

HANDELS- UND FINANZGEBAREN
IN DER ÄGÄIS IM 5. JH. V. CHR.

TRADE AND FINANCE IN THE 5TH C. BC
AEGEAN WORLD

OFFPRINT

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YAYINLARI

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AEGEAN WORLD

Anja Slawisch (Hrsg.)

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Trade and Finance in the 5th c. BC Aegean World

Herausgegeben von
Anja Slawisch

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Zum Geleit

In Zeiten, in denen das Wirtschaftliche scheinbar das Primat über das Politische gewonnen hat, wendet sich auch die archäologische Forschung wieder verstärkt wirtschaftshistorischen Fragestellungen zu. Das 2012 eingerichtete wissenschaftliche Netzwerk »Wirtschaft als Machtbasis: Vormoderne Wirtschaftssysteme in Anatolien« an der Abteilung Istanbul ist dafür nur eines von vielen Beispielen. Der nun vorliegende Berichtsband »Handels- und Finanzgebaren in der Ägäis im 5. Jh. v. Chr.« dokumentiert die Ergebnisse einer 2010 in Istanbul abgehaltenen Tagung, die einen multidisziplinären Zugang zum Verständnis einer besonders signifikanten Konstellation von Wirtschaft und Politik in der Alten Welt sucht: Die (scheinbare) Dominanz Athens im Wirtschaftsleben der Ägäis im 5. Jh. v. Chr. Die verschiedenen Beiträge zeigen, dass neue Erkenntnisse zu dieser komplexen Problematik nur im Austausch zwischen den verschiedenen archäologischen und altertumswissenschaftlichen Fächern zu gewinnen sind. Damit war der von Anja Slawisch konzipierte und organisierte Workshop zugleich ein erster Schritt hin zu einem wirtschaftsarchäologischen Schwerpunkt, der sich hoffentlich weiter an unserer Abteilung etablieren wird. Dafür und auch für ihre Leistungen bei der redaktionellen Vorbereitung des Tagungsbandes gilt ihr unser besonderer Dank.

Weiterhin möchten wir der Spedition Jüngling und besonders BASF Türk für ihre großzügigen Spenden danken, ohne die die Drucklegung des vorliegenden Bandes nicht möglich gewesen wäre.

Felix Pirson – Martin Bachmann

Istanbul, April 2013

Einführung

Unser athenozentrisches Bild von der griechischen Welt im 5. Jahrhundert v. Chr. ist gleichermaßen geprägt durch die antike und die moderne Geschichtsschreibung. Die Dominanz Athens auf kulturellem Gebiet war in erster Linie eine Folge militärischer Siege und einer daraus resultierenden wirtschaftlichen Stärke. Diese erlaubte es der Stadt die führende Rolle im delisch-attischen Seebund einzunehmen und aus dieser Position heraus bestimmte Athen maßgeblich die politischen Geschehnisse der griechischen Staatenwelt. Dinglich manifestierte sich diese Führungsrolle beispielsweise im immensen Münzausstoß der Stadt. Außerhalb Athens – auf den griechischen Inseln, in der Peloponnes, auf Kreta oder auch in den Poleis und Heiligtümern an der kleinasiatischen Westküste – ist das 5. Jahrhundert v. Chr. durch einen deutlichen Rückgang, mancherorts sogar durch das zeitweise vollständige Fehlen, archäologischer und epigraphischer Quellen gekennzeichnet. Dies steht in starkem Kontrast zur Materialfülle sowohl des vorangegangenen 6. als auch des nachfolgenden 4. Jahrhunderts v. Chr. Die intensiven Handelskontakte brechen scheinbar ab; die ägäische Welt wird zum ›Spielball‹ persischer, athenischer und spartanischer Hegemonieansprüche.

Die erhaltenen Quellen zeigen sehr gut, in welchem Maße Athen versuchte, lokale Autonomiebestrebungen insbesondere auf dem politischen, und auf dem Handels- oder Finanzsektor, zu unterbinden bzw. zu reglementieren. Das Handels- und Finanzgebaren des 5. Jahrhunderts v. Chr. in der Ägäis lässt sich jedoch in seiner Komplexität keineswegs allein mit der Dominanz Athens beschreiben bzw. erklären.

Vor diesem Hintergrund entstand die Idee, einen Workshop mit Vertreterinnen und Vertretern der Alten Geschichte, Numismatik, Archäologie sowie der Wirtschaftsgeschichte durchzuführen, in dem ausgehend von Fallstudien eine fachübergreifende Diskussion möglich war.

Die geographische und chronologische Eingrenzung des Themas erwies sich dabei als ausgesprochen sinnvoll, besonders weil dadurch die Lücken und Schwächen der modernen Rekonstruktion und Interpretation antiker Lebensverhältnisse in ihren verschiedenen Facetten besonders deutlich sichtbar wurden. Dass dennoch die chronologische Eingrenzung auf das 5. Jahrhundert v. Chr. nicht immer konsequent durchgehalten werden konnte, sondern wir nach wie vor auf Vergleiche mit quellenstärkeren Zeiten

angewiesen sind, wurde ebenfalls schnell deutlich. Die unbefriedigende Quellenlage außerhalb Athens macht eine Loslösung von der anfangs kritisierten athenozentrischen Geschichtsbetrachtung nahezu unmöglich. Trotzdem erwies sich der Versuch, das Fundament unserer Beschäftigung mit der Antike, gemeint sind v. a. die archäologischen Zeugnisse sowie die schriftliche Überlieferung, auf den Prüfstand zu stellen und den sich daraus ergebenden Interpretationsspielraum für das 5. Jahrhundert v. Chr. neu auszuloten als außerordentlich fruchtbar und zeigte eindrucksvoll das Potential für zukünftige Forschungen und Fragestellungen auf. Im vorliegenden Band wird ein großer Teil der während des Workshops 2010 gehaltenen Vorträge einem breiten Publikum zur Diskussion gestellt.

Ein Problem bei der Beurteilung antiker Wirtschaft stellt zweifelsohne die unterschiedliche Sichtbarkeit von Handelsgütern im archäologischen Befund dar (*D. Carlson, B. Erickson, M. Lawall*). Einige Haupthandelsgüter wie Nahrungsmittel (Getreide, Wein etc.) oder Rohstoffe (Holz, Metall) lassen sich bislang nur schwer nachweisen, wohingegen Materialien wie Stein oder auch Keramik im Fundrepertoire vergleichsweise überrepräsentiert sind. Die Auswertung unterwasserarchäologischer Funde hat diesbezüglich großes Potential, handelt es sich doch häufig um geschlossene Kontexte (*D. Carlson*). Weitgehend ungenutzt sind nach wie vor Kontexte aus gut datierbaren Zerstörungshorizonten wie das Beispiel Milet vor Augen führt (*A. Slawisch*). Zukünftige Publikationen werden die Feinchronologie zahlreicher Fundgattungen – nicht nur an diesem Fundort – weiter präzisieren helfen.

Daneben wurde deutlich, dass die Rekonstruktion ökonomischer Verhältnisse in kleineren Orten und regionalen Zentren anhand der spärlichen lokalen Schriftquellen nur bedingt zu leisten ist (*Chr. Constantakopoulou, B. Erickson, A. Mehl*). Neue Perspektiven und Informationen versprechen in diesem Zusammenhang die Auswertung achämenidischer Schriftquellen sowie der vielfältigen Münzmissionen des 5. Jahrhunderts v. Chr. (*J. Hanke, D. Mauermann, S. Ziesmann*). Letztere Fundgruppe wurde bislang weitgehend unterschätzt, wenn es um die Frage ging, welchen politischen und damit auch ökonomischen Aktionsraum die Poleis der Ägäis hatten. Das häufige Auftreten von Kleinnominalen während des 5. Jahrhundert v. Chr. spricht ebenso für den Ausbau regionaler Netzwerke wie die Tatsache, dass bestimmte Amphoren weniger einer konkreten Poleis als vielmehr regionalen Zentren zugewiesen werden können (*M. Lawall, D. Mauermann, S. Ziesmann*). In diesen Zusammenhang ist auch bemerkenswert, dass bereits in der Antike bestimmte Regionen für die Herstellung und den Export spezieller Produkte Berühmtheit erlangten (*J. Davies, A. Mehl, B. Schefold*); ein Phänomen, dessen Ursprung jedoch bereits vor dem 5. Jahrhundert v. Chr. liegt wie das Beispiel des zyprischen Kupferexportes zeigt (*A. Mehl*). Gleiches gilt für die Entstehung des athenozentrischen Machtgefüges im Bereich der Ägäis während des hier zu betrachtenden Zeitraumes. Die Wurzeln für die Expansion und den Aufstieg Athens im 5. Jahrhundert v. Chr. liegen bereits in peisistratidischer Zeit (*J. Davies*).

Allen Teilnehmern und Autoren möchte ich an dieser Stelle noch einmal sehr herzlich für die inspirierenden Vorträge und Diskussionen sowie die ungezwungene und lebendige

Atmosphäre während des Workshops danken. Mein Dank gilt auch dem Ersten Direktor der Abteilung Istanbul, F. Pirson, der die Durchführung des Workshops von Anfang an – auch finanziell – großzügig unterstützte.

Darüber hinaus gewährten die Istanbuler Vertretung der Firma BASF und die Spedition Jüngling finanzielle Unterstützung. Ihnen sei für ihr Engagement herzlich gedankt. Für die Aufnahme des Bandes in die Byzas-Reihe der Abteilung Istanbul des Deutschen Archäologischen Institutes danke ich den Herausgebern F. Pirson und M. Bachmann.

Besonders danken möchte ich darüber hinaus für die vielfältige Hilfe, die ich in der Abteilung Istanbul erhalten habe: während des Workshops kümmerten sich H. Çatak und H. Tessin um organisatorische und administrative Details, T. Wilkinson entwarf das Logo und übernahm die Durchsicht der englischen Beiträge, D. Krüger beriet bei der Umsetzung der redaktionellen Richtlinien, J. Seeher übernahm die Umschlaggestaltung und A. Baykal-Seeher leistete unschätzbare Hilfe während der letzten Phase vor Drucklegung, indem sie den Kontakt zum Verlag herstellte und sich um die Umsetzung der Korrekturen kümmerte. Ihnen allen sei herzlich gedankt.

Anja Slawisch

Potsdam, März 2013

A View from the Sea: the Archaeology of Maritime Trade in the 5th century BC Aegean

Deborah CARLSON

“If some city is rich in timber for shipbuilding, where will it dispose of it, if it does not have the consent of the ruler of the sea? What if a city is rich in iron or copper or flax? Where will it dispose of it, if it does not have the consent of the ruler of the sea? And yet, it is from these very materials that I get my ships, taking timber from one place, iron from another, copper from another, flax from another, and wax from another”¹.

Such were the deliberations of one anonymous fifth-century BC Greek writer commonly referred to as the Old Oligarch. His apparent frustration highlights two fundamental challenges of attempting to evaluate maritime trade in the Classical Aegean: (1) for modern scholars, the poor survivability in the archaeological record of commodities like metal ingots, timber and textiles; (2) for the ancients, the practical, strategic importance of controlling the shipping lanes in which those archaeologically-invisible commodities were transported.

Over the centuries the picture painted by ancient authors and epigraphic sources has become progressively clearer: the fifth-century BC Athenians exercised near-total control over maritime trade, ensuring that a steady supply of both raw materials (Old Oligarch) and foreign exotica (Hermippus fr. 61) were channeled reliably and directly into Piraeus (Isoc. Paneg. 42). Understanding the extent to which the Athenians also exploited their allies financially (Tribute Quota Lists), secured and controlled the supply of grain near its source (Methone Decree), ensured its delivery to their city (Ath. Pol. 51; Thuc. 8.4), prevented their adversaries from importing foreign grain (Thuc. 3.86) and punished their enemies by excluding them from the ports of the empire (Thuc 1.67) is part and parcel

¹ Marr – Rhodes 2008, 47.

of why scholars continue to debate the scope, durability, and popularity of the Athenian empire.

Several important discoveries made during the past two decades – especially in the field of nautical archaeology – have helped balance the Athenocentric literary record and shed light on trade at the edge of the empire. For the purposes of this paper our focus is limited to the few fifth-century wrecks found in the Aegean, leaving out later wrecks that document the movement of Aegean goods to the western and eastern (Porticello, El Sec) Mediterranean (Ma'agan Mikhael, Kyrenia). The end result is a not wholly comprehensive but nevertheless instructive look at maritime trade in the Aegean during the Athenian Empire.

I. Classical Shipwrecks in the Aegean

I. 1. The Alonnesos Shipwreck

The first Classical shipwreck explored in the Aegean Sea was discovered in 1985 off the island of Peristera, an uninhabited island that lies due east of the island of Alonnesos (ancient Ikos) in the Northern Sporades. Though as many as ten ancient amphora wrecks have been located in the Northern Sporades, the Greek Department of Maritime Antiquities chose to pursue the excavation of the Alonnesos shipwreck because of its unusually large size².

The project commenced in 1992 with the installation of 72 two by two meter grid squares over an amphora mound 25 m (83 ft.) long and 12 m (40 ft.) wide. Grid square Θ6 was selected for excavation because it lay along the deepest edge of the wrecksite, where hull remains were deemed more likely to be preserved. Archaeologists proceeded to uncover 65 amphoras stacked in three layers: at the bottom, a layer of Mendean jars beneath two layers of amphoras said to be from Peparethos³. Excavation of adjacent grid square Θ5 in 1993 revealed an additional, lower layer of Mendean amphoras beneath the Peparethian jars, suggesting that the ship had most recently taken on a cargo of Peparethian amphoras before sinking off nearby Alonnesos. Parallels suggest a chronological context of the last two decades of the fifth century BC.

Beneath the lowest layer of amphoras archaeologists uncovered an assemblage of Attic black glaze pottery: 31 footed bowls (some of which were found still stacked one inside the other), ten kylikes with stamped decoration, a cup-skyphos, a 'Phidias type' mug, an oil lamp, and a salt cellar. This fineware pottery, which could not possibly have survived intact beneath three layers of transport amphoras, was likely stowed in baskets or crates atop the jars, and as these crates disintegrated over time, the ceramics slipped down and between the amphoras. Other utilitarian wares, not demonstrably of Attic origin, include a mortarium, a jug, a chytra, and a lekane.

² Hadjidaki 1996, 563–565 and n. 26.

³ The jars identified by Hadjidaki as Peparethian belong to a broader and more complicated amphora type known as Solokha II. Though Solokha II jars were indeed manufactured on Peparethos, the wide variety of fabrics from known examples points to additional, presently unknown, production sites. See Picon 1990 and Lawall 1995, 234–244.

Elpida Hadjidaki, the director of the Alonnesos shipwreck excavation, estimated that the ship may have been carrying as many as 4000 amphoras, which equates to a burden of approximately 125 metric tons⁴. A ship of this size and date is unusual in the archaeological record, though some maritime historians maintain that, as early as the fifth century BC, vessels of 150 tons burden were commonplace, and ships of 350 to 500 tons were not unknown⁵. The problem with this argument is that, with one exception, it is built upon a corpus of inscriptional and literary sources dating from the last quarter of the fourth century BC⁶. The only explicit historical reference to a ship of maximum tonnage in the fifth century is Thucydides' description of the *muriophoros* employed by the Athenians as a stationary platform during their offensive in the harbor of Syracuse in 413 BC⁷. A vessel with twice the capacity of the Alonnesos ship would have been exceptional, but so too were the circumstances under which the Athenians' vessel – fitted with wooden turrets and screened bulwarks – was brought in to serve as a floating military fortress.

Hadjidaki concludes rather cautiously that the Alonnesos ship originated in Athens, and called at Mende and then Peparethos before traveling to (or from) Ikos, where it sank outside the harbor⁸. This reconstruction is plausible, based on the available evidence, which constitutes less than 3% of the total wreck. The extent to which the two excavated grid squares are indicative of the lading of the entire ship is obviously problematic, and the evidence of other wrecks suggests that different consignments of cargo were clustered in different parts of the hold. Finally, the date range of the Alonnesos cargo (420–400 BC) places the historical context of the wreck firmly within the Peloponnesian War, a fact that designates any such vessel traveling between Athens and the North Aegean as a potential source of strategic goods, and by extension, a potential enemy target. Though the excavation exposed enough charcoal powder and bits of burnt wood to suggest to Hadjidaki that the ship had caught fire, she sees no reason to read the sinking of the vessel as an act of war⁹. Clearly, only the thorough and complete excavation of the Alonnesos wreck will make it possible to address such fundamental questions about the ship's cargo, voyage, and the nature of her demise.

I. 2. The Phagrou Shipwreck

During the summers of 1995 and 1996, the Greek Department of Maritime Antiquities explored and partially excavated the remains of a Classical shipwreck lying at a depth of between 29 and 35 m off the islet of Phagrou near the larger island of Kyra Panagia in the Northern Sporades. The excavation, which was suspended in 1996 following the death

⁴ Hadjidaki 1996, 588.

⁵ Principally Casson 1995, 170–173.

⁶ The textual evidence for large capacity merchant ships adduced by Casson 1991, 171–172 and 183 includes ten honorific inscriptions, the earliest of which is dated ca. 330 BC, the Thasian port regulations of ca. 250 BC, and references in Strabo, Philo, Automedon, and Heliodorus.

⁷ Thucydides 7.25.6. Also unclear is the unit of measurement to which the *murio* refers: is it 10,000 talents (about 260 tons), 10,000 amphorae (250–350 tons) or 10,000 medimnoi (about 400 tons)?

⁸ Hadjidaki 1996, 591.

⁹ Hadjidaki 1996, 575 and 590–591.

of project director Demetrios Chaniotes, has not resumed and no substantial excavation reports have been published. Several brief bulletins describe a primary cargo of Mendean amphoras, perhaps as many as 1500¹⁰. During the 1995 season, which was limited to the excavation of one 2 x 2 meter grid square, a total of 25 Mendean amphoras were raised. This lone grid square also produced an intact oinochoe, an olpe, a lidded lekane, lamps, and several black glaze vessels including a skyphos with a graffito in the form of the letter X. Metal finds from the site include a bronze ladle with a bird's head handle, and two lead bars that once functioned as the cores of a wooden anchor stock. The date proposed for the Phagrou shipwreck, ca. 450 BC, appears to be based on the discovery of two Howland type 21B lamps dated between 480 and 425 BC though the morphology of the 25 recovered Mendean jars points to a date before mid-century and Kazianes variously describes the wreck as belonging to the middle and the end of the fifth century BC¹¹.

I. 3. The Tektaş Burnu Shipwreck

Between 1999 and 2001, the Institute of Nautical Archaeology (INA) at Texas A&M University excavated the remains of a Classical shipwreck off the Aegean coast of Turkey at Tektaş Burnu (*Fig. 1*)¹². Tektaş Burnu is located along a rugged, uninhabited stretch of coast southeast of Çeşme, west of Siğacık (ancient Teos), and east of Emporio, Chios. Navigation in these waters between the Straits of Chios and Siğacık Bay is made particularly difficult by the presence of strong northerly winds that drive and confuse the currents. Negotiating seas under such conditions would have been especially challenging for ancient ships, which carried square sails that were designed primarily for traveling with the wind astern and generally did not permit agile maneuvering. Indeed, underwater surveys suggest that the Straits of Chios are littered with shipwrecks¹³.

The principal cargo of the Tektaş Burnu shipwreck, which lay on the seabed at a depth of between 38 and 43 m, appears to have been a shipment of wine contained in slightly fewer than 200 amphoras of the so-called pseudo-Samian type (*Fig. 2*)¹⁴. Similar amphoras have been found in sixth and early-fifth century BC contexts along the Black Sea coast but have not been conclusively attributed to a specific place of manufacture. Indeed, the confusing array of terms used in modern scholarship to classify such jars – including ‘Samian’ and Protothasian – is a reflection of conspicuous morphological variations that suggest we are in fact dealing with the products of various workshops organized across one or more regions¹⁵. That North Ionia was one of these regions is undeniable, as indicated by the presence, on one pseudo-Samian amphora from the wreck, of a pre-firing circular stamp with

¹⁰ Touchais 1996, 1290 mentions Mendean amphoras, which appear in pl. 239a of Kazianes 1996.

¹¹ Kazianes 1996, 724.

¹² Bass 2002; Carlson 2003. Bass was the overall project director and the author served as assistant director.

¹³ Garnett – Boardman 1961; Foley et al. 2009.

¹⁴ The term “pseudo-Samian” was apparently coined by Georgian archaeologist Otar Lordkipanidze in describing a group of fragmentary jars excavated from a village near the ancient Colchian site of Phasis: Lordkipanidze 1968, 39–40.

¹⁵ Pierre Dupont (1998) seems to have been the first to assign Zeest’s ‘Samian’ and Protothasian types to the same lineage; see also Dupont 2006.

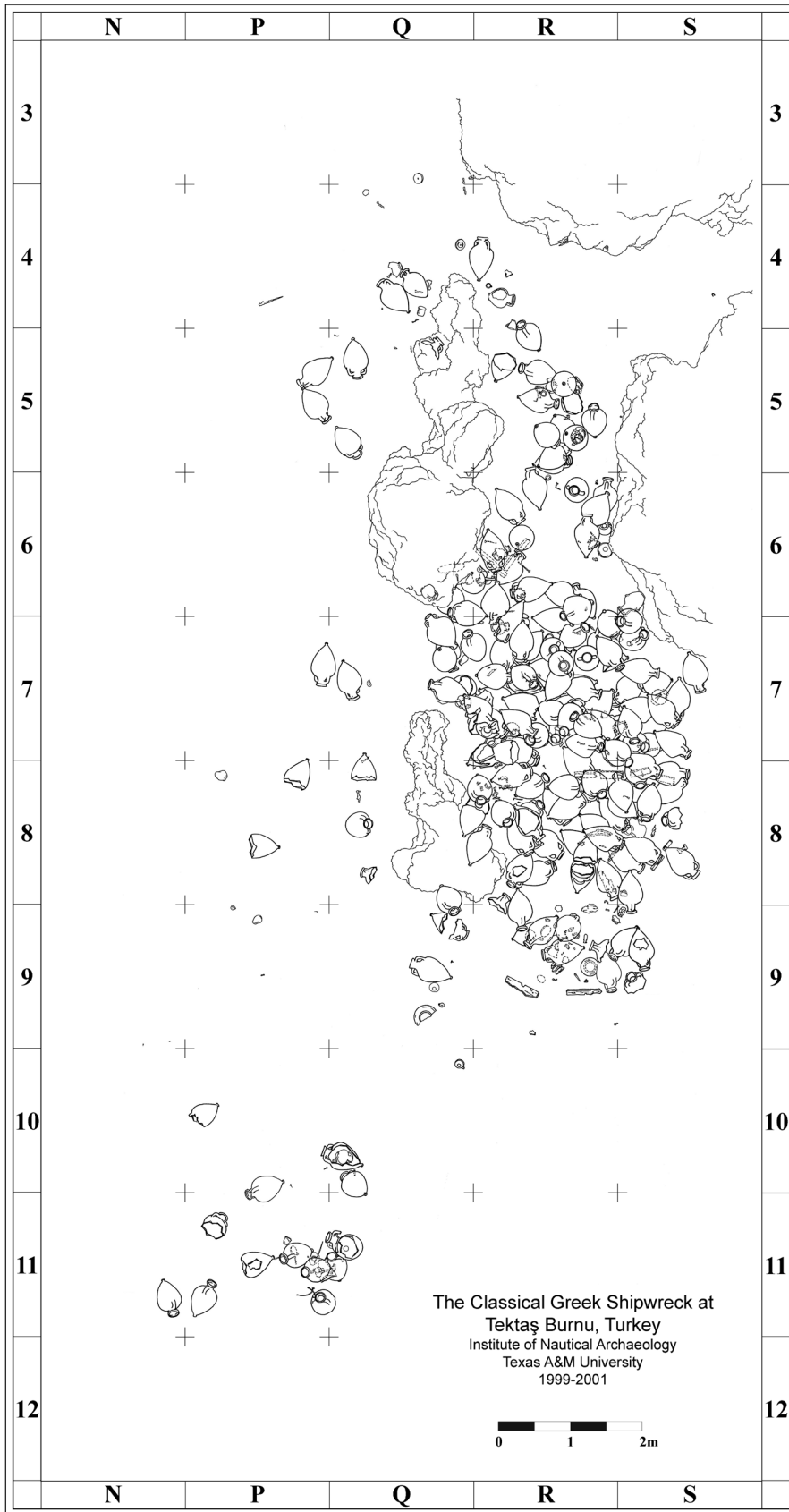


Fig. 1
Site plan of the
Tektas Burnu
shipwreck
(© INA, drawing by
Sheila Matthews).



Fig. 3
EPY ethnic amphora
stamp from amphora
Lot 0846 at Tektaş
Burnu (© INA,
photograph by
Deborah Carlson).

Fig. 2
One of almost 200 pseudo-Samian
/ Erythraian amphoras from the
Tektaş Burnu shipwreck (© INA,
photograph by Deborah Carlson).

the Greek letters EPY, the ethnic of Ionian Erythrai (*Fig. 3*). Nearly all of these jars were lined with a thin coating of pitch, in which it is occasionally possible to see intact grape seeds, suggesting that the Erythraian amphoras on board the Tektaş Burnu ship almost certainly carried wine.

Other transport amphoras from the wreck include ten jars likely manufactured at Mende in Northern Greece¹⁶. All ten jars can be dated to the third quarter of the fifth century BC, but two have a more globular body shape that indicates a date closer to mid-century, while the remainder are more angular and therefore slightly later¹⁷. Nine of these jars were filled with dark, gooey pine tar, and while it is tempting to envision this consignment as a direct export from the timber-rich cities of Northern Greece, spectroscopic analysis of the tar conducted by Curt Beck of the Amber Research Laboratory at Vassar College determined only that it is not derived from *Pinus halepensis* but could have come from another species of Mediterranean pine. What we have then is a consignment of pine tar in Northern Greek containers not necessarily a shipment of Northern Greek pine tar, and is worth considering whether an ancient consumer would have known (or been concerned with) the difference. The tenth Mendeian amphora, and one larger-than-average Erythraian jar, were filled with the butchered bones of an adult bovine, including ribs and caudal (tail) vertebrae. The remaining six amphoras include one or two examples of types manufactured on Chios, Lesbos, Samos, and/or Miletos, and an unknown type that may

¹⁶ Mark Lawall of the University of Manitoba was the first to make this identification in 1997, upon examining one of two amphoras raised from the wreck when it was discovered the previous year.

¹⁷ See Lawall 1995, 121–123 for a discussion of the evolution of his middle Mendeian variant.



Fig. 4 One of three Chian banded kantharoi from the Tektaş Burnu shipwreck (© INA, photograph by Susannah Snowden).

have originated in the North Aegean. The two Chian amphoras are especially diagnostic because they represent the C/2 and C/3 subtypes – the latter suggests that the Tektaş Burnu ship sank between 440 and 425 BC or perhaps very shortly thereafter.

East Greek ceramics constitute the ship's secondary cargo, with the largest component a group of 14 slim, footless kantharoi that feature the unmistakable greyish-brown fabric of Chian pottery. Of these 11 are black-glazed while the remain-

ing three carry traces of a distinctive decoration seen on Chian cups from Emporio and Miletos: a thin dark band around the exterior below the handles and alternating broader bands of black and white on the interior (*Fig. 4*)¹⁸. Votive cups of this exact type, with dedicatory inscriptions painted around the rim before firing, have been excavated at Naukratis and Aegina¹⁹. The discovery of such cups at the Temple of Aphaia gives rise to questions about whether these cups were “made to order for Chiot merchants to be dedicated when their voyage was successfully completed”²⁰, or produced locally near the sanctuaries. John Boardman has described these kantharoi as “cheap, plain, but fragile vases, not altogether ideal cargo”²¹, but the presence of almost one dozen black-glazed examples on the Tektaş Burnu ship indicates that they certainly were cargo, while the few banded but uninscribed cups from the same assemblage may have been the keepsakes of a Chian sailor who intended to dedicate them at various anchorages throughout his journey.

Other finewares from the Tektaş Burnu cargo include 13 table amphoras or amphoriskoi in three or perhaps four different sizes (*Fig. 5*). The majority belong to an intermediate class, with 10 examples ranging in height from 21 to 26 cm. Two smaller specimens, each 18 cm tall, were excavated intact, and a lone example of a larger version, 32 cm tall, has been restored from fragments. Each size shares stylistic features that point to a common, perhaps ultimately metallic, ancestor: doubled cylindrical handles that meet the neck in a prominent molded ridge; an offset between neck and shoulder that is decorated with

¹⁸ Sixth-century examples from Emporio (Boardman 1967, 161–162 nos. 763–764, pl. 65 nos. 888–889), Kato Phana (Beaumont – Archontidou-Argyri 2004, 224 no. 62), and Miletos (Kleiner – Müller-Wiener 1972, 74–75 fig. 5, pl. 21. 2–3). Similar cups have also been found at the Black Sea sites of Histria and Olbia. Voigtländer 1982, 61 no. 117 illustrates a one-handed variety from fifth-century Miletos.

¹⁹ From Naukratis (Boardman 1999, 123 fig. 141) and Aegina (Williams 1983, 169 figs. 10–11). For a summary of the scholarship on votive cups and their inscriptions, see Boardman 1986. Anderson 1954, 146 sees the fourth-century white-slipped drinking cups from Kofinà Ridge as “direct descendants of the archaic ‘Naucratis’ chalices”.

²⁰ Roebuck 1959, 83.

²¹ Boardman 1986, 253.



Fig. 5 Four examples of the table amphorae from Tektaş Burnu
(© INA, photograph by Susannah Snowden).

single, or occasionally paired, dots, painted polychrome bands around the belly, and a stemmed foot with molded ridge like that of the neck. All but one still contain the remnants of a pine tar lining identified by colleagues at the Amber Research Laboratory at Vassar College. Parallels from sixth and fifth-century contexts have been excavated from various sites around the Black Sea and East Greece²². A large domed askos from the wreck appears to have been decorated, like the table amphorae, by being dipped inverted in paint so as to coat only the uppermost portions, in this case the handle and rim. Comparanda for the askos are found at sites in the Aegean and Black Seas and date from the sixth and fifth centuries BC²³.

The remaining diagnostic finewares from the Tektaş Burnu cargo are certainly East Greek and very probably of Ionian manufacture. The corpus includes four banded olpai and a group of 18 one-handled bowls, divided equally between two sizes²⁴. The nine large examples (*Fig. 6*) were originally black glazed, whereas the small one-handlers are almost all plain. The Tektaş Burnu cargo also included one dozen simple, handleless oil lamps, most of which are decorated with painted nozzles and two concentric circles in the interior of the well. The strongest parallels are again from the island of Chios and include a

²² Examples from the Black Sea are known at Apollonia (Venedikov 1963, 257 nos. 744 and 745) and Nymphaion (Scholl and Zin'ko 1999, 44 Photo E9); in the Aegean published parallels come from Athens (Sparkes – Talcott 1970, 341 no. 1497), Chios (Boardman 1967, 176 no. 922), Ephesos (Kerschner et al. 2008, 73 no. GrK70), and Rhodes (Clara Rhodos 8 [1936] 105–109); Stavros Paspalos indicates that unpublished examples have been found at Bayraklı (Izmir).

²³ Examples from the Black Sea come from Olbia (Skudnova 1988, fig. 118), Kiev (Cook and Dupont 1998, 104 fig. 12.6), and Histria (Alexandrescu 1978, 106 no. 696); published parallels from Aegean contexts include examples from Athens (Sparkes – Talcott 1970, 358 no. 1727) and Miletos (Voigtländer 1982, 123 no. 76).

²⁴ Anderson 1954, 138 no. 44; Boardman 1967, 145 no. 596; Sparkes – Talcott 1970, 78 no. 255; Archontidou 2000, 58. See Anderson 1954, 148 no. 161 and 152 no. 222 for Hellenistic one-handlers from Kofinà Ridge.

single lamp excavated from what was presumably a grave, north of Emporio, which also contained a large one-handled cup and a small table amphora very similar to examples from Tektaş Burnu²⁵. Boardman describes the context of the grave as late fifth century BC and suggests that the lamp is a late survival of Howland's Type 21A, which in Athens disappeared after the Persian sack of 480 BC²⁶.

In stark contrast to the one dozen fineware oil lamps from the ship's cargo is a single smaller, heavier, coarser lamp with a deep well that can only

have been used on board by the crew. Just how many individuals were aboard the Tektaş Burnu ship when it sank is a difficult question to answer, but the small assemblage of utilitarian wares from the wreck suggests that the number was equally small – probably two or perhaps three²⁷. The corpus of cooking pots includes three lidded chytrai in two sizes, two lopades, and a small casserole²⁸. A charred stain on the interior of one chytra suggests that it had been in use, though chemical analysis of the stain indicated that it was pure carbon²⁹. Other ceramic singletons from the Tektaş Burnu wreck site include a hydria, a jug, a plate, a mortar, a salt cellar, and fragments of what may be a lidded lekane; most of these pieces are undecorated finewares that appear to be of local Ionian manufacture, though comprehensive petrographic analysis should help us determine if this impression is accurate³⁰.

A small group of Attic black glaze pots, which were probably not cargo but rather personal possessions, provides further indication that there may not have been more than two individuals on board the Tektaş Burnu ship (*Fig. 7*). The group comprises a small askos, a salt cellar, a pair of Sessile kantharoi, and a shallow bowl with a graffito on the underside



Fig. 6 Six of the nine one-handled cups from Tektaş Burnu (© INA, photograph by Susannah Snowden).

²⁵ Boardman 1967, 176–177, 233–234. The table amphora (no. 922) and one-handler (no. 923) are shown on Plate 67, and the lamp (no. 505) on Plate 94; the assemblage was dated on the basis of partial Chian amphoras (no. 946) associated with the finds. For other similar lamps from Classical Chios, see Archontidou 2000, 95.

²⁶ Boardman 1967, 233. The Tektaş Burnu lamps appear to have as much in common with some examples of Howland's Type 20, which continues down into the middle of the fifth century BC (Howland 1958, 43–46).

²⁷ Compare the early third-century BC Kyrenia shipwreck, which was transporting various utensils (salt cellars, kantharoi, oil containers, and wooden spoons) in sets of four, implying a crew of that same number. With a cargo of about 350 amphoras and an overall length of at least 14 m, the Kyrenia vessel was slightly larger than the Tektaş Burnu ship.

²⁸ See Trego 2004.

²⁹ The late Curt Beck of the Amber Research Laboratory at Vassar College conducted the analysis with the hope of identifying organic compounds, but the results led him to conclude that “whoever burnt the contents did a very thorough job.”

³⁰ A petrographic study of selected amphoras, finewares, and coarsewares from the Tektaş Burnu ship is in preparation by Professor Yuval Goren of the Department of Archaeology at Tel Aviv University.



Fig. 7
Attic pottery from
the Tektas Burnu
shipwreck: two
Sessile kantharoi,
small askos, and
shallow bowl [salt
cellar not included]
(© INA, photograph
by Susannah
Snowden).

that presumably implies ownership. The shallow bowl and salt cellar are ubiquitous shapes in the fifth century³¹, while the small askos was found very near to a fine turned stone alabastron, another distinctly personal item³². The Sessile kantharoi include a high-handled type and a low-handled type with stamped decoration³³ – while their presence may seem novel among a cargo in which locally-manufactured ceramics predominate, it is important to remember that – like the small bowls – these sturdy cups rank among the most common shapes in Classical black-glazed pottery, “stability once more dictating popularity in the cheaper wares”³⁴. As a whole this small corpus of Attic fineware stands in sharp contrast to the multiple specimens of table amphoras, lamps, one-handled cups, and Chian kantharoi that complement the ship’s amphora cargo, and while it may be tempting to assign the black-glazed pieces to the upswing in Attic imports that occurs in the late fifth century (Slawisch in this volume), these pots are more likely part of a sailor’s kit made up of items that could have been acquired at any number of ports in the Classical Aegean.

Excavation of the site brought to light various pieces of the ship’s equipment that confirm we are dealing with a vessel that was in all likelihood not more than 13–14 m long. These artifacts include the ship’s two eyes, or *ophthalmoi*, which were found less than a meter apart in an area that must have been the ship’s bow. The two white marble disks measure about 14 cm in diameter and were once decorated with painted, incised, concentric rings and affixed to the ship’s hull with a lead spike, which in one case survived intact; they are the only *ophthalmoi* to have been found in association with an ancient shipwreck³⁵.

At the deepest end of the wreck site, opposite the *ophthalmoi*, divers recovered an amphora that had rolled to the edge of the shelf on which the wreck sits. Sieving of the amphora contents for macrobotanical remains produced the small, coarse ship’s lamp discussed

³¹ Sparkes – Talcott 1970, 130–138; Knigge 1976, pl. 82.

³² A comparable askos is Sparkes – Talcott 1970, 318 no. 1173 (470–450 BC).

³³ Parallels in Sparkes – Talcott 1970, 114–115 nos. 628 and 633, are dated 450–425 BC. Bosilkov 1967, 38 shows a similar low-handled stamped kantharos now in Sozopol.

³⁴ Sparkes – Talcott 1970, 115.

³⁵ Nowak 2001; Nowak 2006; Carlson 2009.

above. Near the amphora were two bronze bucket handles and what appears to be the shaft of a ladle or kyathos. Not far from them were two bone tiles, each 2 cm square, which may be all that remains of an ancient game once played on board. These artifacts suggest that the vessel's working area, the ship's stern, was downslope, which is consistent with the location of the *ophthalmoi* at the opposite end of the amphora mound. Within the amphora mound were the remains of four of the ship's five anchors, represented by 10 lead cores that had been poured into wooden stocks (similar to those from the Phagrou shipwreck)³⁶; the fifth anchor was discovered in 54 m of water and under a meter of sand at the base of the shelf. The findspot suggests that this anchor was cast out in an early but ultimately futile attempt to keep the ship from sinking onto the rocky seabed below.

Though we cannot and probably will not ever be certain of why or under what circumstances the Tektaş Burnu ship sank, it appears that the vessel did not settle onto a bed of sand, sealing and thus preserving the hull under the weight of the amphora cargo. Instead, it sat exposed, sandwiched between two large boulders, allowing marine organisms to devour the wood. Remnants of the ship's hull were negligible but indicate that the vessel was constructed using the traditional Greco-Roman system of pegged mortise-and-tenon joints³⁷. Though the wood fragments fared badly on the rocky seabed, it has been possible to determine that planks and frames were cut from various species of pine and tenons were oak³⁸. Study of these fragments has furthermore shown that the corrosion products produced by the oxidation of copper nails used to fasten frames to the hull planking actually helped to preserve the associated wood by impeding the microbial activity that destroyed most of the hull³⁹.

The ship that sank at Tektaş Burnu in the third quarter of the fifth century BC was a small merchantman, very probably not more than 14 m long. The preponderance of Ionian and specifically Chian pottery on board suggests that this was a local vessel plying a southward course, perhaps toward Ephesos, Samos, or Miletos, when it sank in the treacherous Chios straits. Initial survey of the wreck indicated that this was a modest cargo consisting of South Aegean and Northern Greek amphoras, but complete excavation of the site yielded more meaningful and far-reaching data. While a ship's primary cargo typically indicates where it was loaded, it is the secondary amphora types or singletons that provide shape and texture (and in this case a date for the wreck) to discussions of amphora circulation, use-life and reuse. The most significant contribution of the Tektaş Burnu shipwreck is the single amphora stamped with EPY ethnic, which makes it possible to address more challenging and complicated questions about the role of Erythrai in maritime commerce and the economic condition of Classical Ionia⁴⁰.

³⁶ Trethewey 2001.

³⁷ The hull remains and ship's anchors will be published by Wendy van Duivenvoorde of Flinders University as a chapter in the forthcoming final publication.

³⁸ Analyses were carried out to the genus level by Robert Blanchette and Joel Jurgens of the University of Minnesota's Department of Plant Pathology and to the species level by Nili Liphshitz of the Botanical Laboratories in the Department of Archaeology at Tel Aviv University.

³⁹ Jurgens et al. 2003.

⁴⁰ Ancient references to ceramic production at Erythrai include Ath. 9.475c and Pliny NH 35.161 (see also Tchernia 1986); for Erythraian wine, see Theophr. apud Ath. 1.32b; for wool production at Erythrai see Pliny NH 8.191.

II. Classical Amphora Stamps

The discovery of a stamp featuring the abbreviated Erythraian ethnic (EPY in Greek) on the neck of a single pseudo-Samian amphora from the Tektaş Burnu shipwreck has three major implications for anyone interested in the ships, containers and maritime commerce of the fifth-century BC Aegean: (1) it establishes Erythrai as a Classical source of the important and previously unattributed pseudo-Samian amphora type that is especially widespread in the Archaic period, making possible the creation of a provisional Erythraian amphora typology, (2) it ranks among the earliest examples of the ‘civic’ stamp type, a phenomenon paralleled by stamps from Mende and Chios, which invites speculation about the political or economic events that may have precipitated or necessitated the creation of the civic stamp type, and (3) it provides precious contextual evidence for the frequency of amphora stamps, particularly when weighed together with other iconic stamps in the same cargo.

The 196 jars from the Tektaş Burnu cargo are presently the earliest securely assigned examples of the Erythraian amphora type. The key features of this Classical type, however, have clear Archaic underpinnings, including the egg-shaped body, tall rim with heavy outward curve, and articulated knob toe (*Fig. 2*). Still, the Archaic ancestry of these Classical Erythraian forms is sufficiently convoluted and complicated⁴¹ that following the evolution on the basis of stamps, morphology, and fabrics is ultimately more constructive and more rewarding⁴². The broad evolutionary outline is this: the egg-shaped body of the mid-fifth century lengthens into a taller, slimmer variety with cuffed neck by the late fifth century. In the fourth century BC the mushroom rim predominates, in keeping with the South Aegean regional style, and Erythraian stamp types now feature the EPY ethnic together with either numismatic iconography or a central ligature Alpha-Delta⁴³. Beginning in the third century BC Erythraian jars feature a band rim that is offset or undercut and grows increasingly taller in the first half of the second century BC. By the late second century BC the rim has evolved into the flaring cup-shaped variety identified more than a century ago as the Dressel 24 type and found in excavations of a ceramic workshop at Erythrai itself⁴⁴.

Even this provisional typology is sufficient to illustrate that throughout much of their history Erythraian amphoras followed many of the broad stylistic trends that characterize South Aegean amphora production (such as the mushroom rims of the fourth century BC); the same may have been true of Ionian amphora production in the sixth century BC, with notable exceptions including Klazomenai and Chios. Modern scholars have had some success in using chemical or petrographic analysis to distinguish between these regional production centers⁴⁵, but the ancients may have relied at least in part on stamps to

Forthcoming analysis of what appear to be fibers collected from the Tektaş Burnu wrecksite may indicate a consignment of perishable goods (such as textiles?).

⁴¹ Carlson 2004, 31–65.

⁴² Carlson – Lawall 2007.

⁴³ Jöhrens 1999; Carlson 2004, 86–96.

⁴⁴ Özyiğit 1989; see also Lungu 2010; Opait 2011.

⁴⁵ The topic is vast but see especially Whitbread 1995.

tell them precisely where (or when?) an amphora was made. Of course, once an amphora was refilled, whatever information was contained in the stamp became less meaningful, and inasmuch as only a small percentage of amphoras might be stamped, we are left to wonder for whom the stamps were really intended⁴⁶.

The other stamps from the Tektaş Burnu cargo appear on the Erythraian amphoras only and feature either a circle or a leaf (but never both on the same jar). The incuse circle stamp is located either on the neck between the handles, at the base of one handle, or, rarely, at the top of the shoulder near the base of the neck; generally speaking, these stamps were applied carefully and consistently, and impressed deeply. The stamps appear on just over 20% of the Erythraian jars, and range in diameter from 1 to 1.5 cm, which suggests that the instrument(s) used to create them varied, and need not have been more sophisticated than a piece of cane or the stem of a reed. Circle stamps appear on many different amphora types over a period of several centuries. Their function, or meaning, is unknown, though it is generally agreed that they are too indistinct and too common to have referred to an amphora's contents, origin or capacity – it has been suggested that the circle stamp was a means of testing the density of the clay as the amphora was air-drying⁴⁷.

Nine other Erythraian amphoras are stamped with a small ivy leaf set within a lozenge; the leaf stamps are, without exception, set on the middle of the amphora neck, though they are not nearly as deeply impressed or neatly applied as the circle stamps, and in one case, a second application of the same stamp was made adjacent to and slightly above the first. This very issue of 'illegibility' among amphora stamps gives us reason to consider that at least some stamps functioned as internal, organizational symbols, designed to prevent the products of one workshop from becoming confused with others being fired in the same kiln, filled with the same contents, stored in the same warehouse, or loaded on the same ship.

Some of the earliest amphora stamps from the Greek world are small circles, crosses, and single letters that appear (seemingly randomly) on the toes, necks, and handles of bulbous-necked amphoras manufactured by Chios in the late sixth and fifth centuries BC. The bulbous-necked jar had been the standard Chian amphora shape throughout the fifth century, until it was replaced, ca. 430–425 BC, by the straight-necked type, which endured for many centuries. These new straight-necked amphoras were often stamped with the same motif that appears on contemporary Chian coins: a sphinx seated before a bulbous-necked amphora. Thus, the Chian coin-type amphora stamps rank among the earliest 'civic' examples that can be conclusively attributed to an individual *polis* on the basis of the stamp alone.

At approximately the same time that the Chian sphinx stamp came into circulation, manufacturers at Mende initiated a similar custom of stamping their jars with an adaptation of the Mendean coin type, Dionysos riding backwards on a donkey⁴⁸. But unlike Chios, Mende was one of several Northern Greek cities producing amphoras in the

⁴⁶ Garlan 1993.

⁴⁷ Eiseman – Ridgway 1987, 41–42.

⁴⁸ See Knoblauch 1998 for an alternative reading.

fifth century BC⁴⁹. Though they exhibit a range of clay fabrics, these Northern Greek jars typically feature globular bodies, stem toes, neck grooves, and wedge-shaped rims⁵⁰. Thus, where the Chian coin-type stamp bridges the morphological disconnect between the old bulbous-necked and new straight-necked types, the presence of the Dionysos coin-type stamp may signal an effort to aid the consumer in distinguishing Mendeian jars from their Northern Greek relatives. It seems entirely possible that a similar phenomenon was at play in Classical Erythrai, where amphora production historically seems to have adhered to a regional *koine*.

It is important to emphasize that the coin-type amphora stamps of fifth-century Chios and Mende were novel but not long-lived, and that, more generally, the correlation between coin types and amphora stamps was neither direct nor exclusive. Within the same *polis*, coin types and amphora stamps might be similar but are almost never identical⁵¹, while the same motif may appear on the coins of one *polis* and the amphora stamps of another⁵². The principal novelty of the Classical civic stamps was that, unlike earlier (and contemporaneous) stamps in the form of shapes, letters, and icons, the ethnic and coin-type stamps would have been readily intelligible to the consumer. At present there is little evidence to suggest, and good reasons to reject, the notion that ancient Greek amphora stamps were an expression of civic control over quality or capacity; the arguments are numerous and well-reasoned⁵³. But even if the primary purpose of stamps was to facilitate organization and administration on a local level, wasn't consumer legibility a secondary, added incentive? In the face of more competitive markets, did amphora stamps help consumers more readily connect amphora shapes and coin types with a given *polis*?

In the Tektaş Burnu cargo, a single EPY ethnic stamp made possible the classification of nearly 200 jars as products of Erythrai. And yet, the typology that this lone EPY stamp set in motion relies on the examination of thousands upon thousands of unstamped sherds in order to identify common features of (a) morphology and (b) fabric, the distinctive Erythraian fabric being a well-levigated reddish yellow to pinkish buff over a bluish-gray core, with a moderate scatter of silt-sized black and white inclusions, and little to no mica (*Fig. 8*). Because archaeologists are far more likely to find an unstamped Erythraian amphora fragment as opposed to a stamped one, it is increasingly important that diagnostic sherds and clay fabrics receive as much publication space as amphora stamps⁵⁴. A lingering and important question is why the EPY stamp appears on only *one* of nearly 200 almost identical jars in the Tektaş Burnu assemblage? Was the ethnic stamp merely an experimental type? Was the stamped jar a kind of tithe offering or payment? Could it have been destined to serve as a kind of diagnostic sample in an agora? The answer may elude us

⁴⁹ Papadopoulos – Paspalas 1999.

⁵⁰ Lawall 1995, 156–169; Lawall 1997.

⁵¹ Grace 1949, 186 noted that the Dionysos stamp of some Mendeian amphoras lacks the more detailed imagery that appears on some Mendeian coins, such as the bird below the nose of the ass. Lawall 1995, 108 n. 84, observes that the sphinx's forelegs are shown together on Chian coins but separated on the amphora stamps.

⁵² As the turtles of Thasian amphora stamps and Aeginetan coins, for which see Garland 1992.

⁵³ Debidour 1998; Lawall 2005.

⁵⁴ Lawall 2005.

indefinitely but the presence of a lone example of such a diagnostic stamp type stands as a compelling illustration of the “stamping coefficient” identified by Jean-Yves Empereur three decades ago. Using the excavation of pottery dumps to show that, even within the same workshop, stamped amphoras could constitute 40 to 100% of the total output, Empereur demonstrated that the proportion of stamped to unstamped jars fluctuated over time and distance, and was an ancient reality, not an accidental by-product of modern formation processes⁵⁵. Like kiln studies, the complete excavation of amphora wrecks offers archaeologists an opportunity to gauge and compare the ratio of stamped to unstamped jars within individual cargoes.

It is curious that Mende, Chios, and Erythrai were among the earliest Greek *poleis* to manufacture amphoras with a ‘civic’ (coin or ethnic) stamp type, that examples of all three jars are found in the Tektaş Burnu cargo, and that among them only a single Erythraian amphora carries the ethnic stamp⁵⁶. This may have as much to do with Empereur’s stamping coefficient as it does with the fact that some jars in the cargo, such as the globular Mendean, had been in circulation longer than the relatively new consignment of Erythraian jars. While there is little chronological specificity attached to the evolution of ‘civic’ amphora stamps in the fifth century BC, the Erythraian ethnic stamp from Tektaş Burnu does seem stylistically earlier or less sophisticated than the coin-type stamps of Mende and Chios. Given the geographical, geological, and cultural proximity of Erythrai to Chios, which had been stamping amphoras for a long time already in the Classical period, one wonders to what extent changes in production at Erythrai were the result of events on Chios or in the Chian *peraia*? Indeed, Lawall has suggested that organizational changes and/or the consolidation of different phases of amphora production and export on Chios itself are reflected in the marks on Chian jars⁵⁷. Furthermore, it was observed long ago that the fineware ceramics of Erythrai and Chios share a clear affinity⁵⁸, while the discovery of additional shipwrecks consistently indicates that Erythraian and Chian amphoras routinely traveled together in the same cargoes even after the fifth century BC⁵⁹.



Fig. 8 Ceramic sections of Erythraian fabric samples, including an amphora handle from the Athenian Agora (above) and a body sherd from the excavations at Banyoz / Erythrai (below), (reproduced by kind permission of the American School of Classical Studies at Athens, above, and Ege University courtesy of Ömer Özyiğit, photographs by Deborah Carlson).

⁵⁵ Empereur 1982.

⁵⁶ Other parallels for the EPY ethnic stamp include a rectangular Alpha-Phi-Upsilon (or Upsilon-Phi-Alpha?) monogram oriented vertically on the handle. These ΑΦΥ stamps have been excavated from nearly a dozen different sites around the Mediterranean and Black Seas but have no clear provenience and remain unattributed; see Carlson 2004, 103 n. 263 for references. See also Lawall 1995, 151–152 for discussion of the evidence for (late?) fifth-century Akanthan amphoras with the AKAN stamp.

⁵⁷ Lawall 1998.

⁵⁸ Bayburtluoğlu 1978.

⁵⁹ Foley 2009; Demesticha 2011.

III. Erythrai and Classical Ionia

More than 40 years ago, John Cook identified what he termed “The Problem of Classical Ionia”⁶⁰. For Cook, the absence of monumental architecture in fifth-century Ionia signaled a drastic departure from the magnificent temples built in the previous century at Ephesos, Samos, and Didyma. In this architectural void, Cook saw an Ionia devastated by the revolt of 499 and mired in an economic paralysis, brought on in part by the high cost of Athenian imperialism. Jack Balcer later wrote that the Ionian Greeks of the Classical period “did not build markets, harbors, temples, civic buildings, or give contracts for monumental sculpture. In short, the central urban nodes in fifth century BC Ionia were economically depressed areas”⁶¹. This tradition of Ionian poverty was revisited more recently by Robin Osborne, who demonstrated that a critical lack of excavation is partly to blame for the bleakness of Ionia’s archaeological picture, and warned against interpreting the absence of evidence as evidence of absence⁶².

Even a superficial survey of Ionian geography accentuates the highly desirable location of Erythrai at the head of an enormous gulf protected by a handful of small islands, with the abundant arable land of the Mimas peninsula toward the interior; this was clearly a region with considerable natural and agricultural assets. These assets included an impressive number of ancillary communities, many of which are named in inscriptions but none of which has been located with the certainty that comes from archaeological excavation of *in situ* remains⁶³. Initial excavations at Erythrai by Turkish archaeologists began in the 1960s and succeeded in uncovering the remains of an Archaic temple to Athena Polias on the acropolis, the Hellenistic theater, portions of the city wall, Hellenistic and Late Roman villas, and a Byzantine aqueduct⁶⁴. Continued work in the late 1980s brought to light evidence for a late Hellenistic potter’s quarter north of the city wall near the mouth of the Axos river⁶⁵. More recent work has focused on the consolidation of earlier work, the conservation of numerous mosaic pavements and frescoes, and the possibilities for future exploration to the north of the acropolis where construction has revealed Classical pottery, ancient wells, and a necropolis⁶⁶.

We know precious little about the political and economic condition of Ionia, and Erythrai in particular, in the fifth century BC, but among the most informative documents we have is the Erythrai Decree, which reveals as much or more about Athenian imperialism as it does about Classical Erythrai⁶⁷. The surviving text was copied from an inscribed block found on the Athenian Acropolis near the Erechtheion that is now lost (as is the original

⁶⁰ Cook 1961.

⁶¹ Balcer 1985, 40.

⁶² Osborne 1999.

⁶³ Rubinstein 2004, 1073–1076.

⁶⁴ The principal sources are Bayburtluoğlu 1975 and Akurgal 1979.

⁶⁵ Özyiğit 1989.

⁶⁶ Akalın 2008; Akalın 2009; Akalın 2010.

⁶⁷ Meiggs – Lewis 1969, 89–94 (ML 40).

copy). The decree embodies an early form of the political, religious, and military requirements (more numerous in the 440s BC) for those cities that attempted to secede from Athens but were later recovered: offerings at the Greater Panathenaia, the installation of a democratic council and armed garrison, punishments for murder and treason, consequences of exile. Epigraphically the inscription can be dated 470–450 BC, but restoration of the archon's name (Lysikrates) makes it possible to narrow that date to 453/452 BC, which constitutes key evidence that some important allies were significantly disaffected already in the 450s BC⁶⁸.

The Athenian Tribute Quota Lists indicate that five Ionian cities were classified as possessions or dependencies of Erythrai: Boutheia, Elaioussa, Polikhna, Pteleon, and Sidoussa⁶⁹. The precise location of each city is not clear, but it is generally supposed that Boutheia, Polikhna, Pteleon, and Sidoussa were situated to the north of Erythrai on the ancient Mimas (modern Karaburun) peninsula, while Elaioussa may have been one of the coastal islands southeast of Lesbos⁷⁰. For the first assessment in 454/453 BC, a payment of three talents was made by Boutheia. Since Boutheia's later payments are far smaller (1000 *drachmai*), and working from the proposed date of the Erythrai Decree, it is assumed that Erythrai was in revolt in 454/453 and Boutheia was home to those still loyal to Athens⁷¹.

After Erythrai was recovered by Athens ca. 453/452 (the proposed date of the Erythrai Decree), the tribute quota list entries reveal that, between 450/449 and 447/446 BC (Period II), the Erythraians made their tribute payment with these same five (and in one year four) neighboring towns as part of a *syntely*⁷². Irregular entries over the next decade indicate that each of the six cities paid (and was listed) separately, until 434/433 BC, when the tribute payment made by Erythrai *included* that of the five dependent settlements. The tribute quota lists thus give the impression that the relationship between Erythrai and its neighbors was becoming increasingly centralized in the 430s BC, which is precisely the time of the Tektaş Burnu shipwreck⁷³. If Erythrai had assumed a more formal role as central authority, then perhaps the city was inclined to exert tighter control or organization over civic matters like the delivery of tribute payments and the production, filling, and export of amphoras⁷⁴. Some caution is warranted, however, inasmuch as the arrangement of the lists is heavily reconstructed and therefore highly questionable. As Kallet rightly

⁶⁸ Lewis 1994.

⁶⁹ Meiggs 1975, 538–561 asserts that, of the more than 30 cities in the Ionian district that paid tribute, Erythrai's payment of 7 talents was second only to Kyme, which paid 9 talents.

⁷⁰ Keil 1910; Meritt et al. 1939, I. 485–487; Engelmann – Merkelbach 1972, 37 reject this idea. The difficulty of identifying Elaioussa stems from a corruption in Strabo (13.1.67) and a rather vague description by Pliny (NH 5.138).

⁷¹ Meritt et al. 1950, III. 21–22, 252.

⁷² IG I² 195, 13–17 (450/449); IG I² 196, 28–30 (448/447); IG I² 198, 58–64 (447/446). No tribute was collected in 449/448 B.C. Elaioussa is not listed as part of the *syntely* in IG I² 195 (450/449).

⁷³ An attractive but fanciful model is Balcer 1985, who argued that the villages neighboring Erythrai were fortified, self-sufficient rural estates and mercantile centers linked to one another and to the central urban node at Erythrai in a dendritic system. See Morris — Papadopoulos 2005 on the conspicuous absence of farm towers in Classical Ionia.

⁷⁴ In such a scenario perhaps the Erythraian amphoras with circle and leaf stamps could be understood to represent products of workshops located in some of the neighboring towns within the *syntely*?

notes in the case of Miletos some two decades later, “the different ways that Athens had of referring to Miletos in this period may not have been tied to political circumstances at all, but could reflect changes in the method of collection”⁷⁵.

IV. Maritime Trade in the Classical Aegean

Working from sources and documents such as those identified in the opening paragraphs, when coupled with the intriguing yet incomplete evidence of the Alonnesos shipwreck, one could easily conclude that Athens was in total control of maritime trade in the Classical Aegean. And yet, two recent discoveries have recalibrated our perception of commercial activity at the periphery of the Athenian Empire – they are the Tektaş Burnu shipwreck and a faded customs inventory, recorded in Aramaic beneath the earliest known specimen of the Proverbs of Ahiqar, found in Elephantine, Egypt in the early 20th century⁷⁶. The Ahiqar Scroll is an inventory of ships arriving at an unknown Egyptian port from Phoenicia and Ionia, the cargoes they transported and the duty they paid in the eleventh year of the reign of Xerxes (475 BC) or possibly Artaxerxes (454 BC).

Over a period of ten months, 36 Ionian ships (19 of which are classified as *spynh rbh*, or large ships) offloaded and paid duty on their cargoes in the form of silver and gold. The owners of the large vessels were, in addition, required to relinquish a portion of their cargo, assessed at a fixed rate of about 20%. Because we know the value of the duty assessed – 21 1/2 jars of wine, approximately 10 jugs of oil, 30 empty jars and one wooden strut – it is possible to estimate with moderate accuracy that the larger ships carried around 110 wine amphoras, 50 oil jugs, 150 empty amphoras, and 20 wooden timbers. On the basis of this evidence, it follows that these large vessels were probably comparable in size to the Tektaş Burnu ship, while the 17 other Ionian ships were apparently even smaller.

By the end of the season, the duty paid by the Ionian *spynh rbh* amounted to almost 40% more empty amphoras (one-third of them uncoated) than wine-filled amphoras, indicating that the jars themselves had an intrinsic value⁷⁷. According to Herodotus, empty amphoras were collected at Memphis, filled with water and then sent to a barren tract of desert, where they were needed to make the three-day trek between Egypt and Palestine⁷⁸. In addition to the duty paid on the cargo, the Ionian *spynh rbh* paid two additional charges: one a harbor tax called the ‘silver of the men’ and the other the ‘portion of the oil’ tax, which was levied at an unknown rate. Departing Ionian ships apparently carried natron soda (*ntr*), and were accordingly charged an export duty.

⁷⁵ Kallet 2004, 489.

⁷⁶ Porten – Yardeni 1993; Lipinski 1994; Yardeni 1994; Briant – Descat 1998; Tal 2009.

⁷⁷ Lipinski 1994, 63–64 suggests that the distinction between coated and uncoated refers not to pitch lining on the interior but to clay slip on the exterior.

⁷⁸ Hdt. 3. 5–7. Horden – Purcell 2000, 149 suggest that the empty amphoras may have been needed to package the return cargo of natron.

The Ahiqar inventory thus points to a brisk trade between Ionia and Egypt during the Delian League – a time when, it has been suggested, Ionia was experiencing something of a Dark Age owing to the destructive turbulence that followed the Ionian Revolt and the increasing financial demands of the Athenians. But the archaeological, and now the literary, record is beginning to show that, in the years after their victory over Persia, the Ionian Greeks began in earnest to reassemble their cities and revive those commercial contacts that had proved lucrative and reliable in the past⁷⁹. Just four years into this effort, Ionian merchants were able to dispatch into Egypt at least 36 ships, each carrying “its specific cargo almost exclusively”⁸⁰. The homogeneous nature of the Ionian cargoes, coupled with the seemingly cautious yet systematic increase in the number of shipments through the sailing season⁸¹, speaks to the existence of a well-organized trade network between Ionia and Egypt. This scenario, moreover, reflects a fundamental tenet of commercial exchange: “L’entreprise marchande est une prise de risque, car on n’est jamais sûr de pouvoir vendre et d’avoir le client intéressé pour les marchandises que l’on transport. Quand les trafics sont mis en place et que le marchand connaît la demande, tout pousse à apporter les mêmes marchandises”⁸². In other words, “the glamorous manifestations of high-prestige trade should generally be regarded as outgrowths from or intensifications of the routine patterns of redistribution, just as the most showy and celebrated productive enterprises are of the mundane rhythms of production... Little and often usually outweighs big and rare”⁸³. Which is to say that modest *caboteurs* like the one that sank at Tektaş Burnu were far more common in Classical Greece than ships the size of the one wrecked at Alonnesos.

After much time, the archaeological and literary records are beginning to shed light on the ambiguous history of those regions like Classical Ionia which lay at the periphery of the Athenian Empire. While the evidence presented here suggests that Classical Ionian commerce endured in spite of (not because of) Athenian policies and imperialism, there are still many historical gaps and archaeological questions that can only be tackled with greater effort directed to the complete and thorough excavation of existing land and shipwreck sites.

⁷⁹ Gorman 2001, 147 characterizes the second quarter of the fifth century as a time of “heavy construction” at Miletos. See Güngör 2004 for an overview of the modest archaeological evidence for a relocated fifth-century settlement at Klazomenai.

⁸⁰ Yardeni 1994, 70.

⁸¹ In early spring (February-June), the Ionians sent five large and seven small ships; in summer (July-September), nine large and four small ships, and in fall and early winter (October-December), five large and six small ships.

⁸² Briant – Descat 1998, 73.

⁸³ Horden – Purcell 2000, 366.

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