Mangalia (Callatis), at Istria, very many at Cetatea Alba (Tyras), at Nicolaev (Olbia), in most of the Greek cities

of the Bosphoros, and especially in the cities of the Tauric Chersonesos.

c Lacking sufficient dates as well as an exact determination of the material, some investigators used to believe that the rooftiles and those for the graves were of local make: Olbia, Tyras, Odessos, Istria, Callatis, etc. To support this affirmation were brought forward a series of arguments.

It was said that such a ~~good~~ product without particular value could have been easily produced in our regions because it ~~was not~~ demanded only earth and wood to burn. Therefore it did not have reason to be imported from such great distances, Taking into consideration the fact that the distance and the ^{handling} ~~manipulation~~ were made the product much more expensive.

It is true that at Istria, and at Callatis, ^{where} there have been found an even larger quantity of tiles and st. amphoras, the stage of economic development in general and especially the existence of a true pottery industry allowed without a special effort the fabrication of common rooftiles on the spot, so that the city would not continue to be dependent. Tiles of the best quality, well-shaped and well-baked, pithoi of great capacity (500 to 1000 liters), huge quantities of pipes for well-studied ~~xxxxxxxx~~ water channels, with good dimensions and well-baked, endless categories of pottery and especially that of everyday use, receptacles of all sizes, different well-shaped tools of terracotta, and artistic figurines of Tanagra type, are so many products of the local industry that we find at every step in the cities above-mentioned. Why did these centers, with such developed industries, ^{of} ~~and~~ fine pottery and fine ceramics, not produce also rooftiles?

(9.XII.57)

As for the st. amph., the explanation is simple: the centers from Greece and A. Minor that produced wines and oil made an organized and constant export to the cities to the north and west of the Pontus, where, as we have already shown, there was no oil production and the local wine production was insufficient for the needs of the Greek and native population. The better quality wine and oil sent from Greece had to come in special vessels in a particular packing. But the usual

amph. for ~~the~~ daily use surely also in our parts were of local fabrication and had no stamps (in no city from the NW that we remember, except for Chersonesos, are stamps known on the local pottery).

The eagle with the dolphin that appears on the tile stamps (as well as the presence of this symbol on the autonomous coins) could as well justify the theory of a local production. All the same, from the examination of the whole complex of items that the problem presents, ~~it~~ clearly results:

1) At least at Istria the ^{existence of the} ~~astynomia~~ has not been established;

2) Nearly the whole total of numbers of astynomes and producers on the tiles are found also on the amphora handles surely imported from Sinope and Chersonesos;

3) The name of ^{ΣΙΝΩΠΙΩΝ} ~~SINOPION~~ and of APXENTOAEMOZ, ΠΡΥΤΑΝΙΣ, ΓΟΑΑΣ, ΚΥΡΟΣ, which are the most frequent on the tiles, are not found in the onomastica from ^{Istria} ~~Isthmia~~ and Olbia. In the same way, neither ΔΙΟΦΑΝΤΟΣ as astynome on the stamp of APXENTOAEMOZ.

4) Stamps of the same astynomes and producers on the tiles having as emblems the eagle with the dolphin are found also in the other cities along the coast, cities which did not have this emblem.

In Pridik's tables, out of nearly 400 stamped tiles having the emblem of the eagle with the dolphin, we find 23 different astynomes and more than 40 different producers. Comparing this proportion of tiles with eagle and dolphin found in the Gk. cities of south Russia, at Istria we have found out of a total of 30 tiles only 3 with the eagle and dolphin. In the same way, we have found 2 with eagle and dolphin on amphoras. Such a small number at Istria cannot in any way support the appearance of this symbol in the local production.

Let us add that the ~~stamped~~ tiles found at Istria and at Mangalia have a clay completely different from that of the local ones. The technique of manufacture justifies us also to tend to believe in imported merchandize; the clay is not homogeneous, the tile is formed of an interior thick layer of inferior quality of a light brick color and many times ash-grey, on which was put on both sides a thin layer of fine clay, bright red, well-levigated and well spread. Through

firing at a moderate temperature and therefore inexpensively, there has been obtained
amalgamation
the ~~assimilation~~ of the two finer strata with the thicker one, which has given a
tile formed of three combined layers, which has particular resistance although it
has not been submitted to firing ~~at~~ a very high temperature.

The conclusion which we reach is that the tiles were import goods: not only
the roof tiles but also those used on graves were from Sinope.

Let us look now at the reasons for which this import was made into regions in
which there existed the conception and tradition of fabrication, as well as the raw
material and the main d'oeuvre for such production.

The earliest stamped roof tiles are dated ~~to~~ ⁱⁿ the middle of the 4th cent. BC.

Apart from the characteristics of the writing that take us to this period,
we have to consider, for the group of ~~sty~~ the tiles, also the fact that some of them
(no. 438-9, 445, 450, etc., in our country, and numerous others from Pridik) present
names with the genitive in omicron instead of omicron upsilon according to the
Ionic dialect. This takes us to the years 350-330 B.C., the last period in which
there can still be found both forms of genitive simultaneously, after wh. date only
the one in -OY is used.

Not much later after this date, Istria had entered into the game of trouble
which took her to her repeated destructions. If we count only the big known moments
on the basis of historic documentation: Philip II, Alexander the Great, Lysimachos,
and the invasion of the Gauls (without counting either historical remains ^{also} as well
the many archaeological data from excavations), we already have in a very short
time a ~~very~~ whole series of big destructions, starting from the middle of the 4th
cent. BC.

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After each of these events, the city was certainly exhausted and made great
efforts to stand up again. It is without doubt that after each withdrawal by the
invaders, the city used to start life again (we know an undoubted continuation
documented both archaeologically and historically). The constr. of public buildings,
dwelling-places
~~houses~~ in process of being rebuilt, as well as the burials in ~~the~~ ^(i.e. not much) level cemeteries,

in which were used the sarcophaguses improvised from tiles, ~~then~~ demanded without delay this important construction material. In those moments the tile-producers from A. Minor, who knew of old the commercial ways of the Bl. Sea towards our cities, were finding conditions favorable to the placing of their goods. Evidently the cost of transportation from such a large distance must have made things perceptibly more expensive but probably the ^{shipmen} boatmen brought the tiles more as ballast in the bottom of the boat, the principal purpose of the transport being really the loading on return with all the local good products: wheat, animals, skins, honey, ~~and~~ slaves, etc.

In future excavations, especially in the ^{late} Attic ~~levels~~ and "ellenisitic levels, as well as in the graves of the same periods, it might be possible to find (that) more stamped roof tiles which through detailed registration would lead to exact documentation for future historical studies.

The
Transportation and commercialization of wines and oils in the Greek harbors in our country still presents some aspects not yet clear. In this way, we do not yet know whether these goods were brought in amph. or if commerce was made that we can call bulk commerce, in which case the goods would have been brought in vessels of great capacity.

p. 369 It seems that wooden barrels were not used much in early Gk period to wh. our study refers. Neither from the remains of archaeological excavations nor from the plastic representations do we know in our country such barrels, except in a much later period at the beginning of our era at the same time as the Roman economic expansion. This is surely explainable through the fact that wood was scarce enough in Greece and especially in the islands and as much as could be found, all the small quantities that could be imported were used preferably for the ostr. of ~~the~~ ships and boats, for roofs, and for floors, etc.

For the handling of the wine in the so-called ambulant sales, by retail, in they used sheepskins ~~that took the~~ place of smaller receptacles, and cowhides in place of "barrels" of big capacity.

We know of plastic representations in which are seen 1 or 2 skins of cow or ox in carriages pulled by horses, skins which are supplied with taps of drainage for making easier the handling of the liquid.

It is ^{one} ~~different~~ thing, retail commerce, and a completely different thing wholesale commerce, our harbors becoming in this case transit depots and intermediary factors . . . The businessmen from here shared the profits with the producers and the importers, in a much larger way than if they had remained at the plain commerce of buying and selling of a fixed and limited unity, of sealed and stamped amphoras. We have proofs that at least in the principal harbors of the NW of the Bl. Sea ~~there~~ ⁱⁿ there has existed, along with the very developed commerce of wine and oil in st. amph. also a commerce of wholesale. Investigations and studies on this economic side have not been made in our country or in other parts, but it is to be wished that they will be made because the following of this aspect of the local economic life can give us interesting things in respect to the relations of import and export with the producing and consuming centers.

At Istria and at Callatis have been found many pithoi (big jars of the shape of a barrel, with capacities varying from 300 to 1000 liters; see fig.65). [Caption: Pithoi found in the last excavations at Istria, 1950-53. a) in the economic section of the S side of the city, 4 pithoi in a single room, buried to the mouth; b) In the same section, in another enclosure, a pithos buried only to the half (next to it a mortar and pestle); c) The excavation of another pithos in the W side of the same section (belonging to a later period); d) A pithos from the old excavations, in front of the museum of the excavations (probably from a better period). Many of these pithoi that we find also in the villages ⁱⁿ ~~from~~ the interior of the territory in which are found ancient traces of human settlements, ~~they~~ have been used for holding drinking-water, and especially for storage in good conditions of grains. But on the bottom of some have been found also de-alcoholized remains of wine, remains of oil, or remains of salted fish. Therefore they were used also for these purposes.

We can say that the total of these jars are of local fabrication. Each center, small as it may be, on the basis of the pottery tradition, and of their own resources, made such vessels, fired in individual ovens usually dug out in the earth. The discoveries of today prove that the receptacles were buried in yards and even in houses. Numerous storerooms with stone walls and with special ventilation in the walls have been found during the excavations of Istria, especially in the S part of the city. In one of these deposits were found 4, in another 7, pithoi.

From a late period (the end of the Hellenistic and especially the Roman imperial period) Dobrudja has known many discoveries - by chance - of such receptacles of local fabrication and use. Some of them have on the neck or on the belly, incised "in cold" [after firing??], various letters and various figures that indicate the name of the owner and the capacity of the vessel. At Callatis have been found several fragments of pithoi with inscriptions. In the deposit of ancient material from Istria have been found fragments from the lip or from the body of large jars, having various letters and signs incised or stamped in relief before firing. We have found (enceinte) the remains of two pithoi in the lower level excavated in 1950 in the enclosure of Istria. The jars were found at a depth of 3.20 m., under the last level of the Byz. period. One of them shows that it had a ^{greatest} diam. of 1.30. Both had ^{horizontal} bands in high relief, giving the impression of the bands that hold barrels. The vessel was wheel-made. The clay ~~was~~ of light ash-color, well levigated, differentiates completely from the red clay of the pithoi of late period from the ^{commercial} economic section of this settlement.

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Also at Istria, Vassily Purvan mentions the existence of even older pithoi, of which we wd have learned many details, if ^{we} ~~they~~ had not had the misfortune that the manuscript of Istria V was lost after the death of the great scholar. Here is what V. Purvan ~~maxxeritinx~~ wrote in 1923 [~~xxxxx~~ La Penetration Hellenique et la Vallee du Danube, in a Rumanian publication] 1923, p.23] in reference to these pithoi: " . . . In fact, in the square well ~~xxx~~ on the SE side of the acropolis containing exclusively Gk vases of the 6th cent BC, we have found - as did Stern at Berezan - fragments of indigenous vases, this time very large, in the shape of

pithoi, handmade without wheel, of coarse clay badly levigated and badly fired, and decorated with big horizontal bands in relief that ~~were~~ completely surrounded the vessel like the circles of a barrel, incised in turn with small oblique depressions imitating the structure of thick hemp ropes."

There are also jars, whole or in frg.s, that have a different shape from that mentioned above, different dimensions, different clay, and a special technique of manufacture and firing. These are found in the older levels of the excavations, organized or by chance, that are made in the interior of the ancient cities of the Bl. Sea coast.

It is almost without doubt that the remains pertain to the earthenware "barrels," in which were brought, during the Hellenistic period, on ships large quantities of wine and oil to Istria and Callatis. For the moment we don't have concrete indications to show the provenance of these arch. remains. It cd be that these pithoi were not stamped, or that the stamped fragments were not found, or that they have passed unobserved. The idea of the existence of ^{wholesale} commerce is sustained also by the discoveries made in some Gk cities of the south of USSR, where the aspect of the developed commerce of wines and oil of import in sealed and stamped amphoras is the same with that found in our country. R. B. Ahmerov says in Vestnik Drevnii Istarii, 1949, 4, that in the course of the arch. excavations of Chersonesos, the lips of 2 pithoi with the stamp of the astynome from Sinope were found.

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~~it was the center of production of~~
At least by the center of production of Sinope was practised a wholesale commerce, on the basis of which oil and wines were brought on ships in containers of 500 to 1000 liters, discharged in the N Pontic harbors and sold in large quantities to the intermediary local business men. Surely, ~~that~~ ^{big} after emptying them, the jars were taken off the ships and left on the spot, so that the vessel could load on the way back other goods. Now the trader came in, who had to store the goods in good condition before passing to the retailing commerce. It is very probably that the wines and oils were transferred to amphoras of local fabrication, on the basis of the local standard of capacity in use, and were resold to the provincial traders who took them to the interior.

Maybe also throughout the ^{GK} cities of the Bl. Sea was developed a retail commerce without packing, in other words without amphoras, the goods being served to the buyer in his own containers or in jugs, at certain places of unpacking for the local use. To support this hypothesis, we have also some material evidence. Among the arch. remains from the depots of ^{was} ~~istria~~ ^{istria}, coming from the old excavations, uninvestigated and unpublished, ~~was~~ found, a few years ago, a frg. of a small pot enlightening for the evolution of the economic life within the city. It is a vessel which, acc. to a calculation based on the fragment which has reached us, must have had a Ht. of ca. 0.15, and which certainly made part of a measure. On the remaining fragment, (Fig.68) [caption: The commercial measure for the sale of wine and oil in retail, having the stamp of the agoranome ΑΓΟΡΑΝΟΜΟΣ (from the old deposit of Istria material, without knowing the place and condition of finding) noticed by V. Zira.)) we find at 0.03 below the lip a rectangular stamp applied to the soft clay, on which we read:

ΑΓΟΡΑΝΟΜΟΣ
ΑΓΟ[ΑΑ]ΝΟΜΟΣ
[ΤΟΥ ΙΕΡΟΥ]ΝΥΜΟΣ

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Acc. to the aspect that is presented by the dark ashy clay, the small vase must be of local fabrication. It could not even be otherwise because it was not usual to import vases of inferior category in shapes, execution and material, since Istria had industry that was enough developed for such pottery that had no special artistic value. On the other hand, the stamp gives us the name of an agoranome. On the other hand, in the whole of more than 1000 imported amphoras that we now have at Istria, we have only names of ~~magix~~ astynome magistrates from Sinope and Chersonesos, The eponyms from Rhodes, and names without title from Thasos.

Agoranomes we have never found, except only on an amphora from Herakleia. Anyhow for the existence of a commerce by retail, there was no sense in bringing into the city of Istria a standard vase of small size, on which would figure the name of a foreign magistrate, not from the city. It is therefore very probable that we have to do with ~~in~~ a unit of measure made at Istria and used on the local market for retail commerce of oil and wine.

For the history investigators, the appearance of the agoranome ΑΓΟΡΑΝΟΜΟΣ ΤΟΥ ΕΠΕΝΥΜΟΥ will be of interest, just as it is for us to observe that from the 2nd to the 1st cent. BC (in wh. the stamp cd be placed) the agoronomia was functioning. The retail commerce on the local market was therefore controlled and guaranteed, having corresponding development to this organization. A similar case to this one from Istria is presented by Staerman []. It is about a small jug found at Tyras, in which appears the stamp and title of an agoranome: ΠΥΘΟΚΡΙΤΟΣ ΑΓΟΡΑΝΟΜ . . .

Also at Chersonesos has been found during the excavations a small jug that had on the handle a stamp with three lines:

ΑΣΤΥΝΟΜΟΥΝΤΟΣ
ΦΟΡΜΙΩΝΟΣ
ΤΟΥ ΠΥΘΙΩΝΟΣ

So that also at Chersonesos we meet a unit of measure for the local retail commerce, but with the name of an astynome not an agoranome as in our country [Ahmerov, V.D.I. 1949 , no.4, p.99-123.] and as at Tyras.

The stamp on this jug clearly indicates the local provenance: Phormion son of Pythion is a Chersonesos astynome and belongs, acc. to the Soviet scholars, to the 3rd chron. grp., in other words he ~~was~~ ^{was} in function around the years 200 BC. Ahmerov considered that the stamp with the name of the astynome on a jug of such small size was the only case known up to 1949.

What is for the moment certainly taken to advantage from what has been said above, is the ~~fixx~~ ^{on} establishment that while at Istria and at Tyras retail commerce ~~at~~ the local market was guaranteed by the local agoranomes, at Chersonesos this function was filled by the astynomes.

We regret that both Ahmerov and Staerman have no reproductions of the jugs from Chersonesos and Tyras with the stamps of ast. and agoranomes. We have not even indications on the capacity of the vessels. It wd have been interesting to know these data which could have made clear the problem of the system of measuring liquid goods in the region of the NW Pontus, and especially in that of Istria. If we cannot now make this investigation

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in a complete way, we shall at least try some deductions on the basis of the material that we have at hand.

A unit of measure of ~~the~~ capacity existed, certainly in our Pontic cities, and almost certainly in the whole extent of the territory that was in economic relations with the Greco-Romans, in whose countries it was based on the measure "etalon" [talent?]. This appears as above without doubt after a simple look at the whole of other matters of [their numbers?] economic practice. The Gks on the coast knew the numeral system, the measuring of surfaces, of height, etc., as well as the weighing system. These helping elements of the development of the economic and social life ^{had} penetrated even from the 5th c. BC into the world of the natives from both sides of the Danube. We can understand this following with much attention the remains of the material culture that can illustrate the reality of the past: coins, weights marked and unmarked, receptacles of standard types, tiles, stone blocks, boundaries of agricultural places, house foundations, etc. Without doubt also capacity measuring was under an organized system.

Checking over whole series of imported amph. from Rhodes, Thasos and Sinope, that have reached us complete, we have taken into the study also a number of different older types of amph., from the period anterior to stamping, and we have measured their capacities.

The amphoras with bulge on the neck, found under the floor of the temple at Istria, that we attribute to Chios, which have been dated in the 5th - 4th c BC, have a capacity of 21,500 liters. The unstamped amph. of small size but with spreading belly, with neck and handles high, with short, pointed base, found by chance in some graves dated in the 4th c, have a capacity of 20 liters (without the neck).

The commercial amph. from the period before stamping that followed those from Chios and about wh. we have spoken above (Fig.55), found in the Museum at Istria, contain half a metretes (20 liters).

All the imported amph. in our country from Rhodes in the earliest period (the beginning of the 3rd c BC) have 20 liters, in other words half a metretes.

Those from Herakleia are of 10 liters, corresponding to a quarter metretres.

Sinope as well as Thasos sent amph. of two different capacities. For Thasos, counting acc. to the thickness of the handles and the size of the stamps, ca. 60 per cent indicate large amph. and only 40 per cent small amph. At Sinope the proportions seem to be respectively of 40 per cent and 60 per cent.

As we have shown, there were found at Istria not long ago in the depot of the excavations a whole stamped amphora from Sinope. It is the first whole Sinopian amph. known in our territory. Examining this important monument we have proceeded also to the measure of its volume. The result obtained was astonishing: only 17,500 liters, as compared to the 20 liters that we were expecting, judging by the volume of the Rhodian amph. The capacity of the Sinopean amph. does not correspond anyhow, not even to that of the amph.s from the period before stamping, which are usually somewhat larger than 21 liters. It would result from this that official unit of measure was one way at Sinope and completely different at Rhodes, although the majority of amph.s belong to the same period.

It wd be to be expected that at least the Thasian amph.s wd have a capacity similar to that from Rhodes, it being given that these 2 centers of production, although far from one another, were part of the same Hellenistic world, while at the same time Sinope, remote and somewhat isolated from this world was leading a life apart, in wh. it is natural to find a particular aspect also in the economic domain such as we find in the political and religious ones. With all this, we could find out (after we have made a measuring of the Thasian amph.s from Jurilovca) that the amphoras from Thasos spread on our territory as well as on that of the S of USSR have a capacity of 8,700 liters, in other words half of the capacity of the Sinopean amph.s.

It is clear that Sinope used a unit of capacity corresponding to 17,500 liters, and that Thasos had the same unit (the Thasian amph.s known in our country representing half of this measure). Also the influence of Thasos on the commerce of pottery from Sinope is easily noticed also in the shape of the stamps, in the multitude and variety of the symbols, and even the disposition of the 3 and 4 rows of the legends in some

of the stamps on tiles.

One may say that the metretes of 40 liters was valid only in the Aegean-Asiatic world, (with amph.s of half a metretes each of 20 liters) and that the region of Thrace as well as Pontus used other units of measure "the metretes" of 35 liters [in amphoras of half a measure each of 17,500 liters at Sinope and quarters of measures each of 8,750 at Thasos).

In relation to the problems of the unit of capacity measure, we may also take into consideration an interesting measure-etalon found in the walls of the castle III Schuchhardt in the valley of Pallas. It is true that the monument is referred to a much later period (the 2nd - 3rd c. AD) but and that it has been used especially as a capacity for grain. Anyhow, lacking other material elements, this also can be of use in our investigation [T. Sauciuc-Saveanu, Rumanian pub.].

The etalon is made of a marble block of parallelopiped form in which are two hollows of conical shape with depth of 0.445 m and diameter of 0.400 m at the mouth. The interior is perfectly smoothed and in the rounded bottom there is in each a hole for drainage (Fig. 69).

On both sides of the block is an inscription as follows: on one is written (cf Sauciuc-Saveanu):

ΕΙΣ ΔΙΜΟΔΙΑ ΕΚ
ΕΞΗΝΑ ΠΛΙΝΙΝΕΙΟΥΝΑ
ΕΝΤΙΑΝΟΖ ΚΑΙ ΤΗΝΤΩΝ
ΚΑΙ ΗΚΙΣΤΑ ΠΑΡΕΛΕΙΠΕΝ

On the other side the inscription is shorter:

ΔΙΜΟΔΙΑΝ ΕΚ ΔΙΜΟΔΙΑ

It is known that in the 2nd and 3rd c AD there was functioning at Tomis (and surely also in the rest of Dobrudja) ^a measure of capacity that had as its basis the Roman measure known as modius (8,751 liters). The measure shown to us in the marble monument at Costanza has written in Greek on both sides: dimodia, which indicates a measure equal to twice a modius, in other words 17,502 liters. As such a unit of capacity was not used by the Romans, it must be considered as pertaining to the local system of measures and weights, as compared to the Roman unit of 8.751 liters. Why did the Greeks make an

p.377 etalon of 2 modii, and why did they not use the Roman one? They were still used, from the late Hellenistic period, to a Greek measure of 17,500 liters, such as was contained by the amph.s of wine and oil imported here from Sinope and Thasos.

This is possible, if we consider that - although the Greeks adopted in the Roman period various forms of the new culture - the basis remained the same.

[star]

We have analyzed up to now various aspects of the ~~stamped amph.~~ the problem of import ~~interritorial~~ of st. amph.s to Istria. But it is as interesting to investigate also the penetration of these amph.s into the interior, in other words to follow their area of expansion beyond the points on the sea coast.

St. handles have been found in many centers in the interior. A large enough investigation in this direction is hard to make now, because the material has not been followed studied in the place of finding, and as much as has been found has not been collected and stored in scientific conditions.

There are numerous small localities that do not figure in the archaeological map of Dobrudja, although it is known that from there come many st. amph. handles, found in private collections or in various provincial museums, without precise data on the conditions of finding.

We hope that in the near future we or others will occupy themselves also with the Hellenistic amph.s, of which the traces are found in the context of life of the native population, far from the sea harbors in which the goods were unloaded.

For the moment, we can merely notice, with for information, some of the centers, trying also some conclusions in relation to the problems that they bring forward:

Razboieni, formerly Alifaci, W of Babadagh, where have been found several amph's among which a whole one from Pontic Herakleia, with stamp in ^{incuse} relief of square shape on the neck. ^{It is} ~~they are~~ in the museum of Tulcea under the number 54C;

Malcoci, a locality with many arch. remains. From here has come into the Tulcea museum a whole amph. from Rhodes with stamps on both handles:

ΔΥΟΚΑΕΙΛΣ

4

in a rectangle with stars in the corners, and on the other stamp:

ΕΠΙ[ΛΗΥΘ]Ο
ΔΟΡΟΥ
ΠΕΛΑΓ[ΕΙΤΝΙΟΥ]

(under inventory no. 9, in the Tulcea museum).

Also at Malcoci (under no. 8 and 11) other two amphoras from Thasos with ^{worn out} stamps.

Meidanchioi, near Macin, an amphora (with the stamp of the astynome illegible) of late period (probably the 1st cent.) and an amph. from Thasos (under no. 96 in inventory of Tulcea museum).

Mahmudia, numerous SAH found in the field, in the ploughed earth. ~~They have been~~ dispersed by the local people. The plain sherds without value have been dispersed by the local people.

p.378

Murughiol, much Hellenistic material and numerous st. handles from the 4th to the 2nd c BC, scattered around and not yet picked up. (Some have been picked up by V. Zira.)

~~Maxshallnotx~~

We shall not return over the localities Baia-Hamangia, Sinoe, Tariverdi, Vardul - Caraharman, of which the stamped amph. have been registered in the present work and also not on the localities on the right side of the Danube (Cernavoda - Hinog, Hirsova, Ostrov, etc.) of which we have already spoken.

It is not the place to speak now also about the whole ~~amph~~ or broken amph. with or without stamps found during the works on the way to Medgidia - Navodari, material that has not been registered and collected with care.

In the south part of Dobrudja outside the enclosure of Tomis and Callatis at considerable distances, have also been found stamped amph.s. The localities Tuzla-Far, Vana-Veche, Albesti, Peceneaga, etc., must also be added. A great number of amph. stamps have been found at Costinesti (Mangeapunar) [Rumanian publ.].

Along with the Thasian stamps at Costinesti have been found also some with incuse stamps on the neck, belonging to Herakleia.

In the summer of 1956, the Institute of Archaeology of the Academy of R.P.R. [Rumania] gave us the assignment to investigate and make trial trenches in the locality Costinesti and surroundings, where chance discoveries have brought to attention the remains of human settlements.

We made 6 trial trenches around Costinesti and in the village Schitul, as well as at 2 kilometers toward V near the highway Costanza-Mangalia. With this occasion we have made sure the existence of two wide-spread settlements of the Hellenistic period above which were Romano-Byzantine settlements.

At the eastern extremity of the village Schitul, we discovered the ~~dams~~ ^{lit. dikes} dikes of an ancient harbor dug in the rock, and at the NW end of this harbor, an agglomeration of pottery fragments in which remains of amph.s predominated.

What interests us in a special way in this short report on the archaeological focus of Schitul-Costinesti, is that, ~~as~~ both in the agglomeration above-mentioned, and in the points tested near the highway, we have found stamped amphora handles coming from Thasos Sinope, and Rhodes (to these are added also those from Heraklaia found longer ago at Costinesti, mentioned above).

15.XII

We must say now that Dr. H. Slovozianu has gathered here ca 20 stamped handles, ^{aeol.?} and that the archaeologist H. Doicescu and the writer G. Naxum have also found some stamped handles. We have information that ^(the homes of) at some of the inhabitants of Schitul-Costinesti, at the school, and in the private collection of some amateurs, are found also many examples.

p.380 We have given several details about the recent discoveries at Schitul-Cost. in order to bring out the importance of this new ^{archaeol.} focus, in which the abundance of st.amph.s shows the probability of a commercial center of import based on the harbor of Schitul. (It is possible to find here the ancient city of Parthenopolis mentioned in the ancient sources as between Tomis and Callatis.)

In this problem of the diffusion of amphoras in the interior of Dobrudja, we must mention especially the fact that in 1955 a chance discovery made at 2 kilometers NW of the village of Jurilovca behind the promontory of Dolojman, has brought to light very int. ^{Well out} things. In the fields, around a burial placed under the center of a tumulus were found not less than 100 amphoras, placed in a regular circle around the grave. The amphoras were whole when the villager let the plough sink into ^{or, "the cultivation" (apand tunc)} (freshly turned earth).

The 100 amph.s are divided into 2 types:

1. Unst. amph.s characterized by their large and massive bases; the body is tall and thin,

and thin. The height is 0.97 m (see fig. 55, the amph. on the right, and Fig.70 the amph. on the left).

2. Small amph.s from Thasos, of average Ht. 0.65 m, of the type of the quarter of a metretes, having small stamps on one of the handles. The stamps are of the type of those with representation^{ation} the kneeling Herakles, drawing his bow, or with a long-stemmed flower. ~~F~~ [Cannot make out if these are 2 different types?]

The material belongs to the 1st half of the 4th cent. BC. It is dated by the small early stamped from Thasos, which in turn dated the other unst. tall amphoras.

The richness of amphoras placed in a grave in the Istria territory presents the biggest interest. The same great interest is presented also by the burial ritual unknown till now in our country. It is understood that the discovery wd. have been of even greater value if the grave had been undisturbed and the circle of amphoras had not been taken apart.

The amphoras were placed obliquely, close one to the other, with the mouth ca. 30 degrees up, with the base deep into the ground, and alternating a large one with a small one. Surely the ~~po~~ tipping position indicates that the amph.s were full when the burial was made. Anyhow, some of them still have on the bottom solidified residues.

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Following the different rituals of burial which have ~~been~~^{revealed} ~~developed~~ by the archaeol. discoveries in the S of USSR, we find out that in the series of Kurgans dug at near Chersonesos, of which Max Ebert makes a full report [M.E., Preah.Zeit. 1913], have been found graves that contain 5, 7, 8, 9, and 15 amph.s in specially dug out niches. Acc. to their position, the amph.s could have been placed in the graves full. in the trench of the deceased. So that the practice of burial with a large no. of amph.s was known, although under another shape, also among the native tribes in the S of USSR. Also in these graves are two types of amph.s: some belonging to Herakleia with incuse stamps on the neck; others are longer (0.97 m) and not stamped, and resemble to the point of identity those found at Jurilovca.

A kylix with glaze, a lekythos with redfigured dec., a bronze bell, and other objects found in the tumuli from near Chersonesos, ~~have~~ made Max Ebert take the amph.s as of the 4th c BC. We note that similar groups, each of 15 amph.s (14 in the niches and one at the head of the dead) have been found in graves from Chersonesos. In the grave no.6, on the

neck of an amph. we note an incuse stamp with large letters, written in two rows:
 deepened

ΔION
 ΥΣΙΟ(Σ)

A similar stamp we found also on an amph. frag. from Istria (in text no.427) but with retrograde legend. shd. say no.732

The resemblance between the burial ritual of Jurilovca and Chersonesos is only in respect to the large number of amphoras in the grave. At Jur. the amph.s formed a circle around the grave, while in . . Ebert's, they are placed inside the grave, in specially made niches.

V.F.Gaidukevich has recently published [pub. of 1955] the picture of a grave excavated at Olbia, in which are placed in rows several tens of amph.s from Herakleia and Thasos, dated in the 4th cent. BC. [amp. at Fig. 74 of Gaidukevich]

But bear in mind that also at Olbia was found a circle of amph.s, in a grave discovered by B. Pharmakovski in the Hellenistic necropolis, and described by him under no. 78 in a report of 1912 [Pharm. in Arch. Anz. XXVI, 1912, p.351, fig. 31.]. The grave was surrounded by 17 amphoras of different types placed - as at Jur. - in a nearly perfect circle. The position of the amph.s is however reversed from those in Jur.: in our country the amph.s are placed with the mouths in, but in Olbia with their bases in. [Fig. 75]

In his report Pharm. does not investigate the types and provenance of the amph.s, he only mentions that it is about the Hellenistic period.

We have insisted a little bit more about the information of archaeological order bound to the discoveries of st. amph.s in the Dobrudja territory, from the midst of the native population because this side of the problem had not been investigated, although it deserves special attention, and any new data may enlarge the possibilities of our knowl. The natural question which now arises: how far into the interior did the Greek goods in amphoras penetrate? Did they remain only in the territory of today's Dobrudja, or did they also cross the Danube?

The stage of our knowledge today can lead us to interesting conclusions. Some organized excavation, as well as chance discoveries, have brought to light amph. fragments with stamps not only at Tariverdi and in other places in Dobrudja, but also across the

Danube far into the Carpathians and in the N of Moldova.

In the ^a plains of the Ciur~~u~~^a, the Iasi district, has been found a lot of more than 100 stamps [Prof. V. Tudor has put at our disposal his manuscript, as well as his corresponding plates, for the plain of Ciura and Stăienesti-Cimpulung. We have also used his communication from the 1954 session of the academy of R.P.R. (Studies and References concerning the history of Rumania, Buch. 1954, I, p.8 ff.)], all from Rhodes and Knidos, belonging to the 3rd - 1st c BC (not a single stamp with the name of an astynome, and none from Thasos). Also from Rhodes and Knidos we have ^{stamps} at Stăienesti-Cimpulung-~~a~~^{stamps} Muscel. At Plesesti, the Falticeni section, we have Rhodian stamps [The Rhodian st. from Ples. ^{sic} is kept in the museum of Turnu-Severin.] At Schitul of Tirgoviste, at Poiana- on the Siret - at Popesti on the Arges, at Spantov, Gumelnita, Gradistea, Fundul Chiselet, Piscul Crasaⁿ²~~linor~~, have also been found different Greek stamps. At Tinos have been found double handles, of the type of Cos, and $\frac{1}{2}$ a Sinopean handle with the name of the astynome. G. Cantacuzeno published, longer ago, [G. Cantac., "Timbres amphoriques inedits tr. en Roumanie," in Dacia III, 1927-32, p.612 ff.] a Sinopean stamp with the name of the astynome ALEXINOY and of the producer MIOPIAATHE, found by D. Butculescu at Cetatea Dimbovitei near Cimpulung.

Also Rhodian stamp has been found at Runcu in the neighborhood of the monastery Tismana. It is a stamp of circular shape with the flower of Rhodes in the middle - We read: EHI EYΦANEY(Σ). The month cannot be read. [Rum. pub.] The stamps from Stăienesti-Muscel bring interesting things. Out of the number of 60 Rhodian stamps found here and studied by Prof. D. Tudor, only 5 have a relative resemblance with some of the ¹⁵⁰~~150~~ stamps found at Istria: 45 are of another type, and 10 are dubious. Not even the stamps from Knidos discovered at Stăienesti (25 in number, of which 10 are restored by Prof. D. Tudor) are found among those from Istria. The same way the single ex. from Rhodes found at Baia De Fier by C. Nicolaescu-Plopsor is not known in another place in our country [~~See~~ Nic.-Pl. has brought both stamps to our notice even from the year 1954.].

The area of diffusion of Greek goods enlarges itself this way very considerably. Until now we knew only of the penetration into the depths of the territory of the coins

of Philip and Alexander, of those from Thasos and Dyrrachium, but the way of these was in no case through Dob. or through the mouth of the Danube, but directly through Thrace.

If the Knidian stamps and those from Rhodes found in Moldova, at Stoienesti and in Gorj, are of other magistrates and producers than those we have noticed at Istria, it means that their provenance is from transport that did not pass through the intermediate of Istria. One puts forth therefore the hypothesis of some direct relations between the Rhodian or Knidian producers and the Geto-Dacian consumers of the sub-Carpathian regions. If we admit such a hypothesis, three would be the ways by which the goods could penetrate to the Geto-Dacians of sub-Carpathia.

1. The native traders used to go with ^{carts} ~~the carriages~~ to Istria or to other harbors of the Black Sea, they used to take their products and brought from there the Greek imported goods. There ^{was} ~~is~~ without doubt a considerable number of native ^{cart} traders used to carriage transport, with the long journeys, with the risks, and the inclement weather (which was not the case with the Greeks, at least in the beginning). Eager ^{for gain} to win, the possessors of "capital" or of barter goods, these traders bought in the harbors the wine and oil which is made sure by the remains of amphoras in their home districts, they surely bought also fine clothes from the Orient, scents, and other goods that they transported with their "samaris" and carts.

2. The second way, much more important than the first: the Greeks coming by sea did not stop at Istria or another port, but ~~were~~ entered the mouth of the Danube and went up the river to the small stations on the riverside, which were owned directly by the natives. Here the goods were unloaded and waited for the native traders who continued the transport by land.

Sailboats filled with goods went high enough up the Danube: remains of Greek settlements or of Greek culture in native settlements have been found in sufficient quantity but especially on the right bank of the river. We know for later in the imperial period also an association with boats at Axiopolis (Cernavoda). On the left hand of the Danube near Galati, then at Zimnicea, Balanovai (near T. Magurele), on the Mostistea, etc exist remains of the Greek penetration into the local medium. At Barbosi was found a

sculptured marble sarcophagos of more than 3000 kilograms wt. probably of Asiatic prov. The studies of other investigators [G. Tocilescu, Dacia before the Romans, Buch. 1880, pp. 343-410, 413-533; V. Parvan, La Penetration, etc. (d'apres les dernieres decouvertes archaeol.", in B.S.H.A.R. X, 1923, pp23-48; idem, G. Cantacuzeno, . . . Dacia III, 1927-1932, p.612.] treat in a large way some of the steps of the penetration of the Greek goods and cultures beyond the Danube.

Framed in the whole of other news that we have in most recent times, what was made clear by the older historians make the idea stronger that also in the Hellenistic period, not only in the Roman, there existed along the Danube port centers and Greek or Greco-native settlements, in which the boatmen brought their goods in order to be nearer the place of unpacking of the Geto-Dacian world.

3. If at the beginning the Greeks were afraid to go far from the Danube harbor, certainly with time they became more daring, and started to enter the tributaries of the river, on the Siret, Prut, Arges, Dimbovita, and Olt, which were navigable in antiquity at least for light craft.

Remains of the Greek penetration on the course of the tributaries are found in several places, of which we name also Poiana-Tecuci on the Siret. From the shore of the last navigated water, the amphoras were taken further with the samar or with carts. The appearance of a stamp in the cave of "Woman of Gorj" (near Baia De Fier) and of another near the monastery of Tismana, indicates unconditionally land transport (even if the Jiu was in antiquity navigable for light craft, anyhow from here up to the point where st. handles have been found, transport had to go over several kilometers by land).

Such were the beginnings of ^{Greco-Geto-Dacian} interpenetration ~~xxxx~~. The relations started at least from the middle of the 4th c BC and continued nearly 3 centuries increasing continually as is seen from the Rhodian amph.s at Iasi, from the end of the 3rd cent.

Bringing in one way or another the goods near the consumers, without a very great surplus of expense/ (in fact only a surplus of time) the Greeks received much ^{higher} ~~greater~~ prices than at Istria, Callatis or Tomis. But there is also another motive that favors the small centers of the Danube shores against Istria. The authority in the city states

on the sea coast had the most severe customhouse regime. Coming into the harbor, the boats were submitted to a first tax of entrance, then came the taxes of unloading, those of storage, taxes ~~of~~ ^{passing to} for ~~expressing~~ the city itself, and at last the taxes of exit for goods that went into the interior.

Judging from the situation in the harbors from which we have information, the taxes were established on the value of the goods, reaching in some cases a quarter of their value. For what concerns the value of taxes for exit from the city, we do not have suff. information, but surely they were quite sufficiently high also.

Entered through the mouth of the Danube and ^{making stops} ~~halting~~ in the small centers without administrative and fiscal organization of Greek type, the traders had from the beginning an important difference in earnings. Their interest was enlarged to the double, if we suppose that goods of local production with which they returned offered the same advantages not returning through the grasp of the Istria customhouse. To this can be added also the difference of price that the traders ^{made} ~~used to make~~ buying the goods directly from the producer or in his neighborhood. The roads to the Bl. Sea harbors was hard and the population was pleased with the existence of a constant ~~max~~ buyer who would knock at its door with ^{his} ~~its~~ own means of transportation.

Thanks to these commercial relations bringing advantageous conditions, the native Geto-Dacians were encouraged to increase agriculture and animal husbandry, the production of Honey, cheese and fat, to prepare hides, to gather and condition plants and hay, to cut forests, to shape and sell wood for the constr. of boats.

As we have seen, the advantages of both sides were much larger when the boats came up the tributaries which we have shown often happened.

The above remarks seem to oblige us to change our opinion on the role and importance of the Greek colonies in the development of the economic and social life of the native tribes from the Muntenian plains, from Moldova, and even from beyond the Carpathians. The native traders coming in contact with the civilized world, became simultaneously also agents that brought home also the more advanced ideas, refined tastes, and the desire to become more wealthy that were developing fully among the Greeks of the coast.

Let us see also another aspect of the problem. Having before them the model of the Greek amphoras, it would not be understandable that the Geto-Dacians wd not try also to manufacture amph.s. In the 3rd to the 1st c, the local tribes had their own coinage (based on the imitation of a prototype). In the same period we know that they had also kilns for pottery and their own moulds(?), and that splendid Delian cups were ~~made~~ imitated. Especially instructive is one of these Delian cups of local fabrication, found in 1938 at Snagov (Fig.76). [Rum. pub.]

All around the vase and on the bottom are reproduced Geto-Dacian coins ^{with} imitation of the Macedonian type. ~~For sure~~ ^{certainly} the potter used Geto-Dacian coins for the ornamentation of the cup. The reproduction of the coins confirm once more the local fabrication and ~~the~~ shows a desire to affirm himself by the Geto-Dacian producer. In the same way, it confirms the date of this production and of the Dacian coin of early type. [F. Courby, Les Vases Grecs a Relief, Paris 1922, dates the Delian cups with vegetable ornament and copies after ~~children~~ ^{from} Greek and Roman Republican coins, ~~to~~ the middle of the 2nd c to the beginning of the 1st c BC.]

In the series of imitations that the Geto-Dacians made in the 3rd to the 1st c BC after Greek ~~models~~ models: coins, amphoras, stamps, Delian vases, etc., we must add also the last discoveries from Sincraieni [Rumanian? pub.] [or Hungarian?] beyond the Carpathians, in the region Sf. Gheorghe - near Miercurea Ciucului. Among the silver drinking bowls for wine from ~~these~~ treasures, we find copies in metal nearly identical with Hellenistic kantharos types (Fig.77).

The imitation of Greek amph.s by the Geto-Dacians is in this way not a chance and isolated phenomenon. The fact is integrated in the complex of the great process of interpenetration and gives us material documentation on the basis of which we can follow the shapes and the period of the economic movement in the midst of the native population.

The problem on the whole is much ~~larger~~ too large for this work, but we cannot overlook some of its aspects that are directly connected with the amphora and its role in the Geto-Dacian economic life.

In the ~~deposit~~ of archaeol. material from Istria we have found a catalogued amph. depot

handle registered in Group IX "miscellaneous" under no.759. It comes completely out of the common through the composition of its clay, and especially through the amazing character of the "inscription". At first sight we think we are in front of a Rhodian stamp. The round handle is bent after ca. 0.05, and as much as is preserved shows a bend of nearly a right angle, just like Rhodian handles. The rectangular stamp in relief is impressed on the top of the handle with the usual process used for stamping Greek amph.s of the Hellenistic period. The very granular clay is of bright brick color. Not a single trace of slip(?).

But only at first sight does the frg. give the impression of a Rh. handle. Seen from closer, the unusual features of the clay make us conclude it is a local product, and a sufficiently careless one. The three rows in the stamp include a series of signs that are neither Greek nor Latin, and give a cuneiform impression. Such an inscription has never been seen on the territory of the Gk cities of the Bl. Sea. Although in general the stamping of amphoras with barbarian ^{writings} ~~languages~~ is unknown to us, we cannot exclude the possibility of a stamped handle of Asiatic origin!

Similar round amph. handles with rect. st. without legend that can be read, and having only two or three rows of ununderstandable signs, have also been found at Stoienesti near ^mCipulung Muscel, and have remained nearly 50 years in a collection in Cimpulung without getting any attention from the investigators. Only last year this coll. has been taken for investigation, and remains to be published in the near future. [Fg. 78]

Similarly, there have also been found, by Dinu V. Rosetti in the excavations of 20 years ago in the Getic settlement from Popesti on Ardes, more than 20 amph. handles in appearance Rhodian, but in reality of rough local fabrication, on which are stamped in rectangular frames stamps which cannot be interpreted. And in the recent excavations of the Academy of R.P.R. have been found at Popesti such stamps [Rum.pub. 1955]. Among the amphoras of local production from Popesti, another category characterized by double handles similar to those from Cos. [Fg. 79]

Also at Popesti have been found some halves of amphoras having such stamps. The material is found in the depots of the museum of the city of Bucharest, unpublished.

Here is a series of interesting discoveries, closely related one to another, and ~~simily~~ close enough to the stamp from Istrâa.

We must admit that the above amph.s are of local fabrication, imitating by their shape and stamps amph.s from Rhodes and Cos. ^{Amphoras from Rh. and C.} ~~which were~~ circulating in that period so freely have been used as prototypes for local production. We think that there was not enough insistence on the signs on the stamps; they were considered ornamental. These signs are curious; although they seem to be varied enough, all the same they repeat themselves. It is to be remarked that the same signs are to be found also partly on the ^Geto-Dacian coins. It is a problem that remains to be cleared in the future.

star

We have studied the import of commercial amphoras into Istria. We have seen their origin, what goods they contained, what commercial ties the city had with the big Asiatic ^{-Greek} and Aegean centers.

p. 391 Going further from the coast of Pontus, we have followed the amph.s into the interior of Dobruja; we have passed with them beyond the Danubâ, and we have followed them along the rivers that furrow the district from N to S. We have seen the infl. that was exercised by the Hellenistic civilization on the local populations, thanks to the goods introduced here. We have followed the fabrication of local amph.s in close relation to the Greek amph.s that served as prototypes.

Let us now make some conclusions imposed by the study of imported and local amph.s which we have seen still in such close relation:

1. In the 6th and 5th c BC Istria maintained stable commercial relations with most Greek centers of production, especially with Miletos, Rhodes, Samos, Chios, and Thasos. The import of wines and olive oils is proved in this early period through numerous unstamped amph.s of commercial type from these centers. But there can also be found amph.s of unidentified source.

There are no indications for this period of an import of such goods from Attica.

2. A series of commercial amphoras found at Istria and surroundings, differentiated

in type from the archais ones mentioned above, prove the existence of massive import of wine and oil at the end of the 5th c and at the beginning of the 4 c BC.

3. The commercial amph.s of great circulation with "certificate of origin" ⁱⁿ ~~under~~ the shape of stamps impressed on the handles, start to penetrate at Istria in the 1st decades of the 4th c BC (the years 390-350).

~~Also~~ In this period one can notice also the beginnings of a massive import of stamped rooftiles.

4. The import of amphoras with wine and oil, as well as that ^{of} ~~with~~ rooftiles, continued for more than 3 centuries, till nearly the beginning of our era/ (from this date the amphoras and rooftiles imported into our country no longer have stamps).

The period in which the stamped amph. import reached its maximum of intensity is placed approx. between 250 and 70 BC. The great majority of stamped amphoras is placed in this interval. Before this period are only some amph.s from Herakleia, a number also small, from the first period of stamping at Thasos, and a reduced number of Sinopean st. from the chronological groups I and II.

5. The centers of production ^{that are} surely determined and that ~~have~~ exported goods in st. amph.s to Istria are: Thasos, Sinope, ~~Herakleia~~, Chersonesos, Rhodes, Paros, Cos and Knidos.

6. Of the total of stamps, nearly 80 per cent have been restored) ^{(read or} providing several new names of magistrates and producers as well as numerous variants of stamps already known. The shapes of the imported amph.s have been in large number well/defined. We think that it could be established that the dies were made of wood or bone.

We have struggled to determine types and technological features of the different centers of production, the capacity of the vases, their chronological position, as well as the commercial ways by which the goods came.

7. The material studied proves from the point of view of imported quantities, that Sinope keeps in front of the other centers followed immediately by Thasos.

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8. The large number of amphorastamps found at Istria makes up a good indication on the volume ~~that~~ reached by the wine and oil import in our harbor. We must take into

consideration that apart from the 1162 stamps here studied, a very large number were taken to Germany during the 1917 war, many are still scattered in various collections, without being counted, others wait to be excavated (not even 10 per cent of the surface and depth of Istria has been investigated up till now).

9. In the measure in which the import of wine and olive oil in st. amph.s was exceeded by the increasing demands of the consumers' market, Istria imported large quantities of such goods also in jars of 500 to 1000 liters each. In this case the wines and oils stored at Istria were decanted into small amphoras of 10 and 20 liters, probably of local make and unstamped, with which the trade was carried further.

10. Nearly all the stamps in our country are found also in the Greek colonies on the Thracian coast or on the N coast of the Bl. Sea in S USSR up to a great distance from the respective harbors. Even the archaic unstamped amph.s from the 6th c BC are found identically in settlements in south USSR.

It results that Greek centers of prod. used for the expansion of their commerce the whole line of the NW coast, as in a single market of unpacking for the same categories of goods.

We give below a succinct ^{statistical} table on the import of wines and oils to various places in this large territory, in order to show the frequency ~~of the stamps from Istria~~ by centers of production of stamps found at Istria (RPR), Olbia, Tyras, Mirmekion, Tiritaki, Odessos (R.P.Bulgaria).

[table]

12. Part of the goods unloaded in the harbor of Istria were taken over by intermediary traders who went to the markets in the interior. Numerous remains of st. amph.s are found in the interior of Dobruja, and along the rt bank of the Danube.

13. On the left territory of the Danube, goods penetrated carried by the river and the navigable tributaries, by Greek traders who came up to the subCarpathian region and Moldova. A large number of st. amph.s from Rhodes and Knidos near Iasi, near Falticeni, at Poiana on the Siret, at Cimpulung-Muscel, at Baia De Fier, and at Tismana in Gorj, as well as in numerous centers on the Mostistea, and from near Bucharest.

14. The Geto-Dacians imitated amph.s of Rh. type and Coan. They also imitated stamps of these amphoras, replacing the Greek letters with signs that have not yet been deciphered.

15. The area of diffusion of Greek goods and Greek culture proves the great infl. exercised by Gk. civiliz. on the native Geto-D. tribes. We can now speak in the Carpatho-Danubian districts of the existence of a superposed class that knew how to appreciate to the sweet and heavy wines from Rhodes and Knidos, that preferred the local fats to the fine oil gathered in the olive groves of the S, that found the sipping of drinks from silver cups *to the* . . . after the foreign model, and who disposed of the material possibility of being able to procure himself such expensive refinements.

Travel from Rumania
dictated by Helen Bass & V.G.

RUMANIA

12.XI.57

14.01

Let's Bon.

Returned to the

9.11.58

and on

V. Canarache, section on Thasian (pp. 30, ff.)

In the Aegean at 6 km. from the coast of Macedonia, is the is. of Th. Known in antiquity for her rich gold, silver, zinc, iron and marble mines, and at the same time for her good soil for agriculture, the ^{native} ~~imm~~ population seems to have been of Thracian origin, but in the middle of the 7th c. BC signs of Greek colonists come from Paros [M. Guarducci, in the Italian encycl., 5th vol., Thasos, for all historic dates.] colonists ~~which~~ who started having the first place in the island, and who in the following century extended their control also over some continental centers, succeeding in completely Hellenizing them.

The history of Th. is little known. One knows that at the beginning of the 5 c. BC the city went with Persia against the Greeks, having later to bear the consequences of the defeat. It is also known that afterwards, being allied to Athens, it put aside the aristocracy and the tyrants and adopted the democratic form of government of the Athenian type.

We know also of an attempted revolt of the Th. against the Athenians, which did not succeed. Defeated, Th. loses its continental possessions, and is obliged to pay tribute to the Delian League. In 446 BC it succeeds in recovering its possessions, exchange for a considerable increase in tribute.

When after some time the position of Athens starts to be weaker, Th. puts aside the democratic regime, and returns to the oligarchy. It breaks with Athens, and goes together with Paros to the Spartan side. But the fate of arms is favorable to Athens, and in the year 408 Th. is again defeated and the island is occupied. After the rise of Macedonia, Th. fell in the year 340 under Philip II, and remains in this situation until the occupation of Macedonia by the ^Romans. Regaining its freedom, the city gets again to economic prosperity. We have information from which it results that at the beginning of the 2nd c. BC the continental possessions were bringing to Th. 300 gold talents each year, and that the mines on the ~~continent~~ island have revenue of nearly 100 gold talents. At that time, the city of Th. had

p-32 2 ports, a commercial and a military one, strong walls for protection, a big commercial fleet, and renowned institutions for culture and art. The silver tetradr. from Th. was the most wide-spread currency during the 2nd c BC: it had gone deep into the world of the native tribes in our country and of the south of Russia, and even far beyond the Danube back into Germany, Gallia, etc. (Many coin hoards found in this region show the roads of expansion of Thasian commerce.)

For the problem that we follow, in the first place the production of wine and oil of the island is of interest. Today there exist here rich plantations of vineyard and olive trees. Surely even in antiquity it was the same. We have also information in this respect especially from the 4th to the 3rd c. BC. So both the ancient authors and those of the late period, which is true without precise dates, on the great production of wine in Thasos. It is precisely known that in other centers wines had a superior quality even in the first year of ^{recolte} ~~their production~~, while ~~since~~ at Th. they ~~were~~ became valuable only after being kept for at least 2 or 3 years. [Athenaeus I, 52 ff.; of A. Dumont, p.32.]

This for the earlier period. For the 2nd period of prosperity, we have ^{less} ~~fewer~~ evidence/ concerning wine and oil trade.

1. On the dating of ~~the~~ Thasian stamps

Th. amphoras are found in our country as well as in the south of USSR, in . . . Bulgaria, in Greece. Unfortunately there exists no large study about them, so that for the moment we are reduced to hypothesis (guessing), concerning the dating of the vessels.

Occupying himself with this problem, Grakov attributes a series of Thasian stamps to the 1st half of the 4th c. The Soviet scholar bases himself on the archaeological context in which some of these amphoras have been found, as well as in the comparative study of iconography. He attributes the other categories of stamps to the period between 370 and 180 BC. Grakov does not mention the existence of Thasian amphoras after this date. We however would have ~~is~~ some objections to this.

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If we admit that the export of Thasian amphoras was especially being made in the 4th to the 3rd cent., and that it ~~ceased~~ ^{ceased} at the beginning of the 2nd cent., it wd. mean that the city would have had a great economic prosperity exactly under the foreign rule, and that it would not have exported any more wine just in the ~~new~~ period of its new economic expansion, after the Macedonian rule had been put aside. The problem is complex, and lacking basic documentation it cannot be resolved in this study. What for the moment comes to support Grakov's opinion is the fact that during the excavation that took place in 1950 in the Agora of the island Thasos by the collective French School (V. Grace, P. Leveque, and G. Roux [cf. BCH vol. 75, 1951, pp. 142-187.] number of 162 Thasian stamped handles were taken out of the perfectly dated layers by the archaeologists between the end of the 3rd cent. and the beginning of the 2nd century BC. V. Grace also speaks in the report about excavations of the recent years and about some stamps found in the layers that belong to the beginning of the 4th cent. BC. Some Thasian handles without stamps are attributed to this early period.

We will ^{adopt} therefore the chronology proposed by Grakov (which we know indirectly only from ~~the~~ what the investigator E. Staerman has said), noticing only ^{our} ~~the~~ objection for future investigations.

The Thasian stamps found in our territory and grouped in this publication are altogether 288 examples. We have grouped in alphabetical order from no. 1 to 211 those stamped that had a whole name or one that could be surely restored, without paying any attention to any chronological order or classification of the symbols, thus avoiding the difficulty which we encountered with the stamps of this city, of not knowing exactly ~~the~~ what function the persons had whose proper names appear (sometimes 2 and 3 names on the same stamp), without any title or other indication. Because of this it cannot be certain which is the eponym, ^{allowed ourselves} the magistrate or the producer (the attribution of function which we ~~decided~~ to make in the general indexes must not be taken as being documented, but ~~must be~~ must be given only a relative character: that is why we have noted with question-

p. 33

(P. 33) mark). From no. 93 to 168 are registered the stamps which could not be ^{restored} completed and which have in the remains of legends and symbols all the elements of Thasian stamps.

From this number to no. 211, we have registered the stamps that surely come from ~~Thasian~~ Thasos but that could not be drawn. We have also added to the total a number of 50 illegible examples, but surely from Th. by their shape and ^{pasta} clay.

2. The technological analyses of the material and the chronological order

The amphoras from Th., completely different from those from Rhodes, are similar in shape to the jars from Sinope and Herakleia Pontica. The clay is not dense, nor made homogenous through ~~repeated~~ repeated working as in Rhodes. It contains much sand and especially a great quantity of iron oxide which through baking at ca. 800 degrees has given a porous pottery of red color similar to ~~the~~ bricks. If the earth had been washed with greater care, much of the sand wd. have been eliminated, and through (decantare - ^{letting it settle} ~~shovelling back and forth?~~) much of the iron oxide would have been removed, obtaining in this way a ~~mix~~ paste able to resist without risk of deformation a firing of above 800 degrees. In this case, the brick red color wd have been less intense, and the bits of iron oxide in process of melting which give an impression of charcoal traces would have disappeared. We wd have had a more compact pottery, lighter in wt., more resistant, and more impermeable. But just ~~this~~ the lack of these qualities are very helpful to us: they constitute the most important characteristic of the Thasian amphora on which they can be distinguished from the quantity of sherds even if we don't find the ^{corresponding} respective stamp.

The surface was not made through bathing in kaolin, but by smearing with liquid ^{from} obtained through the clay prepared for making the vase. A quantity of this was diluted in water, sifted several times and well beaten. Covered in this way, the amphora ~~was~~ received a light brown color. This surface was applied with a ^{bundle} handful of straw, grass or twigs with leaves. Many amphoras have on their surface traces of straw and leaves ^{clearly} well impressed on them, just as they have impressed - especially

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on the handles and the neck - ^{finger} prints of the potters.

(D. 33) The Thasian amphoras had different shapes and dimensions. Making a selection the stamped handle fragments that reached us, we observe that these handles can be grouped according to dimensions in 4 distinct categories. In the first category come the long and specially wide (up to 0.05) handles with big stamps (0.035 by 0.015). These unusually large sizes make us believe that the handles belong to the middle type of amphora, ^{from} which we have found not a single whole one, but which ^{according to} must have been in circulation, ~~after~~ the evidence brought even by some stamps that have as symbol the amphora itself (nos. 1, 18, 103, 137, 139 and Dumont p.16, figs. 5 and 6). ^{corresponding} Also to this type of half-metretres must correspond the 2nd category of amphora with wide handles (of 0.04), very robust, with 2 to 3 ridges on the back.

D. 34 The other 2 categories belong to the smaller amphora of ~~3/4~~ 1/4 metretres, which are the most usual in our country and which we know from a few stamped examples found whole near Istria [In the fall of 1954 were discovered near Jurilovca at the foot ~~find~~ of a funerary mount (tumulus) 100 whole amphoras of which approximately half had on one of the handles the small ^{rectangular} stamps of Thasos of the 4th century BC. The other half consisted of unstamped amphoras which belonged to an unknown center of production. Only 16 amphoras of the 100 could be recovered from the villagers who had taken them to their houses; all are now in the depot of the Istria workrooms, except one stamped example which has been put in M.N.A. (the Museum in Bucharest). (Of this discovery we speak in another place further.)]. Similar example of which only part of the foot is missing has been found at the Getic site of Poiana. [V. Parvan, Castrul de la Poiana,].

10 2 The Thasian amphoras found in south Russia are of the same small type as those ^{fig.11} found in our territory. [E.M.Pridik, op.cit., p.125, fig.2.] ¹³⁵ From the recent excavations made in the center of the island Thasos, 2 amphoras of this same type have been found. [V.Grace, BCH 75, 1951, pp.142-187, fig.97, inv.no. 397 (it is dated in the 4th cent. BC.)]

Entirely differently, apparently, is the Thasian amphora found in the collection

of the Athens Museum and published by Dumont. From which one may conclude that Th. as well as Rhodes must have had the export of goods organized in such a way that as to send into each region a different sort of packing.

p. 35 The dimensions of the amphora found in our country ^{according to} after the example from Jurilovca in the Museum of Bucurest (fig.17, left) are the following:

Ht. 0.685
maximum diameter 0.23
diam. of interior of mouth 0.075
" " outside of rim 0.105
ht. of handles 0.240

Exactly the same dimensions have the amphoras found in south Russia and especially in Chersonesos. The Thasian amphora investigated by Dumont in Athens is different generally speaking from those found in our country, in that it has a nearly much greater ovoid shape and a capacity than the amphoras in the NW which as we see become much thinner, starting from the belly ~~xxxxxx~~ to finish gradually with the point, which much reduces the capacity. The Thasian amphora in Athens resemble that from Knidos, but is a little fuller. It has smaller and curved handles.

p. 36 It has the following dimensions: [he gives some] [from Dumont p. 15]

It does not have the base shaped and strengthened as those of the small amphoras found in our country, but here the base is finished at once with the lower part of the vessel, forming a pointed point that is undetachable.

The stamp is placed always on the horizontal part of the handle, in the middle, or at the end near the neck. Sometimes they are found also at the outside edge of this portion, even on the spot where the handle curves to go down. Hence we do not ~~ex~~ precise have a rule in this respect.

It is interesting that on some amphoras that according to their stamps we must consider of the oldest period one notices on the neck and on the handles one or two bands made of red paint. What is the meaning of this sign in a period when the commercial amphoras were already stamped, we do not know. It is very probably that we have to do with the remains of the old tradition from the period before stamping, when the commercial amphora had such signs.

(P. 36)

The most important characteristic of the Thasian stamp we find in the fact that always without exception ~~whichever~~ ^{whatever the} text, and however the symbol may be placed, the ethnicon ΘΑΣΙΩΝ written also ΘΑΣΙΩΝ, is always there. Neither Rhodes nor Sinope nor Herakleia nor Chersonesos indicate the ethnicon on their amphoras. Only Knidos follows the example of the Thasians.

The first chronological grouping is formed by the rectangular stamp within which the old symbol of the city is found: Herakles with beard, with right ^{knee} bent and with the bow drawn ready to shoot. This representation was in the 5th to the 4th cent. BC, the emblem of the city of Th. and occupied the principal place in the iconography of Thasian coinage.

^{below}
Above or ~~next to~~ of the figure of Herakles, and sometimes at the sides, are written one or two names, usually abbreviated, without any titles (in the text nos. 17, 41, 42, 123, 131). The stamps of this type are of two sizes: 0.045 by 0.025, and 0.035 by 0.020.

P. 37

Grakov considers them ~~the first~~ ^{by} the first chronological group, dating from about 390 BC. He ~~dates them~~ ^{dates them} according to style and iconography, and especially by the fact that such stamps have been found in close archaeological context well dated in this period.

Not having at hand Grakov's study, we cannot judge to what extent ~~the~~ ^{they} stamps of the same shape ~~and~~ ^{belong to the same chronological group.} but with different symbols. (The incomplete information above I have taken in great part from Staerman [refs.].)

From the same source, the category of Thasian stamps whose characteristic is a lack of any symbol, and which have the legend in three superposed lines, (the ethnic and 2 abbreviated names), are placed immediately after the year 370 BC (in the text no. 54, 77, 78). Therefore Grakov considers them posterior to the Herakles type (we have shown above that V. Grace thinks on the basis of the Thasos excavations of 1950 that ~~this~~ stamps must be considered earlier than the stamp with symbols). ~~the~~

The stamps of this type are very rare (at Istria in a total of 288 examples we have found only 3). ^{also} ~~What concerns~~ their dating, we are inclined to think that they

(p. 37) are earlier than the year 390, and that they probably are the first stamped handles from Thasos. Precisely the lack of any symbol is an indication in this direction.

We consider that the evolution of the system of marking the ^{commercial} amphorae has followed the order in which we must distinguish between the simple legends and those combined with symbols.

In general the stamping has had the following development: a) red stripes with paint on the belly; b) the same on the neck and then on the handle; c) one or two incised circles on the neck; d) a single letter on the neck without stamp, written free-hand, also with red paint; e) the name of the producer; f) the ethnic and the name without symbol incised on the neck of the amphora; g) a stamp without symbol, with writing in relief on one handle; h) the same stamp with official emblem of the center of production; i) the same stamp with different symbols of the producers and of the magistrates.

The second chronological group contains nearly square stamps which show on one long side the ethnic, and on the other a single name. Between the two rows always appears a symbol. The letters are large, well-spaced, very regular but ~~marking~~ not cursive. In the same way the symbols are represented expressively, in strong relief and worked with artistic care.

In this group we notice two different dimensions of stamps, which are clearly distinguishable from each other, and we can thus form two sub-groups 2a and 2b (0.028 by ~~24~~ 0.035 in nos. 1-6, 13, 15 16, 18, 19, 25, 30, 26, 35, 39, ~~43~~ 43-47, 59, 62, 64, 65-67, etc., for type 2a and then the dimensions 0.026 by 0.028 in nos. 11, 40, 79, 82, 83, 85, 95, 122, etc. for type 2b).

On the basis of Grakov's information, Staerman places this stamp in a very long period: the years 350-270 BC.

(p. 38 for no 64)
p. 39
In the third chronological group come the rectangular stamps, larger or smaller (usually 0.030 by 0.020), in which the legend is written on two or three ~~later~~ sides (sometimes also on the 4th side) containing the ethnic and two or even three proper names, whole or abbreviated. The writing in most instances is cursive. In the middle

(P-39) appears the symbol which in this type of stamp is smaller, more complicated and less successful in artistic execution. The stamps ⁱⁿ from the text 8, 12, 14, 20, 21, 28, 36, 37, 49, 52-3, 57, 58, 61, 90, 118, enter into this category. Staerman attributes this last group, ^{following} ~~according to~~ Grakov, to 270 - 220 BC.

A fourth chronological group fixed (after the discoveries made in Pergamon) between 220-180 BC are referred to the stamps which have symbols, ethnic, and a single proper name, written with interruptions on 2 or 3 of the sides of the stamp.

In general, both the dating and the chronological order of the above must be taken with reserve, especially since nothing is said about the stamps from after 180 BC.

Let us now take into discussion also other aspects of the problem. For example, the replacement of angular letters with those that are lunate, in a period much earlier than that usually known.

The sondage that I have made in the mass of ^{early} Thasian stamps from Istria shows out of 24 stamps (nos. 7-8, 14, 17, 20-24, 36-7, 40-42, 52-3, 55, 61, 90) not one is written with these lunate letters.

On the other hand, ~~the~~ ^{early} type of those nearly square stamps, with big regular letters, in which near the symbol appears the ethnic and a single name (the second chronological group), uses in nearly equal proportions the angular epsilon and sigma with the lunate letters.

Out of 55 stamps attached to this theory, 39 present the two angular letters (1-7, 11-13, 15-16, 25, 28-29, 34, 38-9, 45-7, 49-51, 61-4, 66-7, 69-71, 73, 79-82, 84, 85) and 17 examples both epsilon and sigma of lunate shape (18-19, 26-7, 30-31, 35, 43-4, 65, 68, 74, 76, 83, 90-92). We find four more similar examples (99, 111, 125, 139) also in the series of unrestored stamps.

This sondage in our material shows clearly that Thasos used between the years 350 and 270 BC both forms of writing.

The phenomenon is repeated as we shall see also in the Sinopean stamps of the same period, and Rhodes gives us similar indications later for the middle of the

(P. 39) 2nd century BC.

It results here that in the amphora stamps the two ~~from~~ forms of letters were
which is valid
used simultaneously starting from an early period, a valuable thing not only for
Thasos but also for other centers, viz. Sinope and even Rhodes.

end of introduction & Thasos

V. Canarache, section on Thasian (pp. 30, ff.)

(*Supplemental Annotations*, 1952)

p. 31
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" " outside of rim 0.105
ht. of handles 0.240

Exactly the same dimensions have the amphoras found in south Russian and especially in Chersonesos. The Thasian amphora investigated by Dumont in Athens is different generally speaking from those found in our country, in that it has a nearly ovoid shape and a ^{much greater} capacity than the amphoras in the NW which as we see become much thinner, starting from the belly ~~in order~~ to finish gradually with the point, which much reduces the capacity. The Thasian amphora in Athens resemble that from Knidos, but is a little fuller. It has smaller and curved handles.

p. 36

It has the following dimensions: [he gives some] [from Dumont p. 15]

It does not have the base shaped and strengthened as those of the small amphoras found in our country, but here the base is finished at once with the lower part of the vessel, forming a pointed point that is undetachable.

The stamp is placed ~~always~~ on the horizontal part of the handle, in the middle, or at the end near the neck. Sometimes they are found also at the outside edge of this portion, even on the spot where the handle curves to go down. Hence we do not ~~xx~~ ^{precise} have a ^{rule} in this respect.

It is interesting that on some amphoras that according to their stamps we must consider of the oldest period one notices on the neck and on the handles one or two bands made of red paint. What is the meaning of this sign in a period when the commercial amphoras were already stamped, we do not know. It is very probably that we have to do with the remains of the old tradition from the period before stamping, when the commercial amphora had such signs.

(p. 26) The most important characteristic of the Thasian stamp we find in the fact that always without exception ~~whatever the~~ ^{whatever the} text, and however the symbol may be placed, the ethnicon ΘΑΣΙΩΝ written also ΘΑΣΙΩΝ, is always there. Neither Rhodes nor Sinope nor Herakleia nor Chersonesos indicate the ethnicon on their amphoras. Only Knidos follows the example of the Thasians.

The first chronological grouping is formed by the rectangular stamp within which the old symbol of the city is found: Herakles with beard, with right ^{knee} bent and with the bow drawn ready to shoot. This representation was in the 5th to the 4th cent. BC, the emblem of the city of Th. and occupied the principal place in the iconography of Thasian coinage.

^{below}
Above or ~~at the bottom~~ of the figure of Herakles, and sometimes at the sides, are written one or two names, usually abbreviated, without any titles (in the text nos. 17, 41, 42, 123, 131). The stamps of this type are of two sizes: 0.045 by 0.025, and 0.035 by 0.020.

P. 27 Grakov considers them ~~as being from~~ the first chronological group, dating from about 390 BC. He ~~makes them~~ ^{by} dates them ~~according~~ to style and iconography, and especially by the fact that such stamps have been found in close archaeological context well dated in this period.

Not having at hand Grakov's study, we cannot judge to what extent ~~the~~ stamps of the same shape ~~and~~ ^{belong to the same chronological group.} but with different symbols. (The incomplete information above I have taken in great part from Staerman [refs.]).

From the same source, the category of Thasian stamps whose characteristic is a lack of any symbol, and which have the legend in three superposed lines, (the ethnic and 2 abbreviated names), are placed immediately after the year 370 BC (in the text no. 54, 77, 78). Therefore Grakov considers them posterior to the Herakles type (we have shown above that V. Grace thinks on the basis of the Thasos excavations of 1950 that ~~this~~ stamp must be considered earlier than the stamp with symbols). ~~The~~

The stamps of this type are very rare (at Istria in a total of 288 examples we have found only 3). ^{also} ~~What concerns~~ their dating, we are inclined to think that they

(p 37) are earlier than the year 390, and that they probably are the first stamped handles from Thasos. Precisely the lack of any symbol is an indication in this direction.

We consider that the evolution of the system of marking the amphorae has followed the order in which we must distinguish between the simple legends and those combined with symbols.

In general the stamping has had the following development: a) red stripes with paint on the belly; b) the same on the neck and then on the handle; c) one or two incised circles on the neck; d) a single letter on the neck without stamp, written free-hand, also with red paint; e) the name of the producer; f) the ethnic and the name without symbol incised on the neck of the amphora; g) a stamp without symbol, with writing in relief on one handle; h) the same stamp with official emblem of the center of production; i) the same stamp with different symbols of the producers and of the magistrates.

The second chronological group contains nearly square stamps which show on one long side the ethnic, and on the other a single name. Between the two rows always appears a symbol. The letters are large, well-spaced, very regular but ~~lacking in~~ not cursive. In the same way the symbols are represented expressively, in strong relief and worked with artistic care.

In this group we notice two different dimensions of stamps, which are clearly distinguishable from each other, and we can thus form two sub-groups 2a and 2b (0.028 by ~~0.035~~ 0.035 in nos. 1-6, 13, 15 16, 18, 19, 25, 30, 26, 35, 39, ~~43~~ 44x247x 43-47, 59, 62, 64, 65-67, etc., for type 2a and then the dimensions 0.026 by 0.028 in nos. 11, 40, 79, 82, 83, 85, 95, 122, etc. for type 2b).

(no list on p 38) On the basis of Grakov's information, Staerman places this stamp in a very long period: the years 350-270 BC.

p. 39 In the third chronological group come the rectangular stamps, larger or smaller (usually 0.030 by 0.020), in which the legend is written on two or three ~~inter~~ sides (sometimes also on the 4th side) containing the ethnic and two or even three proper names, whole or abbreviated. The writing in most instances is cursive. In the middle

appears the symbol which in this type of stamp is smaller, more complicated and less successful in artistic execution. The stamps ⁱⁿ ~~from~~ the text 8, 12, 14, 20, 21, 28, 36, 37, 49, 52-3, 57, 58, 61, 90, 118, enter into this category. Staerman attributes this last group, ^{following} ~~according to~~ Grakov, to 270 - 220 BC.

A fourth chronological group fixed (after the discoveries made in Pergamon) between 220-180 BC are referred to the stamps which have symbols, ethnic, and a single proper name, written with interruptions on 2 or 3 of the sides of the stamp.

In general, both the dating and the chronological order of the above must be taken with reserve, especially since nothing is said about the stamps from after 180 BC.

Let us now take into discussion also other aspects of the problem. For example, the replacement of angular letters with those that are lunate, in a period much earlier than that usually known.

The sondage that I have made in the mass of ^{early} Thasian stamps from Istria shows out of 24 stamps (nos. 7-8, 14, 17, 20-24, 36-7, 40-42, 52-3, 55, 61, 90) not one is written with these lunate letters.

On the other hand, ~~these~~ in the type, of those nearly square stamps, with big regular letters, in which near the symbol appears the ethnic and a single name (the second chronological group), uses in nearly equal proportions the angular epsilon and sigma with the lunate letters.

Out of 55 stamps attached to this theory, 39 present the two angular letters (1-7, 11-15, 15-16, 25, 28-29, 34, 38-9, 45-7, 49-51, 61-4, 66-7, 69-71, 73, 79-82, 84, 85) and 17 examples both epsilon and sigma of lunate shape (18-19, 26-7, 30-31, 35, 43-4, 65, 68, 74, 76, 83, 90-92). We find four more similar examples (99, 111, 125, 139) also in the series of unrestored stamps.

This sondage in our material shows clearly that Thasos used between the years 350 and 270 BC both forms of writing.

The phenomenon is repeated as we shall see also in the Sinopean stamps of the same period, and Rhodes gives us similar indications later for the middle of the

2nd century BC.

It results here that in the amphora stamps the two ~~from~~ forms of letters were
which is valid
used simultaneously starting from an early period, a valuable thing not only for
Thasos but also for other centers, viz. Sinope and even Rhodes.

V. Canarache, section on Heraclea, pp.189-203

ET 20
but would
only through
P. 195
not a collector
(the
step)

The Pontic Her. was a Doric city colonized by the Megarians in the 1st half of the 6th cent. B.C.

Soon after the beginning of its life, Heracl. managed to attain a high level of economic development. The advantageous position of the city as well as the fact that from the beginning the Heracleans, after they had imposed themselves on the natives, were able to take advantage of the wealth of some large surrounding territories, and made possible the construction of 2 harbors and of strong commercial fleet.

The politics of Heraclea made her ally herself to the Persians at the time of their war with the Greeks. The friendship with Asiatics brought her surely great economic advantages, that is why after the victory of Athens the city continued to resist, refusing to enter into the Delian League.

In its period of prosperity, Her. decided to send colonies to the NW shores of the Black Sea, forming the cities of Chersonesos and Callatis.

In the 1st half of the 4th c. B.C. (the year 364), as a result of strong fight between the aristocrats and democrats, a tyranny managed to impose itself at Her. Some of the tyrants became related to Asiatic kings, as a result of this, the city acquired more rural territories, and reached a maximum of prosperity, becoming the most important colony of the whole of the Black Sea. But at the time of the Macedonian supremacy, Lysimachos occupied the city, making here his base of operations in Asia Minor. After his death, the city quickly regained its strength and allied itself to Ptolemy against Antigonos Gonatas. In the year 280, the Heracleans' squadron was the strongest of the Ptolemy's fleet. [Memnon, 13, Justin XXIV, 1, 8] The vessels were constructed with superior means not known before in the ancient world; according to Memnon, the principal vessel of the Heracleans had 2 bridges, 1600 oars, and 1200 soldiers. [Memnon, 18 and 23]

How strong Her. was from a military pt of view can also be seen from the fact that in the fights that followed among the Seleucids and the Ptolemies, alone or

still
allied to the small kings of Pontos and of Bithynia, she could ~~also~~ send to the help of Nikomedes I another squadron of triremes, then in the war between Antioch and Byzantion, she allied herself to the latter with 40 triremes. [Ibid.]

p.190 The economic strength of Her. was not less than its military strength. This is ill. also by the fact that at the time when the Galatians appeared ^{on} the Asia Minor scene, Her. was able to send to Byzantion 4000 gold staters as contribution to the war expenses.

When the Galatians invaded the Pontos, in the year ~~255~~ 255, Her. sent a land army to Mithridates III, and large quantities of wheat to Amisos, which was starving; in the same way, it could pay 5000 staters to the Galatians, who just the same invaded the territory later. [Rostovtzeff,]

From the economic and social pt of view, we know that in the 4th c. B.C. the prosperity of the city was due to the ^{exploiting} ~~advantage~~ of the work of those classes of small cultivators ~~possessing~~ ^[large?] agricultural properties - not owners - called AAOI often mentioned in the literary sources of this period. Regarding this aspect of historical order of Her., Rost. gives a bibliography [Richerthan we could include in the text, but which we considered well to note here, as follow], which there is no place here.

Losing its independence simultaneously with the rise of the Bithynian kingdom, Her. began to decline and then at the time of the 3rd Mithridatic war, it was surr. and after 2 years of resistance was destroyed by Aurelius Cotta.

But soon after the peace treaty, the Roman senate returned to it its territory and harbors. It seems that in the ~~interior~~ Imperial period, Her. managed to remake itself, but in a less widespread form; the sources no longer speak of the city, although on the coins of this period can be found mention of the word "metropolis". [I have completed Rost.'s historical data, op. cit..... with some new info. of P. Romanelli, Encyc. Italiana, ~~vol~~ V, Heraclea Pontica.]

1. CONSIDERATIONS ON THE EXPANSION OF THE COMMERCE OF HER. IN THE HELL. PERIOD

The general historical data do not mention the wine and oil products of Her., and do not bring clarification on the extent ^{of} ~~that~~ the commerce ^{that she} had in general, One

knows only that the city was rich, that it had widespread and fertile territories, that the traffic from the interior was carried through its ports, that it possessed a strong military and commercial fleet, and that it played a predominant role in the political and economic life of Asia Minor and of the Bl. Sea [area].

Her. established regular communications ~~with~~^a on one side with all the harbors of the NW of the Bl. Sea, and on the other side with Rhodes and Alexandria to the south. [Diodor.3,47.]

p.191 It is interesting that ~~the~~^a loaded boat could cross in 14 days the Bl. Sea and the Aegean, from the Sea of Azof (probably from Panticapaeon) to Alexandria: it seems that all the boats stopped at Her. for the change of goods.

Despite all the vicissitudes through wh. Her. passed, and all the loss of ^{its} liberty, ~~the~~ commercial importance continued to exist in the 1st half of the 2nd c. B.C. The city is mentioned in the treaty ^{contracted} ~~closed~~ in the year 179 B.C. between Pharnaces and Eumenes, Prusias and Ariarathes, near Cyzicos, Mesembria and the Tauric Chersonesos. [Polybios, XXVI,6 and 2.]

Exactly in the period mentioned above, in other words from the beginning of the 4th c. to the end of the 2nd c. B.C., we must place ~~the same end of the 2nd c. B.C., we must place~~ the stamped commercial amphoras which went from Her. to all the centers of consumption.

Although the production of wine and oil does not seem to have been among the 1st occupations of the Heraclaeans, all the same their goods are attested emphatically in all the centers of the NW coast of the Bl. Sea. It is v. probably that also the goods of the native producers of the neighboring territory were taken and put ~~in~~ into trade by Her. businessmen and sea men.

The presence of Her. amph.s in the provinces of the south, beyond the Propontis, is nowhere noticed. This is explainable if we take into consideration that the markets there were firmly and permanently occupied by the products, more abundant and of better quality, from the Aegean islands. On the other hand, the Her. commerce occupied all the markets of the north, since the city was at less than half the way from this market, comparing with the distance that separates it from the centers of the S.

This is why the wines exported by Her. were cheaper than those coming from great distances/

The presence of some important quantities of amph.s in our parts and in the S of USSR can also have another explanation: often in the course of history, with long-continued occasions of repeated and ~~extensive~~ closing of the Bosphores, Her. remained alone mistress in the basin of the Bl. Sea. The island goods not being able to enter the Bl. Sea, Her. was able to outsell them without hindrance.

In his documented publication about the type of the Her. amph., the Sov. investigator I. B. Zeest [I.B. Zeest, The Type of the Heraklean Amphora - in Russian], dealing with the great number of amph.s of Her. provenance found in south Russia, especially in Tanais, and in the kurgans dug in the Matitzin district, shows that this amph. brought, without doubt, a cheap product, for they are found especially in the graves of the poorer local population, while in the graves of the rich Greeks he has not found them. The same thing can be said also of the finds from our country. Most of the fragments of Heraklean amph.s have not been found as much in the city Callatis, as in the territory of the natives, at 10 or 20 kilometers from the coast. []

At Istria we have found no complete amph.s, however we collected an important no. of st. handles and necks, altogether 33 examples, of which 25 have been deciphered. They are the subject of our Grp. III, Heraclea. But first we shall reproduce 2 to be complete ex.s found in the M.O. in Bucharest, inv. nos. 1657, 1658. Their origin is the Severeanu collection, ~~with the same~~ provenance Mangalia/ (Fig.s 31-32)

[Captions: Fig.31. An amphora from Pontic Heraclea with an incuse stamp on the neck (the middle of the 4th cent. B.C.), found near Callatis. In the Bucharest City Museum, inv.no.1667. Fig. 32. Another amph. from Pontic Heraclea, nearly identical to the preceding (but it has a different stamp); The same collection, inv. no. 1658.]

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2. INCUSE STAMPS ON THE NECK OF AMPH.S AND STAMPS IN RELIEF

Lacking complete ex.s from Istria, we have reproduced here some examples found at Callatis, in the Buch. City Mus., so that the reader can more easily follow the details of the type of amphoras from Heraklea found on our territory, type to wh. correspond most of the stamped handles of the present group. At the same time, he

will be able to conceive the dimensions, profile, stamp and details of the base and rim.

Her. had at least 3 different ways of stamping, and as many shapes, easily distinguishable, all datable in the second half of the 4th c. B.C.

The 1st category is made up of the amph. that was stamped not in relief but in incuse; the stamp without frame was applied on the neck, not on the handle (this category formed the majority of amph.s found in our country and in USSR).

In general this stamp does not contain a symbol, and only a single proper name, divided often into 2 lines; the name was v. seldom preceded by the preposition ENH.

The 2 other categories have normal stamps, in relief on the handle.

In our country, the incuse stamps of the 1st category are predominant (in the text nos. 460, 461, 462, 463, 465-69, 472, 475, 477, 478-9).

3. THE FIVE TYPES INDICATED BY I. B. ZEEST

A more exact description of all the types of amph.s found in Her. ~~has~~ is made by the Sov. invest. Zeest, to wh. we have referred before for the lot of amph.s found in and near Tanais. Zeest's study is based on the fundamental Grakov [], in which the Russian scholar makes also a chronological classification.

He divides it into only 2 chronological groups, the 1st limited to the years 350-300 B.C. [Staerman, ~~XXII~~ ~~XXXXXX~~] and the second from 300-250 B.C. [Staerman, Mt Tiritaki]. Four amph.s with englyphic st. on neck, and 2 frags. found by Gaidukevich [Tiritaki] in the excavations of Tiritaki, confirm, acc. to the other material of the respective archaeological complexes, the end of the 4th cent. and the beginning of the 3rd c. B.C.

In the 1st chron. grp, Zeest has distinguished 3 types of amph. easily enough distinguishable among themselves.

We reproduce here 3 types from the drawings from "Kr. S. XXII, pp.49-50, and further on the types 4 and 5 which belong acc. to the same author, (pp.50-51), to the 2nd chron. grouping, that is to 300-250 B.C.

p.195

Type 1. The perfectly oval shape; from the neck over the shoulder, ~~xxxx~~
smooth
down to the foot, a single line with varied curves. The neck, cylindrical in the upper part, widened lower down, joining without a break the body of the amph. The diameter of the rim, 10 cm. the handles, curved, come together below: the ht. 21 cm. The diameter at the middle of the jar, 26 cm. The foot is rounded below and hollow inside, it has a ht of 6 cm. The total ht of the amph. is 70 cm. The good quality of the clay mix, the proportions, the general elegance, shows that this type can be considered as the repres. shape of the amph.s from Herac.

Type 2. Is differentiated from the first especially by the profile ~~for~~ of the amph., wh. on the whole is no longer similar to an egg. The neck is not cylind. except at the middle: its upper part widens to the rim, and its lower part also widens, but more suddenly, in order to form the shape of the ~~shoulder~~^{back} of the amph. with lengthy shoulder. The handles are thicker and more strongly curved. From the half below, the body is no longer oval as in the 1st type, and drops down, becoming thinner from the diameter of 25 cm to that of 4 cm, as much as is the thickness of the foot, forming a cone with point down. The ht of the handles is 24 cm, diam. of rim, 11 cm., total ht 74 cm.

Type 3 is similar in general aspect to the 1st type: shoulders rounded, giving to the whole body an oval shape. The foot is less thin and less necked in the lower part. The diam. of rim 10 cm., belly 26 cm., ht of h. 21 cm., total ht 71 cm.

Type 4. Distinguishes itself from the others by the whole appearance of the vase, but especially by the shortness of the neck, the roundness of the shoulders, the nearness of the handles to the base [sic]. The foot does not end with that slight bulging as in Type 1, but it ends sharply, forming a cone point.

Type 5. is v. similar to the small amph. from Thasos, as well as in general shape as in the smallest details. The Sov. investigators seem to have established that in the 3 first types of the first chronol. grp., are found only stamps with proper names without eponyms, and that only in the 2nd grp are found formulas with name of magistrat preceded by the prepos. ENI.

V. Canarache, section on stamps of Cos

(Supposedly Canarache, 1958)

pp. 276-279

Cos is after Rhodes the largest island of the SE Aegean (280 sq. square).

Of its prehistoric history, there is too little known. On the other hand, information is abundant for the period from the 4th to the 3rd century B.C., when Cos, being in the best relations with Rhodes and later with Alexandria, flourished most. Many inscriptions were discovered by the excavations of the Italian School, and proved the existence of some cultural and scientific institutions, among which a medical school. The pleasant climate of the island, its close relations with Rhodes and Alexandria, the artistic and literary atmosphere made of Cos the most favored friend of Ptolemy Soter and Ptolemy Philadelphos, which who used to spend the summer holidays on the island, together with the heads of the intellectual life in Egypt.

After the fall of Egypt, as the dominant power in the Aegean, Cos comes completely into the orbit of Rhodes, continuing to remain an important commercial point, where the Rhodian and Alexandrian businessmen could land and negotiate on their way north. The biggest revenue of the priests of the island came from the obligatory taxes for the sacrifices (the sacrifices were also obligatory for the inhabitants who took an active part in the economic life). Fragmentary inscriptions found here indicate the list of the taxes and the principal groups of those who had to pay, for the obligatory taxes sacrifices. Those that worked in the harbor, the seamen, the shipowners, as well as the whole crew, from the commandant to the last sailor, made up it seems, an association; while on the other hand, the entrepreneurs who rented the collecting of obligatory taxes formed another group. The big land-owners, the rich and those with much money (sic) as well as the aristocrats of the town, formed the dominant class which chose the priests.

In the ~~process of~~ productivity production of Cos, a predominant place was kept by raw silk and its processing. Until the spread of the superior silk of Chinese origin, the silk of Cos was famous in Rome and in the whole of Italy. It seems that some of the inscriptions referring to taxes mention the use of slaves in the processing of silk

fiber.

p.277 In the villages around the city and in the country houses lived the landowners who worked alone or with the help of slaves. Also from the inscriptions and from the list of taxes of which we have spoken, one can find out that in Cos there was cultivated on a large scale wheat, barley, broad beans, and thyme, and that the vineyards played especially important part in the economy of the island. [Rostovtzeff, S.E.H.H.W., p.257, and following, for all the historic dates. [?]. The wine of Cos was famous in the 3rd century B.C. Large quantities were consumed by the local controlling classes, by the thousands of foreigners come to visit the island, by the sick people who came to the famous Asklepeion, by the group of doctors in the school of Hippokrates attached to the sanctuary. Cos also carried on quite a wide commerce in wine in various parts of the world, but ^{the proportions of} this export ~~xxxxxxxxxxxxxx~~ did not approach the ~~proportions~~ extent of the commerce of Rhodes, Thasos, Knidos and Sinope.

1. On double handles with and without stamps ("bicylindrical") ~~tricylindrical~~

I identified
was
made
by
Mauri,
in 1925,
of Pnyx
p. 169,
for refs.

On our territory, as well as in the south of U.S.S.R., no whole amphoras ~~with stamps~~ have been found with stamps which by an ethnic adjective or by a device could be identified as belonging to this center of production. However, despite ancient information that shows that wines from Cos were very wide^{ly} spread in the Hellenistic and Roman period, not a single archaeological find, no plastic monument~~x~~ or epigraphic monument, give us^{having been} indications about the type of amphora from Cos. A deposit found in Tyras of more than 30 amphora handles of the same type with one and the same name, the Soviet investigators analyzed carefully the letter forms [grafia], the clay, and the "onomastica", attributing these handles to Cos.

her []
In one of his recent studies, Staerman occupies herself widely with the amphoras from Cos, and attributes to this center of production a large number of stamps, the origin of which had not until now been established.

(p. 277)

The analysis made has brought the Sovietic scientists to the confusion that the handles of the amphoras from Cos present two different types: one of round shape a little less thick than the type from Rhodes, and of a single piece; the second - the most characteristic and best preserved - has an unusual handle formed by two ~~thin~~ narrow pieces stuck together, forming the so-called double (bicylindrical) handle.

On one of the two cylindrical parts of the handle is applied a long and narrow stamp of oval shape without frame which contains usually a single name, sometimes complete and more often abbreviated. No indication of an ethnic, of an eponymous ~~affix~~ name, or of any kind of official title [?]. Very rarely a device. Some of the legends are inverted, others have the letters in ligatures (no. 712), other times the writing is very irregular and with cabalistic forms (no. 720, 721, 722), something which makes the exact reading of these items very hard and indicates a late period. The stamp is applied only on one of the two parts of the combined handle.

The clay is similar to that from Rhodes, as is similar also the slip, of the same color and with the same fine kaolin.

For the moment, there has ~~not~~ been made any special study on the basis of which can be placed in time the different categories of stamps from Cos.

At Histria have been found very few examples, only ~~12~~ 12 deciphered and 11 undeciphered, so that one cannot make a deeper investigation in this direction.

p. 278

Not even the much more numerous examples determined by Staerman are sufficient for a complex study. If we take into consideration the "grafia" and the ligatures, one can say that the stamps from Cos found on the coast of the Black Sea could be earlier ("more timely") than the 2nd century B.C. It could very well belong even to the first half of the 1st century B.C. This however ~~only~~ is only a hypothesis, because until we find a larger number of such stamps, which must be well studied, one cannot speak of a firm dating of the stamped amphoras from Cos.

(p. 278)

An interesting side of the problem of the amphoras from Cos is made up by the fact that both in our country ~~amphoras~~ [Studies and Investigations of ancient history," Bucharett] and also in the archaeological centers of south U.S.S.R. are found many double handles without stamps. Both the curve and the dimensions of the handle, each taken separately, are identical ^{to} those which have stamps attributed to Cos. Moreover, the clay of ~~which~~ these unstamped handles, as well as the slip, are the same as on the stamped ones. ^{In the} Excavations at Histria, such handles appear in great numbers, in various late Hellenistic layers. Also whole amphoras of this type with double unstamped handles ^{have} been found near Bucurest, in a Getic site of ~~from Popesht. Some have found some amphoras of the type with double handles~~ Both At Histria as well as at Popesht appear however also handles which show an inferior technique and a lack of care in shaping and baking, although they keep all the characteristics above-mentioned. We think that it could mean local imitations, of which we shall speak in another place.

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What we must remember from the above is that not all amphoras from Cos are stamped. Indded, B.N. Grakov has made earlier the same remark, explaining that in antiquity Cos was renowned as a producer of wines, and that it exported its wines not only in stamped amphoras but also in plain amphoras without any inscriptions.

712 traces of a symbol

In the deposit of the Istria chantier, from old excavations, without other indication

"intoamai" - exactly

717 Found in L. II after the fire of 1944

V. Canarache, section on Rhodes
pp. 217 ff.

p. 217

Historical notes. Alliance with Ptol. of Lagos, defeated in 306 by Demetrios the Pirate. Siege. Letters of Zenon (258 B.C.) show Rhodes as the most imp. exchange market of Phoenician and Eg. goods [Rost.] Study by Ranovitch, Rumanian, "Hellenism and its Historical Role." Develop. of crafts and organized commerce. Increased importance, due to new cities and trade conn.s w. Orient. Penetration to N and W of Bl. Sea. "In any case, the earlier types of unstamped amphoras found at Istria and in the Bosporian cities show much older relations." [Doesn't

p.218

actually say that some of these unst. are Rhodian.] Rally to help Rhodes after the earthquake; its resurgence. [Cf. Polybios.] State and private wealth.

Section on Rhodes

new [18]

finished

21.5.63

August 1

wrote with &

have a real

translation not

just notes -

while fights of the Ptolemies, Seleucids and Macedonians lasted, Rhodes to stay out and develop agriculture, etc. Even ca 200 when Ph. V occup. Chers., destroying cities in the Pergamon and Carian region, re under occup. of Rhodes, Rh. does not give way, but continues commerce. Alliance w. Byzantion, so ed pass into Bl. Sea, and w. Rome, so ed connect nt. Deathstroke of free port of Delos. We do not find any more st. amph. from as late as the end of the 1st c. B.C.

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TYPO-TECHNOLOGICAL PLACING OF RHODIAN AMPH.S

- 4 series acc. to particularities of the stamps:
 - 2.) circular w. rose
 - 3.) rect. w. legends in 2 or 3 lines, eponyms
 - 4.) "secondary" stamps, with name of potter, etc.
 - 5.) incomplete but definitely Rhodian stamps (not in the general index)

p.220

(star)

Fabric - clay beaten, not trodden as in other places. Fine-grained, v. little bits. Firing at over 800 degrees.; without vitrification.

Section on Protein

now [18]
finished

21.5.63

August 1
wrote with &
have a real
translation, not
just notes -

V. Canarache, section on Rhodes
pp. 217 ff.

p. 217 Historical notes. Alliance with Ptol. of Lagos, defeated in 306 by Demetrios the Pirate. Siege. Letters of Zenon (258 B.C.) show Rhodes as the most imp. exchange market of Phoenician and Eg. goods [Rost.] Study by Ranovitch, Rumanian, "Hellenism and its Historical Role." Develop. of crafts and organized commerce. Increased importance, due to new cities and trade conn.s w. Orient. Penetration to N and W of Bl. Sea. "In any case, the earlier types of unstamped amphoras found at Istria and in the Bosporian cities show much older relations." [Doesn't

p. 218 actually say that some of these inst. are Rhodian.] Rally to help Rhodes after the earthquake; its resurgence. [Cf. Polybios.] State and private wealth.

183
220-183, while fights of the Ptolemies, Seleucids and Macedonians lasted, Rhodes managed to stay out and develop agriculture, etc. Even ca 200 when Ph. V occup. Thracian Chers., destroying cities in the Pergamon and Carian region, which were under occup. of Rhodes, Rh. does not give way, but continues commerce. . . . Alliance w. Byzantium, so cd pass into Bl. Sea, and w. Rome, so cd connect w. Orient. . . . Deathstroke of free port of Delos. . . . We do not find any more st. amph. from as late as the end of the 1st c. B.C.

p. 219

TYPO-TECHNOLOGICAL PLACING OF RHODIAN AMPH.S

- 4 series acc. to particularities of the stamps:
- 2.) circular w. rose
 - 3.) rect. w. legends in 2 or 3 lines, eponyms
 - 4.) "secondary" stamps, with name of potter, etc.
 - 5.) incomplete but definitely Rhodian stamps (not in the general index)

p. 220

(star)

Fabric - clay beaten, not trodden as in other places. Fine-grained, v. little bits. Firing at over 800 degrees.; without vitrification.

Compact on break, unlike any other contemp. Color also distinctive. Slip. . . .

Not just smeared on to give a pretty surface; see inside mouth of jar, ~~rim~~max


margin of where slip reached when vessel was dipped in the slip solution. But

p.223 some Rh. were not thus dipped; one can see brush or rag marks, and dip effect inside mouth is missing.

2 Rh. jar shapes, Dumont and regular. We have no reason to speak of D.'s type, which has not been found in Istria or Callatis, etc., etc. ~~And~~ It didn't circulate in Rumania. Publish it here, because it is so different from those that come to us.

Presentation of jar found by Tocilescu, pub. by T. without profiles or measurements. [] Same type as those found elsewhere in the area, and like the one

p.223 in Herm. (Gives dimensions.) (Describes features of profile he illustrates.)
(also in fig.46);

Rising handle  round section. But there is also another handle shape (fig.47), which starts to bend right under the rim, forming a curve, so there is no acute

p.224 angle; section still round. Foot charact.: compact and not hollow underneath, underside not flat but sl. convex; cf. fig. 45.

3 types of stamps, see figs. 42,43.

[Stylized stamp 58 near fig. 42, 43]

[Note Helen B. and I have found no identification of the Rhodian jar illustrated on p.10, unless it is freely adapted from the one ill. p.223, i.e. handles of his "other" type (see above) have been attached, to make it more general. In the text there is no mention of a second jar publ. by Tocilescu.]

V. Canarache, section on Rhodes
pp. 217 ff.

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Compact on break, unlike any other contemp. Color also distinctive. Slip. . . .

Not just smeared on to give a pretty surface; see inside mouth of jar, ~~inner~~ margin of where slip reached when vessel was dipped in the slip solution. But some Rh. were not thus dipped; one can see brush or rag marks, and dip effect inside mouth is missing.

p.222

2 Rh. jar shapes, Dumont and regular. We have no reason to speak of D.'s type, which has not been found in Istria or Callatis, etc., etc. ~~and~~ It didn't circulate in Rumania. Publish it here, because it is so different from those that come to us.

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21 I 63 / Incomplete, notes.
might be worth while
to draw full trans.

V. Canarache, section on Rhodes
pp. 217 ff.

p. 217

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21.17.63) Julius text continues to p. 226

no -
V. Canarache, p.169, 453
(in Sinope section of catalogue)

Without symbol.

From the storerooms of the Istria excavations, 1951, from the old excavations,
without any other indication.

In M.N.A., inv. no. 2457.

Unknown [otherwise]. For the first time it appears on a tile fragment on which it
is stamped as can be seen from our reproduction, on which is stamped the name of
ETYMOZ in two lines, and incuse, not in relief. The name and the stamp with all its
characteristics are known to us through Staerman ("Kr.S." XXXVI) which she attributes
to the Pontic Herakleia. ^{But} The stamps mentioned by Staerman are applied vertically on
the neck of the amphoras from Herakleia found in the south of USSR and especially of
^{But} Tyras. The Soviet author does not mention any tile with this stamp.

We have attributed the tile of ETYMOZ to this group in which its presence appears
queer enough, since all the recorded tiles until now are of Sinopean provenance.

We mention this fact in order not to make confusion, and at the same time to
heighten the importance of the fact that the discoveries up to now have not ~~given~~
ever brought to light other stamped tiles of the Black Sea except the Sinopean ones.

BLACK SEA AREA - RUMANIA -

TRANSLATIONS OF CANARACHE
AND NOTES ISTRIA

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