Towards a typology of Knidian amphoras of 4th-2nd c BC

Until recently it was considered that amphora production in Knidos started to develop approximately from the mid 3c BC. After the discovery in 1980 of a whole series of dump sites of condemned production of amphora workshops on Datça peninsula (ancient Knidos) and after many years of research of this territory by a French-Turkish expedition, it became clear that Knidos produced its amphoras from the archaic era and right up until the developed middle ages. The most expressive [representative?] materials were received for the late Classical period and the early Hellenistic, primarily because the dump sites of the workshops of those times were saturated with stamps. In the final account, the Knidian origin of the following groups of amphora stamps was established definitively: “With the prow of the ship,” with the monogram ΠΑΘ, “Zenon groups Α and Β” and others. However, due to the fact that excavations were not carried out and the researchers were forced to limit themselves to collecting stamps and profiled fragments of amphoras, it became very difficult to form an impression

94 Empereur, J.-Y.; Tuna, N. "Zenon de Kaunos et l’Epave de Serçe Limani" BCH 62 (1988) p341ff. Fig. 4; Empereur, J.-Y.; Garlan, Y. “Greek amphora workshops [Греческие амфорные мастерские]" Грецеские амфоры. (Saratov 1992) p 15 ff. Fig. 6–9.
of the morphology of amphoras of the different types. The introduction of materials from the North Black Sea area makes it possible to fill this blank.

Collections of the fragments of amphora ceramics in the places of the workshops in the Datca peninsula gave J.-Y. Empereur grounds to suppose that the origins of amphora production of Knidos must be thought already in the 6c BC. However, the materials which permit us to get a real picture of the forms of Knidian amphoras in the course of the late classical period and the Hellenistic era exist only for the 4c BC. One can say for certainty that all this time the amphora production in Knidos had been developing within the framework of two main types.

Type 1 may be designated by its most revealing feature as a type of amphoras “with a tall cylindrical neck and mushroom-shaped rim.” Four variants can be isolated within this framework with sufficient certainty.

Variant 1-A (Elizavetovskii) must be recognized as the earliest of them. These amphoras are characterized by a wide pythoid body, relatively short, by a slightly funnel-like neck culminating in a massive mushroom rim, and by a small sharp-ribbed toe. The whole vessels were seen in the complex of Mound nr 5 of the group “Five brothers” of the 70s of the 4c BC, and in cultural deposits of the Elizavetovskoe ancient town itself (Fig. 1-1, -2). The same amphoras were discovered in children’s burial sites in the Kerkinitida necropolis and on the handle of one of them there is a monogram stamp “HP” (Fig. 1-3). The capacity of whole vessels of this series corresponds approximately to measures of 11, perhaps 12, Attic choes (36.11–39.40 litres).

“Gelendzhik” (I-B) variant of the first type is represented by amphoras of larger sizes whose capacity fluctuates around 45–47 litres. They also have flattened shoulders, a less massive rim, and a different profiling of the toe. I know 3 of such vessels of which two are uninvetoried [have no passports] and are kept

95 Amphoras with stamps of the Zenon groups A and B from the shipwreck on Serçe Liman are the exception (Grace, V. “Some amphoras from a Hellenistic wreck” BCH Supp 13 (1986) p 55ff; Fig 2, 4; Koehler, C.; Wallace, M. “Transport Amphoras: Description and Capacities” AJA 91 (1987) p 49 ff. Fig. 26, 27.)
96 Empereur and Garlan (n94) p15.
97 See Monakhov, S.Iu Greek amphoras in the Black Sea area: complexes of ceramic containers of VII-II BC (Грецеские амфоры в Причерноморье комплексъ керамических контейнеров VII-II вв. до н.э.) (Saratov 1999) p251 ff. Table 100.
98 Zeest, I.B. Ceramic containers of the Bosporos. (Moscow 1960) Table XIV-32a; Michlin, B.Iu “Excavations of the Kerkinitida Necropolis in 1975 [Раскопки некрополя Керкинитиды в 1975 г.]” SA 1981.3 p183 Fig. 1-7, 1-8; Kutaisov, V.A., Lantsov, S.B. Necropolis of Ancient Kerkinitida (Некрополь античной Керкинитиды) (Кiev 1989) p.4 Fig. 2-2.
in the Gelandzhik and Kiev museums, respectively, and the third comes from the Maeotic
ground [Гунд] necropolis by the Lenin farm (Fig. 2). On the handle of the latter there is
a mongramic stamp “ℓ,” similar stamps, though from a different die, were seen in a Knidian
workshop in a locality Mukhal Tepe. Most likely this variant of containers should be dated
to the middle–3/4 4c BC.

Variant I-C (Khersonesan), all things considered, succeeds the preceding one. These
amphoras have a sharp transition from the shoulder to the body, the toe is more massive and a
grove is sometimes formed above it (Fig. 3). The vessels of this series were sometimes stamped
with small square stamps with the abbreviation ΠΑΘ(-). The stamps themselves have been
known for quite a long time, but the first finds which provided information on the morphology
of the stamped vessels were made a few years ago. One neck with a stamp on the handle was
found in the settlement Geroevkai near Nymphaia, the second on Belozerskoe settlement
not far from Chersonesos (Fig 3-1,2). These fragments made it possible to visualize the
morphology of the whole vessels and identify them with a whole unstamped amphora from
burial ground nr 6 of the Chersonesan necropolis on the Northern Shore (Fig 3-3).

The context of all the above-mentioned finds is not very revealing, which does not supply
reliable chronological connections, and one can date the production of this series of amphorars
to the 3/4 4c only by indirect considerations. From the point of view of the historical situation
this could correspond to the last period of the dependance of Knidos on the Persian tsardom,
which ended in 332 BC.

Variant I-D (Cherednikovyi) differs from the ones examined above in its more elongated
proportions. The earliest examples were found in a shipwreck near Balearic Islands of the second

99 Antiquities of the Dnieper area (Древности Приднепровья). II. (Kiev 1899) p.42 Table XXXV. Nr 781.
100 Burial ground nr. 13 of the necropolis near the ancient town nr 2 by the Lenin farm.
101 Jefremov, N. Die Amphorenstempel des hellenistischen Knidos. (Munich 1995) Table IV (in the lower row on the left);
Empereur + Tuna (from n94) p352. Fig 6-12.
102 In IOSPE III 22 such stamps are recorded. See also Shelov, D.B. “Stamps on amphoras and roof-tiles found in the
excavations of Panticapea in 1945–1949. MIA 56 (1957) p217 Table V nr 3; Empereur and Garlan [n94] Fig. 7.
103 Excavations of 1986. Stored in IIMK RAH.
105 Monakhov, S.Iu; Abrosimov, E.N. “New Data on Old Materials from the Chersonesan Necropolis [Новое о старых
[p.164]

half of the 60s of 4c BC, \[106\] and the complex of Mound nr 8 of the “Cherednikovaia Grave Group” of the 30s of the century provides the latest date. \[107\] Another such vessel comes from a child’s burial ground of 1963 on the Northern Shore of Khersonesos (Fig. 4-2). \[108\] The capacity of the last two amphoras slightly exceeds 30 litres, which corresponds to the standard of 9 Attic cheires (29.55 l). Fractional vessels of this variant with actual capacity of ca 14 litres are known from Burial Ground nr 9 (1969) from Vani (Fig. 4-3) which, thanks to coins and ceramics, is dated to the 50s of 4c BC. \[109\]

The Second Type of Knidian amphoras, based on the most revealing morphological features, it is expedient to call the type of vessels “with conic neck and cube-shaped toe.” In this type one can also isolate variants: “Haviaras” (II-A); “pythoid-shaped” (II-B); “collared” (II-C); "Epikrates" (II-D); "Ebert" (II-E); "Athenian" II-F; "Cigar-shaped" (II-G). The second type of Knidian containers is partially synchronous with type I and appears in the 3/4 4c.

The earliest variant II-A ("Haviaras") of the II type of containers should apparently be identified with amphoras which were stamped with the dies with the city emblem of Knidos - "ship’s prow" (or "prora"). The stamps of these series are represented rather widely; however, only one whole amphora with such die on the handle from the collection of Haviaras has been known. \[110\] Unfortunately, only one photograph of this vessel has been published; it has the tall, slightly widening downward neck and a body of strictly conical shape. The toe is absent; the rim is most likely rolled.

Knidian localization of stamps with “ship’s prow” has been established by studies of E.M. Pridik, D.B. Shelov and Ch. Börker. \[111\] J.-Y. Empereur proved, as the result of his field studies, that such stamps were used to stamp amphoras in the workshops on the territory

---

106 Monakhov, S.Iu. Greek Amphoras ... [n97] p.372ff Table 164.
107 Monakhov, S.Iu. Greek Amphoras ... [n97] p.340ff Table 150.
108 Monachov and Ambrosimov [n105] p.131. Table 7. nr 23.
109 Monakhov, S.Iu. Greek Amphoras ... [n97] p. 382. Table 169.
110 Published by V. Grace as Samian (Grace V. “Samian Amphoras” Hesperia. 1971. Vol. XL. Pl.15-15). One more whole amphora with such stamp from the shipwreck by the Kizik Peninsula has been mentioned (Börker Ch. “Die Herkunft der Schiffsbug-Stempel.” BCH 1986. Suppl. 13 p.478.)
of the Knidian Peninsula. The case of chronology of "prora" stamps is more complex. N.F. Efremov defines the absolute chronology of this period in the interval of 305–280 B.C. basically because in such case this "first" stage of Knidian stamping is well tied with the succeeding ones. The duration of this period of 25 years is explained only by the fact that the 25 names known to us by stamps are recognised as magistrates, which has not so far been proved by anyone. However, judging by the materials of the ceramic complex in the garbage fill of the ravine, on the top of which the Khersonesian theatre had been built and where such stamps are present, the stamps with the ship's prow cannot be dated later than the middle of the 20s of 4c BC.

The amphora from the Haviaras collection still remains unique. However, among the fragmentary material in the museum vaults of the Black Sea area, I came across at least two finds which can be identified with the Knidian container of the "Haviaras" variant. In the first case, it is a fragment of a tall neck with part of a handle, stamped with ΠΑΘ(•) of the same die that is present on the amphoras with mushroom-shaped rim (Fig. 5-1). In the second case, there was a whole neck with exactly the same stamp on the handle (Fig. 5-2). Such stamps, as was noted above, have been seen on amphoras of I type with mushroom-shaped rim. Here, however, the rim has a completely different profile – in the form of a massive roll with a small flattening above. Such a quite typical morphological feature for "Haviaras" as the tall neck, widening in the lower part and with a smooth transition into the shoulder is also repeated here. All of the above give grounds to suppose that stamping with dies with "prora" and the monogram ΠΑΘ(•) were fully or at least partially synchronous, and fitted into the limits of 3/4 4c BC.

113 N. Jefremow Die Amphorenstempel... S. 62ff.
115 GIM of the Ukraine Inv. nr. B3-1252. Excavations in Olbia 1936.
116 Elizavetovskoe ancient town 1994, excavation site XXXI, p.o.1. Stored in the archaeological laboratory of RGPI.
117 This by no means signifies that stamping with such dies continued for a quarter of a century. In my opinion, the 25 names identified in stamps with "prora", are the names not of magistrates but of fabricants. The stamping itself could have embraced several years within the limits of the indicated period.
The next "pythoid" variant (II-B) of Knidian containers (it would be more precise to say that the variant "of pythoids on a cube-shaped toe" can be illustrated by a more representative number of finds. Two series of amphoras can be isolated within its limits [of the variant]. The vessels of the "early" series (II-B-1) are distinguished by a relatively short neck with a slight swelling in the upper part, roll-shaped sometimes beak-like rim, sloping shoulders, wide pythoid body, which culminates in a small cube-shaped toe which sometimes has a band (wide groove) at the base. Quite a lot of them are found on the Bosporos, mostly these are un stamped amphoras (Fig 6), but amphoras with monogram stamps in an oval frame, sometimes even on both handles (Fig. 7) are also known. According to a number of complexes, such amphoras are dated within the limits of 3/3 4c–beg 3c BC.

The "Late" series (II-B-2) "pythoid" variant appears approximately in the 80s of 3c (the time of the shipwreck near Serce Liman. These amphoras retain approximately the same proportions and size but on the sole of the toe the indentation is always absent, and the toe itself is formed more roughly (Fig. 8). On the handles of the amphoras "late" series one can come across the stamps of the groups "A" and "B" Zenon: ZHNΦΙΑΑ or ΝΦ.118

Two type-standards are established for both "early" and "late" amphoras with cube-shaped toe: full standard amphoras with a measure of 10 Attic choes (35-38 l) and small fractional vessels calculated at a measure of 3 choe (9.85 l). Amphoras of the next variant II-C ("with tall collar-shaped rim") are distinguished, apart from the specific state of the rim, by sloping shoulders which ensures the different proportions of the container – approximately equal correlation of the upper and lower parts of the vessel. Three whole specimens of such amphoras with the stamps of group B Zenon ΣΩ(-), ΝΦ(-), ET(-) were found in different years in Rhodes (Fig. 9)121 One more such amphora with an unclear stamp on the handle was discovered in Elisavetovskaya burial ground in Kuban1,122
In the light of the latest studies on the Knidos Peninsula it has become necessary to reject V. Grace's hypothesis on the Egyptian origin of these series of vessels\textsuperscript{123} and agree with the opinion of J.-Y. Empereur who believes that they were produced in the workshop of the fabricant Sofanes near the present-day Mukhal' Tepe in the central part of the peninsula.\textsuperscript{124}

Chronology of the production is limited to the end of 4c–first decade of 3c, and thus they precede and are partly synchronous with the amphoras from Serce Liman. Recently there appeared data on the fact that in 1/3 3c BC, within the framework of Type II there existed one more variant “Epikrate” (II-D) of Knidian amphoras. This supposition is based on the existence of a small series of englyphic and relief stamps on the handles with the name of Epikratos from the excavations of the Elivavioletsovskoe ancient town, which had been attributed by I.B. Brashinskii to impressions of unknown origin.\textsuperscript{125}

In the collections of ROMK, among the 1979 finds, I found one of these englyphic stamps with the reading ΕΠΙΚΡΑΤΟΥ (Fig. 10-1, 10-2) on a large fragment of a handle.\textsuperscript{126} The characteristic curve of the handle which is moved far away from the neck as well as the dense red clay with small white inclusions leave almost no doubt that we have in front of us the production of Knidian amphora workshops. One more large fragment of a handle with similar morphological characteristics, but this time with a leaf-shaped relief stamp ΝΟΩΔΟΥ, device "leaf" (Fig. 10-3) was also found in the same collection.\textsuperscript{127} Recently such stamps were established in the complex of the Elivavioletsovskoe basement of 1993, which according to the materials of ceramic epigraphy, is dated to the 70s of 3c BC.\textsuperscript{128} Unfortunately, the rims did not survive in either of these stamped fragments, which makes it difficult to compare them with whole unstamped forms of ceramic containers. But even in this case it is evident that the handles placed far away from the neck are characteristic for

\begin{footnotesize}
\begin{itemize}
  \item 124 Empereur and Tuna "Zenon de Kaunos..." [n94] p.344. Fig.4b.
  \item 125 Brashinskii I.B. Greek Ceramic Import in the Lower Don. [Греческий керамический импорт на Нижнем Дону]. Leningrad, 1980. Nr 785, 786.
  \item 126 ROMK, inv nr 5127/148. Excavation site XIV of 1979, p.o. 290.
  \item 127 ROMK from deinventoried finds in the Elizavetovskoe ancient town.
  \item 128 Monachov Greek Amphoras ... [n97] p.487 Table 208.
\end{itemize}
\end{footnotesize}
ceramic containers of Knidos itself, though not for the above-reviewed series of 4c–1/3 3c, but for the later well-known variants of the 3c and 2c BC. One should hope that new finds will in future make it possible to reconstruct fully the form of the containers of the variant “Epikratos” which existed in the 1/4-beg 2/4 3c BC.

It is not excluded that the variant Ebert (II-E) known by the single find from Mound 3N of Petukhovskii Necropolis (Fig. 11-1). The form itself of the amphora with a strictly conical body does not have even remote parallels in Knidian amphora production, and the only element which forces us to suppose its connection with Knidos lies in the characteristic toe with a rolled ring applied.129

The further development of Type II of Knidian containers in 3c BC is traced by individual finds. All things considered, from the middle of the century the basic (if not the only) variant is the “Athenian” variant (II-F), named thus from the first find in Athenian cistern 12-4, dated to 40s of 3c BC (Fig. 10-2).130 In comparison with the containers of the above-reviewed variants, the shape changed insignificantly, primarily the toe, which from cube-shaped turned into sharp-pointed, and acquired an applied ring. Subsequent evolution of Type II of Knidian containers normatively led to the appearance of the “cigar-shaped” variant II-G, well-known from the works of V. Grace. Apart from the tall neck, cone-shaped in its lower part, the traditional elements for this type were now becoming the elongated body, the toe with the applied ring, and a small roll-shaped rim. This type-standard turned out to be very stable and existed with small variations throughout the last third of 3c, the whole of 2c, and probably 1/2 1c BC. Unfortunately even these finds are not very numerous [in the Black Sea area].

One amphora from the excavations of the Athenian agora has the stamp of the magistrate Diokles on the handle.131 From the same place came a second amphora with similar characteristics and with a 3-line illegible

129 Ebert, M. "Ausgrabungen auf dem Gute Maritzin” Prähistorische Zeitschrift V (1913) p.65 Abb.66.C. V. Polin justifiably places this specimen at the end of 4c–beginning 3c BC by the shape of the body.
130 Monachov Greek Amphoras ... [n97], p.538 Table 226.
stamp on the handle (Fig. 12).\textsuperscript{132} The capacity of both vessels fluctuates within the range of 30–33 litres. According to N. Evremov’s modification of V. Grace’s chronology – the stamps of the magistrates of V (or VI) group where Diokles is also included, are dated to the time after the destruction of Carthage and Corinth (146-115 BC).\textsuperscript{133} Most likely, both amphoras should be dated to the middle of 2c BC, which indirectly is confirmed by the materials of the complex at the estate Bol’shoi Kastel’ where fragmented shapes of the same configuration were found.\textsuperscript{134} Finds similar to the Athenian examples were made in other places of the Mediterranean, in particular in Pella.\textsuperscript{135} Towards the end of 2c, Knidian containers acquire a smoother silhouette of the shoulder and body, the capacity of the vessels decreases, as can be testified to by the amphora from the Alexandria museum with the magistrate Drakon (Fig. 12).\textsuperscript{136} Thus, according to the presently available materials, the beginning of systematic import of Knidian wine in large amphoras with mushroom-shaped rims is established from the 70s of the 4c BC. Later the amphoras of Knidian production become more varied in their morphological characteristics, which is particularly typical for the end of 4c to 1/3 3c BC. After this the development of the shape of Knidian ceramic containers moves from “pythoids on cube-shaped toe” of the type that was discovered in Ṣerçe Liman to the vessels with a higher neck and sharp-pointed toe with an applied ring. From the end of 3c BC and throughout the whole of the 2c the amphoras acquire a cigar-shaped body, retaining the marked shape of the toe.

AMA The Ancient World and Archaeology. Saratov.
VDI Bulletin of Ancient History
GIM National History Museum (of the Ukraine)
EG The Elizavetovskoe city-state
EM The Elizavetovskii tumulus

\textsuperscript{133} Grace, V. “The Middle Stoa Dated by Amphora Stamps” Hesperia 54.1 (1985) p.31, 33; Evremov, Die Amphorenstempel ... [n101] p.76, 88, 151.
\textsuperscript{134} Monachov, Greek Amphoras [n97] p.559 Table 237.
\textsuperscript{136} Empereur and Hesnard. ”Les amphores hellenistiques” Ceramiques hellenistiques et romaines II. Besancon, 1987. p.60 Pl.3 nr 15; Efremov, Die Amphorenstempel ... [n101] p.114 nr 11.
[p170]

IIMK RAN  Institute of the History of Material Culture of the Russian Academy of Sciences. 
          St. Petersburg.
MIA     Materials and Research in Archeology SSSR.
RGPU    Rostov National Pedagogical University
SA      Soviet Archaeology
SAI     Society of Archaeological Sources
AA      The Athenian Agora
AJA     American Journal of Archaeology
BCH     Bulletin de correspondance hellenique
BIFAO   Bulletin de l’Institut francais d’archeologie orientale
JHS     Journal of Hellenic Studies
PZ      Praehistorische Zeitschrift
Figs 1-6. Knidian amphoras
1 "Elizavetovskoe" variant (I-A): 1 from Mound nr 5 of the group "Five brothers" of the Elizavetovskoe tumulus; 2 from the Elizavetovskoe city-state; 3 from Kerkinitida.
2 "Gelendzhik" variant (I-B): 1 from the Gelendzhik museum; 2 from the Kiev museum; 3 from the Kuban museum.
3 "Chersonesian" variant (I-C): 1 from Geroevka; 2 from Belozerskoe settlement; 3 from Chersonesos.
4 "Cherednikov" variant (I-D): 1 from Mound nr 8 of the city-state "Cherednikov burial"; 2 from Chersonesos; 3 from Vani.
5 "Haviaras" variant (II-A): 1 from Olvia; 2 from the Elizabetovskoe city-state.
6 "pythoid" variant (II-B): 1 from the Kuban spring; 2 from burial nr 7 of the Starokorsunskii necropolis.
Figs 7-12. Knidian amphoras

7  "pythoid" variant (II-B): 1 from burial nr 8 at the Lenin farm; 2 from a Zelenii farm.
8  "pythoid" variant (II-B): 1-3 from the Serce Liman wreck.
9  "tall collar rim" variant (II-C): 1-2 from excavations on Rhodes.
10 "Epikrates" variant (II-D): 1-3 from the Elizavetskoe city-state.
11 1 "Ebert" variant (II-E) from the Petuxovskii mound 3 N; 2-3 "Athenian" variant (II-F) from cistern nr 21:4 (2) and from Chersonesos (3).
12 "cigar-shaped" variant (II-G): 1-2 from the Athenian agora; 3 from the Alexandria museum.