THE HISTORY OF THE ANCHORAGE

AT SERCE LIMAN, TURKEY

A Thesis

by

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Submitted to the Graduate College of Texas A&M University in partial fulfillment of the requirement for the degree of

MASTER OF ARTS

May 1982

Major Subject: Anthropology

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May 1982

ABSTRACT

The History of the Anchorage at Serçe Liman, Turkey. (May 1982) Dorothy Anne Slane, A.B., Bryn Mawr College; Chairman of Advisory Committe: Dr. George F. Bass

During the summer of 1979, the Institute of Nautical Archaeology (INA) in conjunction with Texas A&M University undertook a survey of the anchorage at Serçe Liman, Turkey. During the course of this survey approximately 300 artifacts were raised. These-have been variously dated from 3000 B.C. to the 13th century A.D. The anchorage site was thus in use for a period of some 4300 years according to the archaeological remains. The frequency of use and the nationalities of the users vary with time and reflect the maritime history of each period.

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ACKNOWLEDGEMENTS

During the course of my field work and research, I have received help, advice and encouragement from many colleagues and friends. First and foremost amongst these I would like to acknowledge my appreciation to Drs. George F. Bass and Frederick H. van Doorninck for giving me the opportunity to direct the Anchorage Survey at Serce Liman, Turkey. My appreciation also to the Director of the Bodrum Museum of Underwater Archaeology, Oguz Alpözen, who was serving as the commissioner from the Turkish Ministry of Culture during the survey season. For his help during the project, especially with the underwater photography, I take this opportunity to thank Dr. Donald Frey. For their donations of time and artistic ability in compiling a series of artifact drawings, I thank Sema Pulak and especially Netia Piercy. For moral support during the uncertain early days of the project, my thanks go to Pilar Luna and Robert M. Adams. To all the divers who worked on my project for a short time, many thanks.

While researching this paper, I had occasion to consult with several archaeologists. Their prompt responses to my inquiries were greatly appreciated; my thanks to Virginia R. Grace, Carolyn Koehler, Ian Todd, Machteld Mellink and especially, many thanks to Kathleen Warner Slane without whom many artifact identifications would not have been possible. An invaluable aid to me during my research were

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the many books and periodicals acquired for me by the staff of Interlibrary Services, Texas A&M University. These overworked professionals were truly tireless in tracking down obscure references.

For help during the writing of my thesis, I would like to thank not only Dr. Bass for valuable criticism but also Jay P. Rosloff, Denise C. Lakey, S. Ruby Lang and Cemal Pulak for pointing out weaknesses and inconsistencies. Any errors still contained in this paper are entirely my own.

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INTRODUCTION

On the southern Turkish coast opposite the island of Rhodes there is a small natural harbor known as Serçe Liman (Fig. 1, p.2). Here an eleventh-century A.B. shipwreck was excavated between 1977 and 1979 by the Institute of Nautical Archaeology (INA) in conjunction with Texas A&M University (Bass and van Doorninck 1978: 119). During the course of this excavation, broken pottery was observed scattered on the slope above the wrecksite and was also found beneath the ship's hull remains. The pottery, examined in passing, did not represent a single time or culture and was scattered without apparent pattern on the slope. It was decided by the excavators of the medieval wreck, George F. Bass and Frederick H. van Doorninck, Jr., that an examination of the disparate material could yield an archaeological record of the use of the harbor. In this paper, I will report on the subsequent seabed survey (1979) I undertook, present a catalogue of the artifacts recovered and analyze the artifacts in order to derive the history of Serçe Liman.

Serve Liman lies on the southern shore of Turkey in its most southern peninsula. The coastline is rugged and nearly vertical. Along the entire length of the peninsula's southern coast there are only two inlets of any size or

The International Journal of Nautical Archaeology and Underwater Exploration provides the format for this thesis.

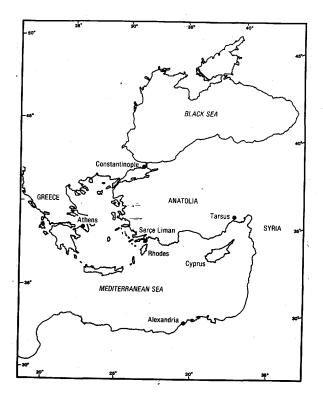


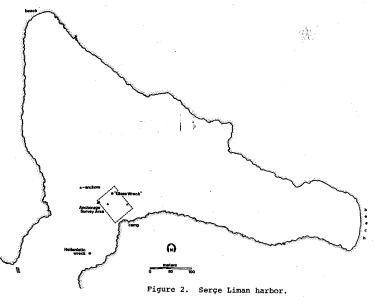
Figure 1. The Mediterranean Sea

affording any shelter from the open sea. These two are Serce Liman itself and Bozukkale (ancient Loryma) to the west; Bozukkale is the larger of the two.

The entrance to Serçe Liman is narrow and deep with the bay opening immediately upon access into a rough oval with a dog-leg extension to the northeast (see Fig. 2, p.4). The shoreline of the bay is composed of extremely rough limestone with two small cobbled beaches, one to the northwest and the other, the main beach, at the head of the dog-leg. These beaches lie at the ends of passes which extend from the northern side of the peninsula. As a result of these passes, the harbor is often buffeted by winds from the north which become trapped in the bay and swirl around confusingly.--

The shore with which the survey was associated is the eastern. As the harbor is entered, the shoreline curves back to form a small recess. There is a sheer rock face at this point, apparently the result of a land slide. Past the land slide area, the shore resumes its normal hill profile. The recess ends in a ridge, extending underwater several tens of meters toward the center of the bay; this ridge figured largely in the survey. Beyond the ridge, the shoreline curves back convexly to the dog-leg.

It was in this section that the slope floor was surveyed extending from the ridge into the harbor for 56 meters. That this area was used as an anchorage in antiquity is testified by the number of anchors recovered:





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a stone anchor, a stone anchor stock and two metal anchors. In at least one case, location of the anchor serves to identify the spot at which the ship which lost it was anchored. A limestone rock-anchor of common Mediterranean type (AS4; see p.33) was found near the bow anchor of the Unlüöglü, the expedition supply boat. The Unlüöglü was moored at the edge of our camp some 40 meters beyond the ridge, to the north. It is probable that in antiquity another ship anchored in this same spot, loosing its anchor perhaps when an unexpected wind came up from the back of the harbor. Three other anchors were found in the ridge area. The stock and one of the metal anchors were found adjacent to the bow anchor of the <u>Virazon</u>, the INA expedition vessel. The Virazon-was anchored over a Hellenistic wreck located at the base of the landslide in the recess near the mouth of the harbor. The last anchor, the second metal one-piece anchor, was found concreted to the in= harbor side of the ridge. The presence of this concentration of anchors in such a small area makes the identification of this general area of the harbor as an anchorage inevitable.

As the presence of the medieval wreck was the catalyst for the Anchorage Survey, the wreck's grid was used as the base for the survey's grid. To the south, the ridge mentioned above runs in an east-west direction dividing the harbor in two on the eastern side. This ridge was chosen

as the southern boundary of the survey area as it forms a natural barrier between recesses on the immediate shore. The northern boundary was more difficult to delimit as neither a natural nor archaeological landmark occurs at a convenient distance from the others. The slope floor, in this direction, becomes less rocky and flattens out into sandy bottom. It was the existence of this sandy bottom which determined the boundary furthest from the harbor entrance. Since the survey was to be concerned only with surface finds, the northern boundary was set along the sandy bottom at a little distance (16 meters) from the bow of the medieval "Glass Wreck" (AS157).

Equally difficult to determine was the eastern boundary, closest to the shore. It would have been possible to extend the survey area up to the shore. This, however, would not only have interfered with work on the excavtion in progress but also would have brought us into an area of intense surface disturbance. It was decided, therefore, to extend the area only 50 meters upslope from the excavation grid. This halted the survey at a distance of some 20 meters from the shore, at a depth of 10-11 meters.

During the course of the excavation of the "Glass Wreck", artifacts had been recovered from beneath the hull remains. It was necessary, therefore, to extend the western boundary downslope. The existence of these artifacts suggested that similar finds would be made to either

side of the wreck. It was at the point of the wreck that the slope ended and the sea floor became more or less flat. Objects which had travelled from shallower depths because of the incline of the sea floor came to rest in this area. The survey was extended downslope then another 20 meters west of the boundary originally planned.

The area thus delineated measured 56 x 70 meters with the short sides lying to east and west. These boundaries were selected as reasonable and practical according to the configuration of the sea floor.

After delineation of the survey area, Dr. Donald Frey, my diving partner and assistant, and I spent several dives anchoring a grid over this portion of the slope. Eight lengths of white cord were measured out to lengths exceeding the 70-meter extent of the area. These cords were marked every 5 meters with numbered tags designating distance from the excavation grid of the medieval wreck in place during the summer of 1979. The lines were fastened, eight meters apart, to ring-topped stakes at the ends and middles of their lengths. Relative distances were checked by using a separate 8-meter line to measure at 5-meter intervals the whole length of each lane. No lines were fixed joining the seven lanes thus created.

Within the lanes, all potentially diagnostic artifacts (i.e. rims, distinctive handles, bases, etc.) were marked with large white plastic tags. These were labelled, each

with a consecutive 2-letter combination beginning with AA through AZ to BA and so forth. The use of letters eliminated confusion between these tags and those used to mark the lines.

When satisfied that no artifacts had been overlooked, Frey photographed each 8 x 5 meter area, floating at a height of approximately 5 meters. These photos have been pieced together into a photomosaic which was used, in turn, while drawing the site plan (Figs. 3&4, pp.9-10).

Only after the positions of the artifacts had been recorded photographically did we raise them. Then Frey and I, joined occasionally by other diver-arthaeologists, retrieved the tagged pieces, collecting them together in pre-selected spots located centrally in the areas to be cleared. The pieces were loaded into a waterlogged, sturdy wooden crate. This crate was raised to a depth of about 3 meters where we spent some 25 minutes at the end of each dive decompressing. Here, we did some rough surface cleaning of the pottery before bringing it out of the water. (Concretion and sponges adhering to ceramic harden considerably on drying.)

After being removed from the water, each object was catalogued, measured, photographed and sent to the Bodrum Museum for storage.

After the locations of the artifacts were mapped (Fig. 4) patterns emerged in their distribution which can be

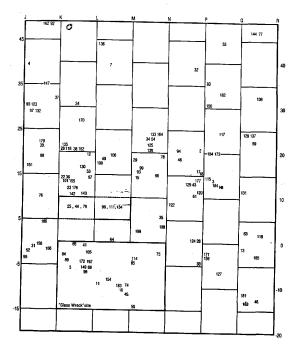


Figure 3. Site plan. (HI on plan in grid PQ10 includes AS14, 16, 47, 57, 60, 62, 66, 82, 91, 102, 103, 119, 160, and 175).

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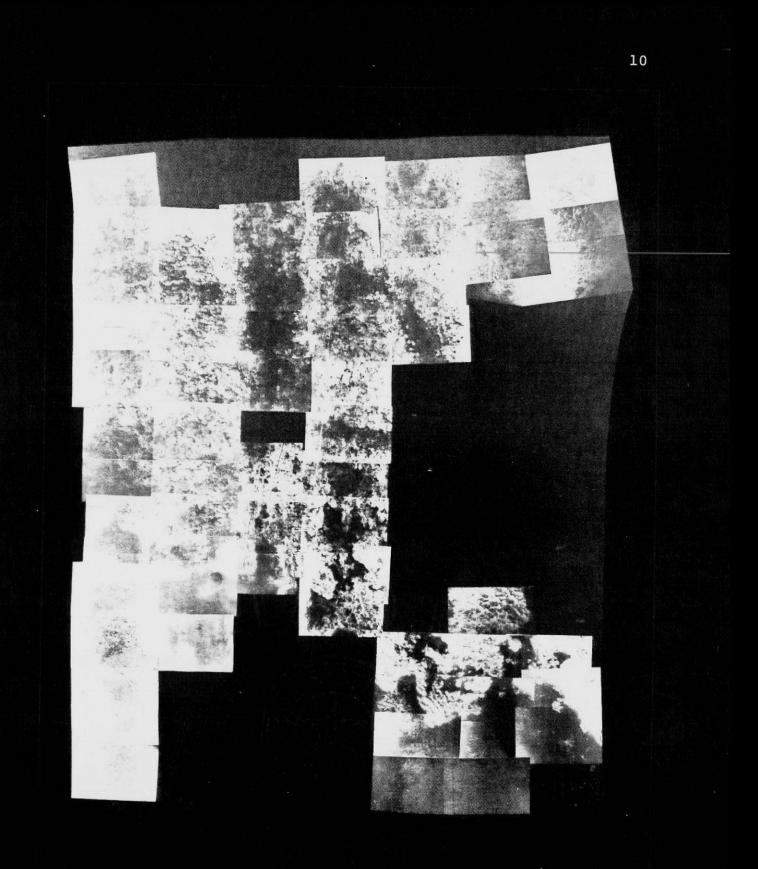


Figure 4. Photomosaic.

directly related to the topography of the slope. To the south, the bottom is very rocky with the outcrop disappearing to the west and north. The ridge, like the shore, is composed of heavily pitted limestone. Sizeable depressions there trapped discarded pottery. In some cases, an object would become concreted to the ridge in a more steeply inclined pit; other artifacts became embedded in the sand pockets of the less acutely inclined pits. These objects probably shifted less from their original resting places than those which settled on the areas of the slope affording less protection.

To the north, bordering the ridge, is a sandy alley which widens as the ridge narrows to its termination on the slope floor. Those objects which were recovered in this area, though buried, rested close to the surface and were generally marked by the plant life which had anchored to them. Few artifacts were recovered here; intensive probing was not undertaken. These artifacts had, as it became clear during the survey, travelled some distance before being buried. In one pocket, formed by a particularly large amphora (AS175), were found nearly thirty separate objects bearing no relation to one another either culturally or temporally.

Adjacent to the alley, the central area of the slope exhibited a number of thickly scattered outcrops. Those in shallower depths are small and conditions here more

nearly approximate those of the alley than of the ridge. The sand and silt between the rocks are not as deep here, however, and the artifacts were more exposed. Farther downslope, there is a large outcrop which was thickly scattered with broken pottery. This greater density cannot be attributed to a higher rate of loss or abandonment in this area than that over the ridge. No doubt the incline and character of the slope above permitted objects to shift downslope from their original positions until caught in the depressions on the large outcrop.

At the northern limit of the survey area, the outcrops thin out, more so in deeper water than in the stretch close to shore. The western third of this area is sandy as the alley but is neither so steep nor so confined by rock. This sandy area fans out to encompass the area of the "Glass Wreck" excavation and the end of the ridge. Not much pottery was found in this sandy stretch with the exception of the concentration of intrusive artifacts associated with the excavation. The explanation for this paucity is two= fold. As has been discussed in the case of the alley, objects were buried in the sand when observed at all. However, this area is also situated some 70 to 80 meters from the shore at a distance too great to afford shelter for ships. Those ships which passed a night or weathered a storm or meltem at Serce Liman would probably anchor closer to shore in shallower water. Since it does not seem likely

that an object would be discarded while a ship was underway and all hands on board were occupied, we would not expect to find many artifacts in this area. Those associated with the "Glass Wreck" were probably shifted from their positions upslope by the action of the ship as it slid down slope and came to rest below the central, large outcrop.

Patterns were sought which might have some temporal significance in the course of studying the deposition of artifacts on the slope floor. None were found. The nature of deposition discussed above was such that objects were often, if not always, shifted from their original resting places. There is no development either downslope or across-slope from oldest to most recent. This confirms the hypothesis that this area of the slope was unrestricted in use through time. The shore remained virtually unchanged and was seen to offer shelter by seamen during the Bronze Age as well as those stopping at Serçe Liman in medieval times. The lack of horizontal stratigraphy is heartening as it validates the hypothesis that a surface survey can yield a true history of the use of the harbor.

HISTORY OF THE ANCHORAGE

In the past two decades, archaeologists have made great progress filling in gaps in the picture of maritime history. We have investigated ships, ports, shipyards and wreck sites using archaeological and historical records. Through these media, much information has been gleaned. However, an important source for maritime history, long utilized by terrestrial archaeologists, has been neglected. A protected area on a well-used trade route will hold vast amounts of information about the people and ships which sheltered there. The site of Serge Liman is such an area.

The geographical location of Serve Liman made this natural harbor at the crossroads of the Aegean and Mediterranean Seas, situated some 14 miles from Rhodes, a convenient shelter for ships of all nations. During the course of the survey of the slope undertaken in 1979, quantities of broken and scattered pottery were recovered. This pottery is the physical record left of the passing of various ships and their crews. Through the systematic recovery and analysis of this material, it has been possible not only to reconstruct the use of the harbor but also to contribute to our knowledge of trade and trade routes in the eastern Mediterranean from the third millennium B.C. to the thirteenth century A.D. Before I present the

material recovered, it is appropriate to outline the assumptions upon which the body of the paper is based.

Assumption 1. Artifacts recovered fall into two general classes in terms of their significance as criteria for identifying the nationalities of the various ships which sought shelter at Serçe Liman. In some cases, an artifact will indicate directly the nationality of the ship from which it was lost, while in other cases, a single artifact may bear no relation to the nationality of the ship but be merely a part of a foreign cargo. To determine the relevance of the place of manufacture of each artifact would be a lengthy proceeding and would be futile. The artifacts recovered are completely disassociated from the ships which transported them. At best, we can only hypothesize about the probability of certain types of artifacts cooking ware, jugs and jars, amphorae and luxury items being products of the ships' native lands.

Cooking pots indicate more precisely than other pottery types the nationality of a ship and its crew; they would have been stocked on board before departure from the home port. Shipboard accidents would be the main cause for foreign ceramics to be introduced into the galley. Such items were not trade goods, being common and often crudely made. Nor is it likely that they were used as containers for particular trade items; their open shapes would have created problems for such a function for it would be

difficult to stopper such containers. Thus, when a cooking pot is discussed, it is fairly safe to assume that it was native to the ship from which it came and can therefore be used to identify that particular vessel and its route. There is a much greater probability that we are viewing a native pot rather than a chance foreign replacement.

In the case of jars and jugs, identification as native or foreign is not so straightforward. The very nature of their functions as storage vessels makes it more possible that some were picked up in foreign ports with their contents. While this is possible, the asle of the sorts of commodities used on board whip would more likely have been as in Mediterranean markets toeay, where staples are displayed in bulk and individuals purchase portions which are transferred to containers provided by the purchaser. If some staple were to be consumed while at sea or, perhaps, during a lengthy stay in harbor, it would have been more logical to take the empty container to market to be refilled than to purchase a new containers. Thus, as with cooking pots, a jug or jar can fairly safely be assumed to represent the nationality of the ship and crew which lost or discarded it.

The case of loss of an amphora overboard is more interesting than that of a cooking pot or storage vessel. The latter may be broken on board ship by everyday usage and the sherds discarded overboard but the breaking of an

amphora is more difficult to accomplish and less likely to occur.

Amphorae can be divided into two groups by function storage jars and transport amphorae. We know that part of a ship's stores were carried in storage amphorae. These vessels would have been onloaded in the home port and so should represent, when found, the nationality of the ship which carried them. Alternatively a recovered amphora could be part of the cargo and thus does not necessarily identify the ship which carried it (e.g. Koan amphorae, containing a product in demand in the Mediterranean, could very possibly be shipped on a vessel of another nationality).

The possibilities of breakage occurring differs in these two cases. In the case of a storage amphora, the jar was usually kept near at hand as it contained a bulk commodity in constant use, usually in the galley. It would be kept in an accessible area. Transport amphorae were closely stacked in the hold of the ship. It has been hypothesized that this stack made a convenient platform on which the crew could walk (Steffy, pers. comm.). If such conduct were to cause an amphora to break in a lower level of the stack, it is improbable that time would be taken to re-arrange the cargo in order to remove it. Pressure from above might break an amphora at the neck or carination but pressure from all sides would probably hold

it in position. Damage to an amphora in the top layer might be dealt with by removing the broken jar but this would cause some undesirable shifting in the adjacent amphorae. Probability of breakage and subsequent disposal is much greater, then, in the case of the storage jar (native to the ship) than in that of the transport amphora. Thus, unless the circumstances surrounding the recovery of an amphora during the Anchorage Survey indicate that it composed a portion of the cargo, it is more likely to have been a storage jar and can be used to identify the nationality of the ship which discarded.

The final category of items recovered at Serçe Liman is luxury goods. These are few in number as it is unlikely that they were in use on board ship but were instead, part of a small cargo, carefully stowed. In this case, identification of the place of manufacture of these items does not identify the nationalities of the ships which carried them. It may, however, indicate the route followed by the ship generally, whether north-south or east-west. Their contemporaneous intrinsic value robs them of much of their value in determining trade patterns, however.

Assumption 2. Artifacts from the anchorage at Serçe Liman have been paralleled from many points in the Aegean, Black and Mediterranean Seas. Some were manufactured as near at hand as Rhodes and some from as far afield as Spain. In instances when it has been possible to identify the

place of manufacture of an artifact, the information has been used to evaluate trade connections with, and beyond, Serçe Liman. In the remaining instances, it has not been possible to identify place of manufacture of an artifact, but only to point out a similarity to a known type; in these cases, trade connections will be evaluated more tentatively. Both situations can be used to reconstruct past trade routes: who was going in which directions at what times?

In historic times, certainly, and probably in prehistoric times as well, ships were not sailed across open water more than was absolutely necessary. It was in the nature of seafaring, dictated by hull capabilities and restrictions and by the limitations of navigational techniques, that the coast be kept in sight as much as was feasible (Rouge 1966:81). The density of islands and proximity of coastlines, especially in the Aegean, made these restrictions manageable. Trade was conducted in two general direction in the Aegean and eastern Mediterranean Seas at the juncture of which seas Serce Liman lies: northsouth connecting the Black Sea, Aegean and North Africa; and east-west connecting the Near East with Greece and beyond. A survey of ancient trade patterns based solely on the Serçe Liman slope survey may seem to present a specialized view of Mediterranean trade, but Serce Liman is located at the crossroads of these historically-known

trade routes.

The north-south route passed Serçe Liman of necessity. While in the Aegean, ships normally followed the Anatolian coastline or island-hopped as far as Serçe Liman and Rhodes. The southern Anatolian coast was used in navigation probably at least as far as Pamphylia; from there, ships either sailed south across a short stretch of open sea to Cyprus, the only island in the eastern Mediterranean beyond Rhodes, or continued east along the coast to Tarsus and Syria before veering south, along the Levantine coast (Hanfmann 1948:139-140).

East-west trade linking eastern areas with the central and western Mediterranean followed any one of three separate routes: 1) along the North African coast and north to Sicily; 2) to Crete via Cyprus and then north to mainland Greece, whence goods and people could be transported over land to the Gulf of Corinth for a further sea voyage to Italy; or 3) along the north-south routes mentioned above, as far as Serçe Liman and Rhodes, then through the Aegean Islands to Greece (Rouge 1966:81-105). Only in this last case would ships necessarily pass Serçe Liman.

These international, trans-Mediterranean and -Aegean routes were important in historical commerce, but just as it is not possible today to explain all trade as being between major metropolitan areas so it was not possible

then. An important element in any trade is that it disperse trade items locally, as well as over long distances. Serce Liman is not only located at the crossroads of the larger trade circuit; it is also located in an area peppered with inhabited sites both on the mainland and on the coastal islands. The western extension of the southern Anatolian coast was never densely populated, but it was inhabited. For several historical periods, particular sites can be identified as being of some importance (see Appendix 2); the island of Rhodes, immediately adjacent to Serce Liman, was important in international trade during all periods since the Chalcolithic (Mellaart 1962:4). Several sites on the western Anatolian coast and the related islands were also long-lived. The proximity of these places, including Chios, Kos, Knidos and Halikarnassos, insured a brisk local trade along with the more immediately recognizable international trade.

The series of maps included in the following pages illustrate the relationships between the locations of cited artifact parallels and Serçe Liman. Emphasis is given to the directions of trade rather than to actual routes, as the latter were very generalized. In cases where the place of manufacture of an artifact is known, the route of the ship which discarded it at Serçe Liman can generally be reconstructed as far as Serçe Liman. In some instances, the latter part of the route can be

suggested based on historical tradition and archaeological evidence; the routes in these instances are represented by solid lines on the maps. In the remaining cases, where the place of manufacture is unknown for parallels cited from various sites, general trade patterns are noted. Thus, if an artifact type from an unidentified locale was found at Serce Liman and also at an Israeli site, it is likely that the route from the place of manufacture to its termination connects the two sites in this network. There are three general possibilities of the origin of such a network: 1) a route originating beyond Serce Liman to the north or west and extending east to Israel; 2) a route originating beyond the Israeli site, extending west to Serçe Liman and beyond; and 3) a network of trade routes with its center at some point between the two sites. In anv case, trade would seem to have been conducted in the area between Serçe Liman and the Israeli site. In such cases, the outlying sites are connected with Serçe Liman by a dashed line. Since the nature and extent of the existing trade cannot be determined with certainty when the place of manufacture is unknown, less weight should be attached to this type of evidence in analyzing the overall picture of past trade.

Abbreviations in Catalogue

- AA The Athenian Agora Excavation Reports. Princeton.
- AAWT Grace, Virginia, 1961, <u>Amphoras and the</u> Ancient Wine Trade. Princeton.
- Agora Catalogue number of objects in storage at the Athenian Agora.

AS Anchorage Survey, Serçe Liman.

- Chios Boardman, John, 1967, <u>Greek Emporio</u>: Excavations in Chios 1952-1955. Oxford.
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- Dura Rostovtzeff, M., 1968, <u>The Excavations at</u> Dura Europos: Final Report. New Haven.
- Hazor Yadin, Yigael et al, 1960, <u>Hazor II. An</u> Account of the Second Season of Excavation, <u>1956</u>. Jerusalem.
- KWS Slane, Kathleen Warner, personal communication.
- LRP Hayes, John, 1972, <u>Late Roman Pottery:</u> <u>A Catalogue of Roman Fine Wares. London.</u>
- Ostia I Carandini, Andrea et al., 1967-1968, "Ostia I" <u>Studi Miscellanei</u> 13.
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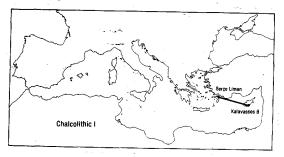
Chalcolithic I

AS1 Storage jar

Figs. 5 & 6, pp.26-27 location unknown Max. h. 0.248*; max. d. 0.220; base d. 0.130. Approximately one-half of body preserved. Orangebrown fabric with large, pale brown inclusions.

Ovoid body with plain lip and flat base. One vertical loop handle, attached below rim, rises almost to level of rim.

Cf. similar water jar from Kalavassos B, <u>SCE</u> IVlA, pl. 64.1.



Material evidence for seafaring in the Chalcolithic Period is scant. It consists in general of inferences drawn from habitation levels on Aegean Islands. The jar AS1 is evidence which indicates seafaring directly. This

*All measurements are given in meters. Two-letter combination given in the upper right corner of each catalogue entry is the seabed identification. Below is grid location.

LE

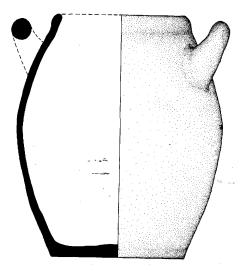
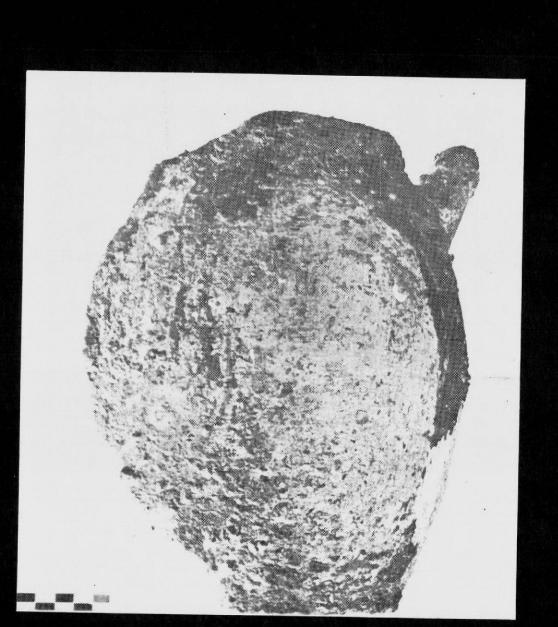
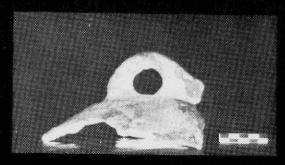




Figure 5 (unless otherwise noted, all figures are 1:2).



AS1



AS2



jar was manufactured at the site of Kalavassos B on the southern Cypriote coast. According to the excavator it is the only off-island example discovered to date (Todd, pers. comm). Base on Assumption 1 the jar was carried on a Cypriote vessel.

The purpose of the voyage which resulted in the loss of AS1 is unknown. The direction in which the ship travelled was toward the west and the blossoming Aegean cultures. No foreign elements indicating trade have been reported from the island of Cyprus for this period, and likewise few Cypriote artifacts have been discovered abroad (Catling 1966:19; Buchholz and Karageorghis 1973:124-5). This lack of material evidence, though due in part to the small number of excavations of Chalcolithic levels, has been construed as an indication of the infrequency of Cypriote ventures. Whatever the motivation for this particular voyage - profit, exploration or curiosity the loss of AS1 strongly suggests that Cypriotes were venturing over considerable distances as early as the beginning of the Chalcolithic Period.

Early Bronze Age III/ Middle Bronze Age I AS2 Amphora CH Fig. 6, p.27 NP20 Max. h. 0.176; handle h. 0.098. One handle and body sherd preserved. Well-levigated brown fabric.

Globular body. Vertical handle attached smoothly, high on sherd. Ring handle oval in section and pinched at top to form horn.



Cf. SCE I, pl. 26, p. 93, #13.

At the end of the Early Bronze Age and the beginning of the Middle Bronze Age, it is believed that people of Cyprus were not actively involved in any trade to the west, the direction of Serçe Liman; Cypriote artifacts have not been identified off-island in this period (Catling 1966:33). Trade is assumed between Crete and Cyprus on the basis of the few Minoan artifacts present on Cyprus (Buchholz and Karageorghis 1973:19); these few indications have been interpreted as meaning that it was the Minoans who initiated and implemented trade. Since Cypriote artifacts have been absent on Crete, or indeed at any point between the two islands, it has been thought that the Cypriotes played a passive role in this trade (Catling 1966:33).

If we reject the conventional hypothesis that only the Minoans were active seafarers, and include Cypriotes under the same heading, several interesting hypotheses of the actual trade present themselves: 1) both islands joined in the trade and their seafarers travelled freely from one place to the other; 2) both islands joined in the trade but merchants met as an intermediate site for an exchange of goods; or 3) only the Cypriotes were actively involved in this trade, being the suppliers of the merchandise sought by the Minoans.

These hypotheses are based on the presence of the storage jar AS2 at Serce Liman. We can no longer theorize that the Cypriotes played only a passive role in the inter-island trade with Crete. In the late Early Bronze Age, a Cypriote ship almost certainly anchored at Serce Liman. That its ultimate destination was Crete (or a way station also visited by Cretans) seems likely as, at that time, Crete was the most prominent cultural center in the Aegean.

The first hypothesis has in its favor the fact that we are dealing with island cultures which would have had strong seafaring traditions. The second is alluring because of the existence of the Minoan coastal site of Trianda on Rhodes (Bury and Meiggs 1975:12). This site was established by the Minoans at a time when their trade network was expanding through the Aegean and the possibility that it was a trading post is strong. The third hypothesis has as much to substantiate it as the commonly held theory of Minoan monopolization; it does not seem likely given that both Cyprus and Crete are sea-bound.

A strong point against finding Cypriote artifacts on Crete or at Trianda is the nature of the merchandise which Cyprus was famous for exporting in antiquity. Copper, if packaged at all, would not have been shipped in imperishable containers, so no physically identifiable traces of this trade would be found on Crete. The lack of such traces, therefore, should not be read as evidence for a solely Minoan trade mechanism. That this was not the case is indicated by the presence of the Cypriote jar at Serce Liman. This jar was probably part of a ship's gear, containing grain, salted meat or fresh water. While in port, though supplies would be replenished, such containers would not stray far from the immediate area which no doubt was adjacent to a market as in Mediterranean ports in the past and today. Therefore, we would not expect to find them except in that area or in the harbor itself. That Cypriote artifacts have not been found in excavations on Crete or Trianda, thus should come as no surprise.

Middle Bronze Age

AS3 Storage jar

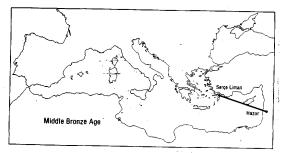
CE PQ10

Max. h. 0.220; handle h. 0.131.

One handle and body sherd preserved. Brown fabric with black inclusions.

Flat, oval handle attached vertically on body. Bulge of maximum diameter off mid-point of sherd with corresponding bulge in handle. Handle meets body obliquely. No part of shoulder or neck preserved.

Cf. <u>Hazor</u>, pl. CXIII; 6,7,9: similar in size and fabric.



For a period of some 1500 years, our interest has been focused on the trade which originated on Cyprus and passed Serce Liman. In the Middle Bronze Age, this focus shifts away from Cyprus to the Levant. Storage jar AS3 is a common Near Eastern type produced for centuries in a single basic form. (Hazor is the only site marked in the Levant as this is the site of the particular parallel cited.) Outside of several Middle Bronze Age sites in

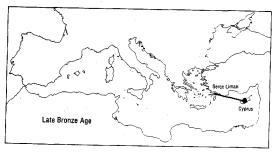
the Near East, it has been found only on Cyprus and in Athens (Bass 1967:122). This once again challenges the accepted picture of a Minoan thalassocracy. The routes marked on the map indicate a trade which existed between the Levant and mainland Greece, to whatever extent, and by-passed Crete.

Late Bronze Age

AS4 Stone rock-anchor HQ Fig. 7, p.34 JK35 H. c.0.60; base th. c.0.20; top th. c.0.095; top w. 0.31; base w. 0.42; hole d. 0.128 x 0.128. Complete. Badly eroded limestone. Trapezoidal, rock-anchor with one large hole cut

off-center, above mid-point. No wear marks preserved.

Cf. Dan E. McCaslin, 1979, Stone Anchors in Antiquity. Santa Barbara: 95.



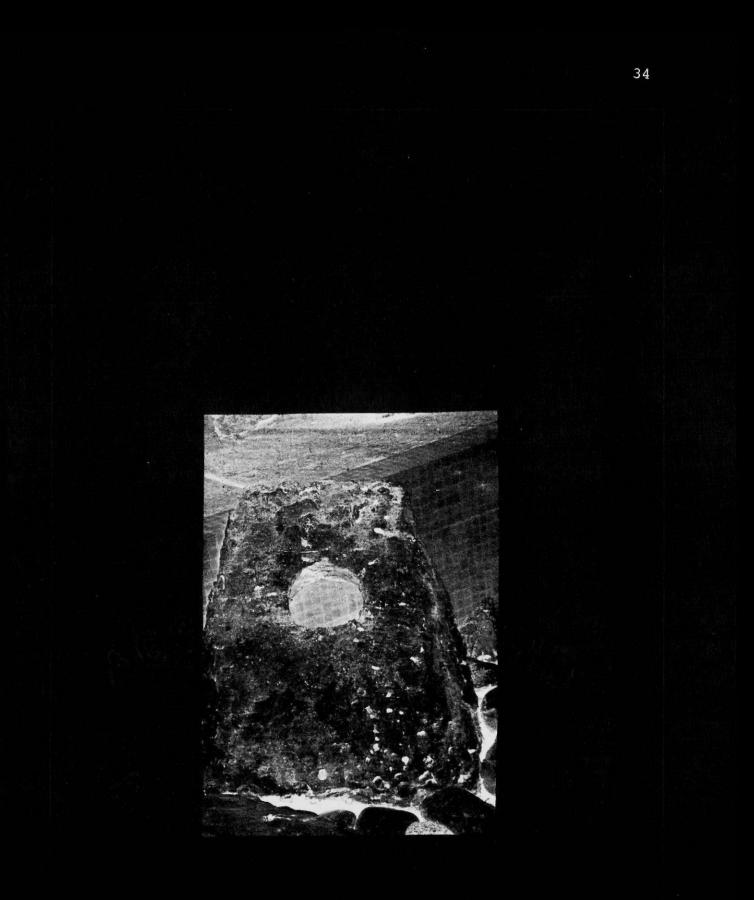




Figure 7

Once again, in the Late Bronze Age, direct contact is evidenced between Cyprus and Serçe Liman by the stone rockanchor recovered from the slope. During this period, Cyprus was the emporium frequented by Levantines, Egyptians and Greeks, both of the mainland and the islands (Catling 1966:3). The Cypriotes did not, however, play a passive role there but were actively involved in sea-borne trade, as indicated by the anchor from Serçe Liman. Trade was fairly universal in this period; the occurrence of artifacts from any part of the Aegean and eastern Mediterranean Seas would not be questioned. The occurrence of only one artifact suggests that Serçe Liman was not widely used in this period - perhaps Bozukkale to the west was the preferred harbor. --

Early Iron Age

12th Century B.C.

AS5 Storage jar JX Fig. 8, p.37 KL-10 Max. h. 0.156; base d. 0.108. Most of base and part of body preserved. Orange-brown fabric.

Body vertical with slight bulge. Flaring ring base. Inside ring, bulging bottom is separated from ring by a deep depression; slight knob in center corresponds to twirl on interior.

Cf. M. Dunard et al., 1964, "Fouilles de Tell Kazel: Rapport Preliminaire" <u>Les Annales Archeolo-</u> <u>giques de Syrie</u> 4: 11 and pl. XIII,4.

AS6 Storage jar FG Fig. 8, p.37 IJ-5 Max. h. 0.087; max. d. 0.219; base d. 0.100. Base and part of lower body preserved. Hard orange fabric.

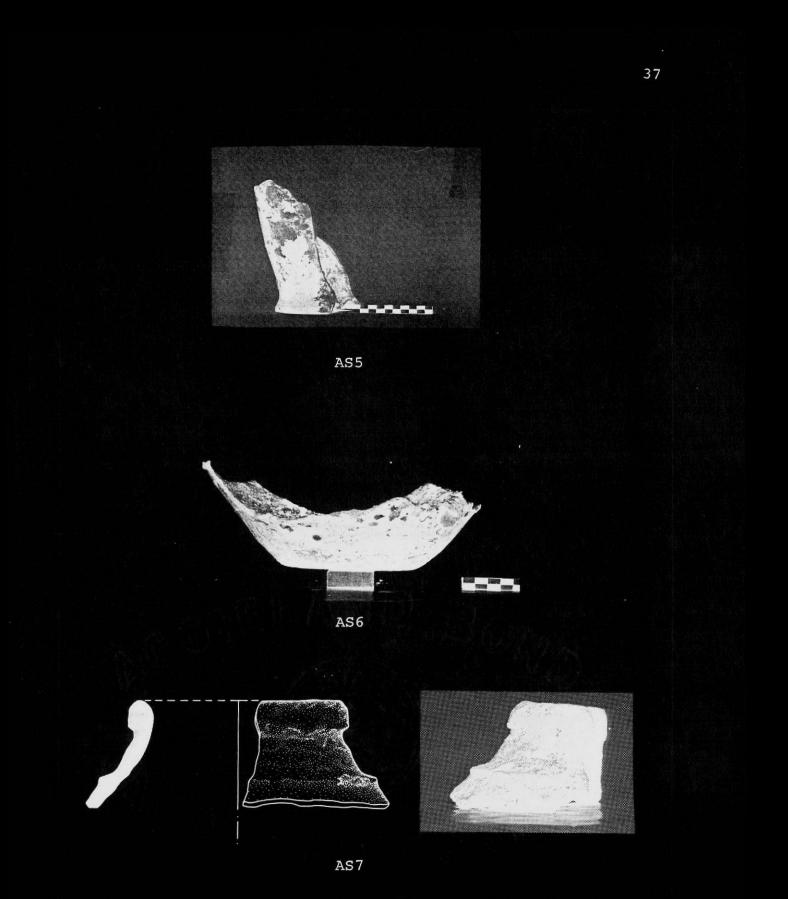
Body tapers at oblique angle to flat base. Juncture of body and base is not sharp.

Cf. similar jar in Taanach, fig. 14.

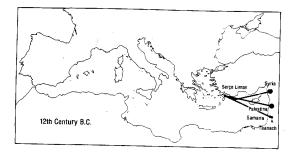
AS7 Cooking pot -- AX Fig. 8, p.37 LM35 Max. h. 0.061; rim h. 0.017; rim d. c.0.110. Approximately half of rim and neck preserved. Brown fabric with black inclusions.

Plain, rounded rim. Neck flares with ridge badly preserved c. 4 cm from top of rim.

Cf. Elihu Grant and G. Ernest Wright, 1938, <u>Ain Shems Excavations (Palestine)</u> Part IV: <u>Pottery</u>. Haverford. pl. 61.2; <u>Samaria</u>, p.102,#16.







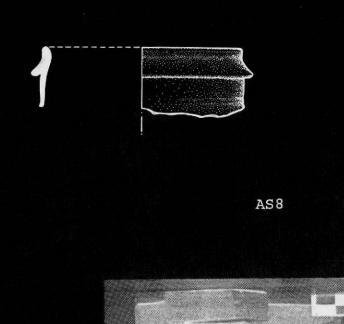
11th Century B.C.

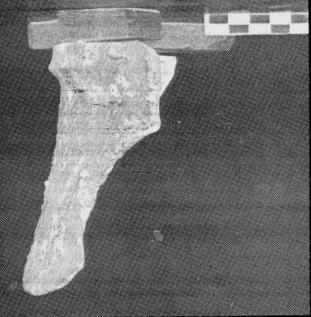
AS8 Jar BP Fig. 9, p.39 location unknown Max. h. 0.034 Part of rim and upper body preserved. Orange fabric with red slip.

Thin-walled body rises vertically. Rim is turned down and billed.

Cf. R.W. Hamilton, 1935, "Excavations at Tell Abu Hawam" <u>QDAP</u> 4: fig. 10; <u>Taanach</u>, fig. 29,#3.

AS9 Cooking pot EA Fig. 9, p.39 location unknown Max. h. 0.121. Part of rim and body preserved. Red fabric with green-brown glaze on interior.





AS9

39

Figure 9

Straight walled body rises to thicker rim. Rim oblique with groove on outside edge and on top.

11th Century B.C.

10th Century B.C.

AS10 Bowl

JP LM-15

Max. h. 0.040; max. d. 0.260.

Part of rim and body preserved. Pale fabric with quartz inclusions.

Slightly triangular rim curves in to bowl.

Cf. Paul W. Lapp, 1964, "The 1963 Excavations at Ta'annek"<u>BASOR</u> 173: 39.

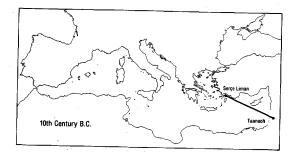
9th Century B.C.

AS11 Crater

KG LM-10

Max. h. c.0.14; rim d. 0.310.

Cf. similar jar in <u>Tarsus</u> III, pl. 119,#246.



Part of rim and body preserved. Pink fabric with quartz inclusions.

Oval rim with vertical interior defined by depression. Body round and deep. No base preserved but fabric thickens at break.

Cf. <u>Taanach</u>, fig. 70,#4. Examples cited here at Megiddo and Samaria.

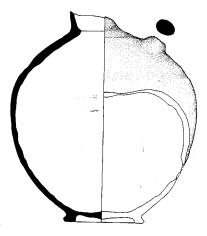
AS12 One-handled jug

Fig. 10, p.42

HB KL15

Max. h. c.0.230; max. d. c.0.170; th. 0.005. Lightly concreted; chipped and worn. Half of base, most of body, single handle attachment and base of neck preserved. Fine tan fabric with micaceous inclusions.

Narrow neck curves to ovoid body; ridge at base

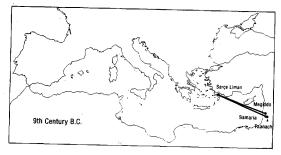






of neck. Handle attached high on shoulder, just below ridge. Flaring, sharply cut ring base.

Cf. <u>Taanach</u>, fig. 60,#4 (different fabric); <u>Samaria</u>, p. 112,#6 (similar fabric).



Developing life in the eastern Mediterranean was harshly interrupted by the incursions of the 'Sea Peoples' at the end of the Bronze Age. The Greeks, Hittites, Trojans, Syrians (Young 1970:24) and Egyptians were severly attacked. The attacks resulted in some instances in the total destruction of a flourishing civilization, in others in the withdrawal of a civilization from the world's affairs (Young 1970:164). The vacuum created by these sets of actions and reactions was filled by the seafaring Phoenicians (Hanfmann 1948:141) who dominated trade in the Early Iron Age (Stieglitz 1971:185; Young 1970:143, 219). There is little evidence for the history of this period in the greater eastern Mediterranean; thus, the peoples with whom these seafarers were in contact are not known. However, they were probably in contact with the Cypriotes; both the isalnd's location and unbroken archaeological record for this period indicate a continuation of civilization (Hanfmann 1948:142).

8th Century B.C.

AS13 Storage jar

Fig. 11 & 12, pp.45-46 QR-5 Max. h. 0.218; max. d. 0.205; rim d. 0.157; th. 0.004. Heavily concreted. Profile and one handle preserved. Light brown fabric.

Thick, finely made rim has deep groove on outer, vertical face and shallower groove on top. Body flares to low maximum diameter. Small, thin handles attached vertically just below rim and above maximum diameter.

Cf. Tarsus IV, p. 230,#876.

AS14 One-handled jug

Fig. 13, p.47

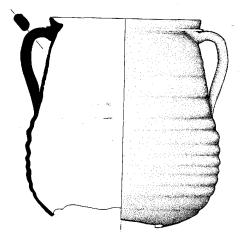
HI3 POl0

Max. h. 0.083; rim d. 0.075.

Rim, neck, part of shoulder and handle attachment preserved. Pale orange/pale brown fabric.

Triangular rim flares from short neck. Ridge at mid-point on neck. Body flares from ridge. Handle attached at level of ridge.

BK



AS13



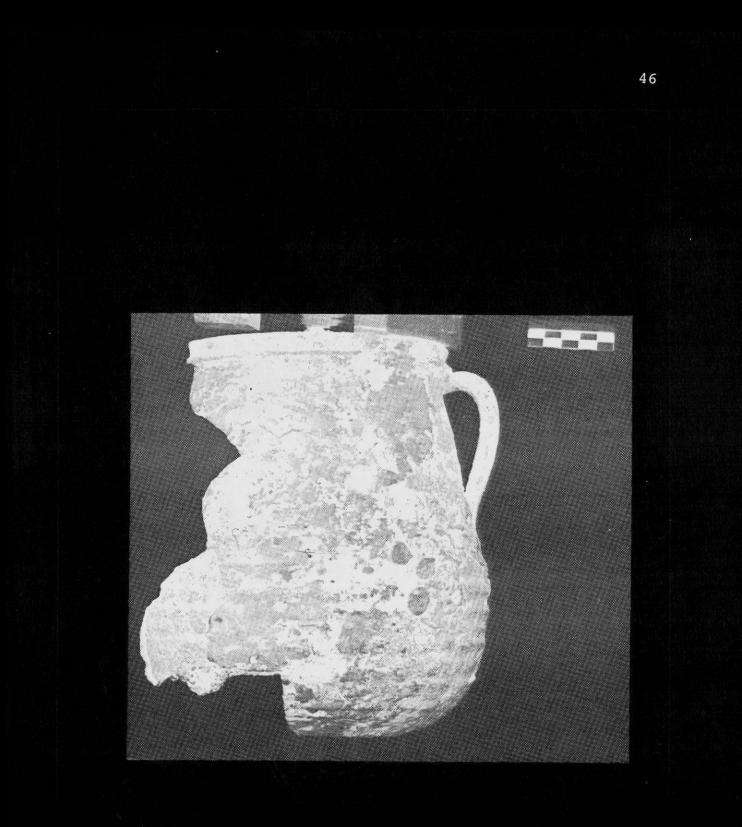
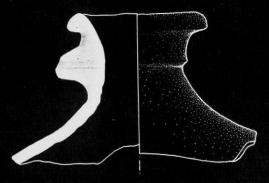


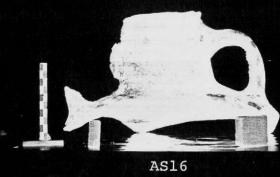


Figure 12





AS14





AS17 Figure 13

Cf. <u>Taanach</u>, fig. 37; Lankester Harding, 1945, "Two Iron Tombs from 'Amman" <u>QDAP</u> 11: 68,#28 and #29; William F. Albright, 1930-31, "The Excavations of Tell Beit Mirsim in Palestine. Vol. I: The Pottery of the First Three Campaigns" <u>AASOR</u> 12: pl. 59 and pp. 82-3 for discussion of type.

AS15 Pithos

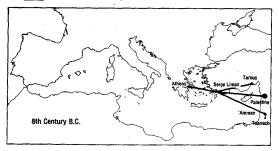
BR MN10

Max. h. c.0.65; base d. 0.140.

Base and part of body preserved; joining piece found near 10 ft. decompression stop. Very coarse pale red-brown fabric with dark inclusions.

Rounded body with disc base.

Cf. Barbara Schlörb-Vierneisel, 1966, "Eridanos-Nekropole I. Gräber und Opferstellen hSl-204" <u>Ath</u>. Mitt. 8: p. 11 and pl. 16.1.



The Phoenicians continued to be active traders to the west in the 8th century B.C., but while they continued to dominate the Mediterranean seafaring scene, they were no longer supreme. As early as the late 9th century B.C., the Greeks had re-entered the eastern Mediterranean to trade (Boardman 1980:35), and by the mid-8th century B.C. they were establishing colonies in the Black Sea region and Anatolia (Boardman 1980:240, 84). It is probable that AS15, the Greek pithos, was not a trade item but rather carried a home product to Greek colonists. Jars of similar size and date, excavated in southern Italy, are thought to have contained wine from Corinth which still was of a higher quality than that produced in the colonies (Koehler, pers. comm.)

The ship which discarded artifact AS15 was headed east toward Syria, probably to the trading outpost of Al Mina. This site is known to have had a large Greek population as early as the late 9th century B.C. (Austin and Vidal-Naquet 1977:65-6). Since this population settled there solely for trading purposes, voyages between Al Mina and the Greek Aegean must have been frequent. There are obviously other possible alternatives for the planned final destination of the pithos, but knowledge of the period indicates that Al Mina was the most likely final port-of-call for the ship which halted at Serçe Liman. The Greeks had not yet entered into trans-Mediterranean trade to such an extent that they

voyaged freely.

It is interesting to note while considering trade connections that the area chosen in the east by the Greeks for a trading post was not in Phoenician territory. They were attempting perhaps to circumvent the Phoenician monopoly on trade with the west and this was the main motivation behind Greek emergence from the isolationism which had characterized their cities for several centuries.

7th Century B.C.

Fig. 13, p.47 PQ10 Max. h. c.0.195; rim d. 0.120; handle h. 0.096. Most of rim, neck and shoulder, all of one handle and base of second preserved. Red-brown fabric (?).

Small rounded rim. Neck bulges in center. Broad sloping shoulder. Oval handles attached just above mid-neck and on shoulder.

Cf. J. Naveh, 1962, "The Excavations at Mesad Hashavyahu: Preliminary Report" IEJ 12.2: fig. 6.4.

AS17 Amphora

AS16 Amphora

Fig. 13, p.47 NP15 Max. h. c.0.415; max. d. c.0.380. Toe and lower body preserved. Light brown fabric with some impurities.

HIF

DW1

Body tapers evenly to very short, false-ring toe. Cf. Chios, pl. 44X.

AS18 Amphora

DW2 NP15

ЪA

Max. h. 0.219.

Toe and lower body preserved. Light brown fabric with some impurities.

Body tapers evenly to very short, false-ring toe. Cf. AS17.

AS19 Storage jar Fig. 14, p.52 location unknown Max. h. 0.043; mouth d. 0.090; rim w. 0.016; th. 0.005. Concreted and worn. Part of rim, shoulder and body preserved. Orange-brown fabric

Horizontal rim, pointed at both ends, is folded down onto concave shoulder. Short shoulder meets swelling body in sharp carination. Incised line circles rim above mid-point of shoulder.

Cf. Taanach, pl. 81.1; Patricia M. Bikai, 1978, "The Late Phoenician Pottery Complex and Chronology" BASOR 229: 49.

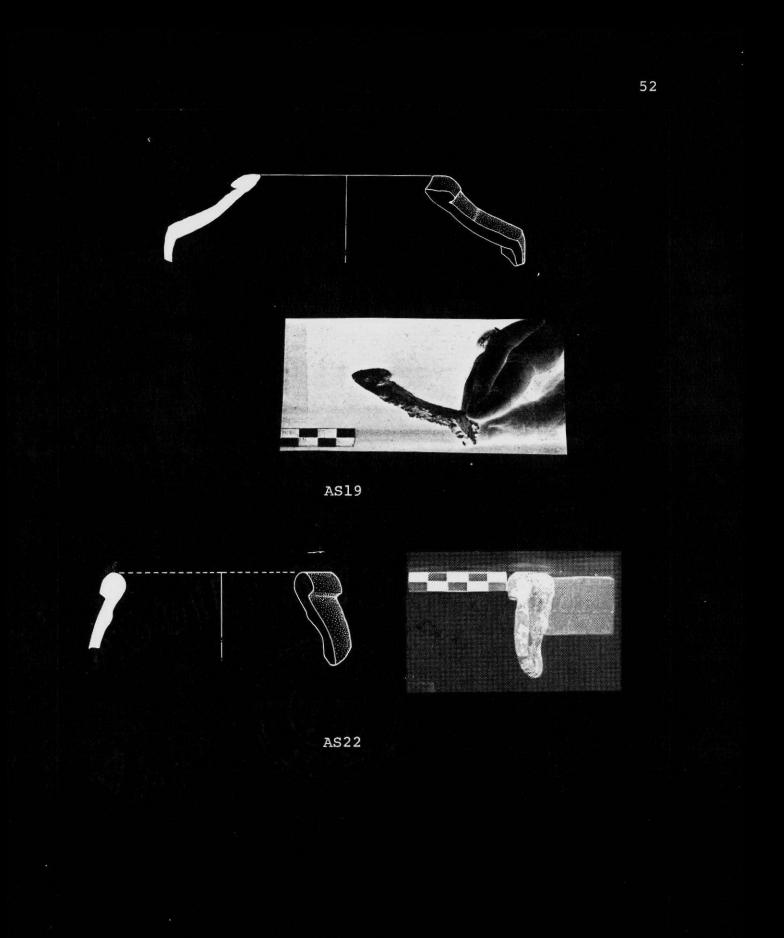


Figure 14

KA KL-10

Max. h. 0.022; rim d. 0.080; th. 0.004. Concreted and worn. Part of rim and body preserved. Brown fabric.

Flat rim decorated with groove in center. Thick rim. Body curves out sharply from rim.

Cf. Seton Lloyd and Nuri Gokce, 1953, "Sultantepe: Anglo-Turkish Joint Excavations, 1952" Anatolian Studies 3: fig. 7.7.

AS21 Jug

DU MN15

Max. h. 0.043; d. c.0.14; th. 0.003.

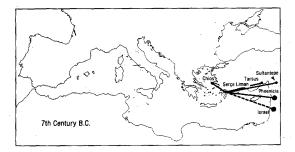
Concreted. Part of rim and neck preserved. Orange fabric with black inclusions.

Heavy rounded rim curves under sharply to thin neck. Ridge preserved on neck echoed by groove on interior.

Cf. Tarsus III, 255-6.

The emergence of Greece into the international trading world during the 8th century B.C. was discussed above. During the 7th century B.C., several of the Aegean islands along with the eastern city of Tarsus also emerged from isolation. Several motives have been ascribed to this sudden and uniform appearance of westerners in the eastern Mediterranean:

1. G. Hanfmann (1948:142-3) suggests that the



control which the Cypriotes had held over the waterways was broken by the arrival of the Assyrians on the Mediterranean coast, thus giving free access to the Greeks hovering on the sidelines awaiting just such an opportunity

of direct trade with the east. M.M. Austin and 2. M.M. Austin and P. Vidal-Naquet (1977:65-6) discuss the effects of Greek colonization as they pertain to the east and trade.

No doubt a synthesis of these reasons was responsible for the complex situation which began the age of Greek supremacy in the Aegean.

In any case, after several centuries of minimal indications of the overall trade picture at Serçe Liman, during the 7th century B.C. many and diverse ships halted at the anchorage. The artifacts recovered indicate a continuation of Levantine trade to the west, an assumption of Cilician trade along the Anatolian coast, the beginnings of the later far-flung Chian wine trade and finally, further indication of a blossoming Greek trade with the east.

6th Century B.C.

AS22	Amphora	EO
	Fig. 14, p.52	KL10
	Max. h. 0.052; rim d. 0.110.	

Part of rim and neck preserved. Red-brown fabric. Rounded rim undercut slightly at juncture with body. Neck bulges below rim.

Cf. AAWT, #44: Chian.

AS23 Amphora GO Fig. 15, p.57 KT.10 Max. h. 0.52; max. d. 0.38. Toe, lower body and part of shoulder preserved. Brownish fabric. Carinated shoulder curves to tapering body. Bulbous toe offset. Uneven hole pierces base of toe. Cf. Chios, fig. 125, #946. AS24 Storage jar FC Fig. 15, p.57 KL30 Max. h. 0.132; handle h. 0.113. Part of body and one handle preserved. Coarse brown fabric with large white inclusions. Ear-shaped, vertical handle attached on ovoid body. Cf. SCE II, pl. XIII. AS25 Cooking pot LC KLM5

Max. h. 0.066; handle h. 0.066; rim h. 0.025.
Part of rim andbody, one entire handle preserved.
Dark orange-brown fabric with black inclusions.

Vertical rim. Squared lip thicker than rest of rim: Interior of rim has deep, finger-wide depression,

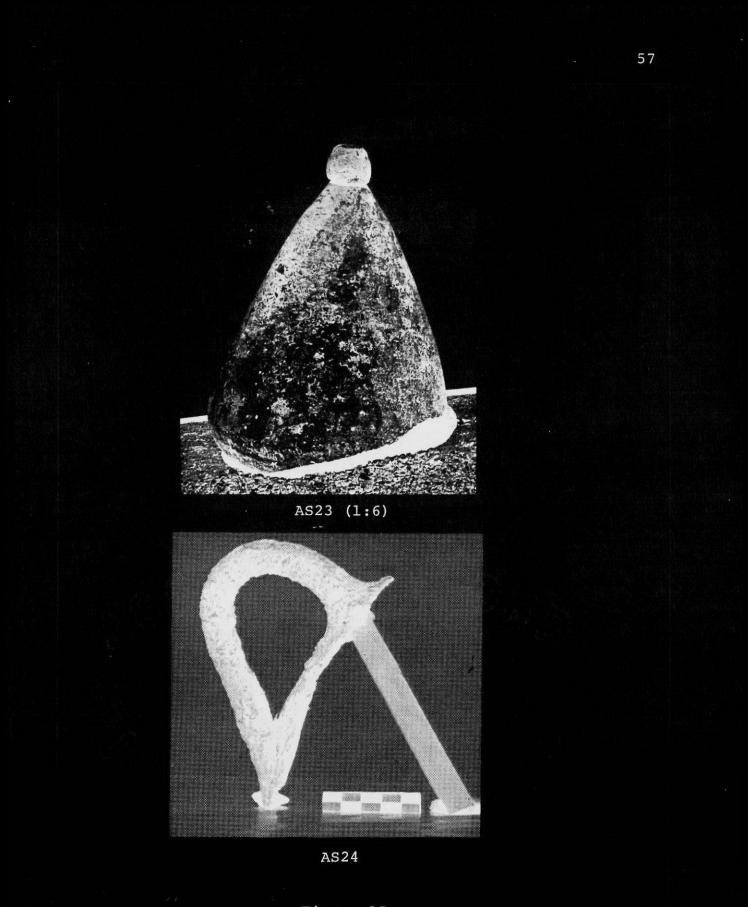


Figure 15

very slightly echoed on exterior. Rim and body meet at sharp angle. Ribbon handle attached level with rim, slopes slightly, then turns to attach on body at maximum diameter.

Cf. <u>Tarsus</u> III, fig. 76, #794 and p. 225 for discussion of development of type.

AS26 Jug

BC NPO

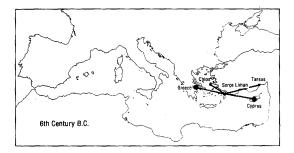
Fig. 16, p.62

Max. h. 0.115; handle h. 0.072; rim h. 0.017. Small part of rim and body, all of one handle preserved. Tan fabric.

Plain out-turned rim. Body slopes to mid-handle where ridge defines change in angle of slope. Juncture of rim and body defined sharply on interior, by curve on exterior. Flat, ridged handle attached below juncture and on steeper slope of body, below ridge.

Cf. <u>Tarsus</u> III, fig. 89, #1271: part of Greek intrusion in level.

With the re-emergence of civilization in Greece, it was only a matter of several decades before the Greeks had made their presence felt in the eastern Mediterranean. By the 6th century B.C., Greek civilization encompassed not only the Aegean but also the coast of Asia Minor as far



south as Halikarnassos and Rhodes. From the middle of the century, the Ionian coast of Anatolia and the islands off that coast comprised the western boundary of the Persian Empire. This does not seem to have effected any strong influence on the Ionians as they were ruled indirectly by a king far from their homes and directly by Greek governors.

Trade was widespread and often originated from various points in the Aegean. Such is the case with Chios. The wine from this island was prized by the Greeks as of premium quality (Amyx 1958:176). The Chian wine trade is known to have extended north to the Black Sea and west to mainland Greece; evidence of a southern trade is found in the two 6th-century sherds of Chian amphorae at Serçe Liman as well.

Earlier trade routes continued to be used also. The well known route from Greece to Cyprus and the Near East via the northern tip of Rhodes and the south Anatolian coast (and thus Serce Liman) was still used, apparently by Greeks travelling to Tarsus and perhaps beyond. It must have been a Greek ship which discarded artifact AS26 at Serce Liman and parallels to this piece can be seen in a 7th/6th-century intrusion at Tarsus. This contact with Tarsus was not, however, one-sided. A contemporaneous cooking pot of Tarsan manufacture was also recovered at Serce Liman (AS25).

The Cypriotes were also involved in trade which passed Serve Liman. Artifact AS24 is a common 6th-century type of Cypriote storage vessel. Though it may have been used to carry a trade item, it is more likely that it represents part of a ship's gear, broken en route. I have found no other examples of this type of jar outside Cyprus which indicates that it did not contain a widely traded commodity.

5th Century B.C.

AS27 Amphora BL Fig. 16, p.62 RS0 Max. h. 0.250; handle h. 0.210; handle w x th. 0.037 x 0.043; th. 0.005. Very concreted; removed from ridge with hammer and

chisel. Entire handle and part of body preserved. Brown fabric.

Sling handle heavy and oval in cross-section. Thin body wall. Handle slopes up at $c.45^{\circ}$ angle from

body.

Cf. <u>SCE</u> III, pl. LXXXI; <u>SCE</u> II, pll. LXXIX and CXXXIII; cf. Zemer, p. 31 for distribution; cf. Einar Gjerstad, 1960, "Pottery Types: Cypro-Geometric to Cypro-Archaic" <u>Opuscula Atheniensia</u> 3: 120-121 for development of type.

AS28 Amphora

EW

KL20

Max. h. 0.259; handle w x th. 0.048 x 0.041; th. 0.006. Concreted. Shaft of handle and shoulder (?) attachment preserved. Pinkish tan fabric.

Similar description to AS27.

Cf. AS27. -

AS29 Amphora

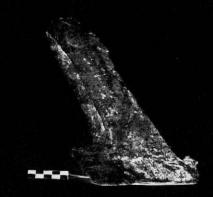
СТ

MN15

Max. h. 0.174; handle w x th. 0.048 x 0.054. Concreted and worn. Base of handle and body sherd preserved. Brown fabric.

Similar description to AS27. Cf. AS27.

AS30 Amphora HJ Fig. 16, p.62 PQ15 and PQ5 Max. h. 0.64; max. d. c.0.365; rim d. 0.131; handle



AS26



AS27



AS30 (1:10)

Figure 16

h. 0.122.

Neck, handles, shoulder, lower body and toe preserved. Large section missing from body but complete profile preserved. Well-levigated red-brown fabric with micaceous inclusions.

Oval rim sharply undercut. Neck tapers slightly; delineated from shoulder by ridge. Sloping shoulder merges into globular body with no delineation. Short, ring toe is bevelled on exterior face. Oval handles attached below rim, arch up slightly and then turn to vertical and attach on shoulder.

Cf. Virginia Grace, 1971, "Samian Amphoras" <u>Hesp</u>. 40: p. 71 (P24869).

AS31 Amphora

DI

Fig. 17, p.64 JK-5 Max. h. 0.303; pres. max. d. 0.256; toe d. 0.076. Toe and lower body preserved. Fine, hard, orange fabric.

Body tapers to long hour-glass toe. Interior pierced deeply. Bottom of bevelled toe has regular circular indentation.

Cf. Agora P30685; Zeest, pl. IX, 20K; Lazarov, Potshchnalata Flotilaya (Varna): 184.16.

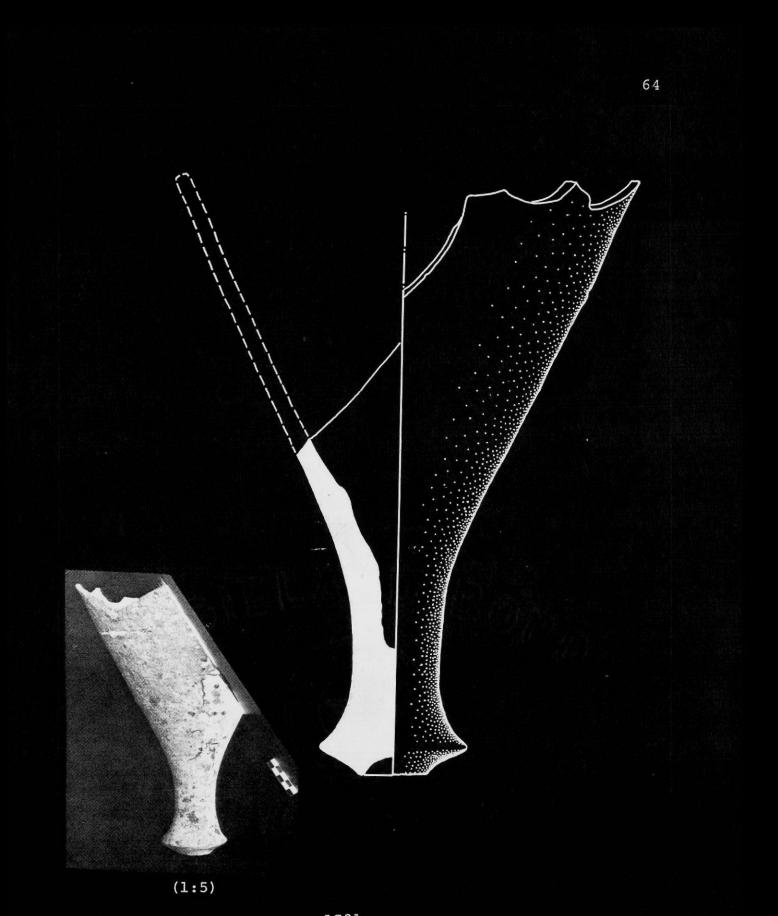
AS32 Amphora

CS

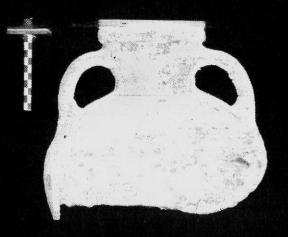
Fig. 18, p.65

63

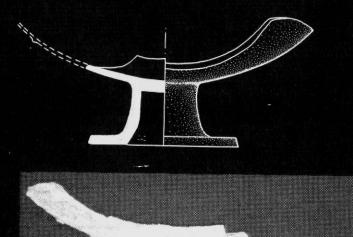
NP35



AS31 Figure 17



AS32



AS33

max. h. 0.255; max. d. 0.290; neck h. 0.071; rim d. 0.143; handle h. 0.073; handle w x th. 0.026 x 0.020; th. 0.009.

Concreted and pitted; rim chipped. Body preserved to below maximum diameter. Orange-brown fabric with brown core; gritty with white inclusions.

Plain heavy oval rim. Funnel neck. Globular body. Thin, oval handles attached just below rim and on shoulder. Rim and mouth unevenly thrown.

Cf. SCE II, pl. LXXXIV.

AS33 Kylix

Fig. 18, p.65 NP-5 Max. h. c.0.052; base d. 0.079; base h. 0.033; th. 0.003.

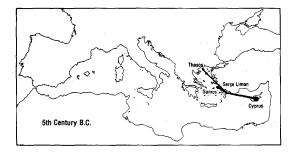
Concreted. Complete base, part of body and one handle attachment preserved. Fine orange-brown fabric.

Body wall curves in very shallow bowl. Pedastle base. Pedastle flares slightly to flat, sharply cut base.

Cf. SCE II, pl. CXLII.

The history of the 5th century begins in the midst of the Ionian Revolt against Persia. The entire Aegean coast of Anatolia was involved in this action which lasted until 494 B.C. (Burn 1970:33). A few years after the Persians

ВJ



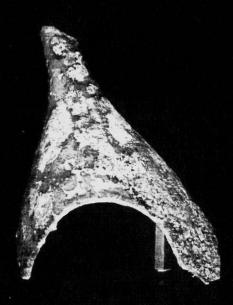
had put down the revolt of the Ionians, Darius attacked Attica (490 B.C.), and in 480 B.C. Xerxes attacked Athens. The political situation of the Aegean was unstable, then, for the first twenty years of the century and this is naturally reflected in the trading scene.

In the 5th-century assemblage from the harbor at Serce Liman only two artifacts are dated to the early part of the century while the remainder are all dated after the Battle of Salamis (when specific dates are assigned to the parallels cited). Of the two amphorae dated to the early 5th century, one is from Samos (AS30) and the other from Cyprus (AS32). The Samian amphora is dated by its context in the Athenian Agora excavations to before 490 B.C. Samian olive oil was much prized abroad (Grace 1971:81-82) and jars of this type have been found to the north in the Black Sea region and to the south on Cyprus and in Egypt, as well as in Athens. With the exception of Athens, Samian amphorae of this period have been found in areas dominated by the Persian Empire; Samos itself was one of the islands involved in the Ionian Revolt. This distribution could indicate that trade within the Empire continued even as the revolution was under way. The same may be said of the Cypriote amphora although I have not found any other parallels off-island. The Samian examples in Athens indicate a trade outside of the Persian domain, a fact which can be explained by the position of commercial importance held by Athens as early as the beginning of the 5th century.

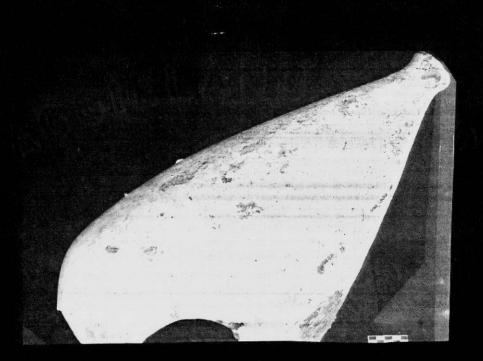
The remaining artifacts in the assemblage date to the period following the Greeks' repulsion of the Persians from the Aegean. None is dated to the period of the Peloponnesian War. During this interim period of peace, the Aegean was controlled by the Athenians. The seaways were safe and commercial enterprises throve. Trade as reflected as Serce Liman had never been so brisk and diversified.

4th Century B.C.

AS34 Amphora BV Fig. 19, p.69 MN20 Max. h. c.0.392; th. 0.011. Concreted. Lower body and most of toe preserved. Brown fabric.



AS34 (1:5)



AS35 (1:5) Figure 19 Body tapers with slight curve to extremely long, pointed toe.

Cf. SCE II, pl. XLII, 1.

AS35 Amphora

Fig. 19, p.69

Max. h. c.0.580; toe h. 0.026; toe d. 0.057; th. 0.007. Lightly concreted; pitted and worn. Pitch preserved on interior. Profile preserved from shoulder to toe on one side. Gritty brown fabric.

Rounded shoulder. Long tapering body. Ring toe flares slightly from join with body. Slight bevel to toe. Amphora interior tapers to regular depression in toe. --

Cf. Agora SS1845, P2372 and P2419; <u>Chios</u>, fig. 126, #947.

AS36 Amphora

Fig. 20, p.71

EO KL10

Max. h. 0.101; depth at perforation 0.049. Very worn toe preserved. Red-brown fabric.

Cylindrical toe tapers to flat base. Interior of amphora base marked by deep depression. Base of toe perforated vertically.

Cf. Agora P28156; <u>Chios</u>, fig. 126; #951 and #952B; SCE III, pl. CVI. Chian.

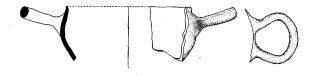
70

HР

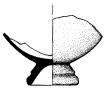
MN5















AS37 Bowl

Fig. 20, p.71 JK30 Max. h. c.0.063; rim d. 0.130; handle w 0.054; th. 0.004.

Concreted. One handle, part of rim and body preserved. Brown fabric.

Plain rim curves to deep bowl. Ring handle attached horizontally below rim.

Cf. AA 12.2, pl. 14.

AS38 Kantharos

FE

Fig. 20, p.71 KL20 Max. h. 0.068; base d. 0.052; base h. 0.023; th. 0.003. Part of base and part of bowl preserved. Orange fabric with red slip.

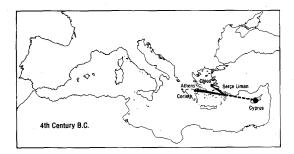
Body slopes to form deep, narrow bowl. Pedestel base. Base flares to rounded edge. Ridge defines mid-point. Bottom third rounded and widest.

Cf. Joe E. Armstrong and John McK. Camp II, 1977, "Notes on a Water Clock in the Athenian Agora" <u>Hesp</u>. 46: 151, pl. 42b.

Greece continued to be in a state of intermittent war during the first half of the 4th century B.C., until united under the rule of the Macedonians. Anatolia and the Near East, including Egypt, were nominally controlled by the

72

EP



Persians (Avraamides 1971:1) though in international relationships of a non-political nature it was the local 'governors' who were in command. These areas may have been divided politically but culturally they were becoming more closely aligned all the time (Bury and Meiggs 1973:418-420, 450-451). During the last quarter of the century, all of the eastern Mediterranean was united as a single political unit under Alexander the Great (Rostovtzeff 1953:183-184); this political unity, while not long-lived, cemented the cultural unity which had been growing for several centuries. Trade was universal.

This situation is not reflected in the assemblage of artifacts from Serçe Liman. Rhodes was reaching the florit of its role as emporium and it was thus towards Rhodes that most trade in the area was directed (Craik 1980:18; Magie 1950;71; Bury and Meiggs 1973:363). There was less reason

to use Serçe Liman as an overnight or bad-weather shelter with a large harbor so close at hand.

3rd Century B.C.

AS39 Amphora

EI

Fig. 21, p.75 JK20 Max. h. c.0.265; mouth d. 0.109; neck d. 0.111; handle h. 0.195; handle w x th. 0.042 x 0.026; th. 0.009.

Everything above carination preserved. Brown fabric with black inclusions.

Collar rim with deep groove undercutting it. Tall cylindrical neck. Shoulder near horizontal. Oval handles attached below rim arch up to base of rim and descend vertically to shoulder. Legible stamp and semi-legible stamp on highest points of handles; rectangular stamps. Incised grooves below lip and below center neck made before firing. Stamps name Damostheneus and Aretakles.

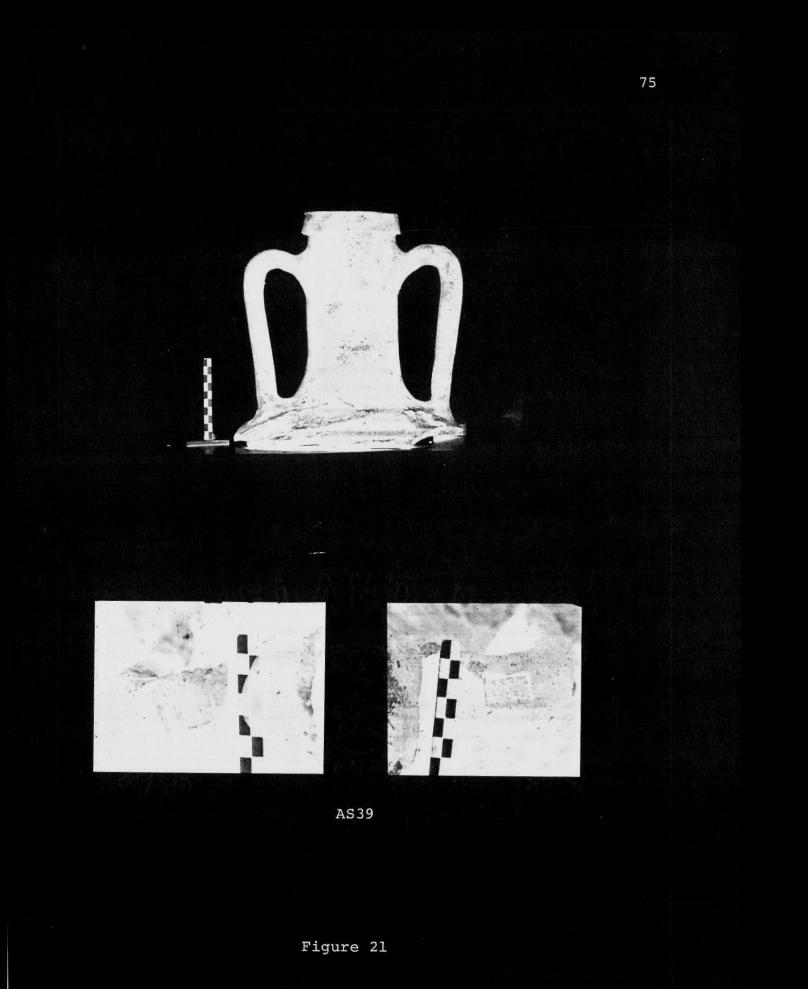
Cf. Virginia Grace, 1963, "Notes on the Amphoras from the Koroni Peninsula" Hesp. 32: fig. 1,2.

AS40 Amphora

Fig. 22, p.76

HO LM15

Max. h. c.0.310; toe h. 0.045; toe d. 0.036; th. 0.006. Lightly concreted. Toe and part of lower body



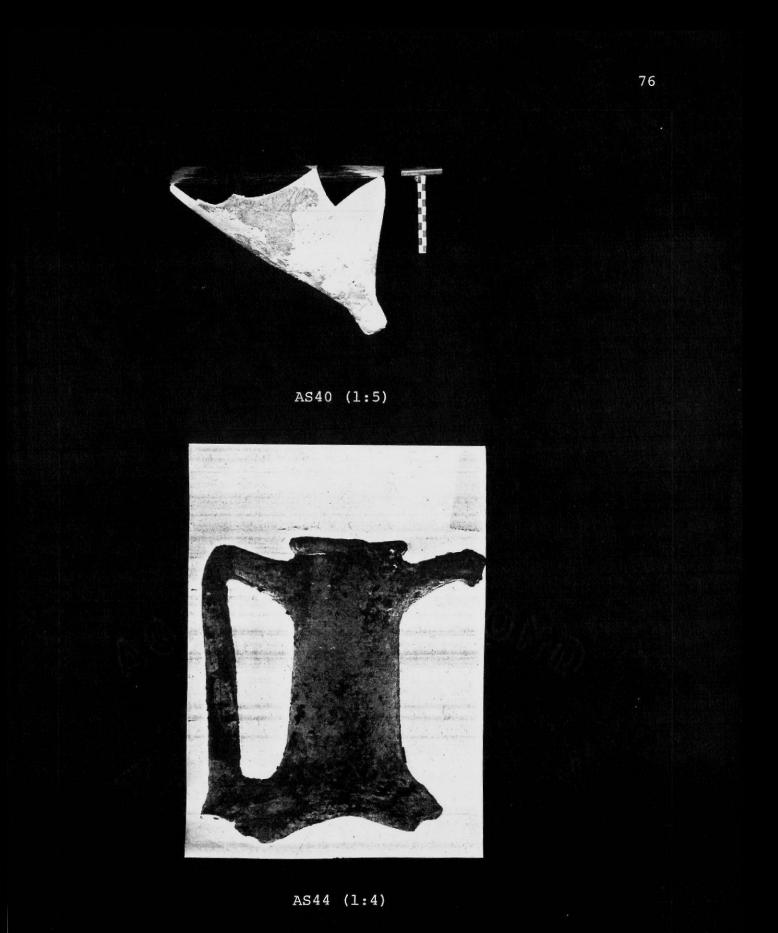


Figure 22

preserved. Pale orange/light brown fabric.

Long peg toe turns sharply to flaring body. No curve to body walls.

Cf. AAWT, #62: Rhodian; Agora P22132, SS10268.

AS41 Amphora

JY KL-5

Max. h. 0.124; toe h. 0.055; toe d. 0.040; th. 0.006. Lightly concreted and worn. Toe and part of lower body preserved. Light brown fabric.

Body tapers to straight peg toe. Base of toe is rounded.

Cf. AAWT, #62: Rhodian; Agora P22132.

AS42 Amphora

КM

location unknown

Max. h. 0.212; toe d. 0.037; th. 0.008. Lightly concreted and worn. Toe and part of body preserved. Pale brown fabric.

Body tapers to cylindrical peg toe. Depression on interior of peg.

Cf. AAWT, #62: Rhodian; Agora P22132.

AS43 Amphora

CK

NP10

Max. h. 0.109; rim h. 0.014; rim d. 0.130; handle

w x th. 0.040 x 0.031; th. 0.007. Concreted and worn. Horizontal section of one handle, fraction of rim and neck preserved. Brown fabric.

Rectangular rim sharply offset from neck. Handle attached just below rim, slopes up to level of mouth, then turns down sharply. Stamp illegible.

Cf. AAWT, #62: Rhodian; Agora SS10268 or P22132.

AS44 Amphora

Fig. 22, p.76

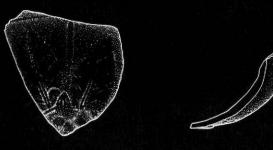
LH KLM5

Max. h. c.0.305; rim d. 0.119; neck h. 0.240; handle h. 0.258; handle w x th. 0.027 x 0.026; th. 0.009. Very concreted and worn. Rim, neck, one entire handle, horizontal section of second and part of shoulder preserved. Orange-brown fabric.

Round rim delineated from cylindrical neck. Sloping shoulder. Oval handles attached below rim, Project up slightly and turn down sharply to form ⁽¹⁾ long vertical shaft to attach on shoulder.

Cf. <u>AAWT</u>, #62: Rhodian; Agora SS7583, SS7584, SS10268 and P22132.

AS45 Megarian bowl KE Fig. 23, p.79 LM-15 Max. h. 0.038; th. 0.005. Concretion removed? Worn. Part of body near base



AS45



AS46



<u>7547</u>

Figure 23

preserved. Fine tan fabric; traces of red paint preserved.

Sherd preserves deep bowl-like curve. Molded decoration: palm fronds (2) separated by a cone= shaped object and a vertical ridge. Fronds and cone rest on a ring. Decoration in interior of ring chipped.

Cf. Karin Braun, 1970, "Der Dipylon-Brunnen B₁: Die Funde" <u>Ath. Mitt.</u> 85: #134.



In the 3rd century B.C., Rhodes had attained such a prestigious economic position (Craik 1980:18; Magie 1950: 70-71) that the situation which we saw developing in the preceding period was intensified: the assemblage at Serçe Liman consists solely of Rhodian amphora fragments. This lack of diversity is logical in the face of the importance of Rhodes as a mercantile station, the proximity of Serçe Liman to the island and the identification of Serçe Liman

as a port for one of the demes of the Rhodian Peraea (Fraser and Bean 1954:59, 79). No foreign ships would be tempted to stop at Serçe Liman, so close to their ultimate destination. Thus, during the 3rd century B.C., Serçe Liman was not used as a shelter along the trade routes discussed above because the hub of all these routes was Rhodes.

This explains the disappearance of diversity among the artifacts recovered at Serçe Liman but not the increase in the number of Rhodian ceramics. Serçe Liman has been identified tentatively as the port of the city of Casara, a Lindian deme of the Rhodian Peraea (Fraser and Bean 1954: 59). Such cities, situated on this barren peninsula,were no doubt dependent on Rhodes for a supply of luxury items at the least -- such luxury items as wine (Magie 1950:50-51).

2nd Century B.C.

AS46 Amphora

Fig. 23, p.79 QR-15 Max. h. 0.277; handle h. 0.269; handle w x th. 0.035 x 0.032; th. 0.008.

Concreted. Approximately one-half of rim, part of neck and one entire handle preserved. Red-brown fabric.

Plain round rim, straight neck. Round handle attached below rim, archesup to peak then turns sharply to straight shaft. Base attachment preserved.

81

DO

Incised line parallel to neck on part of sherd; not continuous around neck. Stamp illegible.

Cf. Delos, pl. 55: amphora from Cyprus.

AS47 Amphora

HI13

Fig. 23, p.79 pQ10 Max. h. 0.095; d. 0.130; th. 0.009. Concreted and worn. Part of neck, rim and handle preserved. Red-brown fabric.

Plain oval rim delineated from cylindrical neck. Handle attached below rim, extends up almost to rim level and is broken off just as it starts to turn to vertical. No stump.

Cf. Delos, E27 -- Rhodian.

AS48 Amphora

CN

NP15?

Max. h. 0.108; rim h. 0.011; rim d. 0.140; handle
w 0.041; th. 0.009.

Very concreted and worn. Approximately one-half of rim, neck and horizontal portion of one handle preserved. Orange fabric.

Square rim delineated sharply from neck. Handle attached just below rim; set slightly obliquely to neck so top of handle at turn to vertical even with top of rim. Small square stamp (illegible) on under-

side of handle near attachment.

Cf. Delos, E7: Rhodian.

AS49 Amphora

CL

location unknown

Max. h. 0.289; d. c.0.124; handle h. 0.289. One handle, part of rim and neck preserved. Orange fabric.

Square rim with two parallel grooves beneath it. Straight, cylindrical neck. Handle attached below rim. Horizontal part of handle arched up slightly. Turn to vertical sharp. Indentation for finger at turn. Vertical shaft straight. Stamp illegible.

Cf. AAWT, #31:- Rhodian; Agora SS10268.

AS50 Amphora

KQ

MN-15

Max. h. 0.275.

Concreted and worn. One handle preserved. Light brown fabric.

Short horizontal section of handle. Sharp turn to long vertical shaft. Stamp illegible.

Cf. Agora SS6790: Rhodian.

AS51 Amphora

JT

location unknown

Max. h. c.0.065; handle w x th. 0.042 x 0.030; th. 0.007.

Concreted and worn. Part of handle and neck preserved. Red-brown fabric.

Large oval handle attached to cylindrical neck. Horizontal section preserved. Arches up to rounded point at turn to vertical. Circular stamp just before curve: Rhodian rose?

Cf. Agora SS7928 and SS7933; M. Dothan, 1965, "The Fortress at Kadesh-Barnea" <u>IEJ</u> 15.3:fig. 26,2: Rhodian.

AS52 Amphora

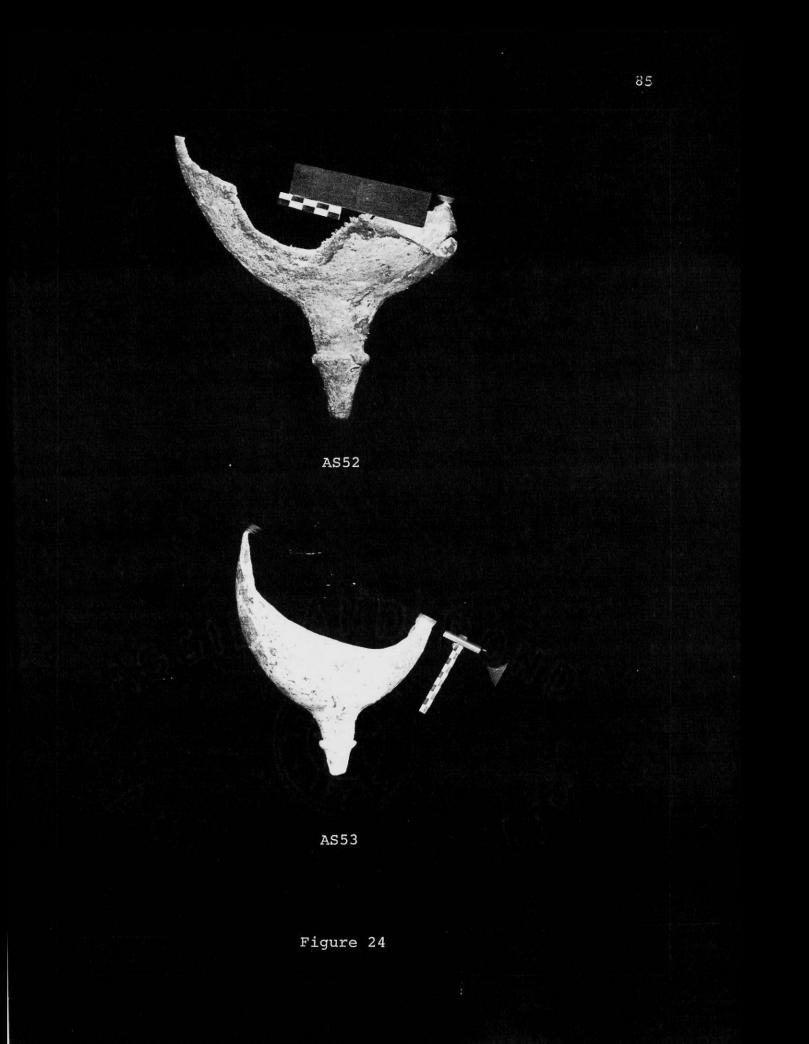
Fig. 24, p.85 JK-5 Max. h. c.0.24; toe d. (top) 0.055, (ring) 0.046; toe h. 0.10; th. 0.006. Toe and part of body preserved. Brown/red-brown fabric.

Preserved body globular with smooth curve to long, tapering pointed toe. Typical ring below midpoint on toe.

Cf. AAWT, #64: Knidian.

AS53 Amphora DX Fig. 24, p.85 KL15 Max. h. 0.323; toe d. (top) 0.057, (ring) 0.05; toe

FK



h. 0.08; th. 0.008.

Toe and part of lower body preserved. Brown fabric.

Preserved body globular with smooth curve to long, tapering pointed toe. Typical ring below midpoint on toe.

Cf. AS52.

AS54 Amphora

BV MN20

Max. h. 0.227; handle w x th. 0.046 x 0.024. Concreted. Shaft with part of shoulder preserved. Tan fabric.

Double handle curves to vertical shaft. Base of shaft flares slightTy at shoulder attachment.

Cf. AAWT, #56: Koan; Agora P25738.

AS55 Amphora

DY

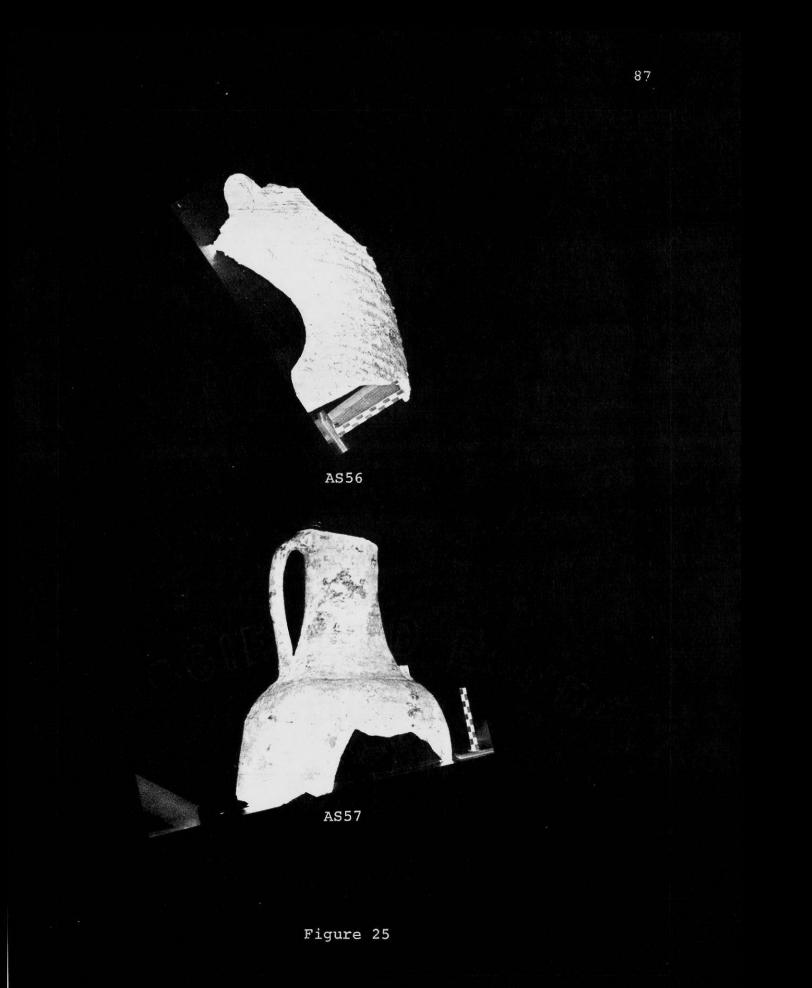
PQ40

Max. h. 0.128; th. 0.007.

Concreted and worn. Neck ridge preserved. Brick red fabric.

Smoothly curving sherd with ridge on exterior. Cf. <u>AAWT</u>, #56: Koan; Agora P3464 and P25738.

AS56 Amphora EG Fig. 25, p.87 location unknown



max. h. 0.38; handle h. 0.088; th. c.0.01. One handle and part of body preserved. Brown fabric.

Preserved section of body bulges at handle, is pinched beneath and is fairly vertical below pinch. Handle attachedhigh on preserved sherd; twisted. Has circular cross-section on top and is flattened on bottom. Body patterned with ridges.

Cf. Joseph Elgavish, 1976, "Pottery from the Hellenistic Stratum at Shigmona" IEJ 26.2-3: 74, #18.

AS57 Amphora

HIA

Fig. 25, p.87

PQ10

Max. h. 0.445; max. neck d. 0.178; handle h. 0.111; handle w x th. 0.038 x 0.021; th. 0.013. Lightly concreted; stained and worn. Neck, one handle, shoulder and part of upper body preserved. Orange-brown fabric with black inclusions.

Cylindrical neck with slight flare from approximately half of height. Lower half flares more sharply to carination. Body curves down and swells slightly before maximum diameter is reached. Shoulder is almost non-existent. Flat oval handle attached high on neck, bows out and then curves in to attach just above carination. Space between neck and handle slight. Handle attachment messy.

Cf. Jean-Pierre Joncheray, 1976, Nouvelle

Classification des Amphores (France): pl. III, #38; Greco-Italic.

AS58 Storage jar

JF

DS

RS35

KM-5 - KM-15

Max, h. 0.043; rim h. 0.024; rim d. 0.180; th. 0.004. Heavy concretion; worn. Part of rim and body preserved. Red-brown fabric.

Vaquely triangular rim slants inward, just off vertical. At mid-point, rim curves in sharply and meets flaring body at an acute angle. Juncture creates ledge on interior.

Cf. Samaria III, 230, #16 and 218.

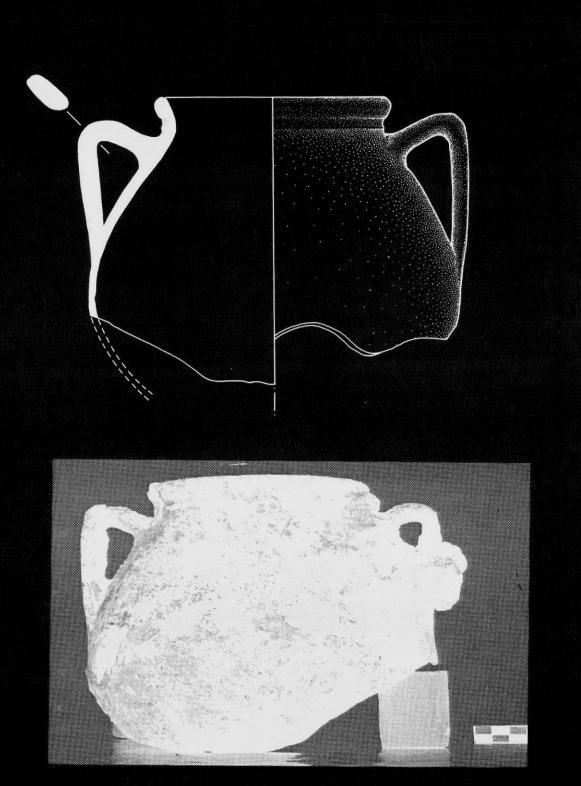
AS59 Storage jar Fig. 26, p.90 Max. h. 0.152; rim h. 0.011; rim d. 0.123; handle h.

0.070; th. 0.004.

Concreted and worn. Preserved to low on body. Red= brown fabric with orange core.

Plain, rounded rim with slight ridge beneath. Globular body. Oval handles attached below ridge; arch up level with rim. Attached on shoulder above maximum diameter.

Cf. Homer Thompson, 1934, "Two Centuries of Hellenistic Pottery" Hesp. 3: p. 415, E125 (P3403): Athenian.



AS59

Figure 26

AS60 Jug

HI11 PO10

Max. h. 0.120; th. 0.003.

Lightly concreted and worn. Part of body preserved in two pieces. Red-brown fabric.

Small globular shape with no base or top preserved. Ridged neatly and shallowly.

Cf. M. Dothan, 1971, "Ashdod: Second and Third Seasons of Excavations 1963, 1965" <u>Atigot</u> (English Series) IX-X: p. 45, fig. 2.14.

AS61 Jug

CX NP10

Max. h. c.0.118; base d. c.0.056; th. 0.004. Concreted and worn. Entire base, approximately one-half of body and possible handle attachment preserved. Red-orange fabric.

Body has high shoulder tapering to kick base. Kick has small boss on center exterior. Possible handle attachment preserved above maximum diameter.

Cf. Nancy Lapp, 1964, "Pottery from Some Hellenistic Loci at Balatah (Schechem)" <u>BASOR</u> 175: p. 20, #2.

AS62 Cooking pot

Fig. 27, p.93

HI5

91

PQ10

Max. h. 0.056; d. 0.150; handle h. 0.053; handle w x th. 0.019 x 0.010; th. 0.004.

Concreted and worn. Part of rim, one handle, and part of body preserved. Coarse brown fabric with micaceous black inclusions.

Squared vertical rim with inner ledge for lid rest. Body swells from faint exterior groove at base of rim. Flat oval handle attached level with rim, extends straight out and then turns down and in to attach on body at maximum diameter.

Cf. Edward L. Ochsenschlager, 1967, "III. The Excavations at Tell Timai" JARCE 6: p. 35, #7.

AS63 Plate

DD

Fig. 27, p.93 QR0 Max. h. 0.038; d. ; ring d. 0.097; th. 0.003. Very concreted. Two-thirds of rim missing; otherwise complete. Red fabric.

Flat dish with plain ring base and vertical rim. Even thickness throughout.

Cf. similar plate in Dura-Europos, p. 23, #132.

AS64 Lagynos

KU LMO

Max. h. 0.090; neck d. 0.032; th. 0.004. Concreted and worn. Part of rim, handle and shoulder

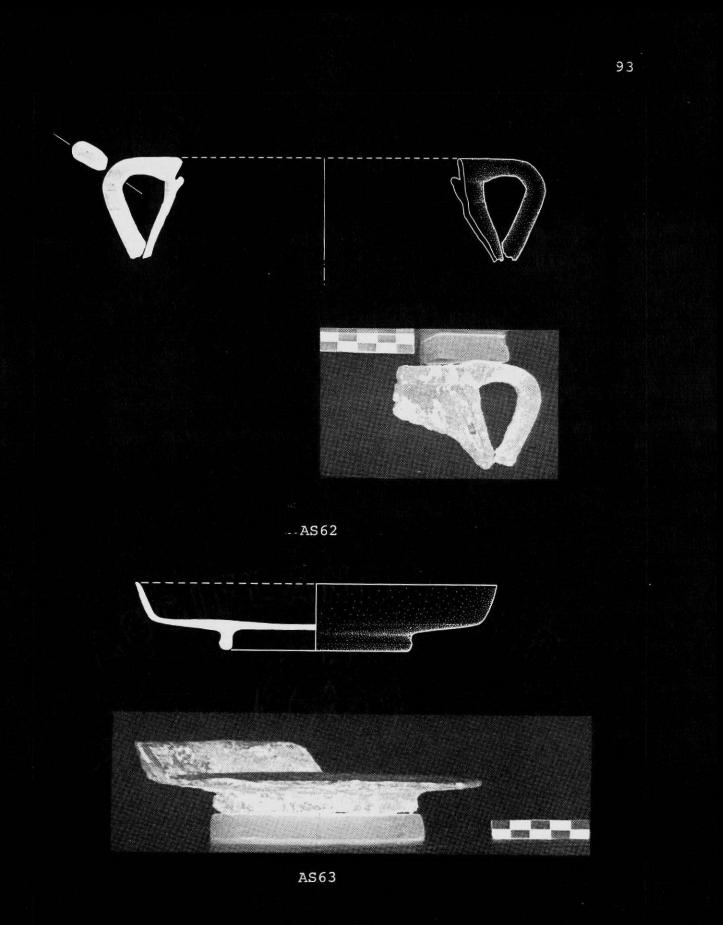


Figure 27

all of neck preserved.

Tall, narrow neck with flaring lip, broad, flat shoulder. Handle attached below rim on neck and arches up.

Cf. M. Dothan, 1971, "Ashdod: Second and Third Seasons of Excavations 1963, 1965" <u>Atigot</u> (English Series) IX-X: p. 37, fig. 11,3.

AS65 ? base

ко кь-5

Max. h. 0.039; disc d. 0.037; th. 0.004. Concreted and worn. Base and lower body preserved. Orange fabric.

Bowl-shaped body tapers sharply to disc base. Hole pierces base. Base of disc shows signs of further attachment (?). Interior depression at base.

Cf. Edward L. Ochsenschlager, 1967, "III. The Excavations at Tell Timai" <u>JARCE</u> 6: p. 45, #18.

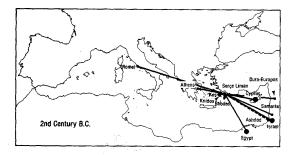
AS66 Unguentarium HI8 Fig. 28, p.99 FQ10 Max. h. 0.096; max. d. 0.039.

Concreted. Toe and rim missing. Red-brown fabric.

Cylindrical neck curves out to shoulder. Body tapers to break. Preserved sections of uneck and toe open.

Homer Thompson, 1934, "Two Centuries of Hellen-

istic Pottery" Hesp. 3: 472-474.



During the 2nd century B.C., trade was brisk in the eastern Mediterranean, in spite of the almost continuous struggle for power carried on between the Seleucids, Ptolemies and Antigonids with the accompanying switching of allegiances (Magie 1950:passim). In spite of this, there is not only more variety in the areas identified as centers of manufacture for the artifact assemblage at Serçe Liman but there are a few artifacts for which it is impossible to assign a provenience as their occurrence is so wide= spread and uniform throughout the eastern Mediterranean and the Aegean.

As in the earlier part of the Hellenistic period, Rhodian amphora fragments encompass a large percentage (40%) of all the finds for the 2nd century B.C. The variety of other nations represented at Serce Liman is an indication of the position held by Rhodes during the Hellenistic period (Craik 1980:18). Until supplanted by Delos, Rhodes was <u>the</u> emporium in the eastern Mediterranean. From the immediate vicinity came the Knidian and Koan amphorae recovered at Serce Liman. The Knidian amphorae (AS52 and AS53) are nearly identical in fabric and dimensions and must have been discarded or lost by the same ship. The Koan amphorae (AS54 and AS55) differ substantially the one from the other in fabric, so much so that it is indicated that only one is of Koan manufacture while the other may be pseudo-Koan.

Such local trade was probably heavier in the direction of Rhodes than back to the islands. There is no earlier occurrence of a Knidian or Koan wine amphora at Serçe Liman since their markets lay mainly to the west and north (Magie 1950:50-51). By the 2nd century B.C., however, Rhodes' position as emporium was so strong that produce destined for all parts of the eastern Mediterranean shipped from all parts of the eastern Mediterranean and beyond passed through there.

This last is in all likelihood the explanation of the remaining 2nd-century B.C. artifacts from Serçe Liman. The scope of trade represented centers mainly, after eliminating the Rhodian and local amphorae from consideration, on the Levantine coast -- a trait which we have seen in previous

centuries (Rostovtzeff 1953:463). The furthest extent of the trade mechanism is represented by the Graeco-Italic amphora, AS57. The Romans had begun to enter the eastern Mediterranean in a political sense, very reluctantly in the early 2nd century B.C. though trade relations had been established considerably earlier.

The remaining, undiscussed artifacts of the 2nd century B.C. recovered at Serce Liman are anonymous. Their value in examining the trade situation during this century lies in their very anonymity. Each could have been produced at any one of a number of places in the Hellenistic world. Pottery had become, in many ways, so international and institutionalized in character that it is often impossible to determine where a type, such as the lagynos or unguentarium, originated. Craftsmen travelled freely and took shapes with them.

1st Century B.C.

AS67 Amphora

EL EL

Max. h. c.0.476; max. d. 0.274 (just below second ridge); neck h. overall 0.307; neck h. to first ridge 0.149; to second ridge 0.158; handle h. 0.231; max. neck d. 0.194 (at base of handle attachment); min. neck d. 0.110 (at top of handle attachment); handle w x th. 0.055 x 0.022.

Very worn. Rim, neck, handles and shoulder preserved. Brown fabric.

Double handles form 90⁰ angle. Attached roughly. Bell neck.

Cf. AAWT, combination of features from #56 and #57.

AS68 Amphora

KR

KL-10

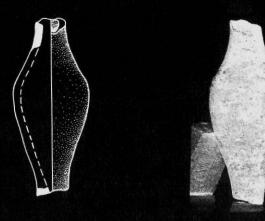
Max. h. 0.108; toe d. 0.058; th. 0.005. Part of toe and lower body preserved. Orange-brown fabric with white and black inclusions.

Body tapers to offset toe. Exact profile of toe uncertain. Flares from body and has a boss on the bottom (?).

Cf. Tarsus I, fig. 191A.

AS69	Amphora	HM
	Fig. 28, p.99	QR20
	Max. h. c.0.600; rim d. 0.108; handle h. 0.106;	
	handle w.x th. 0.027 x 0.028; th. 0.014.	
	Heavily concreted. Rim, one handle and good par	t of
	body preserved. Brown fabric with vacancies.	

Rim has depression on top and is squared off from thinner body wall on interior and exterior. Long flaring body is ridged. Handle attached vertically





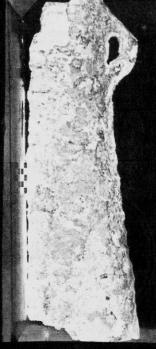




Figure 28

on side, below rim. Cigar-shaped body.

Cf. G. Charlin et al., 1978, "L'Epave Antique de la Baie de Cavaliere" Archeonautique II: fig. 13: Punic form not found in land excavations.

AS70 Kylix

FV

Fig. 29, p.101 location unknown Max. h. c.0.052; d. 0.180; ring d. c.0.063; th. 0.005. Heavily concreted; worn. Base, most of bowl, part of rim and parts of two handles preserved. Red and black fabric unevenly fired.

Plain, vertical rim. Body slopes to form shallow bowl and flattens out at ring base. Ring flares slightly. Handles attached on rim horizontally.

Cf. AA 5, F32, pl. 1 and p. 14.

AS71 Kylix

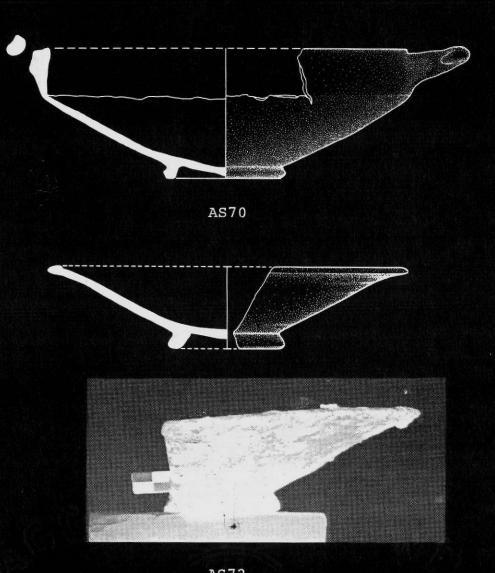
HY

location unknown

Max. h. 0.070; d. 0.177; w of handle 0.032; th. 0.003. Heavily concreted. Fragmentary but profile complete. Red-brown fabric.

Plain, vertical rim. Body slopes to form shallow bowl and flattens out at ring base. Ring flares slightly. Handles attached on rim horizontally.

Cf. AS70.



AS72



AS73

FI

JU

AS72 Plate

Fig. 29, p.101 location unknown Max. h. 0.032; rim d. 0.019; ring d. 0.082; th. 0.004. Lightly concreted and worn. Most of ring and approximately one-half of body and rim preserved. Pale orange fabric.

Plain oval rim delineated by groove on interior. Rim curves to steeply sloping body. Shallow bowl. Plain ring base.

Cf. similar plate in Tarsus I, fig. 179, #38.

AS73 Amphoriskos

Fig. 29, p.101 KM-5 - KM-15 Max. h. 0.063; base.d. 0.028; th. 0.003. Concreted and worn. Base and part of body preserved. Brown fabric.

Body tapers to proportionately large disc foot. Base pierced - deliberately? Prominent wheel marks on interior wall.

Cf. John Hayes, 1971, "Four Early Roman Groups from Knossos" <u>BSA</u> 66: fig. 8,5; <u>AA</u> 5, F48-49: transitional Hellenistic-Roman type.

AS74 Ring base

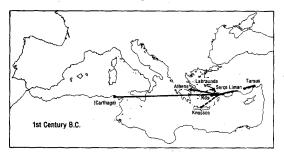
KŴ

LM~10

Max. h. 0.023; ring d. 0.090; th. 0.006. Concreted and worn. Part of ring and body preserved. Brown fabric.

Body and ring flare equally from juncture. Slight bevel to ring. Almost flat on bottom.

Cf. Pontus Hellstrom, 1965, <u>Pottery of Classical</u> and Later Date: Terracotta, Lamps and Glass, Labraunda Lund: #198: Eastern Sigillata A.



The artifacts of the 1st century B.C. from Serçe Liman reflect the loss of status suffered by Rhodes (Magie 1950: 111) and its ensuing eclipse by Tarsus (Magie 1950:384). The areas represented by artifactual evidence are not as diverse as in previous centuries. This may be because most fall into the second category discussed at the beginning of this paper, of artifacts for which no place of manufacture has been determined. In part this can be explained by the universality of character which had been assumed by much of the Mediterranean-produced pottery during the late Hellenistic and Early Roman periods. However, parallels for these pieces are not as diverse the one from the other as in preceding centuries. They are paralleled mainly in the eastern Mediterranean at sites of acknowledged importance such as Athens and Antioch.

Approximately one-half of the items without a known center of manufacture have been paralleled by finds from the Hellenistic and Roman levels at Tarsus. By the middle of the century, Tarsus had gone a long way toward replacing Rhodes as the major trading center of the eastern Mediterranean (Magie 1950:384). This can be seen in the physical evidence recovered at Serçe Liman -- artifacts AS68 and AS72. Though there is no certainty that these objects were made in Cilicia, their only known parallels were found there. Whether they were imported or local does not detract from the identification of Cilicia as a focal point of eastern trade. It should be kept in mind that it was during this period that Cilicia was annexed to the Roman Empire and that piracy was finally put down along the southern Anatolian coast by Pompey (Bean 1971:280).

The two remaining artifacts from the western Mediterranean indicate the blossoming Roman presence in this area along the southern Anatolian coast, facing toward the east and the continued presence and, indeed, expansion, of the vanquished Puns. Very little is known certainly about the seafaring extent of the Punic people after their final subjugation by the Romans in 150 B.C. (Burn and Edwards

1970:103); artifact AS69 may not tell us very much more about this. Punic hole-mouth jars have often been recovered during the excavations of Roman shipwrecks of the 1st centuries B.C. and A.D. (Joncheray 1976:27). These jars occur in small numbers in the galley areas of the wrecks and are generally opined to have carried salted fish or fresh water; they were not used to carry any trade item (e.g. Joncheray 1973:40). The ships from which the Punic jars have been recovered have not been identified as Punic themselves in any case. This uniformity of the use of a ceramic foreign to the nationality of the ship which carried it is unique thus far in the study of nautical history. Because of this oddity, we cannot say that a Punic ship sheltered at Serce Liman during the first century B.C. An Italian presence is noted in artifact AS57 and may be extended to include AS69.

The areas of the eastern Mediterrranean represented at Serve Liman had become even more localized in the first century B.C. than they had been in preceding centuries. This may be attributed to the disturbances occasioned by Roman entry into the area and the wars resulting in the formation of the province of Asia. A contributing factor was also the decreasing importance of Rhodes as an emporium of Aegean and eastern Mediterranean commerce.

1st Century A.D.

AS75 Amphora

HN MN-5

Max. h. 0.123; th. 0.007.

Concreted and worn. Part of shoulder and one handle attachment preserved. Light brown fabric.

Neck curves out to sharp carination. Body flares slightly below it. Double handle attached at base of curve to carination. Bell shaped.

Cf. Agora P12504, P2101.

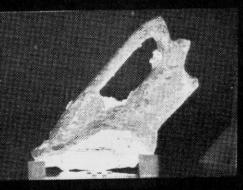
AS76 Amphora FH Fig. 30, p.107 JK10 Max. h. 0.080; handle h. 0.077; handle w x th. 0.050 x 0.027; rim d. c.0.180; th. 0.007. Concreted. Part of rim, neck and handle preserved. Brown fabric with dark inclusions.

Oval rim separated from cylindrical neck by incised line. Peaked double handle attached below rim. Bridge of terracotta attaches handle to neck. Cf. Agora P28555.

AS77 Amphora ET Fig. 30, p.107 QR45 Max. h. 0.408; neck h. c.0.208; neck d. 0.085; rim d. c.0.100; swell d. 0.132; handle h. 0.315; handle w.x



AS76



AS77



AS78

th. 0.045 x 0.023; th. 0.006.

Very concreted. Rim, neck, one entire handle and part of shoulder preserved. Brown fabric with black inclusions.

Plain circular rim on long, cylindrical neck. Neck breaks from straight to convex swell at mid= handle, flares down to handle base where curve is broken by a ridge. Below, swell is the same. Double handle attached on neck and at ridge. Handle arches up to peak then vertical shaft extends straight down to ridge.

Cf. AAWT, #57; Agora P12504, P11690:

AS'	78	Amph	ora

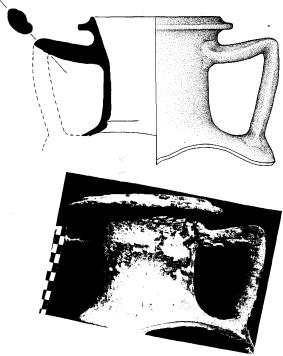
Fig. 30, p.107 MN20 Max. h. 0.156; toe h. 0.075; th. 0.006. Concreted. Toe and part of lower body preserved. Orange-brown fabric.

Body tapers to long, pointed toe. Base of toe rounded.

Cf. Grace 1973, fig. 8,15: Pamphylian.

AS79 Amphora LG Fig. 31, p.109 KLM5 Max. h. 0.163; mouth d. 0.132; rim d. 0.160; rim w 0.016; handle h. 0.107; handle w x th. 0.030 x 0.015;

DN



AS79

Figure 31

neck d. 0.095; th. 0.005.

Concreted and worn. Chip out of rim. Part of one handle missing, otherwise complete to shoulder. Orange-brown fabric.

Rim has exterior ledge just below lip. Lip curves down and out to ledge. Ledge curves in to cylindrical neck. Narrow, sloping shoulder. Flat handles attached below ledge, project up slightly and then turn down at more than 90° angle to attach at base of shoulder. Groove at base of neck on interior.

Cf. Ostia I, pl. 39.

AS80 Storage jar

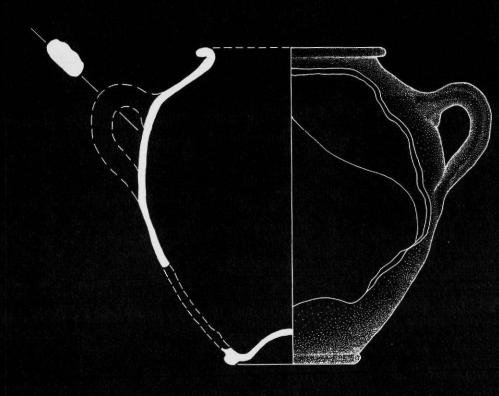
HF JK30

Max. h. 0.208; ring d. 0.148; th. 0.007. Concreted. Base and one-half of lower body preserved. Red-brown fabric.

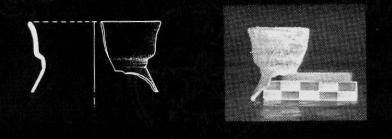
Body tapers steeply to ring base. Outer surface of ring rounded. Base within flat.

Cf. Ostia I, 24, #436.

AS81 Jug GE Fig. 32, p.lll location unknown Max. h. 0.180; rim d. 0.109; base d. 0.066; th. 0.003. Very concreted. Part of rim, shoulder, body. base



. AS81



AS82

and one entire handle preserved. Pale brown fabric with small black and white inclusions.

Out-turned, flat rim separated from shoulder by deep groove. Flat shoulder slants down to carination; body rounded to incipient ring base. Base offset by slight groove both at base of body wall and immediately after turn to base. Deep kick with small, circular depression at head of kick echoed by small boss on exterior surface. Oval ridged handle attached on carination, arches up slightly and attaches again below maximum diameter; smooth join to body. Rim is uneven.

Cf. Tarsus I, p.268, #709.

AS82	Jug	HI2
	Fig. 32, p.111	PQ10
	Max. h. 0.037; max. d. c.0.065.	
	Concreted. Part of rim and neck preserved.	Pale
	orange fabric.	

Plain vertical rim pinched just above mid-point. Base of rim and top of neck juncture sharply marked by indentation. Neck flares in a curve from pinch. Fine ridge at base of rim. Thin-walled.

John Hayes, 1973, "Roman Pottery from the South Stoa at Corinth" <u>Hesp</u>. 42: 460: Italian Thin-Walled or Eggshell ware; Cedric G. Boulter, 1963, "Grave in Lenormant Street, Athens" <u>Hesp</u>. 32: 129 and pl. 45 (P10338).

AS83 Jug

CI

Fig. 33, p.114 PQ35 Max. h. 0.234; rim d. 0.112; handle h. 0.126; handle w x th. 0.027 x 0.015.

Lightly concreted. Most of rim, entire handle, neck and part of shoulder and body preserved in two fragments.

Rim flat on top and out-curving. Neck cylindrical with two grooves below rim. Shoulder sloping to globular body. Oval handle springs from lip to shoulder.

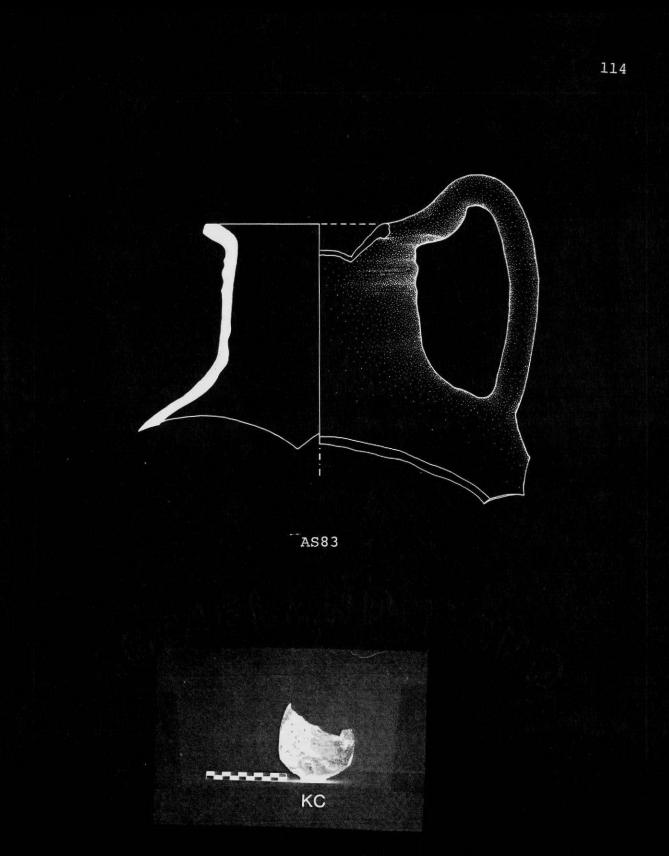
Cf. AA 5, H17; Cedric G. Boulter, 1963, "Graves in Lenormant Street, Athens" <u>Hesp</u>, 32: pl. 45; <u>LRP</u>, form 126; Charles K. Williams, 1974, "Excavations at Corinth, 1973" Hesp. 43: 29 and pl. 7 (C-73-279).

AS84 Jug

KC

Fig. 33, p.114 KL-5 Max. h. 0.095; disc d. 0.030; max. d. 0.100; th. 0.002. Lightly concreted and worn. Base and lower body preserved. Red-brown fabric.

Body swells to low maximum diameter then tapers sharply to disc base, forming a low carination. Flat







disc base offset from body. Interior depression corresponds to disc.

Cf. James A. Sauer, 1973, <u>Heshbon Pottery 1971</u>, (Michigan): 20-21, #40; William L. Reed, 1957-58, "The Excavations at Dibon (Dhiban) in Moab. Part II: The Second Campaign, 1952" <u>AASOR</u> 36-37: pl. 70,6 and 7; M. Cohen, 1976, "Excavations at Horvat Haluqim" <u>Atiqot</u> 11: 49, fig. 13, 2 and 3.

AS85 Bowl

JB

Fig. 34, p.117 MN-5 Max. h. 0.058; d. 0.120; rim h. 0.036; ring d. 0.048; th. 0.002. Concreted. Profile and one handle preserved. Brown

fabric.

Tall, vertical rim. Slight depression at base of rim, at carination. Base slopes to create deep bowl. Flattens out over ring foot. Low ring flares. Sharply cut. Handle attached just below lip. Oval cross-section. "Knotted" handle uneven. Top is higher than lip.

Cf. AA 5, G52, pl. 66; John Hayes, 1971, "Four Early Roman Groups from Knossos" <u>BSA</u> 66: 258 and fig. 8,8: Koan.

AS86 Bowl

JL

Max. h. 0.037; rim d. 0.140; th. 0.002. Lightly concreted. Part of rim and one entire handle preserved. Brown fabric.

Thin, plain, vertical rim. "Knotted" handle attached unevenly below lip. Top of handle higher than lip. Thumb or finger marks preserved on "knots". Cf. AS85.

AS87 Bowl

AL

location unknown

Max. h. 0.030.

Slightly concreted. Small fragment of carination without rim or base preserved. Red-brown fabric.

Body wall curves down almost vertically and then turns to more horizontal slope. Juncture marked by carination.

Cf. AS85.

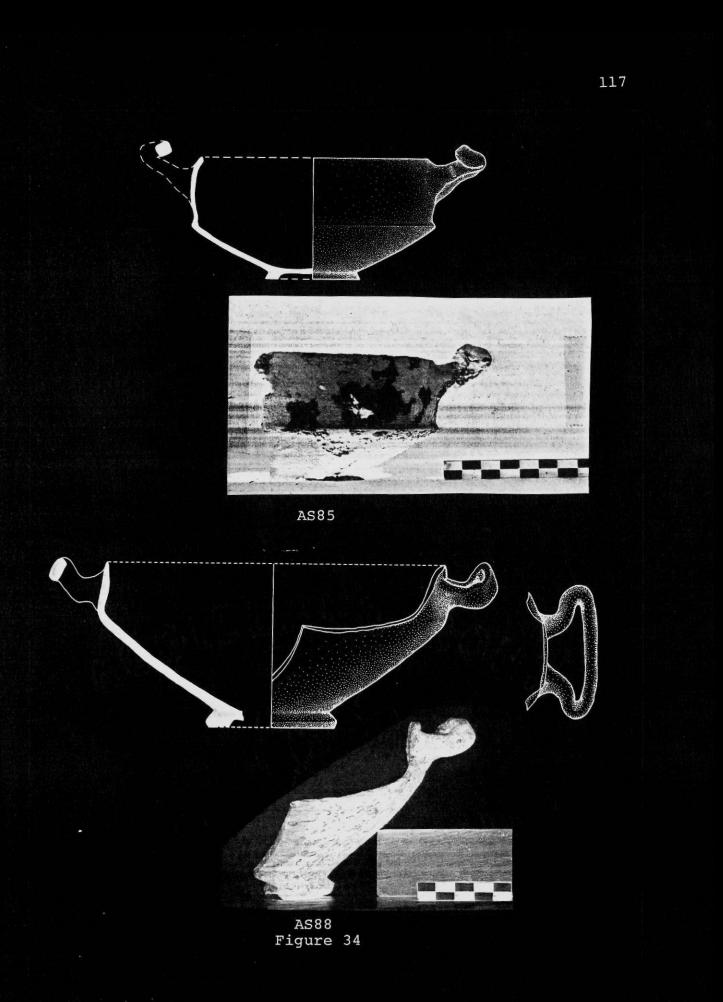
AS8	8	Bowl

GI JK15

Fig. 34, p.117

Max. h. c.0.09; d. c.0.18; handle w. 0.072; th. 0.003. Complete profile and one handle preserved. Fine brown fabric.

Vertical lip with sharp turn to sloping walls. Body walls straight diagonal to ring base. Ring flares and is beveled on exterior edge. "Bracket"



handle attached on rim. Oval cross-section.

Cf. AS85: similar.

AS89 Plate

JN

KL-5

Max. h. 0.015; ring d. 0.049; th. 0.003. Concreted and worn. Ring base slipped; small section of body preserved. Orange fabric.

Body joins ring at high angle. Sharply cut ring flares from attachment. Exterior base comes to a point in the center. Interior continues curve of body.

Cf. AA 5, G82, pl. 72.

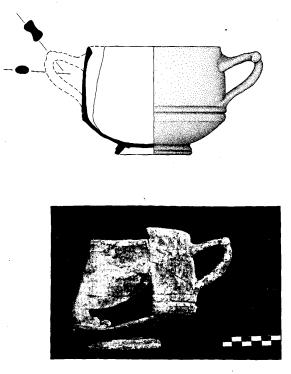
AS90 Cup

Fig. 35, p.119

CU MN10/15

Max. h. c.0.118; d. 0.150; handle h. 0.052; th. 0.002. Very concreted. Badly fired. Complete profile and one handle preserved. Orange and grey fabric with black and white inclusions.

Plain rim slightly thicker on inside of body. No demarcation between rim and straight, vertical sides. "Knucklebone" handle attached vertically on straight wall. Below handle, two concentric grooves traverse body. Below grooves, body turns sharply and tapers sharply to slightly flaring ring base.



AS90



Low, well defined ring with ridge at inside edge.

Cf. Zdenko Brusic, 1975, "Anticki Brodolom kod Zlarina" Povremene Izlozbe Muzeja Grade Sibenika LXII.

AS91 Glass bottle

Fig. 36, p.121

HIL PQ10

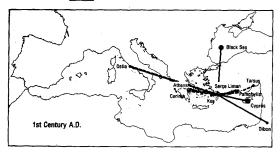
Max. h. 0.170; rim d. 0.034.

Rim, neck and shoulder preserved. Glass has bluish

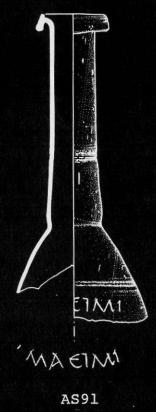
tint.

Heavy, vertical rim with depression on top. Separated from neck. Long neck to globular shoulder. Band of etching preserved at mid-shoulder. Fragmentary inscription on shoulder. Two lines graven on shoulder above inscription.

Cf. Ostia I, #160: Cypriote.



The situation noted for the trade of the 1st century B.C. had been ended by the 1st century A.D. The wars which



1





AS94 (1:10)

AS92

Figure 36

predominated in Anatolia in the 1st century B.C. had been finally ended by the Romans and comparative peace had begun to restore economic balance in the area. Artifacts in the 1st century A.D. assemblage from Serge Liman represent trade from the furthest extents of the Mediterranean. Evidence of local trade was found alongside #Vidence for the last leg of the Far Eastern trade and the Italian trade.

A preponderance of the artifacts recovered were made in Kos. This proportionately heavy export from Kos reflects the good economic position of the island, no doubt due in part to the blanket tax exemption granted by the Emperor Claudius and re-affirmed by Titus (Magie 1950:570). AS75, AS76, and AS77 represent three different periods of the lst century A.D., indicating a continuous export on the part of the Koans. The very great dissimilarity between AS75 and AS77 on the one hand and AS76 on the other may indicate that more than one substance was shipped from Kos in amphorae. Artifacts AS85 and AS86 (and perhaps AS86) are further indications of a Koan presence in the harbor, whether they are identified as trade items or ship's gear.

A nation not represented until now, oddly enough, is Pamphylia. Under Roman rule the area seems to have been consolidated and organized with the result that a fragment of a Pamphylian amphora was lost or discarded at Serçe Liman in the 1st century A.D. The destination of the ship which carried this amphora was more likely Delos than Rhodes,

in view of the decline of Rhodes noted above (p. 105).

The glass bottle neck AS91 was made in Cyprus. It is of a common Mediterranean type except for the double-folded rim. This trait has been identified repeatedly as Cypriote and such vessels have been found as far afield as Italy, though rarely. In the case of AS91, its planned destination was not necessarily any further afield than a city on the Anatolian coast but it should be noted that the possibility of its being routed for the western Mediterranean is feasible in light of the eminence of the Romans in the area at that time.

The juglet AS84, identified in one instance as Nabataean, represents a link in the trade supplying Rome with the luxury items of ex-Mediterranean territories -- India and Arabia in particular. The Nabataean Arabs had control of this route as far as Petra in the Hellenistic period (Roebuck 1966:393) and in all probability they continued to man it under Roman rule.

From the completely opposite direction came the cup AS90. This artifact is more perfectly paralleled than any other in the entire collection from Serce Liman by a cup from the Black Sea. There is no evidence of where these two nearly identical kantharoi were made but the type was reasonably typical throughout the northeastern Mediterranean.

Amphora AS80 represents the blossoming trade between east and west which developed along with the Roman Empire. This amphora of Ostian fabric is interesting to note as substantiation for an hypothesis of the nearly immediate absorption of Anatolia into the Italian marketing sphere. Ostia was the clearing house for the west just as, earlier, Rhodes had been for the east.

The remaining two artifacts happen to have been paralleled by finds in Athens but seem to be of common eastern Mediterranean types.

The underlying commonality of all these objects is their origination in areas controlled during the 1st century A.D. by the Roman Empire. The process of acquisition of land had been carried out fairly thoroughly in the preceding century and comparative solidarity and peace had allowed a resurgence in trade between the various parts of the Mediterranean, both east and west.

2nd Century A.D.

AS92 Amphora GV Fig. 36, p.121 JK45 Max. h. 0.272; rim d. 0.130; handle h. 0.244. Part of rim, neck and one handle preserved. Brown fabric.

Rim rounded with sharp termination on neck. Neck may have slight curve out. Horned handle attached below lip. Bowed.

Cf. AAWT, #62; Agora P21781: Rhodian.

BX MN15

DT

NP20

max. h. 0.257; handle w x th. (top) 0.030 x 0.055, (bottom) 0.033 x 0.030.

Bow and horn of handle preserved without attachment. Brown fabric.

Horned handle. Vertical shaft bowed.

Cf. AAWT, #62: Agora P3150: Rhodian.

AS94 Amphora

Fig. 36, p.121

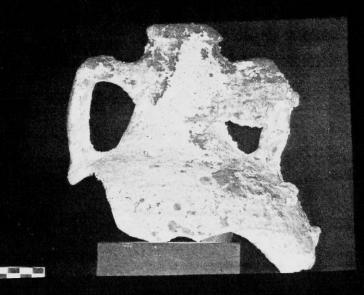
Max. h. c.0.478; rim d. 0.120; rim h. 0.018; neck d. 0.110; neck h. 0.247; handle h. 0.249; handle w x th. 0.035 x 0.034.

Concreted and worn. Rim, neck, handles and part of body preserved. Brown fabric.

Rounded rim. Cylindrical neck. Bowed, horned handles attached below rim and on body. No delineation of shoulder. Long ovoid body.

Cf. AAWT, #62; Agora P21781: Rhodian.

AS95	Amphora				
	Fig. 37, p.126	JK-5			
	Max. h. 0.210; neck h. 0.107; handle h. c.0.085;	neck			
	d. 0.075.				
	Neck, handles and shoulder preserved. Brownish				



AS95



AS96 (1:10)

fabric.

Small mouth, short neck. Rounded out-curving lip. Flat handles attached below lip and below neck. Juncture of neck and shoulder a fairly sharp curve. Handles arch up. Shoulder curves to perhaps ovoid body.

Cf. Agora P3297.

AS96 Amphora

LF

Fig. 37, p.126 KLM5 Max. h. c.0.540; handle h. 0.098; th. 0.010. Concreted and worn. Rim, neck, one handle, part of shoulder and body preserved. Orange-brown fabric.

Thick oval rim with offset band at base. Delineated from flaring neck by incised line. Rounded, sloping shoulder curves without break from neck to body. Oval handle, ridged down spine, attached above mid-neck and high on shoulder forming arch.

Cf. Ostia I, #523.

AS97 Table amphora

Fig. 38, p.129

HA JK25

Max. h. c.0.214; th. 0.011.

Heavily concreted. One handle attachment, portion of shoulder and body preserved. Brown fabric with black inclusions. Shoulder slopes to carination and body tapers. Body ridged. Oval handle attachment at carination. Projects at sharp angle from shoulder. Body walls thick.

Cf. AA 5, J49, pl. 14, p. 56.

AS98 Lamp

Fig. 38, p.129

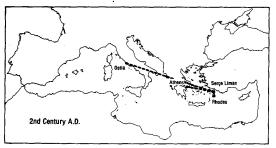
JA KL-10

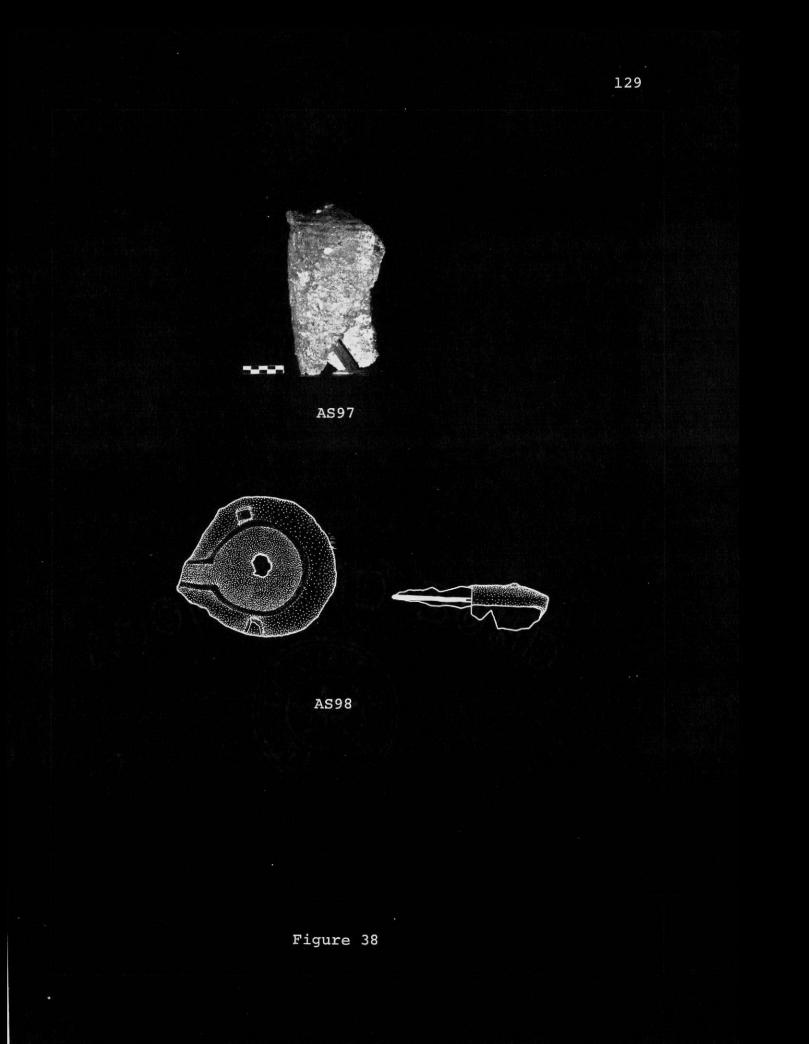
Max. h. 0.024; d. 0.072; th. 0.002. Concreted and worn. Top section preserved. Brown

fabric.

Body slants out to flat top. Small hole in top for wick. Square ridge on top traces nozzle and circular body of lamp.

Cf. KSW, pers. comm.: Italian firma lamp -made in northeastern Italy, popular in Hadrianic times.





Social and economic conditions were good in the Roman province of Asia under the Emperors Trajan, Hadrian and the Antonines (Parker 1938:37). Cities flourished and trade was brisk. Imports arrived in Asia from the west, Rhodes continued to be involved in the wine trade and, once again, parallels for un-provenanced artifacts are to be seen in Athens.

As in the preceding century, west Mediterranean artifacts are numbered among the finds at Serçe Liman. These include a firma lamp, mass produced in northern Italy (AS98), and a Betique amphora from Spain (AS96). These products were probably shipped east from the commercial center of Ostia. Neither type is found commonly in the east but both are found in substantial numbers in the west and in Ostia. Shipping, from out of Ostia to the eastern Mediterranean, was continuous during the period of Rome's dominance in the east. The volume of this export emanated mainly from Ostia. The possiblity of the north Italian and Spanish artifacts being transported separately from this system exists but the probability is that they were transported <u>en</u> masse from Ostia.

Rhodes may have declined from its position as the main emporium in the eastern Mediterranean but it never ceased to export wine. This was its chief export and, after its decline, its chief livelihood. The effect of its decline on the use of the harbor at Serçe Liman is apparent in the

map above. The absence of artifacts from the east at Serçe Liman does not indicate a stoppage of exports from east to west; on the contrary, this exchange of goods was probably extensive but with Rhodes no longer serving as the common marketplace, ships did not enter Serçe Liman as often. This applies to trade from east to west which is not represented in the assemblage but what of that from west to east which is represented? This is unanswerable; perhaps the eastern seafarers preferred the harbor at Loryma to that at Serçe Liman; perhaps they followed a different route which took them south of Rhodes to Crete.

Once again, it has not been possible to identify several of the recovered artifacts by place of manufacture but they are paralleled at Athens. This situation has been recurrent since the 2nd century B.C. Athens received imports from all over the Mediterranean during these four centuries. Whether this was a normal state of affairs for other cities of the eastern Mediterranean as well, I don't know. It is obvious at Athens because of the extensive and thorough excavations which have been carried out there. In any case, the artifacts from Serçe Liman that have been paralleled there indicate some commonality between the imports of the western and eastern Aegean. The whole was a united market area.

3rd Century A.D.

AS99 Amphora

Fig. 39, p.133

DC MN15

Max. h. c.0.146; neck h. 0.089; rim d. 0.115; handle h. 0.107; handle w x th. 0.046 x 0.018; th. 0.007. Concreted. One complete handle, part of shoudler, neck and rim preserved. Orange fabric.

Rim flat and horizontal with groove marking juncture with neck. Short neck bulges under rim; sharp curve to shoulder. Flat handle attached below rim on bulge and on sloping shoulder. Attachment on neck crude; on shoulder, neater.

Cf. KWS, pers. comm. -- Corinth excavation -C-62-9 ?? in 3rd century context.

AS100 Amphora

AG LM15

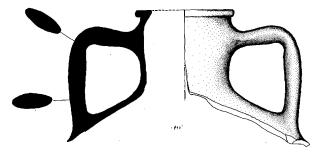
Fig. 39, p.133

Max. h. c.0.205; mouth d. 0.085; handle h. 0.109; handle w x th. 0.040 x 0.022.

All of one handle, most of second, rim, neck and part of shoulder preserved. Brown fabric.

Collar rim. Heavy and rounded with abrupt termination on neck. Short neck with curve to sloping shoulder. Neck terminates just below handle attachment. Crescent handles thick. Groove terminates at neck and shoulder.

Cf. AA 5, K111, pl. 15 and p. 68; Agora P11936.



AS99



Figure 39

AS101 Amphora Fig. 40, p.135 Max. h. c.0.120; toe d.0.057; th. 0.0065. Concreted. Toe and lower body preserved. Brown

fabric with black inclusions.

Body tapers to cylindrical toe. Depression in base of toe echoed on interior. Uniform thickness throughout.

Cf. AA 5, K109, pl. 15.

AS102 Amphora

HIH

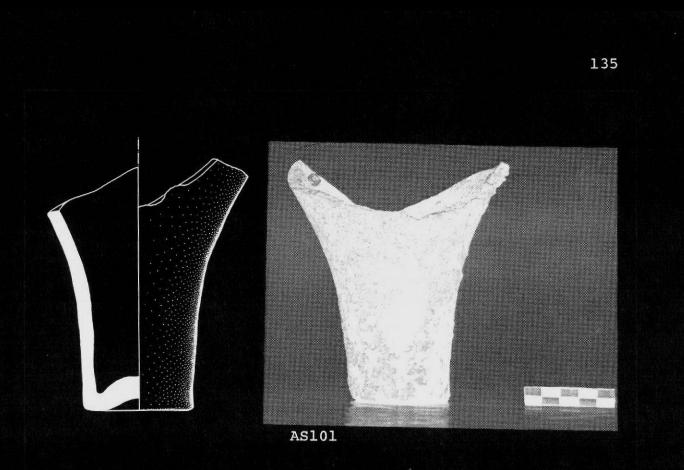
Fig. 40, p.135 PQ10 Max. h. c.0.310; max. d. 0.252; handle h. 0.086; handle w x th. 0.050 x 0.017; th. 0.008. Concreted and worn; pitted. Part of rim, shoulder and body, one entire handle, preserved. Red-orange fabric.

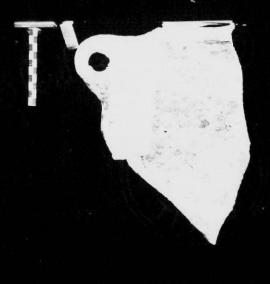
Plain squared rim delineated from shoulder by undercutting. Shoulder is horizontal. Body is almost vertical. Band of deep, combed ridges on carination. Body plain below this. Large, flat loop handle attached just before ridging starts and just before it stops.

Cf. Agora P28298: Palestinian; Zemer, #49-53, p. 61; Jeremy Green, n.d., <u>Cape Andreas Expedition</u> <u>1969</u> (Great Britain): p. 18, fig. 7; Allyn L. Kelley,

EO

KT.10





AS102

Figure 40

1976, The Pottery of Ancient Egypt: Dynasty I to Roman Times (Toronto): pl. 99.4.

AS103 Amphora

HI19

PQ10

HL

Max. h. 0.099; handle h. 0.070; handle w x th. 0.045 x 0.019; th. 0.013.

Concreted and worn. Part of rim, shoulder and body, one entire handle preserved. Red-orange fabric.

Plain squared rim delineated from shoulder by undercutting. Shoulder is almost horizontal. Body in almost vertical. Band of deep, combed ridges on carination. Large, flat loop handle attached just before ridging starts and just after it stops. Cf. ASI02.

AS104 Amphora

Fig. 41, p.137 PQ15/20? Max. h. c.0.44; max. d. 0.324; rim h. 0.022; neck h. 0.167; handle h. 0.164; handle w x th. 0.041 x 0.021; th. 0.011.

Lightly concreted. Rim chipped, lower body missing. Brown fabric.

Pointed rim delineated from cylindrical neck. Shoulder slopes to tapering body. Handles carefully patterned with three grooves running down spine. Oval



AS104 (1:10)



AS105



AS106

Figure 41

in section. Attached below rim and on shoulder, handles extend horizontally, then curve to straight vertical.

Cf. Agora, Benachi Lamp Jar (no inv.#): Egyptian?

AS105 Amphora

 Fig. 41, p.137
 KL-5

 Max. h. 0.174; rim d. 0.100; handle h. 0.106; handle

 w x th. 0.039 x 0.022; th. 0.006.

 Concreted. Part of rim, neck, shoulder and all of one

handle preserved. Dark brown fabric with black

Square rim with depression on top offset from neck by groove. Neck straight to base of top handle attachment then flares out to sloping shoulder. Oval handle, attached below rim and on shoulder, extends out and then curves down and out to shoulder.

Cf. KWS, pers. comm. -- Spanish.

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AS106 Amphora
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AI
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Fig. 41, p.137 IM15 Max. h. c.0.13; max. d. 0.175; ring d. 0.102; ring h. 0.019; th. 0.006. Over half of ring base and part of lower body preserved. Brown fabric.

кх

Body wall, near vertical, tapers to ring. Ring and body separated by incised line. Ring vertical. Cf. AA 5, M94, pl. 73 and p. 93; Samaria, p. 302.

AS107 Amphora

location unknown

Max. h. c.0.32; max. d. 0.246; th. 0.010. Lightly concreted. Base of neck, shoulder, handle attachments and part of body preserved. Red-brown fabric.

Square groove marks juncture of neck and shoulder. Shoulder slopes to sharp carination. Body cylindrical with almost no taper as far as preserved. Oval handles attached on shoulder at carination.

Cf. Agora P21453.

AS108 Cooking pot

Fig. 42, p.140

Max. h. c.0.21; lip width 0.028; th. 0.007. Most of base, about one-third of body and lip preserved. Grey-brown fabric with black inclusions.

Flat horizontal rim separated from body on exterior by depression. Body ovoid. Base flat with fairly sharp meeting with body. Top of rim decorated with incised wavy line before firing.

HW

BQ MN0

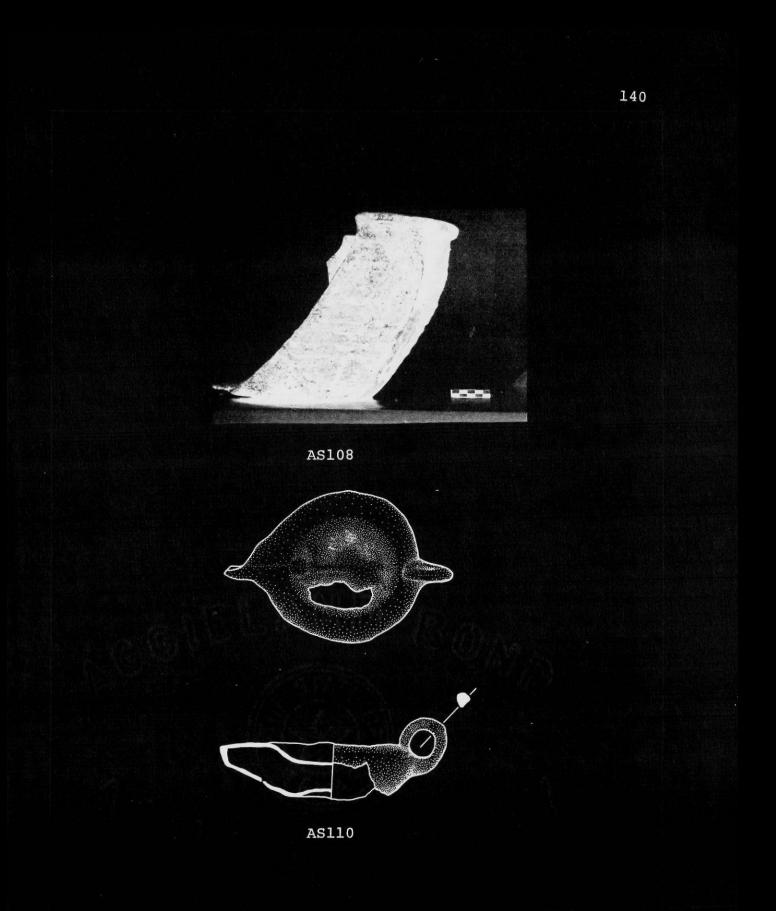


Figure 42

Cf. Sebastyan Morints, 1961, "Obrik Dakizskoi Kupyturyi v Rimskuyu Epoku" Dacia 5: 409.

AS109 Bowl

FJ

MIN O

Max. h. 0.087; ring d. 0.074; th. 0.003.
Very concreted and worn. Ring base and lower body preserved. Pale orangé fabric.

Ring base delineated sharply from globular body. Square cut ring. Walls of base extremely thick tapering to 0.003 m at break/rim.

Cf. H. Dunscombe Colt, ed., 1962, <u>Excavations</u> at Nessana (London): pl. XLIV.

AS110 Lamp

DS

Fig. 42, p.140 RS35 Max. h. 0.041; d. 0.080; th. 0.0015. Heavily concreted. Many fresh breaks. Body, handle and part of nozzle preserved. Light brown fabric with black glaze (?).

Simple ring handle attached vertically high on back of body. Pierced by small hole. Body concave on top and bottom. Nozzle curves out from body gently.

Cf. Judith Perlzweig, 1963, Lamps from the Athenian Agora (Princeton): #107. 141

AS111 Tray

Fig. 43, p.143

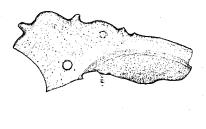
Max. h. 0.017; rim w. 0.014; th. 0.002. Not concreted; cleaned when recovered? Part of one end and section of rim at other preserved. Clear, pitted glass. Molded.

Flat, scalloped handle at each end of tray. Oval tray. Symetrical pattern on handle consists of peakhill alternation. Hole pierces preserved handle just beyond dish. Ground lines mark central peak and outer half of other two. Circle ground at base of second hill on preserved right portion of handle. Rim marked by ridge on outer edge. Shallow dish. Second piece preserved portion at other end of tray from end of handle along side, also right side.

Cf. Elsbeth B. Dunesbery, 1971, "Ancient Glass in the Collections of Wheaton College" Journal of <u>Glass Studies</u> 13: pp. 11-12, #7; W.C. Braat, 1963, "The Glass Collection of the Rijksmuseum van Oudheden at Leiden" <u>Oudheidkindige Mededelingen XLIV</u>: pl. XL, #22; C. Isings, 1957, <u>Roman Glass from Dated Finds</u> (Groningen/ Djakarta): pp. 117-118; Donald B. Harden, 1936, <u>Roman Glass from Karanis (Ann Arbor)</u>: p. 48.

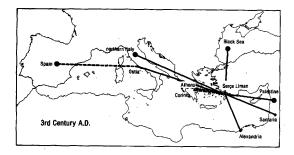
In sharp contrast to the preceding century, the 3rd century A.D. was a time of great economic distress, parti-

LP KLM5



AS111





cularly for the lower classes in the rural areas. With his accession to power, Septimius Severus caused Byzantium, Antioch and Lugdumun to be punished for siding with Niger, one of his chief rivals for the position of Emperor. Economic reforms were also institutedwhich taxed the populus more heavily in order to support the army more royally. Asia Minor and Egypt suffered equally on the rural level, distressed to such an extent that land was abandoned after a decline in productivity due to heavy taxes (Parker 1938: Part II, Chapter V).

Syria, like Africa (the home of Septimius Severus), was a province favored by the Severi as the home of Julia Domna, and thus, the province enjoyed a prosperity not common in the 3rd century A.D. (Parker 1938: 121-122; see also Hitti 1951:353). From the province of Syria, amphorae of the same type as AS102 and AS103 were widely exported (Zemer 1977:61) throughout the Mediterranean. By now it should have become apparent that it is amphorae which, by their presence, absence and distribution, signal the existence of a steady trade in basic supplies, such as wine and oil. Also from the Near East came two bowls, AS106 and AS109.

The continued prosperity of the upper classes and the subsequent import of luxury items is reflected in artifact AS111, the glass platter of a type uncommon outside of Equpt (Jones 1964:850; Rostovtzeff 1953:107). Made in Alexandria, this type had also been found in Ephesus where there are indications of relative prosperity (Akurgal 1973: 143). Also paralleled in Egypt is amphora AS104. Whether this amphora is of local manufacture is unclear but if an Egyptian export, some degree of prosperity is indicated in the production of a surplus commodity. This prosperity did not extend, during the 3rd century A.D., to the rural populations of Egypt as noted above but focused on the urban centers. This applies even more strongly if the parallel for AS104 was an import to Egypt as it was found in a large city. If an import into Egypt, the point of origin of the type was probably somewhere in Asia Minor, the Levant or Cyprus as the Egyptian parallel and AS104 are the only known examples of the type, a distribution which does not denote an extensive geographical occurrence.

Once more, the artifact from furthest afield (AS105)

145

may be Spanish in origin. Following the argument put forward for the 2nd century A.D., this amphora was probably trans-shipped through Ostia to the east along the same route as the amphora AS96, paralleled at Ostia.

The lamp, AS110, is of a common type and indicates, besides the international character being assumed by the Mediterranean as a whole, yet another halt in the harbor at Serçe Liman during the 3rd century A.D.

The remaining artifacts (AS99, AS100, AS101 and AS107) are all paralleled at Athens or Corinth. It is somewhat surprising that such distinctive forms and well made pieces should lack provenances but such is the case with all four objects. It is possible that because of the international character being assumed by the Mediterranean, there was a corresponding loss of national identity which resulted in more varied and less long lasting ceramic forms, as well as a generalization of ceramic forms.

4th Century A.D.

AS112 Amphora

CO

Fig. 44, p.148 location unknown Max. h. 0.482; toe h. 0.105; toe d. 0.077 (concreted); toe depth c.0.037; th. 0.006. Very concreted. Surface pitted. Toe and lower body

preserved. Orange fabric.

Long body tapers to cylindrical toe. Juncture

marked by pinch. Toe resembles ring base. High with boss in center.

Cf. AA 5, L33, pl. 16 and p. 77; C. Scorpan, 1976, "Origini si Linii Evolutive in Ceramica Romano-Bizantina (sec. IV-VII) din Spatiul Mediteranean si Pontic" <u>Pontica</u> IX: 156-157, pl. 1 -- discussion of place of manufacture -- Grace: Samos; Gaidukevic: Syria; Panella: west coast of Asia Minor.

AS113 Amphora

Fig. 44, p.148 RS-20 Max. h. 0.281; th. 0.005. Heavily concreted and worn. Lower body preserved. Brown fabric.

Knob on rounded base surrounded by three concentric sharp ridges. Plain bland then faint ridging. Plain band to break.

Cf. Agora P13510.

AS114 Amphora

KN MN-5

Max. h. 0.019; rim d. 0.210. Concreted and worn. About one-half of rim preserved. Brown fabric.

Triangular, slanting rim. Cf. Allyn L. Relley, 1976, <u>The Pottery of Ancient</u>

GG

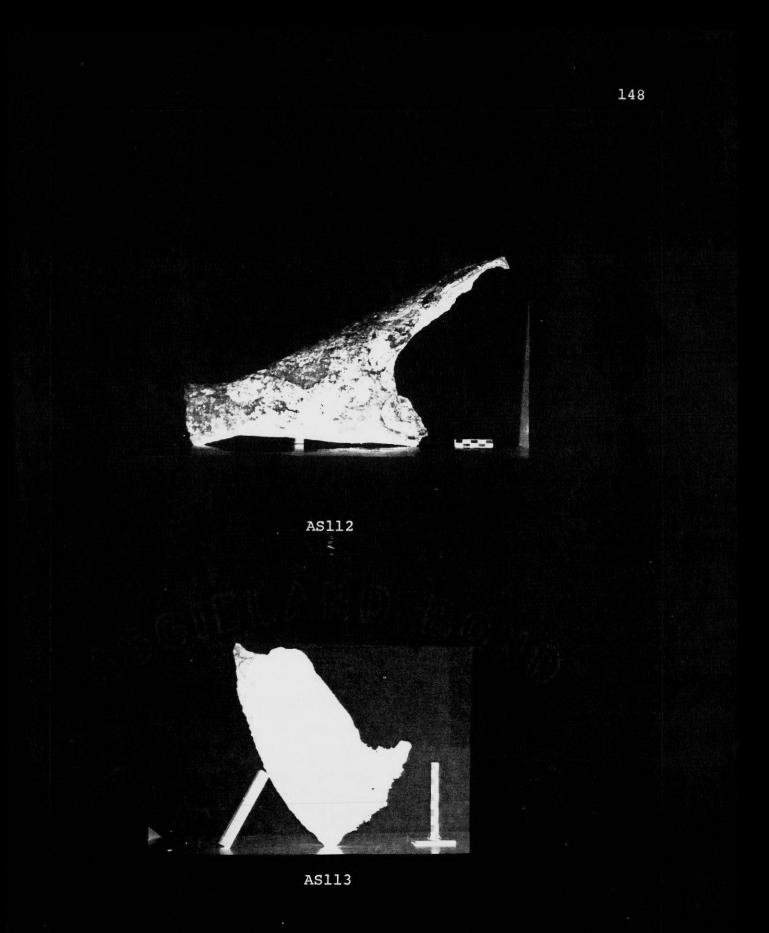


Figure 44

Egypt: Dynasty I to Roman Times (Toronto): pl. 97.28.

AS115 Cooking pot

Fig. 45, p.150

BZ PO10

Max. h. 0.162; rim h. 0.020; rim d. 0.180; handle h. 0.065; handle w x th. 0.017 x 0.016; th. 0.004. Concreted and worn. One entire handle, part of rim and body preserved. Red-brown fabric with black inclusions.

Vertical rim slightly oblique with <u>cyma recta</u> molding at top. Globular body. Small circular handle attached level with top of rim and on body.

Cf. Pinhas Delougaz and Richard C. Haines, 1960, <u>A Byzantime Church at Khirbat al-Karak</u> (Chicago): pl. 53.33.

AS116 Bowl

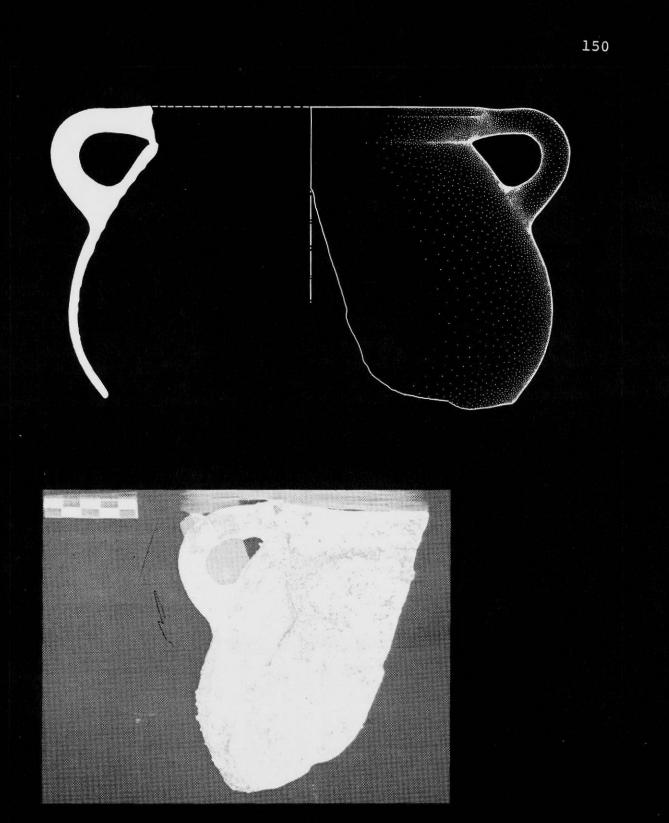
EW

Fig. 46, p.153

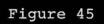
Max. h. 0.032; d. 0.280; rim h. 0.015; th. 0.0015. Concreted and worn. Complete profile. Red-orange fabric; perhaps slipped.

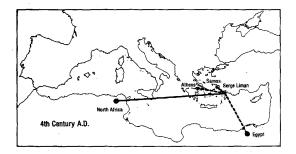
Flat bowl without foot. Plain, vertical rim. Body curves in flat sections to shallow bowl.

Cf. Jean Deneauve, 1972, "Ceramique et Lampes Africaines sur la Cote de Provence" <u>Antiquites</u> Africaines 6: p. 225, pl. LV.









By the middle of the 4th century A.D., the center of power in the Roman Empire had been shifted from Rome itself to Constantinople on the Black Sea (Hitti 1951:349; Magie 1950:41). This change in the focus of the Mediterranean is reflected by the selection of artifacts recovered at Serce Liman. Though we have seen artifacts from each of the areas represented, with a knowledge of the political and economic situation, it is possible to interpret them as a sign of a changing direction of trade. In the earlier centuries of our era, trade had assumed an east-west direction for the most part so that, for instance, several Roman and Spanish artifacts found their way to Serce Liman. With the transfer of the capital to the east, the general direction of trade shifted to a north-south direction in the eastern Mediterranean.

Economically, the situation of the Roman Empire was

equally as bad in the 4th century as in the 3rd (Parker 1938: 128). This is reflected again in the types of artifacts recovered -- bowls from Africa which are no doubt trade items rather than ship's gear. This was a trade of luxury goods rather than a trade dealing with basic goods.

5th Century A.D.

AS117 Amphora

Fig. 46, p.153

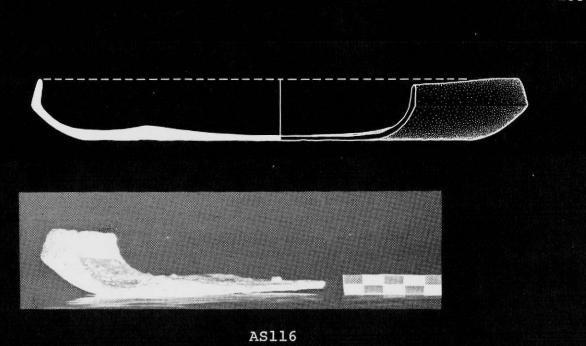
HT PO20

Max. h. c.0.511; max. d. c.0.384; rim d. 0.070; neck h. 0.106; handle h. c.0.100; handle w x th. 0.039 x 0.026.

Concreted and worn. Complete except for chip out of rim. Brown fabric $(?)^{\frac{1}{2}}$.

Simple rounded rim. Short, flaring neck. Small mouth. Neck finger ridged. Sloping shoulder decorated with alternating combed bands (5 lines) and plain bands. Globular body tapers slightly to rounded base. Oval handles attached below rim at start of flare and on shoulder.

Cf. Agora P29343; Dsen Vrsalovic, 1974, <u>Istrzi-</u> vanja i Zastita Podnorskih Arheoloskih Spomenika u <u>Sr Hrvatskop: Dosađasnji Rezultati i Prijedlozi za</u> <u>Dalji Rad</u> (Zagreb): p. 140, #149; Jeremy Green, n.d., <u>Cape Andreas Expedition 1969</u> (Great Britain): p. 20, fig. 8.4.





AS117 (1:5) Figure 46

AS118 Amphora

Fig. 47, p.155

Max. h. c.0.281; max. d. c.0.345; rim d. 0.070; neck h. 0.090; handle h. 0.103; handle w x th. 0.036 x 0.028.

Concreted and worn. Neck, handles, shoulder and part of body preserved. Brown fabric.

Simple rounded rim. Short, flaring neck. Small mouth. Neck finger ridged. Sloping shoulder. Globular body tapers slightly. Oval handles attached below rim at start of flare and on shoulder. Below handle attachments, body combed as far as preserved.

Cf. AS117.

Fig. 47, p.155

AS119 Amphora

HIE PO10

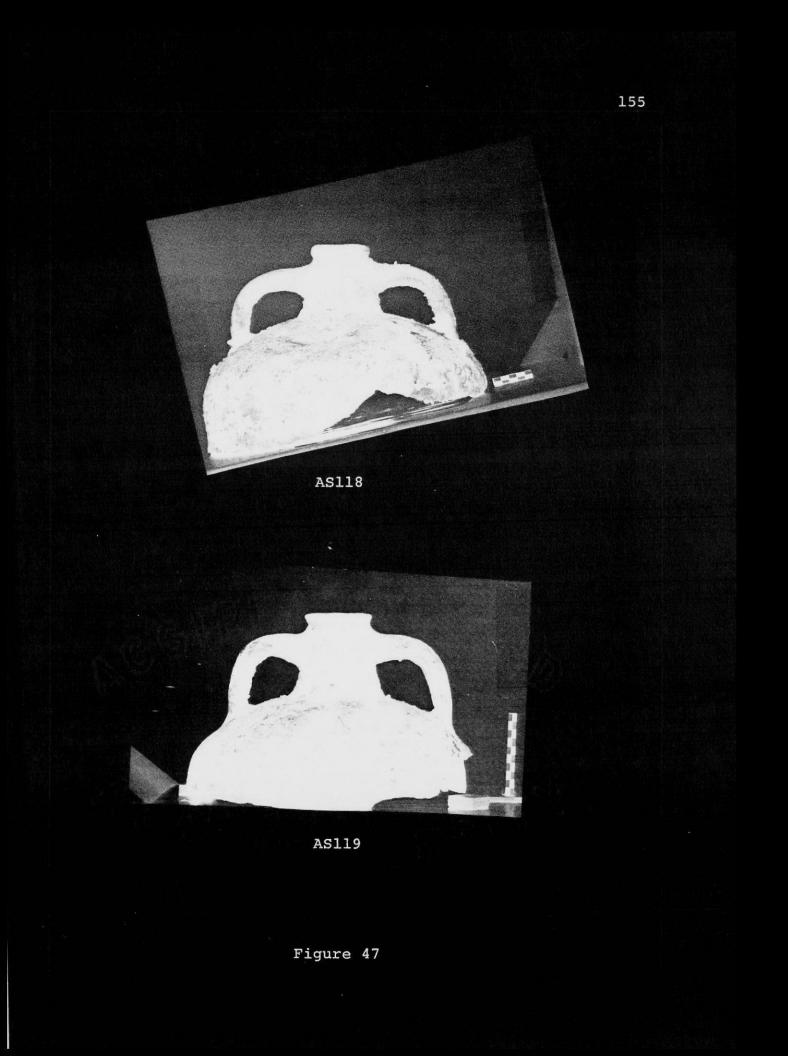
Max. h. c.0.220; max. d. c.0.335; rim d. 0.078; neck h. 0.108; handle h. 0.106; handle w x th. 0.038 x 0.026.

Concreted and worn. Stained. Chip out of rim, otherwise complete through shoulder. Red-brown fabric with red and black inclusions.

Simple rounded rim. Short, flaring neck. Small mouth. Neck finger ridged. Sloping shoulder has large depression on side. Globular body tapers slightly. Oval handles attached below rim at start

154

FQ OR0



of flare and on shoulder. Below handles, three sets of four combed lines separated by plain bands, then continuous combing as far as preserved.

Cf. AS117.

AS120 Amphora

Fig. 48, p.157 NP10 Max. h. c.0.515; max. d. 0.450; neck h. 0.128; rim d. 0.098; handle h. 0.111; handle w x th. 0.037 x 0.028; th. 0.007. Heavily concreted. Complete except for hole in side.

Orange fabric on inside, brown on outside; white inclusions.

Thick plain rim on funnel (or trumpet) neck. Sharp demarcation of neck and shoulder juncture. Sloping shoulder. Ovoid body. Handles attached on neck below waist and on shoulder. Just below shoulder attachment, combed ridges begin and extend down slope of shoulder.

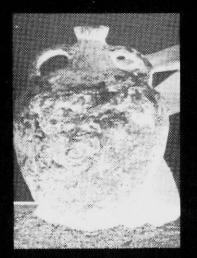
Cf. Agora P8642; Michael H. Jameson, 1969, "Excavations at Porto Cheli and Vicinity" <u>Hesp</u>. 38: p. 340; Wolf W. Rudolph, 1979, "Excavations at Porto Cheli and Vicinity: Preliminary Report V: The Early Byzantine Remains" Hesp. 48: p. 305, #2.

AS121 Amphora

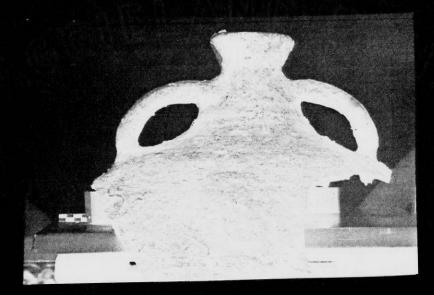
DE TJ-5

Fig. 48, p.157

CW



AS120 (1:10)



AS121 Figure 48 max. h. 0.50; neck h. 0.13; handle h. c.0.084. Neck, handles and shoulder preserved. Hard, fine red-orange fabric.

Thick plain rim on funnel neck. Sharp demarcation of neck and shoulder juncture. Sloping shoulder. Ovoid body. Handles attached on neck below waist and on shoulder. Just below shoulder attachment, combed ridges begin and extend down slope of shoulder.

Cf. AS120.

AS122 Amphora

Fig. 49, p.160 NP5 Max. h. c.0.44; max. d. 0.428; rim d. 0.106; handle h. 0.119; handle w x th. 0.035 x 0.025; th. 0.009. Heavily concreted. Rim, neck, handles, shoulder and upper body preserved. Orange fabric.

Thick plain rim on funnel neck. Sharp demarcation of neck and shoulder juncture. Sloping shoulder. Ovoid body. Handles attached on neck below waist and on shoulder. Just below shoulder attachment, combed ridges begin and extend down slope of shoulder.

Cf. AS120.

AS123 Amphora

HF

CB

JK30

Max. h. 0.190; rim d. 0.108; handle h. c.0.105; handle

158

w x th. 0.040 x 0.026; th. 0.009.

Concreted. Rim, neck, shoulder and handles preserved. Red-brown fabric.

Thick plain rim on funnel neck. Sharp demarcation of neck and shoulder juncture. Sloping shoulder. Ovoid body. Handles attached on neck below waist and on shoulder. Just below shoulder attachment, combed ridges begin and extend down slope of shoulder.

Cf. AS120.

AS124 Amphora

Fig. 49, p.160 NP0 Max. h. c.0.15; handle h. 0.125; handle w x th. 0.039 x 0.026.

Part of rim and one handle preserved. Brown fabric.

Thick plain rim. Handle attached on waist. Similar to AS120, AS121, AS122, AS123.

Cf. AS120.

AS125 Amphora

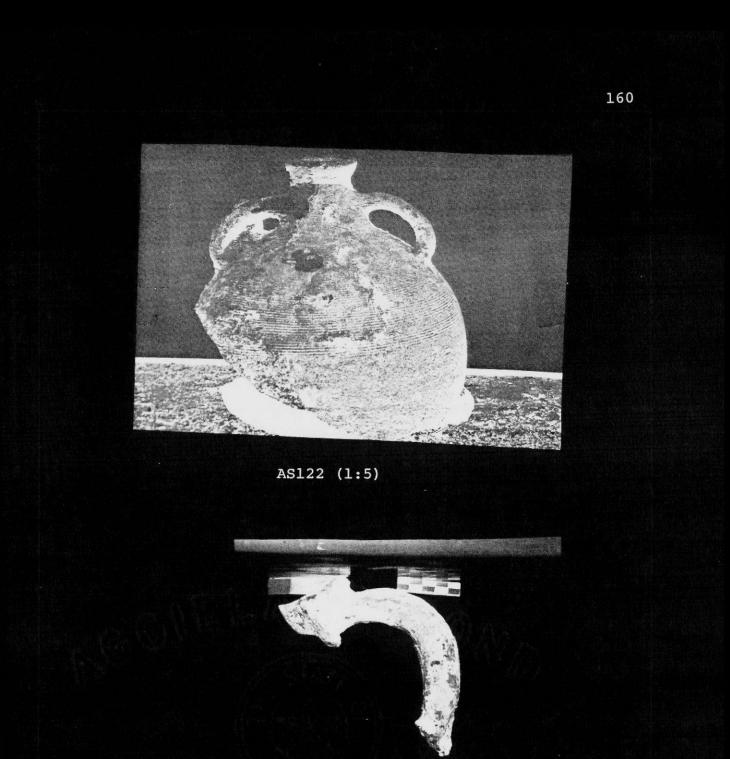
вv

BC

MIN 20

Max. h. 0.102; mouth d. 0.100 x 0.086; handle w x th. 0.034 x 0.022.

Very worn. Rim shipped; neck broken at curve to shoulder; horizontal portion of handles preserved. Orange fabric with black inclusions.





Rim plain with thick ridge beneath it. Oval mouth. Neck tapers and flares to shoulder. Ridged, oval handles attached roughly below rim.

Cf. Agora P13164, P13142, P15758.

AS126 Amphora

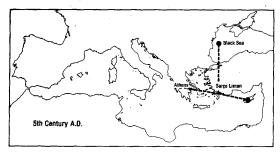
Fig. 50, p.162 location unknown

Max. h. c.0.325; max. d. c.0.280

Concreted and worn. Body below shoulder preserved in three fragments. Orange fabric on outside, light brown on inside; black inclusions.

Thin-walled, round bottomed amphora with faint ridging. Walls taper straight down to more closely ridged base. Base peaked.

Cf. Agora P14093, P13164.



Three types of amphorae were found in quantity at Serce . Liman dating from the 5th century A.D. The point of origin

EN



of none of these types is known. Type I (AS117, AS118, AS119) has been found at Athens; Cape Andreas, Cyprus; and in the western Black Sea. Type II (AS120, AS121, AS122, AS123 and AS124) has been found at Athens and Porto Cheli. Type III (AS125 and AS126) has been found at Athens and in southeastern Turkey. These distributions indicate an Aegean area of occurrence. All types were shipped to (or from) Athens, again indicating the central, apparently important position held by this city.

The economic situation of the Roman Empire had improved by the 5th century A.D. Trade in wine and/or oil had, as evidenced by the amphorae, picked up in comparison to the preceding century; security had returned to the lower class rural population and with increased economic stability, surpluses were once more produced to create export goods. The complete lack of luxury or shipboard items is puzzling.

6th Century A.D.

AS127 Amphora

GM РО-10

Max. h. 0.321; th. 0.004.

Concreted and worn. Half of body including curve to shoulder and base and one handle attachment preserved. Unevenly fired fabric; orange on outside, grey on inside with grey inclusions.

Piriform body curves to rounded base. Handle

163

attached just above maximum diameter. Body ridged from below handle and apparently terminating above base.

Cf. Agora P15330.

AS128 Amphora

DF QR20

Max. h. 0.382; max. d. 0.234; th. 0.008. Concreted and worn. Approximately one-half of body preserved from shoulder to curve of toe. Orange fabric outside fading to light brown inside.

Piriform, ridged body bulges at shoulder, nipped to waist with continuous taper to break.

Cf. AS127.

	AS:	129	Amphora
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Fig. 51, p.165

Max. h. 0.340; base d. 0.168; th. 0.007. Concreted and worn. Most of body below shoulder preserved; entire base preserved. Red-brown fabric.

Body walls almost straight with slight pinch above peaked base. Ridged unevenly. Base consists of concentric rings tapering out to a point.

Cf. Agora P26707; Zemer, #66, p. 76.

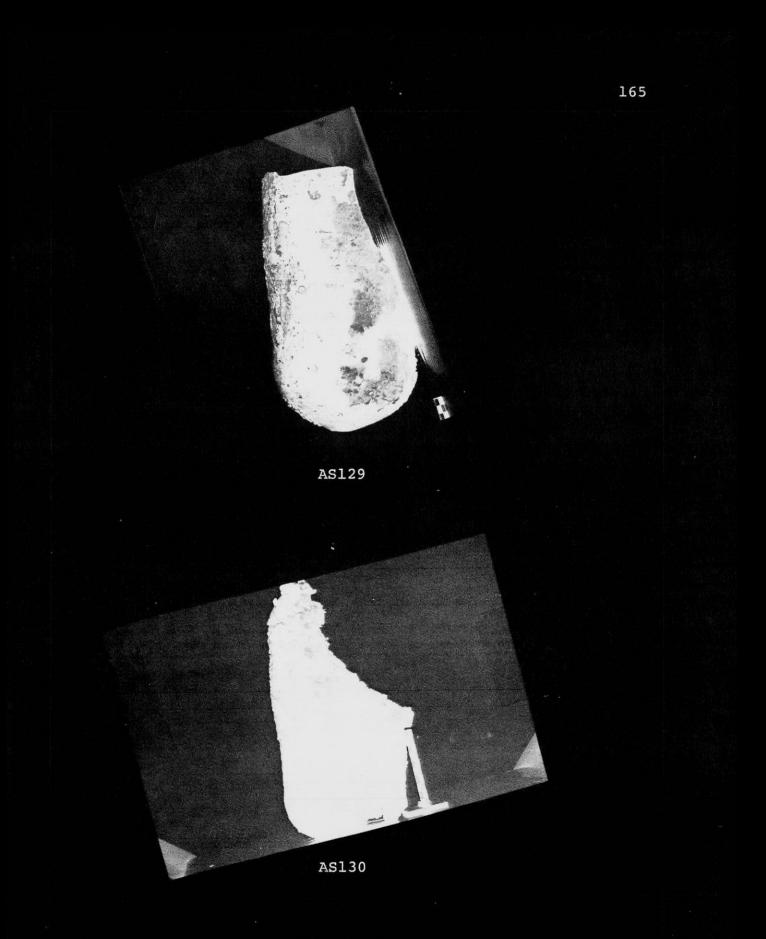
AS130 Amphora

Fig. 51, p.165

NP10

CK

FR KL15





max. h. c.0.351; base d. 0.218; th. 0.008. Base and approximately one-half of body preserved. Pale brown fabric with quartz inclusions.

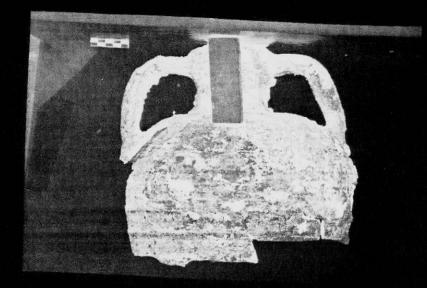
Body walls straight to juncture with base. Base is rounded and toeless. Body and base patterned with ridges. Base has concentric, low ridges emanating to body. Plain strip at base of body, then two high, well-defined ridges, plain strip and six high, well= defined ridges to break.

Cf. AS129.

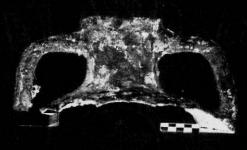
AS131 Amphora BK Fig. 52, p.167 QR10 Max. h. 0.258; max. d. 0.302; handle h. 0.124; handle w x th. 0.033 x 0.024; th. 0.006. Concreted and worn. Pot is cracking and many small

pieces have broken off. Neck, handles, shoulder and part of upper body preserved. Gritty orange and gritty dark grey fabric.

Flat, barely defined rim on short, fairly vertical neck. Neck has ridge at level of handle attachment. Depression on shoulder at base of neck. Globular body faintly ridged. At maximum diameter, ridging becomes more prominent and more widely spaced. Shoulder plain to handle attachment. Handles attached below rim and at base of shoulder. Ridged down spine.



AS131



AS132

Figure 52

Fig. 52, p.167 JK25

Max. h. c.0.165; handle h. c.0.116; handle w x th. 0.032 x 0.023.

Concreted and worn. Rim, neck, shoulder and handles preserved. Orange fabric.

Plain, round rim. Neck flares slightly to rounded sloping shoulder. Handle attached below rim and low on shoulder. Ridge on neck half way between handle and shoulder.

Cf. AS131.

AS133 Amphora

HE MN20

LD

Max. h. c.0.47; th. 0.011.

Most of one side of body preserved from shoulder to above base. Orange fabric (?).

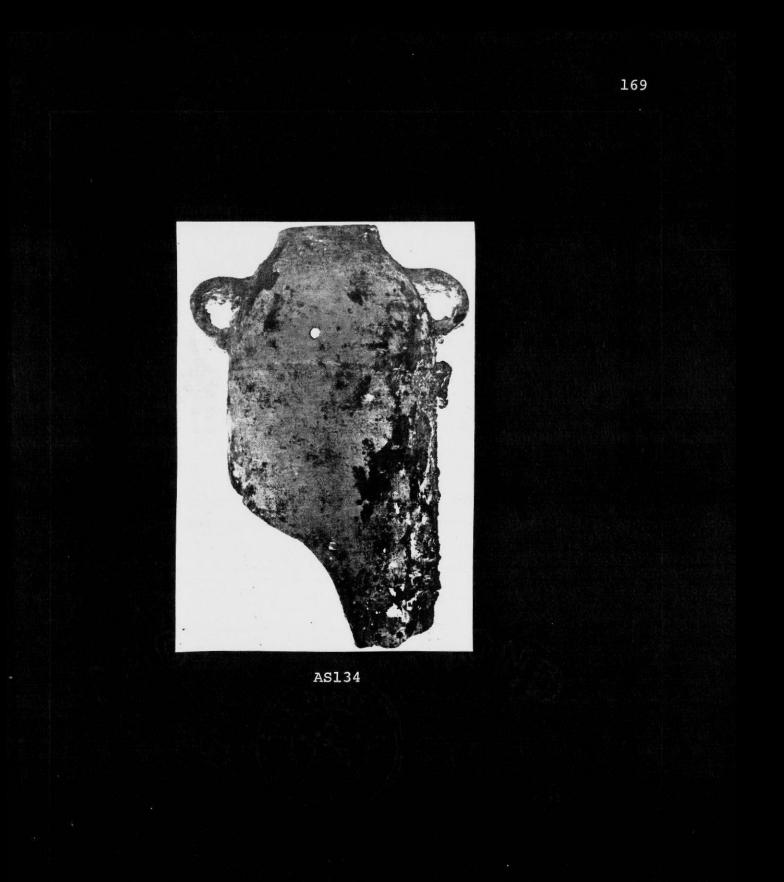
Long cylindrical body. Exterior uniformly ridged.

Cf. AS131.

AS134 Amphora	
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Fig. 53, p.169 KLM5 Max. h. 0.441; max. d. 0.230; handle h. 0.084; handle

HА



w x th. 0.036 x 0.017; th. 0.008.

Concreted and worn. Rim, handles, shoulder and most of body preserved. Gritty red-orange fabric.

Rounded undifferentiated rim curves to sloping shoulder with in-turning curves to cylindrical body. Thick, twisted loop handles set vertically at shoulder base. Two small holes poked in rim, center of one face.

Cf. Charles K. Williams, 1974, "Excavations at Corinth, 1973" Hesp. 43: p. 32 and pl. 8.

AS135 Amphora

E₩

Fig. 54, p.171

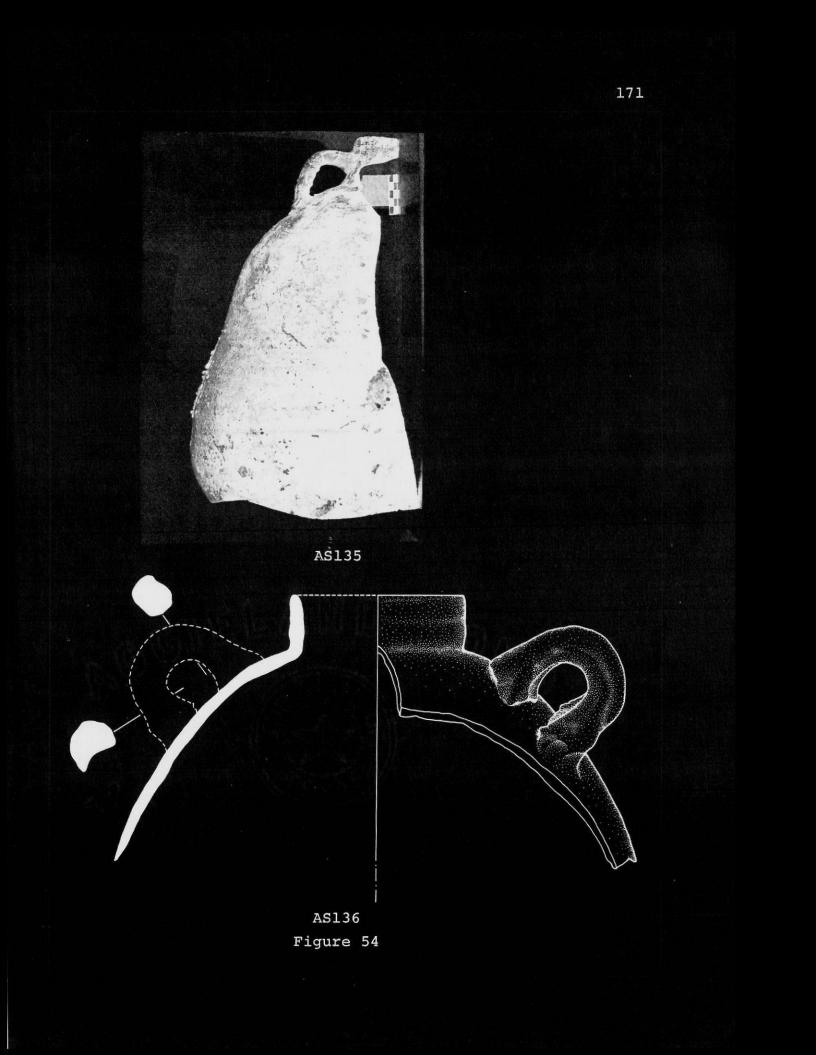
KL20

Max. h. c.0.461; rim d. 0.090; handle h. 0.076; handle w x th. 0.025 x 0.016; th. 0.007.

Concreted lightly. Part of rim and neck, one handle and part of body almost to base preserved. Brown fabric with orange core.

Oval rim sharply delineated from short neck. Small mouth. Handle attached at mid-rim and on sloping shoulder. Bag-like body.

Cf. C. Scorpan, 1976, "Origini di Linii Evolutive in Ceramica Romano-Bizantina (sec. IV-VII) din Spatiul Mediteranean si Pontic" <u>Pontica</u> IX: pl. III,3 and p. 158: Scorpan claims local production but Grace says Samian.



AS136 Storage jar

Fig. 54, p.171

Max. h. 0.177; rim h. 0.029; rim d. 0.090; handle h. 0.059; th. 0.004.

Lightly concreted and worn. Half of rim, one handle and portion of upper body preserved. Brown fabric with quartz inclusions.

Vertical rim with slight depression at juncture with body. Globular body. Ring handle attached vertically on shoulder. Uneven oval in cross-section. Body ridged below handle.

Cf. Zemer, p. 73.

AS137 Amphora

DF

Fig. 55, p.174

QR20

Max. h. c.0.450; max. d. c.0.240; handle h. 0.077; handle w x th. 0.027 x 0.015; th. 0.008. Heavily concreted and worn. Neck, handles most of body preserved. Red-brown fabric.

Fairly undefined, rounded rim on short neck. Neck flares to steep shoulder. Body long and piriform. Handles oval with groove down spine, attached below rim and on shoulder.

Cf. C. Scorpan, 1976, "Origini si Linii Evolutive in Ceramica Romano-Bizantina (sec. IV-VII) din Spatiul Mediteranean si Pontic" Pontica IX: p. 176

HF

LM40

and pl. II.

AS138 Amphora

EF OR35

BW

MN 2 0

Max. h. 0.113; neck d. 0.099; rim d. 0.107; handle w x th. 0.028 x 0.022; th. 0.015.

Concreted and worn. Part of each handle, rim and neck and curve to shoulder preserved. Tan fabric.

Rim turned out slightly. Ridge on neck beneath it. Neck flares slightly to shoulder. Small ridged. and grooved handles attached on ridge below rim. Straight horizontal sestion curves sharply to vertical above shoulder.

Cf. Zemer, #63-65.

AS139 Storage jar

Fig. 55, p.174

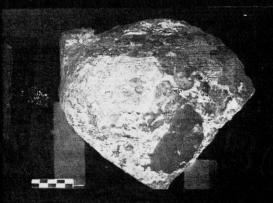
Max. h. 0.212; handle w x th. 0.055 x 0.044; th. 0.015. Concreted and worn. Shoulder, base of rim and one handle attachment preserved. Brown fabric.

Combed ware. Neck curves to round shoulder creating S-curve profile. Thick, heavy handle attached above maximum diameter. Very thick walls. Maximum diameter close under neck.

Cf. KWS, pers. comm. -- N. Aegean and Black Sea type.



AS137



AS139



174

A5140 Storage jar AB Fig. 55, p.174 KL10 Max. h. c.0.28. Concreted and worn. Entire base and approximately one-half of body preserved. Brown fabric. Piriform, thick, ridged body.

Cf. AS139.

AS141 Storage jar

AL

location unknown

Max. h. 0.245; th. (top) 0.010, (bottom) 0.012. Heavily concreted. Two fragments preserved. Approximately three-guarters of circumpherence of body and turn to toe preserved. Brown/red-brown fabric.

Body tapers sharply to simple rounded base. No additional member. Walls thicken at base. Deep body.

Cf. AS139.

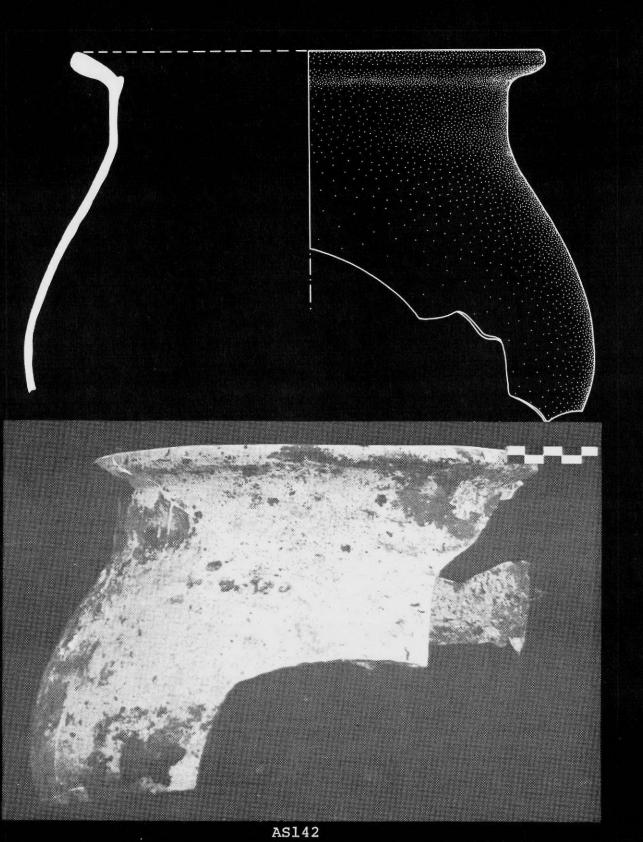
AS142 Cooking pot

GT

Fig. 56, p.176 KL10 Max. h. 0.20; rim d. 0.25; lip w. 0.029; th. 0.005. Rim, neck and part of body preserved. Hard, gritty red-brown fabric with dark brown core.

Broad rim slants in to lip rest. Neck is cylindrical. Body rounded. No strong demarcation between

175





rim and neck or neck and body.

Cf. Petre Alexandrescu, 1972, "Un Groupe de Ceramique Fabriqué & Istros" <u>Dacia</u> n.s. XVI: p. 115 and fig. 1.4.

AS143 Jug

Fig. 57, p.178 location unknown Max. h. 0.177; rim h. 0.044; handle h. 0.091; max. d. 0.171; th. 0.003.

Heavily concreted and worn. Part of rim, all of handle, part of spout and all of body preserved. Red= orange fabric.

Deep, tapering rim turns sharply to ovoid body with high maximum diameter. Flat, oval handle attached at mid-rim and above, arches up to level of lip and is attached at maximum diameter. Spout below rim, opposite handle, broken off close to body. Small opening. Concave base. Body not symetrical.

Cf. Hans Peter Isler, 1969, "Heraion von Samos: Eine Fruhbyzantinischer Zisterne" <u>Ath. Mitt.</u> 84: P. 207 and taf. 89.1 and 3.

AS144 Bowl

Fig. 58, p.180 QR45 Max. h. c.0.050; d. c.0.260; th. 0.006. Lightly concreted. Entire bowl preserved. Pale

HD

ET

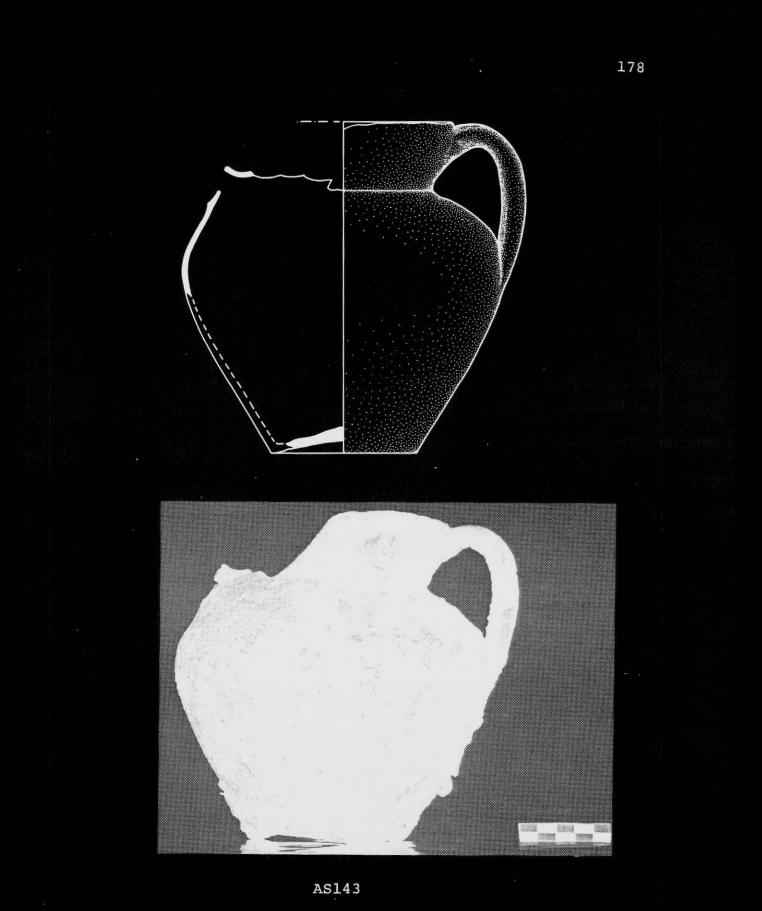


Figure 57

orange fabric. Lime green glaze with darker green streaks.

Shallow dish with out-turned rim. Interior glazed lime green with darker green rays running obliquely around side. Exterior glazed approximately one-half of depth, rest slipped. Scalloped rim. Impressed dashes on exterior below lip, in glazed band for most part.

Cf. R.W. Hamilton, 1944, "Excavations Against the North Wall of Jerusalem, 1937-8" <u>QDAP</u> 10: p. 13, fig. 8.10; Maurice Pezard, 1920, <u>La Ceramique Archai-</u> <u>que de l'Islam et ses Origines</u> (Paris): p. 209 and pl. XVII,1.

AS145 Bowl

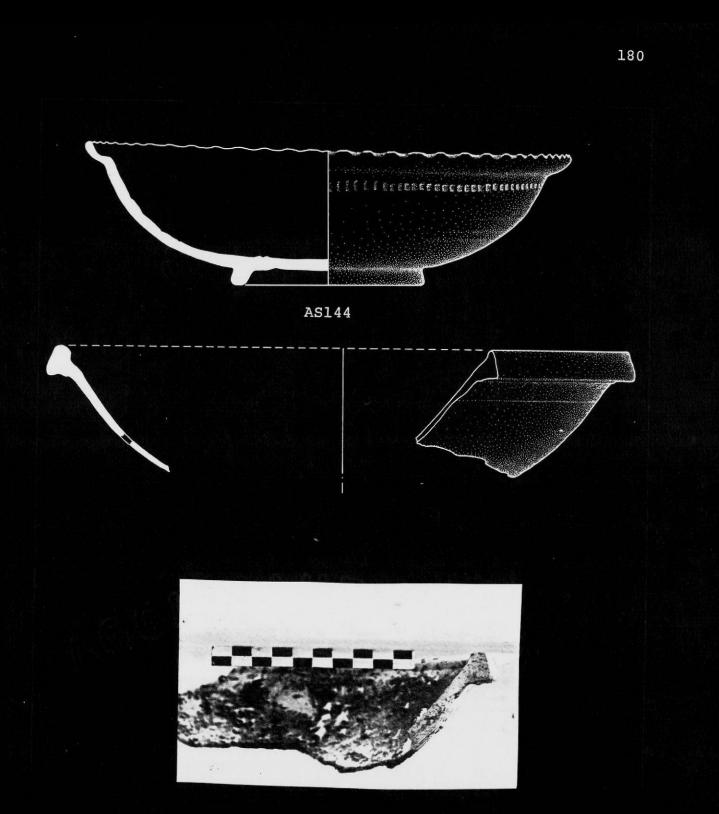
Fig. 58, p.180 Max. h. c.0.062; max. d. 0.320; rim h. 0.016; th. 0.004. Lightly concreted. Part of rim and body preserved.

Reddish fabric.

Heavy rim offset from body. Square top. Depression on interior just below lip. Exterior slants out then turns in to be offset from body by a ridge. Incised line circles body below rim. Body curves in to shallow bowl. Hole pierces body low on wall.

179

КH



AS145





Cf. AA 5, M350, pl. 71 and p. 116; LRP, p. 333, fig. 68, form 3.16.

Trade continued to be brisk during the 6th century A.D. International commerce between Syria and the north, probably Constantinople (Levine 1975:55-56), naturally passed by Serce Liman, whether on a north-south or south-north route. Syria was known at this period for its exports of wine (Levine 1975:8), particularly from Gaza and Ascalon (Hitti 1953:353). The distributions of the amphorae of this period recovered at Serce Liman are, again, basically east Mediterranean but also extend to northern Europe where Syrian merchants are reported to have resided (Hitti 1953: 346-347).

Trade in luxury items within the area between Cyrenaica, Antioch and Constantinople is indicated by the type of Late Roman C ware represented by artifact AS145. Indicative of the local trade which must also have been carried on at this time are the Samian spouted jar, AS143, and the Chian cooking pot, AS142.

7th Century A.D.

AS146 Amphora

Fig. 59, p.184 location unknown Max. h. c.0.32; th. 0.009.

Small fragment of neck, part of one handle, part of shoulder and body preserved. Gritty grey fabric weathered to light brown.

Juxtaposition of neck and shoulder clearly defined. Shoulder slopes into round body with no clear demarcation of its limits. Oval handle, attached roughly on shoulder, curves up and out to attach on neck (not preserved). Four groups of combed lines preserved below handle, separated by broad, plain bands. Pitch preserved in shoulder interior.

Cf. George F. Bass, et al., in press, <u>Yassi Ada</u>, vol. I, <u>A Seventh-Century Byzantine Shipwreck</u> (College Station, Texas): type IIb.

AS147 Amphora

DP

JK35

Max. h. 0.176; handle h. 0.052; handle w x th. 0.034 x 0.028; th. 0.007.

Concreted and worn. Part of one handle and shoulder

нх

preserved. Brown fabric.

Shoulder is a flat curve with no delineation of end. Oval handle attached smoothly at $c.60^{\circ}$ angle to shoulder. Exterior of body plain to below handle where it is combed for c.4 cm.

Cf. AS146.

AS148 Amphora

BN

Fig. 59, p.184 RS-5 Max. h. 0.136; toe h. 0.022; toe d. 0.052; th. 0.006. Lightly concreted and worn. Toe and lower body preserved. Red-orange fabric.

Lower body globular with short, cylindrical toe. Base of toe rough, surrounded by four ridges, then plain, five to seven concentric grooves, plain, then larger ridges extend as far as body is preserved. "Star" inside center.

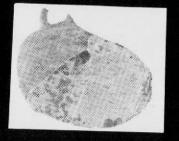
Cf. Caroline Williams, 1977, "A Byzantine Well= Deposit from Anemurium (Rough Cilicia)" <u>Anatolian</u> <u>Studi</u>es 26: p. 183, #20.

AS149 Cooking pot

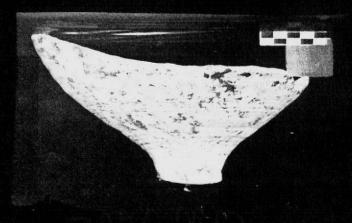
KF

KL-10

Max. h. 0.099; rim d. 0.190; rim w. 0.018; th. 0.003. Concreted. Part of rim and body preserved. Brown fabric with black inclusions.



AS146 (1:10)



AS148

Figure 59

Flat horizontal rim slopes in slightly and then turns sharply to slightly swelling body.

Cf. H.S. Catling, 19 , "An Early Byzantine Pottery Factory at Dhiorios in Cyprus" <u>Levant</u> 4: p. 40, P132, P133.

AS150 Plate

Fig. 60, p.186 PQ30 Max. h. 0.049; d. 0.314; ring d. 0.148. Concreted and worn. Part of ring base, side and rim preserved in several fragments. Red fabric.

Rim is flat fillet on inside echoed by round bulge on outside. Body slopes flatly to form plate. Plain ring base.

Cf. LRP, p. 155, form 105.

AS151 Bowl

Fig. 61, p.192 JK15 Max. h. c.0.053; th. 0.008. Three-quarters of bowl preserves complete profile.

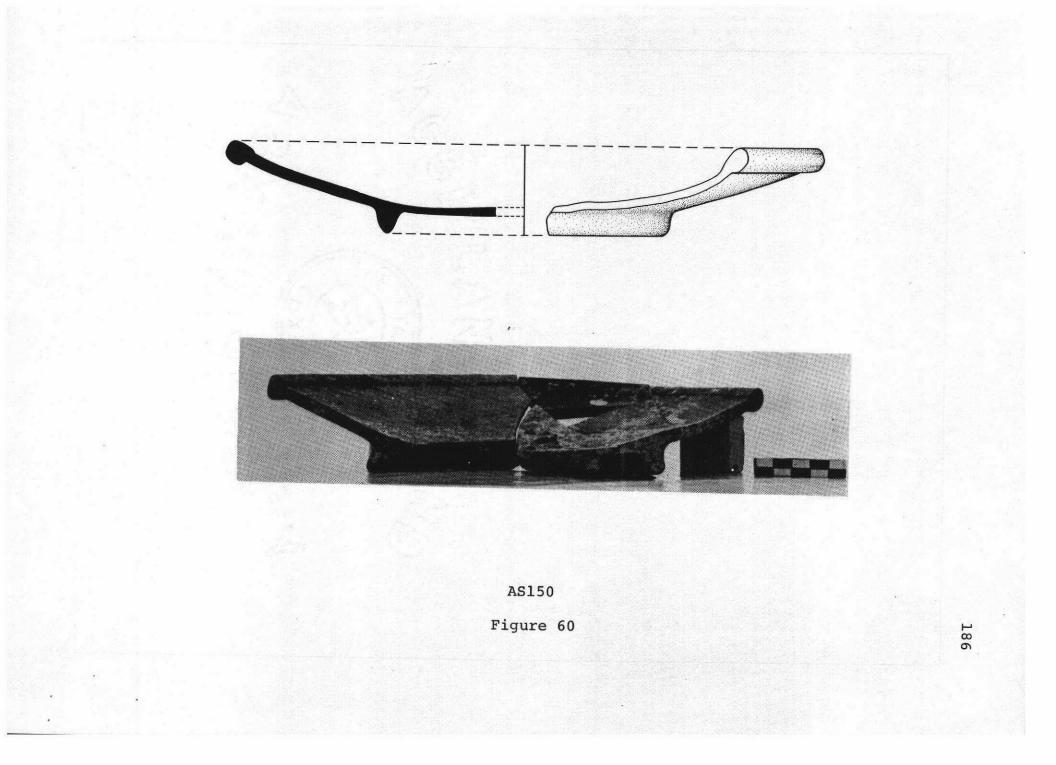
Orange fabric (red ware).

Thick rim decorated by two grooves. Shallow bowl slopes to flat base. Base thick. Exterior of bowl decorated with one row of stippling, applied crookedly.

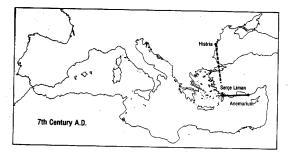
Cf. LRP, p. 379-382; Allyn Kelley, 1976, The

FN

GΖ



Pottery of Ancient Egypt: Dynasty I to Roman Times (Toronto): pl. 98.4; Carolyn Williams, 1977, "A Byzantine Well-Deposit from Anemurium (Rough Cilicia)"



The period of peace and economic stability enjoyed throughout the Byzantine Empire in the preceding two centuries was jarred by the various immediately successful conquests of the Persians in the second decade of the 7th century A.D. After conquering and ravaging Syria and Palestine, the Persian army moved on to Eygpt and Constantinople, successfully in the former instance, not in the latter (Vasiliev 1952:195-196). About ten years later, the Emperor Heraclius regained the lost territory -- again, ravaging the countryside with a war. Unfortunately, this did not end the troubles in the large southeastern portion of the Empire. By the middle of the century Syria, Palestine, Egypt, part of Asia Minor and Upper Mesopotamia had been subdued by the Arabs (Vasiliev 1952:212).

In comparison to the amount of traffic through Serce Liman in the 6th century, the quiet of the harbor in the 7th is amazing. A single export from North Africa had, in all probability, been lost there before the Persian invasion; the single Cypriote cooking pot is more representative of a quasi-local trade than anything else; and the two similar amphorae probably possess a northern Aegean origin. (These may have been discarded from the Byzantine fleet stationed in the general area in defense against the Arab pirates who constantly ravaged the Anatolian coast (Ahrweiler 1966:22).) The fact of there being only two amphorae is also strongly indicative of the virtual discontinuation of the north-south trade which had been going strong for three centuries. It may have been the ravaged countryside more than the political barriers which caused this discontinuity (Lewis 1951:82-83).

8th Century A.D.

AS152 Amphora

Fig. 61, p.192

(no dimensions)

One handle and part of body preserved. Red fabric.

Body flares out slightly under handle attachments. Below base of handle body tapers suddenly. Handle is attached vertically on almost same plane. Asymetrical shape with higher point of handle below mid-point.

188

FE

KL20

Cf. D.C. Baramki, 1966, "Third Preliminary Report on the Excavations at Tell el Ghassil" <u>Bulletin du</u> <u>Musée de Beyrouth XIX:</u> fig. 4.16.

AS153 Juq

ER

Fig. 61, p.192 location unknown Max. h. 0.111; d. c.0.10; th. 0.003. Part of base and body and one handle attachment preserved. Red-brown fabric.

Body wall bulges above mid-point and then tapers sharply to flat base. Body ridged above maximum diameter. Handle attachment barely preserved at break.

Cf. Gerard Brett et al., 1947, <u>The Great Palace</u> of the Byzantine Emperors (London): pl. 15.46 and p. 38.

AS154 Ring base

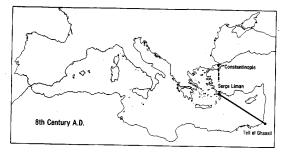
KΥ

LM-10

Max. h. 0.045; ring d. 0.060; th. 0.002. Concreted and worn. Part of ring base and lower body preserved. Red-orange fabric.

Body tapers to high ring. Angle at juncture sharp. Plain ring flares.

Cf. Gerard Brett et al., 1947, <u>The Great Palace</u> of the Byzantine Emperors (London): pl. 15 and pp. 36-38.



During the first half of the eighth century the conflict begun in the preceding century between the Byzantines and Arabs continued. In the eastern Mediterranean region, this conflict was mainly maritime (Lewis 1951:Chapter 3). Dated to this period is a fragment of a Levantine jar (AS152). Long distance trade was probably not very active in this period due to the constant state of war which existed between the defensive Byzantines and the offensive Arabs (Lewis 1951:Chapter 3). It is certainly possible that this jar fragment reached Serçe Liman from the Levant in a merchant ship but it is much more probable, in this period, that it contained some shipboard supply for an Islamic ship headed for the Aegean and, perhaps, Constantinople. The Islamic navy was, at this time, centered in Syria (Lewis 1951:56). Any excursion against the Byzantines, such as that against Constantinople from 717 to 724 (Lewis 1951:93), was likely to draw heavily on the Syrian navy

and the ships' stores would, in these cases, be derived from locally available Levantine goods.

In the later half of the eighth century, the Byzantines resumed their former control of the entire Mediterranean (Lewis 1951:98-99). At Serce Liman are found two artifacts paralleled at Constantinople. This city had become once again the center of trade in the Mediterranean (Lewis 1951: 10; Baker 1938:6). To it were shipped many of the products of the Mediterranean as well as those from further afield. Constantinople itself produced little if anything for its own support (Lewis 1951:176). In this case, we can assume that artifacts AS153 and AS154 should be categorized with those objects which indicate direction of trade rather than the more specific trade emanating from a given point. Thus, AS153 and AS154 should have been shipped from the Near East with some point to the north in the Aegean as their ultimate destination, which they never reached.

9th and 10th Centuries A.D.

AS155 Amphora

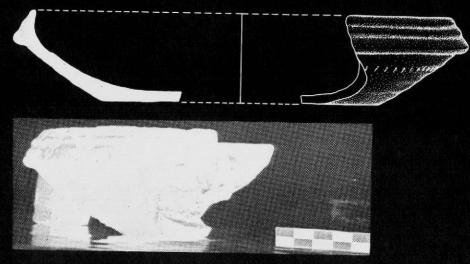
Fig.61, p.192

EO KLJO

Max. h. 0.233; neck h. 0.068; rim d. 0.076; handle h. 0.065; handle w x th. 0.025 ; 0.015; th. 0.007. Concreted. Rim, neck, both handles and shoulder preserved. Brown fabric.

Rim defined by groove on top and at juncture

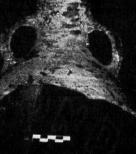
191



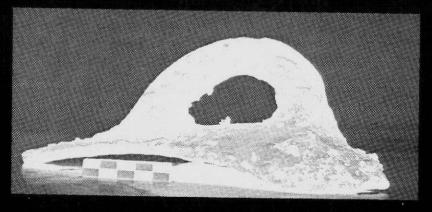
AS151



AS153



AS155





with neck. Cylindrical neck short. Steep shoulder. Ovoid handles attached at mid-neck and on shoulder. Shoulder attachment neat and smooth; neck attachment rough and uneven.

Cf. Maria Comsa, 1960, "Die Bulgarische Herrschaft Nordlich der Donau" <u>Dacia</u> IV: p. 399 and Abb. 1.5.

AS156 Two-handled jug

DH

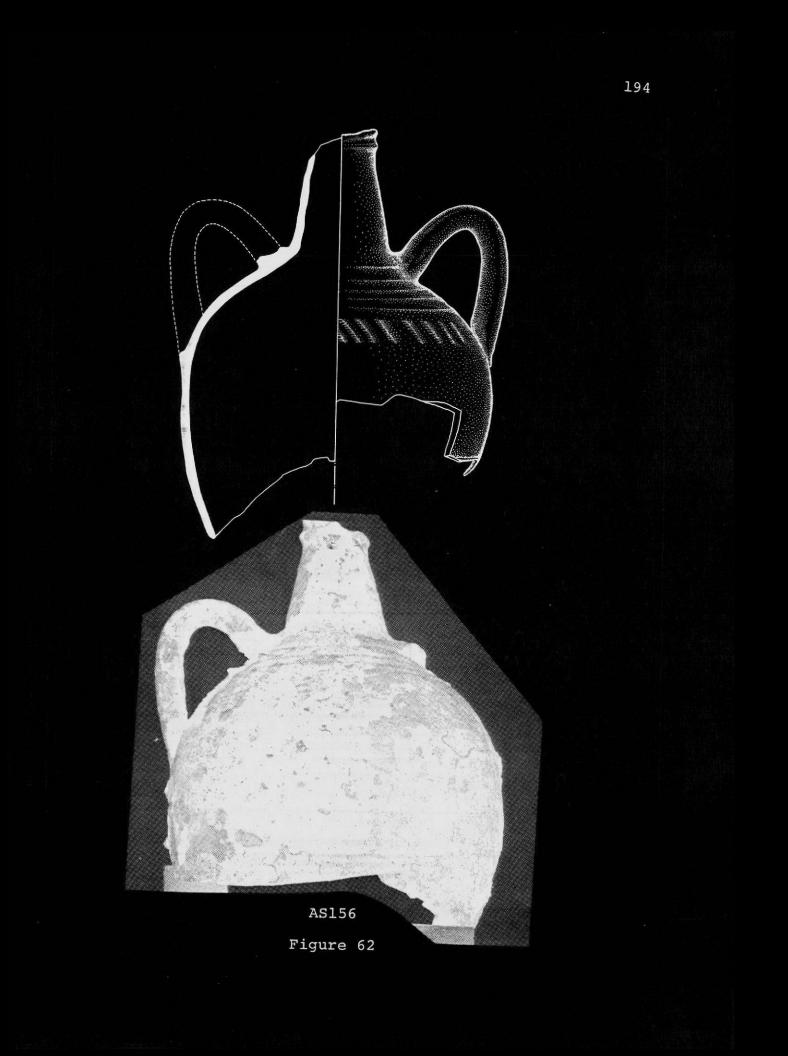
Fig. 62, p.194 JK-5 Max. h. 0.223; pres. max. d. 0.166; neck h. 0.068; handle h. 0.093. Neck, one handle and part of body preserved. Brown =

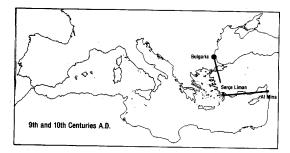
ish fabric. Tall, narrow neck flares to body. Just below

break, ridge preserved. Ovoid body. Thick ribbon handles, attached just below neck, arch up and then attach at maximum diameter. Pattern impressed around body at base of handle. Diagonal grooves with horizontal lines in them.

Cf. Arthur Lane , n.d., "III. Medieval Finds at Al Mina in North Syria" <u>Archaeologia</u> LXXXVII: fig. 3K, pl. 38.

It wasn't until the 960's that Byzantium permanently repossessed southeastern Anatolia and Cyprus from the





Mohammadens. Until the time of Nicephorus Phocas (Vasiliev 1952:308) Crete, Cyprus, Cilicia and points south were held close by the enemies of the Empire. Though hostilities were continuous throughout these first two and a half centuries of Islamic rule, trade between the two great cultures was continuous, if limited. The official trade center was Trebizond on the Black Sea (Lewis 1951:93-94). The Anatolian sea route was not officially existent and was probably limited to small local areas. This situation is reflected in the artifacts recovered at Serce Liman. Though their scant volume may be partly a reflection of the author's inability to obtain published examples of ninth and tenth century pottery for comparative purposes, two examples over a two-century period is not indicative of a constant or heavy traffic.

Those pieces which have been identified indicate trade from the extreme borders of the eastern Mediterranean, merging at Serce Liman: a Bulgarian amphora (AS155) transported southwards and an Islamic jug (AS156) probably from Syria being carried north. Each artifact is representative of a well-travelled route, used throughout history. The ship which carried the Islamic jug may have been one which was privileged by the Byzantine government to cross the border between the two Empires -- an Italian vessel (Lewis 1951:122-123)?

11th Century A.D.

AS157 "The Glass Wreck"

Medieval shipwreck dated to the llth century A.D. Cf. G.F. Bass and F.H. van Doorninck, Jr., 1978, "An llth Century Shipwreck at Serçe Liman, Turkey" IJNA 7: 119-132.

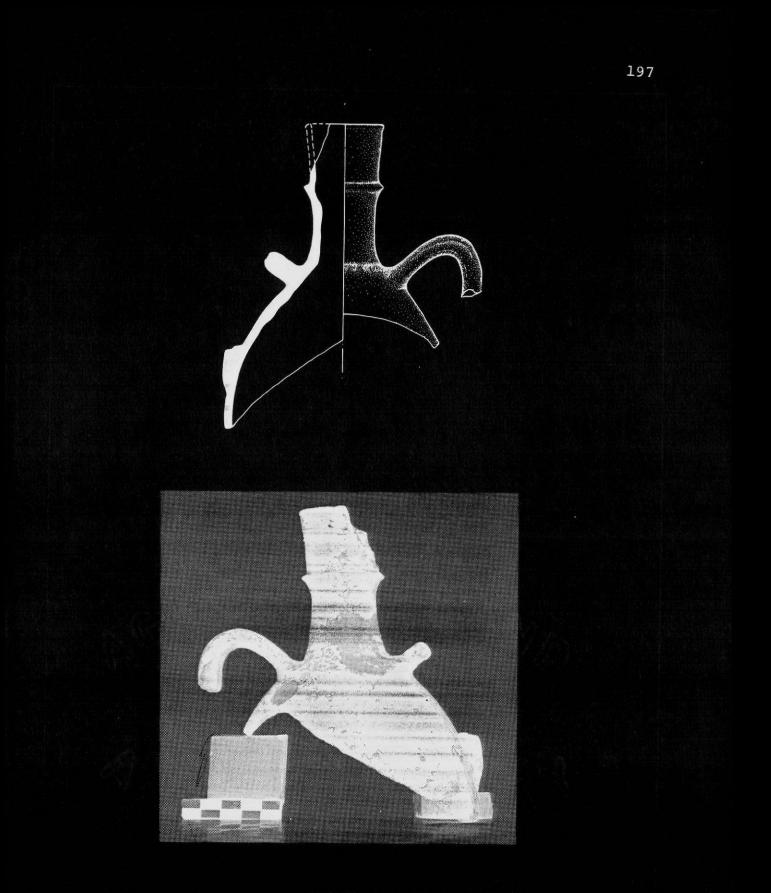
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AS158 Two-handled jug
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Fig. 63, p.197 IJ-5 Max. h. 0.16; neck h. 0.08; neck d. 0.04; body th. 0.004; neck th. 0.003.

Neck, one handle and one handle attachment and shoulder preserved. Fine orange fabric.

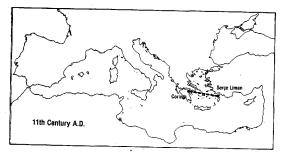
High neck with ridge approximately one-halt way down. Neck pinched slightly below ridge. Sharp demarcation at juncture with shoulder. Rounded shoulder. Arched handle attached just below neck and

DG



AS158 Figure 63 at approximately maximum diameter. Ovoid body.

Cf. Theodora Stillwell MacKay, 1967, "More Byzantine and Frankish Pottery from Corinth" <u>Hesp</u>. 36: 273-274.



In a reversal of the political situation operative through most of the 10th century, during the 11th century the entire Anatolian peninsula and the Syrian coast were controlled by the Byzantines. It is, therefore, interesting historically to note that one of the two artifacts from this period at Serçe Liman is the "Glass Wreck", exhibiting many Islamic links (Bass and van Doorninck 1978:119). Though not definitely identified as yet, this vessel was probably Islamic, travelling from Egypt as far as the Black Sea (Bass and van Doorninck 1978:119; Kubiak 1969:23,26).

AS158, a jug made perhaps in Corinth in the latter part of the llth century, indicates that the Aegean and eastern Mediterranean had once again been opened up to international trade.

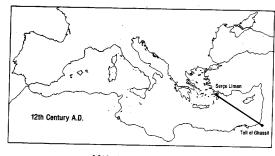
12th Century A.D.

AS159 Bowl

Fig. 64, p.200 PQ15 Max. h. 0.058; d. 0.290; th. 0.004. Concreted and worn. Part of rim, body and perhaps base preserved. Red fabric, possibly with glaze.

Offset rim, deep bowl. Break in body curve to possible base.

Cf. D.C. Baramki, 1966, "Third Preliminary Report on the Excavations at Tell el Ghassil" <u>Bulletin du</u> <u>Musèe de Beyrouth IX:</u> fig. 8.29.



13th Century A.D.

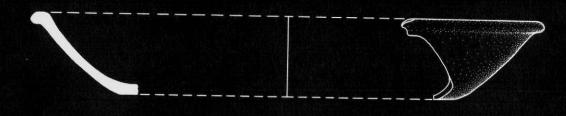
AS160 Amphora

HIJ

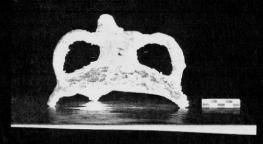
Fig. 64, p.200 PQ10

Max. h. 0.125; neck d. 0.052; handle h. 0.057; handle

BG



AS159



AS160



AS161

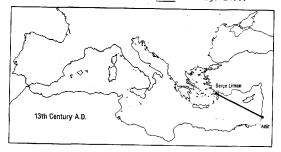
Figure 64

w x th. 0.030 x 0.012; th. 0.005.

Concreted and worn. Neck, handles and shoulder preserved. Brown fabric.

Funnel neck with ridge at mid-point of preserved portion. Rounded shoulder. Flat, almost crescent handles spring up from attachment on ridge and then curve down to attach on shoulder. Body ridged below handle attachment.

Cf. Agora P10732; C.N. Johns, 1936, "Excavations at Pilgrims' Castle, Atlit (1932-3): Stables at the South-West of the Suburb" <u>QDAP</u> 5: fig. 14.8.



By the end of the llth century, the hostilities between the Byzantine and Islamic Empires had generally ceased to be of importance. New cultures and nations had arrived on the scene from the east and from the west. The Seljuk Turks had invaded from the area north of India and had weakened the Byzantine as well as the Islamic Empire (McGarry 1976:370).

It was the advents of the various waves of Crusaders which changed the seafaring scene in the eastern Mediterranean. Vessels from the Italian maritime republics had been carrying on trade between east and west for several centuries by the 12th century (Baker 1938:6). However, there was no European base in the east to make their position as traders more stable. By the early years of the 12th century, several cities in the Near East were taken by the Crusaders and with these a temporary European base was established (McGarry 1976:371). During the Third Crusade, Cyprus was set up as a permanent European trading base(Ambroise 1976:108, n.58 and 117).

For the most part, it was the Venetians who were the most prominent traders during this time. By the early 13th century, Venice had acquired the Cyclades, Sporades and Crete and was expanding at a great rate in the eastern Mediterranean (Baker 1938:14-15).

The two artifacts recovered at Serçe Liman for the 12th and 13th centuries find their closest parallels in Israel, one of the first regions subjugated during the Crusades and containing the holy city of Jerusalem (McGarry 1976:371). It is possible that these artifacts represent the excursions of Venetian vessels from a permanent trading base in Israel though there are certainly other possible explanations, including local trade.

SUMMARY

During the course of the 1979 Anchorage Survey at Serce Liman, Turkey pottery and other artifacts were recovered which encompass at least a 4300-year period. This harbor was in use from earliest seafaring times in the Mediterranean and continues to be used today by various small craft. Though frequency of use varied according to the historical outlook of the time, the harbor was never abandoned as an anchorage for long. A summary of the use of the anchorage at Serçe Liman can best be seen in the graphic illustration which follows: A.D.13th x 12th o llth x o 10th o 9th x 8th x o o 7th x x x o o o 6th x x x x x x x x x x x x 0 0 0 0 0 0 0 5th × × × × × × × × × × 4th x x x o o 3rd x x x x x x x x x o o o o 2nd x x x x o o o lst x x x x x x o o o o o o o o o o o B.C. 1st x x x o o o o o 3rd x x x x x x o 4th x x x o o 5th x x x x x x o o 6th x x o o o x = amphora 7th x x x o o o o = other objects 8th x o o 9th o o 10th o llth o o 12th 0 0 0 LBA o MBA o EBA o

The small number of finds in the early and late phases of this era of use can be accounted for in different ways. It is not the paucity of finds from the Chalcolithic Period and the Bronze Age which should ellicit comment but rather the mere preservation of objects of this antiquity, surviving on the surface of the sea floor. From the Iron Age, there are few finds, which circumstance compliments our knowledge of the extent of intercourse between the areas of the Aegean and eastern Mediterranean at this time. The same can be said of the later phases, due to a state of almost constant warfare between the Byzantine and Islamic Empires.

Thus, it has become clear during the course of this paper that the history of the eastern Mediterranean is presented as a microcosm at Serçe Liman and that single artifacts can be related to the events of its day. The history of the use of the harbor at Serçe Liman, then, is the history of the eastern Mediterranean.

APPENDIX I

A number of other artifacts were recovered during the Anchorage Survey. A few of these have been partially identified (i.e. parallels have been found at other sites but provenance and/or date are unknown). This small group is catalogued below.

AS161 Amphora

CD

Fig. 64, p.200 location unknown Max. h. 0.222; rim d. 0.107; handle h. 0.09; rim th. 0.013; th. 0.008. Half of rim,one handle and part of body preserved. Fine brown fabric.

Rim squared off, no delineation on exterior. Simple curve out from rim for preserved height. Handle attached c.0.05 m below lip. Thick, twisted circular handle. Indentation at bottom for finger or where pinched to attach. Wheel marks apparent from rim to handle base, then body is ridged.

Cf. KWS, pers. comm. -- perhaps from Gaza.

AS162 Jug

GV

Fig. 65, p.205 JK45 Max. h. 0.073; neck h. 0.039; rim h. 0.010; rim d. c.0.076; th. 0.005. Concreted. Rim, neck and curve to shoulder preserved. Red-brown fabric with black and white inclusions.

Squared off rim curves to hour-glass neck. Terminates in sharp ridge and shoulder slants down from there. Interior rounded and smooth. Possible place of attachment for handle on rim.

Cf. KWS, pers. comm. -- may be ceramic imitation of faience "ostrich egg"; made in North Africa or Syria.

AS163 Amphora

Fig. 65, p.205 QR-15 Max. h. c.0.622; max. d. c.0.341. Concreted and worn. Neck and handles missing. Small hole in shoulder. Pale orange fabric.

Ovoid body tapers to peg toe. Oval handles attached on shoulder just above carination.

Cf. Agora P22132: Rhodian.

AS164 Amphora

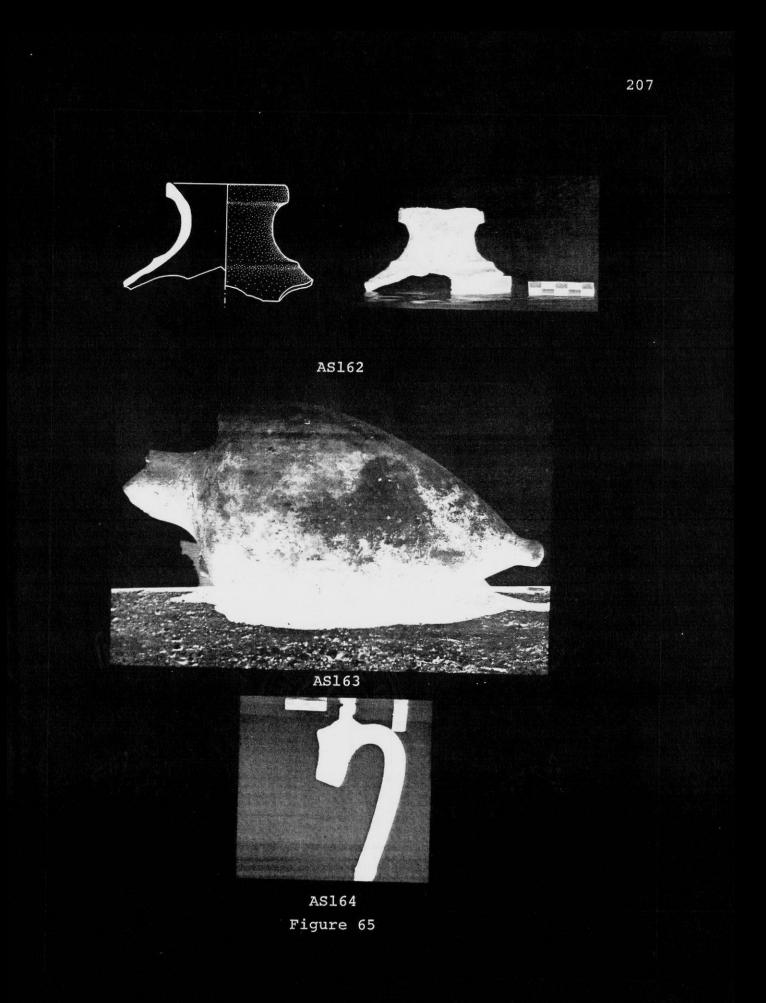
Fig. 65, p.205 MN20 Max. h. 0.106; handle h. 0.207; rim h. 0.014; rim d. 0.098; handle w x th. 0.035 x 0.024.

Concreted. Part of rim and neck, one entire handle preserved. Orange fabric.

Squarish rim sharply delineated from straight neck. Oval handle attachs below rim and archs out

DV

HE



very slightly before turn to long shaft which tapers to body. Top of handle is approximately equal with rim.

Cf. Agora SS5748: Rhodian.

AS165 Lagynos

Fig. 66, p.207

DB QR-5

ЕJ

JK-5

Max. h. 0.135; neck h. 0.079; handle h. c.0.098; neck d. (top) 0.030, (bottom) 0.052; th. 0.003. Heavily concreted. No rim; both neck, handle attachment and part of shoulder preserved. Orange fabric.

Slim flaring neck curves out to broad sloping shoulder. Handle attachment only on one side. Attached on neck near break and on widest preserved part of shoulder.

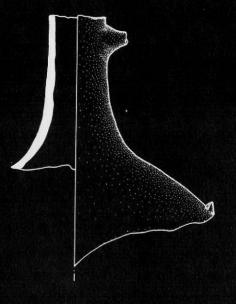
Cf. Homer Thompson, 1934, "Two Centuries of Hellenistic Pottery" <u>Hesp. 3</u>: 450-451.

AS166 Stand

Fig. 66, p.207

Max. h. 0.332; max. d. 0.112,

No rim, base or handle preserved. Brown fabric. Long tapering cylinder. Uneven exterior surface. Cf. Robert J. Braidwood and Linda S. Braidwood, 1960, <u>Excavations in the Plain of Antioch</u> I: <u>The</u> <u>Earlier Assemblages. Phases A-J</u> (Chicago): pl. 69.







AS166

Figure 66

Late Bronze Age II.

Jug	JC
Fig. 67, p.209	KL-5
Max. h. 0.080; d. 0.140; th. 0.004.	
Heavily concreted; worn. Part of rim and	l handle
preserved. Pink-orange fabric.	
	Fig. 67, p.209 Max. h. 0.080; d. 0.140; th. 0.004. Heavily concreted; worn. Part of rim and

Long, round vertical handle curves to short, plain vertical rim. Rim turns in at base of handle attachment sharply to form a wide, slightly sloping shelf.

Cf. M. Dothan, 1971, "Ashdod: Second and Third Seasons of Excavations 1963, 1965" <u>Atigot</u> (English Series) 9-10: fig. 1.16 -- 1200-1100 B.C.

AS168 Anchor stock

HS

RS-20

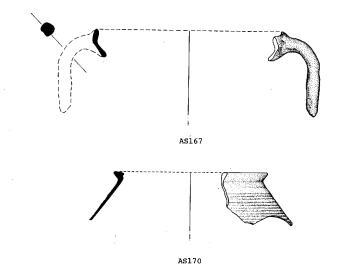
Max. h. 0.205; length c.l.55; width 0.12. Eroded and concreted. Limestone?

Base of stock flat. Top curves from end to end. Mark preserved in center where anchor shank fit on -unevenly cut.

Cf. Dan McCaslin, 1979, <u>Stone Anchors in Anti-</u> <u>quity</u> (Santa Barbara): 75-6 -- 1050/1000-350/300 B.C.

AS169 Cooking pot

JS





Concreted and worn. Part of rim and body preserved. Pale brown fabric with dark glaze (?).

Splayed, "hawksbeak" rim curves up to pointed lip. Body curves down and out from lip.

Cf. M. Dothan, 1971, "Ashdod: Second and Third Seasons of Excavations 1963, 1965" <u>Atigot</u> (English Series) 9-10: fig. 55.3 -- 1000-586 B.C.

AS170 Cooking pot

HC KL25

Fig. 67, p.209

Max. h. c.0.06; d. 0.16; rim w. 0.01; th. 0.004. Part of rim and body preserved. Red-brown fabric with red inclusions.

Thick, flat rim offset from body. Groove at top interior. Body swells sharply from rim.

Cf. Frederick Jones Bliss and R.A. Stewart MacAlister, 1902, <u>Excavations in Palestine During</u> <u>the Years 1898-1900</u> (London): 704-5 -- c.800-300 B.C.

AS171 Cooking pot BG Max. 68, p.212 PQ-5 max. h. 0.102; rim h. 0.022; rim d. 0.230; handle h. 0.091; handle w x th. 0.026 x 0.012; th. 0.007. Lightly concreted. One handle, part of rim and body preserved. Red-brown fabric with paler inclusions. Vertical rim delineated from body by groove. Interior ridge at base of rim for lid. Body ovoid. Handle attached level with rim, extends horizontally, then curves down, and slightly in, to body. Flat in section.

Cf. Frederick Jones Bliss and R.A. Stewart Macalister, 1902, <u>Excavations in Palestine During</u> <u>the Years 1898-1900</u> (London): 104-5 and pl. 54 -c.800-300 B.C.

AS172 Storage jar

KB KL-5

Fig. 68, p.212

Max. h. 0.200; d. 0.250; th. 0.005.

Lightly concreted. Part of base and body preserved. Light brown fabric.

Vertical body turns sharply to flat base. Groove offsets base.

Cf. KWS, pers. comm. -- 3rd-2nd centuries B.C. in Spain; Early Imperial on Rhine; Tiberian to Hadrianic at Corinth.

AS173 Jug

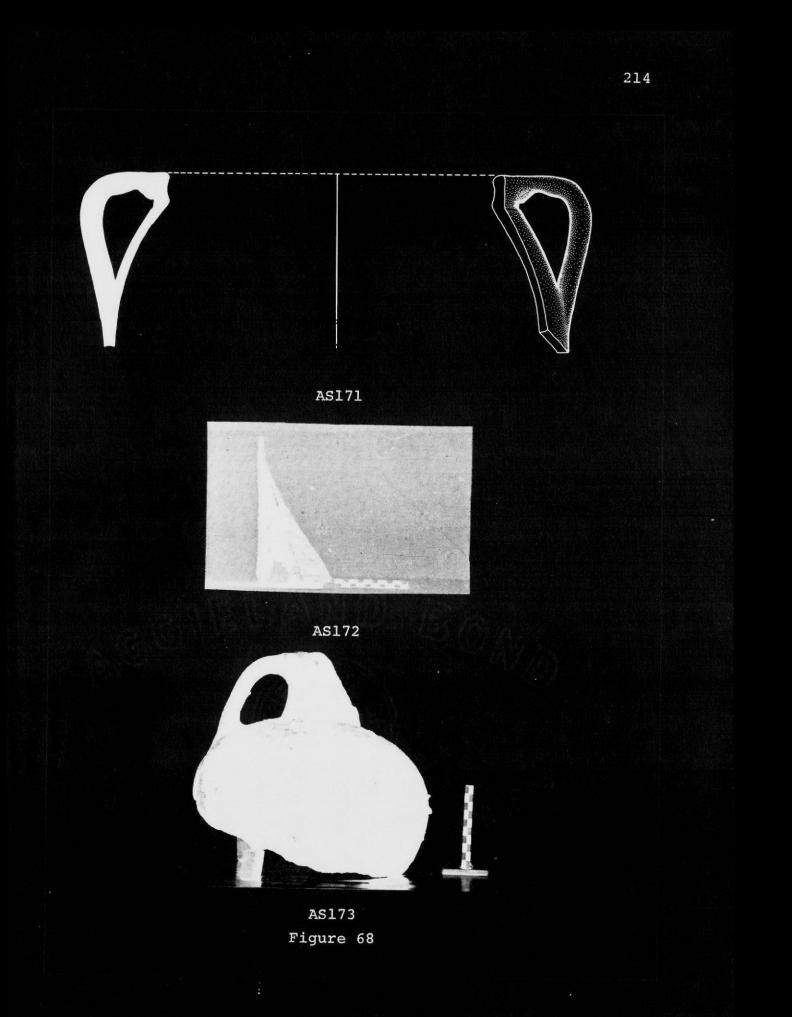
HL

 Fig. 68, p.212
 PQ15/20

 Max. h. 0.251; max. d. 0.272; neck h. 0.072; handle

 h. 0.103; handle w x th. 0.030 x 0.019; th. 0.007.

 Lightly concreted and worn; pitted. Rim and neck



chipped; handle intact; upper body preserved. Gritty brown fabric.

Rim tapers to flaring neck. Sloping, rounded shoulder, globular body. Handle attached as part of rim and on shoulder just above maximum diameter. Semi-oval cross-section for handle.

Cf. KWS, pers. comm. -- local Aegean series from 3rd B.C. - 1st A.D.

AS174 Bowl

FW

Fig. 69, p.215 location unknown H. 0.052; max. d. 0.135; base d. 0.068. Fragment of side missing. Fine, hard fabric; discolored, mottled red and black.

Simple echinus bowl with flat base. Rim incurving with sharp edge. Flat on top.

Cf. Frederick Jones Bliss and R.A. Stewart Macalister, 1902, <u>Excavations in Palestine During</u> <u>the Years 1898-1900</u> (London): 127-8 and pl. 60 --Seleucid Period.

AS175 Amphora HI Fig. 69, p.215 FQ10 Max. h. c.l.04; max. d. c.0.510; toe h. c.0.090; th. 0.005. Lightly concreted; worn. Body, half of shoulder, part of neck and one handle attachment preserved. Found buried in the sand. Orange fabric.

Long peg toe. Body flares to shoulder with slight bulge at mid-body. Carinated shoulder has more pronounced bulge from body. Strongly sloping shoulder curves in to fragmentary neck. Handle attached at mid-shoulder. Deep groove on inside of handle. Exterior has slight ridge. Thin-walled body.

Cf. KWS, pers. comm. -- 2nd B.C. - 2nd A.D., eastern Mediterranean.

AS	:1	7	6	Jug

Part	of	neck preserved without rim; curve to s	houlder
Max.	h.	0.072; d. 0.039; th. 0.004.	
Fig.	69,	p.215	KL10

barely preserved. Orange fabric.

Straight, cylindrical neck with ridge at center of preserved portion. Curve to shoulder fairly sharp. No handle attachment preserved in this section.

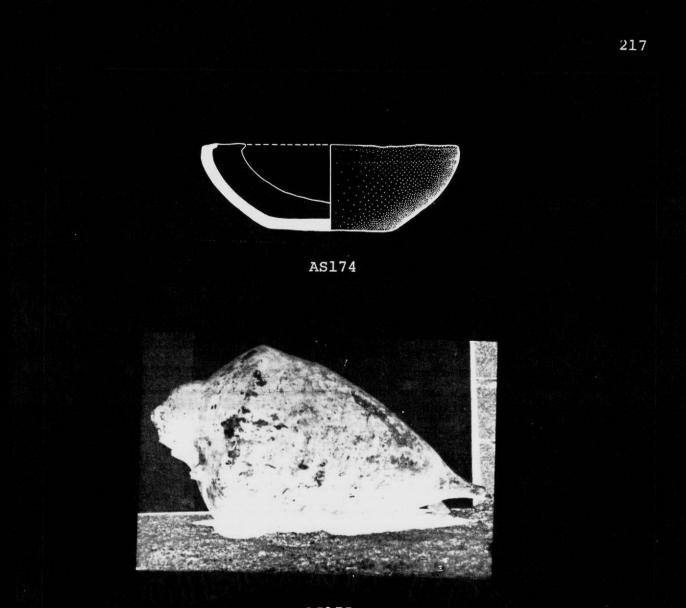
Cf. KWS, pers. comm. -- more likely early Imperial than Hellenistic.

AS177 Storage jar

Fig. 70, p.217 NP10 Max. h. 0.094; rim d. 0.170; th. 0.005.

GO

CA



AS175



AS176

Figure 69

Part of rim, neck and one handle attachment preserved. Brown fabric.

Rim plain with three concentric grooves just beneath it. Neck curves in slightly then flares to shoulder. Second set of three grooves below handle attachment, which is on first set. Handle extends out from neck and up slightly.

Cf. KWS, pers. comm. -- Late Roman?

AS178 Amphora

BH

Fig. 70, p.217 location unknown Max. h. c.0.322; neck h. 0.074; handle h. 0.117; max. d. 0.237; rim d. 0.059; handle w x th. 0.045 x 0.015; th. 0.005. Heavily concreted; worn. Almost all except base preserved. Brown fabric.

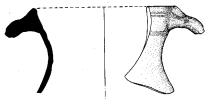
Small mouth, short neck, out-turned rim. Shoulder slopes to ovoid body. Handles flat. Attached approximately center neck, project out and up to approximately rim height then turn sharply down to attach just above maximum diameter at base of shoulder.

Cf. Agora P802 and P9289: Byzantine.

AS179 Amphora

Fig. 71, p.220

EI JK20



AS177



AS178

Max. h. 0.122; handle h. 0.103; neck d. 0.090; rim d. 0.089; handle w x th. 0.043 x 0.021; th. (neck) c.0.010, (body) 0.004.

Rim, neck, part of shoulder, one complete handle, part of second preserved. Brown fabric with black inclusions.

Round plain rim with ridge beneath it. Short neck flares below handle attachment. Thin walled sloping, rounded shoulder. Small mouthed. Handles attached below rim (on ridge) and on shoulder. Three sharp ridges run down back of handle. Ridges meld into body at attachment. Interior base of neck preserves deep groove.

Cf. Agora P2902, P2901 and P26707: 7th-10th centuries A.D.

AS180 Lekythos

Fig. 71, p.220 JK0 Max. h. c.0.095; base d. 0.090; th. 0.004. Part of base and body preserved. Red-brown fabric with black inclusions.

Wall tapers in a smooth curve to flat base. Sharp corner at juncture. Base marked by incised line.

Cf. KWS, pers. comm. -- 6th-7th century A.D., Cypriote.

GN

AS181 Amphora

Fig. 71, p.220 QR-15 Max. h. 0.203; rim h. 0.008; neck h. 0.100; handle h. 0.136; mouth d. 0.102; handle w x th. 0.036 x 0.024; th. 0.005.

Heavily concreted and worn. Rim, neck, one handle and shoulder preserved. Gritty orange-brown fabric.

Round rim curves in to straight neck. Sharp ridge below rim. Handle attached at ridge. Two bulges in neck below handle attachment. Sharp curve to sloping shoulder. Ridged handle attached roughly on neck and on shoulder.

Cf. Agora P2902, P2901 and P26707: 7th-10th centuries A.D.

AS182 Jug

Fig. 72, p.222 pQ30 Max. h. 0.155; ring d. 0.105. Concreted and worn. Ring base and part of body to shoulder preserved. Brown fabric.

Shoulder curves sharply to ovoid body. Base fairly flat with tall, thin-walled ring attached.

Cf. Fr. Sylvester J. Saller, 1957, Excavations at Bethany (1949-1953) (Jerusalem): 316-7, #10 -medieval. 221

EK

нv

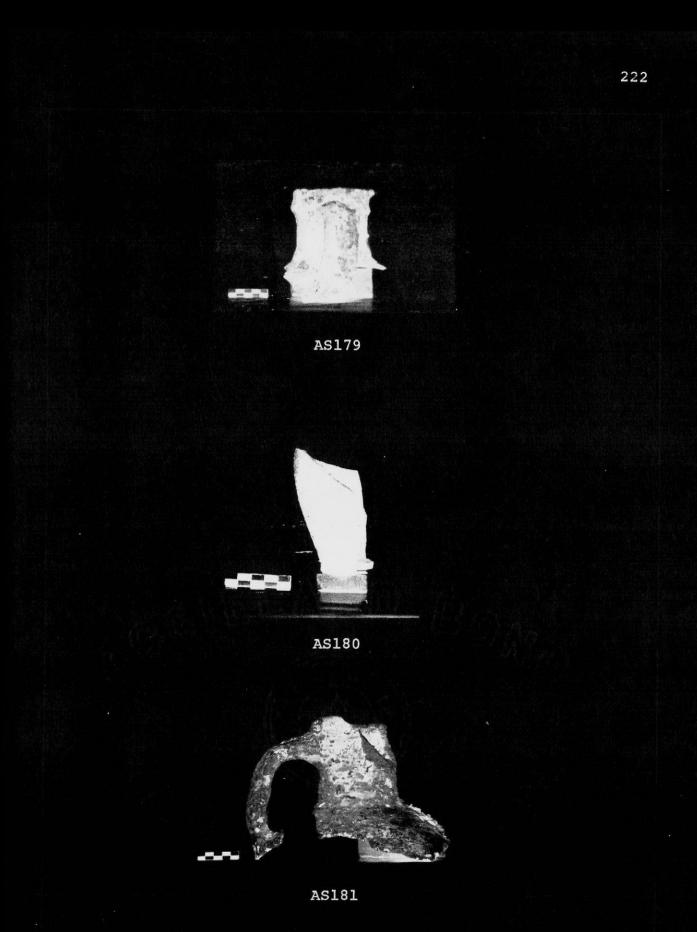


Figure 71

AS183 Base sherd

Fig. 72, p.222

Th. 0.005.

Base sherd preserved. Fine, tan fabric.

Sherd preserves combed lines in herringbone pattern.

Cf. KWS, pers. comm. -- Hama?

AS184 Amphora

CG

Fig. 72, p.222 PQ10 Max. h. 0.150; rim d. 0.125; handle h. 0.091; handle w x th. 0.025 x 0.018; neck h. 0.091; rim w. 0.013; th. 0.007.

Concreted. Rim, neck, one entire handle, attachment of second and part of shoulder preserved. Pale orange fabric.

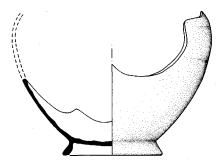
Rim offset from neck by shallow groove. Short, cylindrical neck with large mouth. Handles (thin) attached just below rim and on shoulder. Base of handles pinched. Delineation between neck and sloping shoulder sharp.

Cf. Agora P28487.

Of the remaining artifacts, most are too fragmentary to be identified. This group consists of: 55 amphora fragments (12 rims, 10 handles, 14 body sherds and 19

KD

KL-5







AS183



AS184 Figure 72

bases); 9 storage jar fragments (1 rim, 1 handle and 7 bases); 9 cooking pot fragments (all rims); 12 jug fragments (1 rim, 3 handles, 5 body sherds and 3 bases); 9 bowls (8 rims and 1 base); 1 plate fragment (base); 3 roof tiles (2 cover tiles and 1 pan tile); and 1 iron anchor.

APPENDIX II

The stretch of coast in which Serçe Liman is located has never figured largely in the known history of Anatolia. From the pre-literate period, archaeological evidence offers an argument ex silencio; there is no evidence of any coastal occupation from Antalya to Halikarnassos (Mellaart 1962:4). Indeed, there is little evidence of occupation in the area containing Serce Liman before the Hellenistic period (Bean 1971: Chapter 13, passim). To gain a history of this site before the emergence of Rhodes as a mercantile center of importance, it would be necessary to study the general history of southern and western Anatolia. This is also true for later periods. It was only during the Hellenistic and Roman periods that this stretch of coast possessed a history of its own making. For these periods, inscriptions from the area in combination with occasional references by ancient historians and commentators can be used to re-construct a skeletal history. The lack of earlier archaeological remains and later remains and literary references is direct indication of the state of the area.

Serce Liman lies in the area known during Rhodian rule as the Incorporated Peraea, including all territory controled by the Rhodians on the Turkish mainland. The limits of the Peraea were ever-changing but included the Loryma peninsula at all times (Bean 1971:154). The Peraea was comprised of at least eleven demes associated with the three Rhodian cities of Camirus, Ialysus and Lindus. Casara, a Lindian deme (Fraser and Bean 1954:79) identified with present-day Asardibi, was probably served by a port at Serce Liman (tentatively identified as Port Cressa; Fraser and Bean 1954:59).

The nature of the Hellenistic and Roman evidence of the area related directly to Rhodian involvement there. Though we cannot date the beginning and end of Rhodian concerns here to these periods, it was during the 4th century B.C. that Rhodes attained the height of its greatness and it was in the early centuries of our era that it settled back into near-oblivion. Thus, the direct history of the area of which Serce Liman is a part is merely a reflection of the history of Rhodes.

The beginnings of the Rhodian Peraea are unknown. This question has been discussed by Fraser and Bean (1954: 94-5) with the resulting hypothesis that the Peraea was probably established before the incursions of the Persians and their subsequent control of Anatolia (Fraser and Bean 1954:94). A more specific history of the area is unknown, however, until after the end of the Persian Wars and the beginning of the unquestioned supremacy of the Greeks in the Aegean (Fraser and Bean 1954:94-5). With this rise to power, Rhodes achieved the position of middleman which it would hold between the Aegean and the Near East until Roman times. As Rhodes grew in power and prosperity, it was

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necessary for it to grow territorially as well in order to support its expanding population. It became the greatest emporium of the eastern Mediterranean. It is at this time that we see a true expansion onto mainland just a few miles away; one of the cities founded by the Rhodians was Casara. Ruined fortification walls, stepped pyramidal bases of unknown function and various inscribed architectural members, all in the area, date to the period of Rhodian prosperity. Today, remains can be seen on the northeastern beach at Serçe Liman of what may have been shipsheds. Though Serçe Liman was never a thriving port, it was frequented probably for several centuries by ships filling the needs of Casara and environs.

In the mid-2nd century B.C., conditions changed. The prevalence of Cretan pirates, whom the Rhodians were unable to suppress, weakened Rhodes' control of the seas (Magie 1950:111). Rome was starting to emerge as a power in the Aegean and had not only successfully set Delos up as a rival emporium to Rhodes but had also advocated the virtual dissolution of the Peraea by supporting Lycia's and Caria's claims of independence (Magie 1950:155; Bean 1971:153). From this time, though Rhodes and the opposite Anatolian coast still figured in events of the times, the area's importance diminished and no longer figured largely in Mediterranean history. Rhodes continued to sink into obscurity over a period of several centuries. Control of the Peraea was maintained until at least the early 3rd

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century A.D. and perhaps longer.

It was not until the era of the Crusades and the Knight Hospitallers that Rhodes was once again the center of an historical epoch. This time, however, it is not a center of trade but rather a supply station for warriors on their way east.

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