THE ŞEYTAN DERESİ WRECK
AND THE MINOAN CONNECTION IN THE EASTERN AEGEAN

A Thesis
by
ROXANI ELENI MARGARITI

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of
MASTER OF ARTS

August 1998

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ABSTRACT

The Şeytan Deresi Wreck

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In 1975, a team from the Institute of Nautical Archaeology excavated a pottery assemblage lying at a depth of approximately 30 meters in the bay of Şeytan Deresi (Devil Creek), on the Aegean coast of Turkey east of Bodrum. Despite the absence of ship timbers, the location of the site, the uniform fabric of most of the items, and their distribution on the seabed indicated that the assemblage represented a shipwreck. The pottery, comprising exclusively coarseware utilitarian vessels, may have served as merchandise containers and/or constituted trade items, while some may have held the crew’s food and drink supply.

After conservation and preliminary study of the material, project director George Bass dated the wreck to the late Middle Bronze Age pointing to Middle Minoan as well as Anatolian influences on the pottery. While it is true that none of the Bronze Age analogues constitutes an exact parallel of any of the Şeytan Deresi ceramics, later periods do not provide any closer counterparts. Recent excavations have brought to light material that supports a Middle Bronze Age dating and strengthens the case for the possibly Minoan or Minoanizing nature of the pottery. Additionally, recent work in Eastern Aegean islands substantiates the tradition of colonization and intensive maritime activity by Minoans in the region. The pottery from Şeytan Deresi may have been made in a Minoan settlement of the Eastern Aegean islands or a site on the Anatolian coast where Minoans lived and/or traded.
ACKNOWLEDGMENTS

In the mid-1970's George F. Bass led the first INA (later INA) excavation at Seytan Deresi and published the results in an exemplary preliminary report. I thank him warmly for offering me the challenging opportunity to reassess the material and produce the final report on the site. I did my best to prove worthy of a great teacher and archaeologist, but his is a tough act to follow. This thesis is only a small tribute to his pioneering work.

The completion of this thesis required three trips to the Bodrum Museum of Underwater Archaeology, as well as visits to the Archaeological Museums at Rhodes, Kos, and Crete. I am grateful to the director of the Bodrum Museum, Oğuz Alpözen, for granting me access to the material, and for all his assistance and generosity. I also thank the Museum staff for their help in locating all of the Seytan Deresi pottery at a difficult time of exhibit rearrangement due to the construction of the Yassi Ada model. I extend my gratitude to all INA staff members in Bodrum for making my stay at the INA headquarters pleasant and productive. Netia Piercy, whose drawings illustrate this thesis, deserves special thanks. The staff of the Museums of Rhodes, Kos, and Crete were also extremely helpful; I thank them for their patient assistance in the difficult task of locating material from old excavations in overcrowded museum storerooms.

My involvement in Nautical Archaeology began in 1991 with my participation in the underwater excavation at the Early Bronze Age shipwreck at Dhokos, a project of the Hellenic Institute of Maritime Archaeology (HIMA). I owe great thanks to Nikos Tsouchlos, Dr. Yiannis Vichos, Dr. George Papanassopoulos, and Dr. Eilpida Hadjidaki for all their support and encouragement over the years since that momentous summer. I especially thank Dr. Yiannos Lolos and Dr. Ilias Spondylis, also of HIMA, for sharing with me their expertise in Bronze Age pottery and wreck site formation respectively. Finally, I
am grateful to Dr. Yiannis Sakelarakis for generously providing me with drawings of the Minoan parallel from his famous excavations at Anemospilia.

This thesis would not have been brought to completion without the incessant encouragement and support of many of my friends and colleagues. I thank Peter van Alfen and Rahilla Shatto for applying the necessary pressure at times of frustration. My warmest thanks go to Georgia Fox and Lillian Martin, both Texas A&M graduates, whose loving and unfailing support saw me through the most difficult stages of finishing and submitting the thesis. At Princeton, Christine Philiou and Yossi Rapoport stood firmly by me and tolerated my stress-induced ups and downs; Gilat Levy, Iren Özgür, Janet Klein, and Jessica Tiregol have also been true friends to me and I don’t think I could have finished the semester and submitted this thesis in absentia if it weren’t for them. Without Jessica I would never have met all the formatting requirements of the thesis clerk; she taught me all sorts of computer magic, talked me through difficult points over the phone, and physically sat with me in front of the computer to remedy hour-long clashes between special Greek and Turkish fonts, blue-line margins, “pict” files, and subversive page numbers.

Finally, I would have never made it anywhere without my family’s loving support, encouragement, generosity, and tolerance of my frequent absences. To my sister Alexia, my mother Maria, my aunt Eleni, my grandmother Roxani, and to the memory of my father Constantine J. Margaritis, I owe everything.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>iii</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>iv</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>vii</td>
</tr>
<tr>
<td>ABBREVIATIONS</td>
<td>viii</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>THE EXCAVATION</td>
<td>3</td>
</tr>
<tr>
<td>THE POTTERY</td>
<td>10</td>
</tr>
<tr>
<td>Finds SD 1, SD 2, and SD 3</td>
<td>11</td>
</tr>
<tr>
<td>Finds SD 4 and SD 5</td>
<td>17</td>
</tr>
<tr>
<td>Finds SD 6, SD 7, and SD 8</td>
<td>22</td>
</tr>
<tr>
<td>Find SD 9</td>
<td>28</td>
</tr>
<tr>
<td>Finds SD 10, SD 11, and SD 12</td>
<td>32</td>
</tr>
<tr>
<td>Finds SD 13, SD 14, SD 15, SD 16, and SD 16A</td>
<td>38</td>
</tr>
<tr>
<td>Find SD 20</td>
<td>43</td>
</tr>
<tr>
<td>Find SD 17</td>
<td>45</td>
</tr>
<tr>
<td>Find SD 18</td>
<td>47</td>
</tr>
<tr>
<td>Find SD 19</td>
<td>49</td>
</tr>
<tr>
<td>CONCLUSIONS ON THE CERAMIC ASSOCIATIONS AND DATING OF THE SEYTRAN DERESI ASSEMBLAGE</td>
<td>51</td>
</tr>
<tr>
<td>THE MINOAN CONNECTION IN THE EASTERN AEGEAN: LITERARY SOURCES AND ARCHAEOLOGY</td>
<td>53</td>
</tr>
<tr>
<td>CONCLUDING REMARKS</td>
<td>60</td>
</tr>
<tr>
<td>ENDNOTES</td>
<td>63</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>83</td>
</tr>
<tr>
<td>VITA</td>
<td>90</td>
</tr>
<tr>
<td>FIGURE</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>Plan of the site</td>
</tr>
<tr>
<td>2</td>
<td>Belly-handled amphora SD1</td>
</tr>
<tr>
<td>3</td>
<td>Belly-handled amphora fragment SD 2</td>
</tr>
<tr>
<td>4</td>
<td>Jug SD 4</td>
</tr>
<tr>
<td>5</td>
<td>Jug SD 5</td>
</tr>
<tr>
<td>6</td>
<td>Amphora SD 6</td>
</tr>
<tr>
<td>7</td>
<td>Amphora fragment SD 7</td>
</tr>
<tr>
<td>8</td>
<td>Amphora fragment SD 8</td>
</tr>
<tr>
<td>9</td>
<td>Krater SD 9</td>
</tr>
<tr>
<td>10</td>
<td>Two-handled pithos SD 11</td>
</tr>
<tr>
<td>11</td>
<td>Handleless pithos SD 13</td>
</tr>
<tr>
<td>12</td>
<td>Neck, shoulder, and handle fragment SD 20</td>
</tr>
<tr>
<td>13</td>
<td>Pointed base fragment SD 17</td>
</tr>
<tr>
<td>14</td>
<td>Amphora neck and shoulder fragment SD 18</td>
</tr>
<tr>
<td>15</td>
<td>Amphora neck and shoulder fragment SD 19</td>
</tr>
</tbody>
</table>
ABBREVIATIONS

Bass 1976

*Thalassocracy*
INTRODUCTION

In 1973, George F. Bass and a small group of scholars founded the American Institute of Nautical Archaeology (subsequently Institute of Nautical Archaeology) and applied themselves to the study of ancient shipwrecks. Funded by the National Geographic Society, their very first underwater survey, off the central part of Turkey's Aegean coast, held little promise for the future until a modest supplemental grant, a new recompression chamber and a chartered 65-ft trawler, the Kardeşler, serving as a research vessel, gave them the opportunity to extend their search to additional locations and deeper waters. In the Institute's first newsletter, Bass describes the reversal of fortune: "After so many weeks of frustration, I had now dived on four good wrecks in just two days. The best was yet to come."

With the town of Bodrum (ancient Halikarnassos) as its base, in October the Institute focused its efforts on the Gulf of Gökova. The most exciting event of the survey was the discovery of a pottery assemblage which the team recognized as a wreck. Two large ceramic vessels, half-buried in the seabed at the eastern end of Kerme Bay near Şeytan Deresi (Devil's Creek), had drawn the attention of diver Cumhur Işık during a dive for sponges seven years earlier. Cumhur, now retired but still an invaluable participant in INA surveys, led the team, first to the general area, then to the exact location of the site.

Nearing the end of their survey that year, the team decided to raise the visible artifacts and thus protect them from potential looters. The objects removed in 1973 include a krater (SD 9) and a two-handled pithos (SD 10), both intact, as well as an unspecified number of sherds lying on the seabed. Short-handed and pressed for time the divers marked the positions of the whole jars with lead weights and recorded their relative positions with photographs before raising the vessels and leaving the site. During those few dives they also collected sherds visible on a rocky slope immediately above the find spots of the two complete vessels.

This thesis follows the style and format of the American Journal of Archaeology.
Two years later Bass directed a full-scale excavation of the Şeytan Deresi site. After conservation and preliminary study of the ceramic assemblage retrieved, he published a comprehensive report on the project, presenting a thorough search for parallels in the hitherto published material. He made a strong case for dating the Şeytan Deresi material to the end of the Middle Bronze Age and demonstrated Minoan and Anatolian influences on the pottery, despite the dearth of very close parallels. Although no scholar has yet refuted his thesis in print, some have expressed skepticism. Others, however, are convinced of the validity of his arguments and dating. Among them are J. Mellart on the Anatolian side and S. Hood on the Minoan side, who have supported a Bronze Age date from the beginning and, more recently, Y. Sakelarakis and Y. Lolos, who acknowledge the Minoanizing character of the Şeytan Deresi pottery.

Twenty years after the excavation and initial publication of the Şeytan Deresi finds, archaeological work throughout the Aegean and the broader Eastern Mediterranean region has stimulated new interest in the Şeytan Deresi wreck, and justifies the reconsideration of available data. In the fall of 1995, hoping to elucidate the wreck's date, C. Pulak of INA submitted two ceramic samples for dating by thermoluminescence at the Research Laboratory for Archaeology and the History of Art at Oxford University; the two very disparate resulting dates, both presented as minimum ages for the material, are significantly younger than the dates assigned to the wreck on stylistic grounds. Given their internal inconsistency and incompatibility with all parallels proposed for the Şeytan Deresi pottery, these dates cannot form a basis for the dating of the wreck. The present study of the wreck assemblage is an attempt to demonstrate that material from recent excavations in the Aegean strengthens the case for the possibly Minoan or Minoanizing nature of the Şeytan Deresi pottery. New comparanda come from Crete and the Dodecanese, as well as from mainland Greece and Anatolia.
THE EXCAVATION

Attributing his initial impression that the Seytan Deresi pots belonged to the Bronze Age to wishful thinking, Bass concurred with the view of all the specialists he consulted immediately after the survey and dated the wreck to the Iron Age or Archaic Period in his first published reports of the discovery. The general shape and distinctive handles of the krater (SD 9) raised during the 1973 survey seemed to justify this late date for the specific artifact and the wreck as a whole, but convincing parallels for this and other Seytan Deresi finds, from either the Iron Age or the Archaic Period, were lacking.

Even as a Geometric or Archaic assemblage, the discovery seemed important and the site worthy of excavation. AINA scheduled a project for 1974 but military conflict in the region thwarted their plans. Excavation finally took place the following year and lasted for almost six weeks. The original team comprised 18 members, yet on October 14, the last day of excavation, only six of the crew remained as the others, mostly student volunteers, had to return to their academic pursuits. It was the first excavation undertaken by the group that was to become the Institute of Nautical Archaeology (INA), the first excavation for Cemal Pulak, later director of the Uluburun Project, and the first official collaboration of the Institute with Öğuz Alpözéni, then a commissioner overseeing the project on behalf of the Turkish Archaeological authorities and currently the director of the Bodrum Museum of Underwater Archaeology.

The morphology of the site and complicated layout of the artifact scatter emerges clearly from the published site plan (Fig. 1) and the excavators' descriptions. The finds spread over a 42- m² area but the main concentration, including the two complete vessels raised during the survey, lay at the northern end of the site in a sandy bottom at a depth of 32 to 33 m. Above a rocky slope located east of this sandy area, at shallower depths (27 m), another stretch of sand held a pithos (SD 13) known to Cumhur Ilik but not seen by others during the 1973
Fig. 1. Plan of the site
survey. The pithos contained large rocks, an amphora neck (SD 18), an amphora base (SD 17), a lead fishing weight (SD 22), and, significantly for the understanding of wreck formation processes, two sherds that proved to be parts of finds SD 6 and SD 8, both amphoras of the same type. Not visible on the site plan are smooth stones, "presumably ballast" according to the excavator, of which the divers removed several basketfuls from among the pottery scatter in the sandy area of the site. Also not indicated on the plan are additional finds from shallower waters. Bass mentions "large sherds and a handle identical to those of pithos SD10" lying in 2 or 3 m of water and heavily concreted to the rocky bottom between the site and the shore.

Having moored a 50-ft wooden barge over the site, the team laid down a PVC grid of four 2-m squares around the findspots of krater SD 9 and pithos SD 10, which were now shallow depressions in the sand still holding the original lead-weight markers placed there at the removal of the pots during the 1973 survey. A metal grid soon replaced the PVC piping, and squares were added as the excavation progressed. Using 1-ft steel probes they located concentrations of pottery buried in the sand at the positions noted in the site plan. Since most of the sherds recovered from this area joined to form complete or nearly complete vessels, Bass was satisfied with the thoroughness of excavation.

In spite of thorough combing of the area, the rocky slope, where the divers had seen and collected random sherds during the 1973 survey, did not yield any further artifacts in 1975, except for the base of amphora SD 6. Bass points out that in their hasty efforts in 1973, the divers are not likely to have collected all sherds present among the rocks and, adding that few of the sherds from the rocks joined, speculates that other parties may have visited the site before the archaeologists returned. A further possibility, not necessarily exclusive of Bass's interpretation, is that sherds covered with concretion escaped notice both times; Bass himself notes that the base of SD 6 "was nearly invisible under concretion." Furthermore, the relatively short duration of the project coupled with the dwindling crew towards the end allow
for the possibility that, despite meticulous efforts, the divers missed valuable scraps of evidence scattered throughout the site. Finally, Bass now regrets not having sieved the contents of intact vessels for small finds and organic remains, a routine procedure in subsequent INA excavations.12

After conservation and mending, the finds of the main group were estimated to represent 17 individual vessels, of which 10 were restorable to their original shape. A perusal of the site plan reveals that, in general, joining pieces from the sandy area, especially those belonging to vessels restored to complete or near-complete profiles, were lying in discrete groups. Despite exceptions to this pattern, it seems that most of the ceramic vessels lying in the sandy area had reached the seabed intact; four of them (SD 9, SD 10, SD 12 and SD 13) remained whole, and were slowly buried in situ. Others broke upon impact and their remains were gradually covered by a deep layer of sand. Some fragments, however, were found among sherds of different vessels. Currents and marine creatures may be responsible for such movements, which obviously occurred before substantial deposition of sand over the site. In one extreme case, the fragments of amphora SD 6 were dispersed over a relatively wide area, primarily in the deeper sandy section; the base was concreted to the rocky slope and a body sherd was found inside pithos SD 13 in shallower water.

Despite the absence of ship timbers, it seems that the assemblage at Şeytan Deresi represents a single cargo that sank in a shipwreck, as opposed to items jettisoned from aboard a ship, or debris from shore.13 The location of the site at considerable depth off the eastern point of Kerme bay precludes the possibility of refuse from land, especially since no settlement site is reported in the vicinity. The uniform fabric of the ceramics ascribe the assemblage to a single source and a single shipment while the relatively concentrated layout of the finds and the presence of ballast stones among them contradict the scenario of cargo jettisoned from a ship in distress.
In his study of stratification and contamination in ancient Mediterranean shipwrecks, A.J. Parker provides a simple classification of shipwrecks, based on their state of preservation. He groups shipwrecks into three broad classes: well-preserved, relatively coherent, and scattered. In well-preserved shipwrecks, "coherent timber structure and cargo survive, with a dense concentration of material." In relatively coherent shipwrecks, "part of the disturbed cargo, and, possibly, some structural timbers, survive more or less in situ, though the rest of the wreck is dispersed or lost." While in scattered shipwrecks, "only fragments of the cargo survive, widely spread, and small finds or fragments of the hull are only occasionally preserved." Individual shipwrecks are likely to fall between categories, yet Parker’s classification is useful in defining the degree of disturbance each site has suffered. The relatively dense main concentration of pottery, which appears to have survived more or less in situ, the presence of ballast stones, and additional ceramic finds scattered over a wide area including much shallower waters, combined with the absence of any hull remains or small finds, place the Şeytan Deresi assemblage between Parker’s classes 2 and 3.

Despite its nature as an open deposit, the Şeytan Deresi site offers sufficient evidence for the reconstruction of the main shipwreck event and speculation on the ship’s original contents. The intrusive material at Şeytan Deresi is easily detectable; comprising distinctly random pieces it does not detract from the uniformity of the main assemblage. Its presence indicates that, in addition to the main event of wreck formation at Şeytan Deresi, at least three other incidents, probably minor and chronologically far removed from one another, contributed to the final morphology of the site.

The circumstances that caused the shipwreck at Şeytan Deresi pertain to local geography and weather conditions. The coast of the Gulf of Gökova features a series of parallel mountainous ridges and deep valleys that run in a north-south direction perpendicular to the shore. The excavation team had pitched their tents on the beach of the small bay at the
issue of a deep valley known as Şeytan Deresi. The wreck site itself lies off the bay's easterly point, labelled Çatal Burun (Cape Fork) in nautical charts. These ominous names warn the traveler about the prevailing conditions in the area. Mehmet Turguttekin, then captain of the Kardesler, told Bass that when he was a young man he had seen a waterspout right inside the bay. Bass describes the eerie atmosphere at camp in the evenings, which he ascribes to the unpredictable gusts of wind sweeping down the valley and menacing the camp only to die down as suddenly as they had appeared. On one occasion the violence of such a blast caused the anchors of the expedition's barge to drag, while at another time it snapped a cable. Is it likely, as Bass postulates, that a similar incident caused the ancient wreck? The location of the underwater site approximately 100 m off the easterly point of the bay suggests that the ship was rounding this cape when she came to grief. Since Kerme bay does not seem to hide the navigational hazards, such as reefs or shallows, that beset the neighboring bay of Mazi, a violent gust of wind that hit the vessel unexpectedly as she was entering the bay and caused her to list dangerously and take in water or capsize may explain the disaster.

Having rejected the idea that the cargo might have been tossed overboard to lighten a ship in distress, Bass wondered initially whether the ship had tipped and spilled its cargo when already on its way to the bottom or had capsized while still at the surface, spilled its cargo, and then floated away to be smashed on the rocky shore. Later, based on the group's failure to locate even the slightest pieces of hull timbers he leaned decisively towards the idea of capsizing. He states that the sand in the area of the main concentration was deep enough to have preserved at least some of the timber, had the hull gone straight to the bottom with the cargo. In very shallow water (2 or 3 m deep) near shore, findings of pithos fragments, including a basket handle similar to those of pithos SD 10, provide a relevant, yet ambiguous, additional clue. Bass offers two possible explanations for the presence of these sherds so close to shore. If the entire cargo spilled as soon as the vessel capsized, then some of the pithoi might
have floated away to be smashed onto rocks near the shore. It must be kept in mind that one
of the intact pithoi (SD 13) had certainly floated away and come to rest in a sandy area about
30 m away from the main concentration in shallower water (27 m) above the rocky slope.
Presumably, the hull hit the rocks nearby, or was carried out to sea by the surge. If, on the
other hand, the vessel spilled most but not all of her cargo upon capsizing, she may have
floated towards shore with a couple of pithoi still in her hold. According to this scenario, when
she eventually hit the rocky shore, her broken timbers floated away, leaving pithos fragments to
indicate the area of the final impact.
THE POTTERY

As mentioned, the ceramic finds from Şeytan Deresi comprise a total of 10 almost complete vessels, all restored to complete profile and, until recently, on display in the Bronze Age Hall of the Museum of Underwater Archaeology in Bodrum. Of the additional 16 fragments, some belong to vessels of the same types as the items on display, whereas others appear to be intrusive to the assemblage. All fragments are now stored in the Bodrum Museum conservation laboratory. The description of each type draws from personal observation, entries in the field notebook, the preliminary report by Bass, and notes by Sam Mark who studied the assemblage.

Two additional vessels in the Bodrum Museum, both of uncertain provenance but at least one said to come from the vicinity of Şeytan Deresi, deserve mention in the context of the Şeytan Deresi material. They include a pithos that was displayed in the Bronze Age Hall among the Şeytan Deresi finds because of its similarity to finds SD 10 and SD 11, and, from the Museum’s “amphora depository,” a vessel identical to amphora SD 6. I have included both vessels in the discussion of the respective types.

Finds SD 17, SD 18, and SD 19 are considered intrusive to the main assemblage (cargo) from Şeytan Deresi, and are briefly discussed at the end of this section. All three are single fragments without joins to other pieces from the site and their fabrics are unlike the uniform fabric of most of the pottery. Their presence at the site is obviously due to coincidence; they provide no information on the date or provenance of the cargo.

All measurements are given in meters unless stated otherwise. In the descriptions of overall shape and individual pottery features, I generally use Furumark’s descriptive terminology as it appears in his pivotal work on Mycenaean pottery. In labeling pottery types, I follow Bass’s 1976 report; for types not mentioned in that report I quote the term used in the relevant report or discussions.
Finds SD 1, SD 2, and SD 3

Belly-handled amphora SD 1 (Fig. 2). H. 0.357; max diam. 0.280; rim diam. 0.129; base diam. 0.130. Vessel restored from two fragments, part of body and one handle missing.

Belly-handled amphora fragment SD 2 (Fig. 3). Pres. H. 0.180; th. 0.005-0.007. Initially a single body fragment with handle, now in two pieces.

Belly-handled amphora fragment SD 3. 0.108x0.069; th. 0.004; handle diam. 0.020. Single body fragment with handle.

The most complete representative of this group (SD 1), comprises two pieces recovered during the 1973 survey. An additional piece from a vessel of the same type (SD 2) was raised at the same time, while later excavation revealed the body fragment with handle of a third vessel (SD 3).

The shape features an ovoid body with the greatest diameter approximately at the middle of the height, a straight neck, horizontal rounded lip, and a ringed base. SD 1 was initially reconstructed as a one-handled vessel, but, although only one handle survives in this example, the size and location of the missing wall fragment suggests that there must have been a second, opposite handle. A study of possible parallels leads to the same conclusion. Attached just above the vessel's greatest diameter, the surviving handle is horizontal, and round to oval in section. It exhibits two distinct incised straight lines (slits), one from each handle base upwards. Two short, deep gashes appear beside the slits. Parallel grooves, of very shallow incision, run around the vessel at handle level in a set of three and below the neck in a set of two.

The fabric is coarse, reddish-brown in color (2.5YR 4/4 to 2.5YR 3/4), and heavily pitted with white grit. The surface, riddled with deep holes up to 4mm in diameter, is often obscured by concreted marine deposit and stained dark in places. The walls are uneven, obviously fashioned by hand on a slow turntable rather than a potter's wheel.
Fig. 2. Belly-handled amphora SD 1 (1:3)
Fig. 3. Belly-handled amphora fragment SD 2 (1:2)
Bass mentions the general resemblance of the Şeytan Deresi belly-handled amphoras to a hydria from a 7th-century tomb at Ialysos on Rhodes and a Geometric belly-handled amphora from Centuripe on Sicily.\(^9\) This general similarity, however, does not necessarily date the Şeytan Deresi type to the first millennium B.C., nor does it preclude a Bronze Age date. In both the Rhodian hydria and the Sicilian amphora the neck is proportionately higher than that of SD 1 and, more significantly, handles are almost perpendicular to the wall of the vessel, as opposed to the handles of SD 1, which point almost vertically upwards. An additional vessel from later times that resembles SD 1 in body shape, an amphora from Selada on Thera, also has a proportionally higher neck than that of SD 1, and its handles, though placed at an angle similar to that of SD 1, are attached at the shoulder area rather than the belly.\(^9\)

As Bass points out, this type is present in the Aegean since the Bronze Age. The first parallel he draws from Helladic contexts, a "premycenaean" hydria from Krisa in Phocis, is smaller in size, has a neck proportionately wider than the neck of SD 1 and handles set at a different angle to the body.\(^6\) Other Middle Helladic shapes that may constitute predecessors of the shape are very similar to SD 1 in the configuration of their upper body but are narrower at the bottom and do not feature a ringed base. Bass mentions a household storage vessel from Middle Helladic Eutresis in Boeotia, slightly smaller than SD 1 and with handles set at almost right angle to the body.\(^2\) In finer Yellow Minyan fabric, a water jar from the same site also resembles SD 1 despite an extra handle at shoulder level.\(^2\) Vessels of this type appear in other Middle Helladic sites, such as Prosymna in the Argolid, but have a narrower base and a taller neck than SD 1.\(^2\)

Bass speculates that the Şeytan Deresi shape may also be related to metal prototypes as exemplified by a small gold vessel from the Shaft Graves at Mycenae.\(^2\) Beside the metal example, however, the Shaft Graves have also yielded undecorated ceramic amphoras that,
despite greater size and narrower body below the waist, bear a close resemblance to the Şeytan Deresi specimen in upper body configuration and angle and placement of the handles; according to G. Karo, these have Cycladic parallels.25 Variations of the shape also appear in the Late Helladic period. A decorated example of a belly-handled pithoid jar with ringed base from a Mycenaean tomb in the Ialysos area features handles that point upwards but its neck is proportionally taller than that of SD 1.26 On Kos, Late Bronze Age burials have yielded a number of vessels that may be assigned to this general type.27 For one variety the excavator suggests a Cretan origin and refers to Furumark's comments on similar pithoid jars from Trianda on Rhodes.28 I examined this decorated fine-ware item at the Archaeological Museum of Kos and found that it has little in common with SD 1 in terms of body shape. On the other hand, the varieties that offer closer parallels to the Şeytan Deresi material29 differ from SD 1 in their taller necks and the slightly different placement of their handles. Their body shape, however, closely resembles that of our specimens. They belong to a class of Late Helladic pithoid jars which Furumark describes as types 50-60 and 61.30 The height of the neck varies; some of the later varieties, such as a Late Mycenaean III C example from Perate,31 exhibit a significantly taller neck.

Belly-handled vessels also appear in the so-called Dark Age. Sites such as Nichoria and Kokevi in Messenia,32 where the archaeological record provides some indications for continuity from the Bronze Age,33 have yielded examples of belly-handled jars that may provide a link between the Bronze Age and Geometric and Archaic varieties of the shape.

Despite the shape's demonstrable continuity in the Helladic realm, Bass attributes greater relevance to a two-handled storage jar from Beycesultan, a type that appears for the first time in the late Middle Bronze Age.34 The most remarkable similarity lies in the slit handles; the Beycesultan example exhibits slits identical to those on the handles of SD 1, while their placement with respect to the body and the three parallel grooves or ridges that run around the
vessel’s circumference at handle level resemble closely corresponding features of SD 1. As Bass notes, similar handles with slits are not uncommon on Middle Bronze Age pottery from Beycesultan and continue in the Late Bronze Age. An example from Larisa on the Hermos bears slits that are short and wide, almost lentoid in shape, and thus differ significantly from our examples. In shape, however, the two-handed jar from Beycesultan is quite unlike SD 1: its angular profile, proportionally greater diameter, and lower center of gravity give it a squater appearance. In addition, the ridges at the base of the neck and at handle level appear more pronounced than those of SD 1.

Regarding the incisions on the handles, the most striking similarity between SD 1 and the Beycesultan specimen, I draw attention to identical slits on the horizontal handles of a coarse pithoid jar from Trianda on Rhodes. The vessel features four handles, two horizontal and two vertical. One of the horizontal handles bears deep incisions from its base upwards on either side, while on the opposite handle the incisions are much less pronounced, in fact barely discernible. This pot belongs to those finds that the excavator compared to Mycenaean pottery but Furumark later recognized as “entirely Cretan in character” and dated to the Sub-Late Minoan IA.

Bass mentions triple incisions on the handles of a Late Minoan IA three-handled storage jar from Mallia but doubts their relevance. In the published illustration, however, they appear deep and straight like the single slits on SD 1. In view of the similar slits on the vessel from Rhodes mentioned above, the slits of the Mallia vessel acquire significance as they indicate that the feature was not foreign to Minoan pottery. Slit handles also appear in various Helladic contexts, such as Early and Middle Helladic Pylia, and may be relevant despite the different configuration of the incisions.

The significance of slits on handles is unclear. They may constitute symbols related to manufacture, contents, or ownership of the vessels that bear them, or may be random marks.
devoid of any particular purpose. One of the two "basket handles" of pithos SD 10 also exhibits a deep slit running around the diameter of the handle near each of its bases. In this latter case, had the slits been mirrored in the opposite handle, the grooving could have served to accommodate some type of rope tie; as it is, however, it, too, is more likely to have been some kind of mark or a random feature.

Despite differences, the Beycesultan jar may be related to the Şeytan Deresi material; it certainly demonstrates the distribution of the type in Anatolia. But the Anatolian parallel does not preclude the connection with the material from Mainland Greece. Similar vessels appear at Troy VI under types C45 and C49. Trojan shape C49, represented by a single find, belongs to the category of imported Matt-painted wares and is related to Middle Helladic Matt-painted ware of the Greek mainland or the Cyclades.41 Noting Troy's "western outlook," the excavators speculate that contacts with both the Greek Mainland and Crete may have been either direct or effected via the Cyclades.42 Probably produced on the Anatolian coast or on one of the islands of the Dodecanese the Şeytan Deresi belly-handled amphoras may owe their shape to this direct or indirect east-west connection.

Finds SD 4 and SD 5

Jug SD 4 (Fig. 4). H. 0.402; est. max. diam. 0.316; rim diam. 0.113; base diam. 0.125. Vessel restored from seven pieces. More than half of the body missing.

Jug SD 5 (Fig. 5). H. 0.415; max. diam. 0.315; rim diam. 0.121; base diam. 0.122. Vessel restored from nine pieces. Large part of the shoulder and lower body fragment missing.

The two jugs in the Şeytan Deresi assemblage comprise seven fragments each and have been restored to their complete profile. They have ovoid bodies, with the greatest diameter approximately at the middle of their height. The belly of SD 4 is very assymetrical (lopsided),
Fig. 4. Jug SD 4 (1:3)
Fig. 5. Jug SD 5 (1:3)
perhaps partly due to the large size of the missing part. Both vessels have a flat, uneven base on which they stand rather unsteadily. The single handle, oval in section, is placed vertically from rim to shoulder, and its upper attachment has been smoothed over the rim. The neck is short and slightly concave, with a rounded horizontal lip. Both vessels feature a pronounced groove at the junction of neck and body.

The fabric is coarse, reddish-brown in color (2.5YR 3/4 to 2.5YR 4/6) and heavily pitted, with coarse inclusions and white grit. The interior surface is relatively smooth while the exterior surface is often obscured by concreted marine deposit and stained dark in places.

Bass mentions only the Anatolian (Trojan) parallels for this shape. The general resemblance between Trojan shape B 25 and the Şeytan Deresi jugs, however, may be coincidental and pertinent only to their common function as pouring vessels. Trojan shape B 25, occurring in abundant but very fragmentary examples according to the site report, is tentatively traced to Middle Helladic traditions. The excavators recognize the possibility of a relationship between the Trojan jugs and their Mycenaean counterparts, but also warn that such simple, utilitarian types may well have developed independently at the places where they appear.

In view of the inconclusive comparison with the Trojan shape, possible Minoan and Helladic connections must be considered. If a search for exact parallels seems futile due to the extreme simplicity of this utilitarian shape, a comparison of general proportions and character may prove more instructive. Crete offers countless examples of pouring vessels that approximate the Şeytan Deresi jugs in form. A fine decorated jug from Phaistos, dating to the Middle Minoan Period, may at first sight appear totally different in character but, for all its finesses, exhibits the same basic shape as the much humbler and slightly larger vessels of Şeytan Deresi: ovoid body, vertical handle set from rim to shoulder, flat base, distinct lip. In plain ware, similar shapes of Middle Minoan III to Late Minoan I date appear at Kythera, Mallia. In
Phaistos, and Knossos. Despite their smaller size, the jugs from Kythera, Phaistos and
Knossos are similar to the Şeytan Deresi specimens in character and overall shape. The Mallia
vessels are larger in size, but bear lesser resemblance to the Şeytan Deresi jugs due to their
proportionally wider base and trefoil lip.

Three decorated pouring vessels from the site of Seraglio on the island of Kos appear
relevant to the study of the Şeytan Deresi examples; they belong to the earliest strata of the site
and, according to the excavator, date to the local Middle Minoan III period. Despite their
general resemblance to the Şeytan Deresi jugs, the two taller vessels (inv. 1206 and 1205) do
not share specific characteristics with the latter, except, perhaps their large size. Distinctly more
elongated in shape, they both have their greatest diameter higher along the body's vertical axis
than do SD4 and SD5. The tallest of these two vessels (inv. 1205) has a very straight, tall, and
slender neck and barely perceptible line at the junction of neck and body. The upper end of its
handle is attached to, but not smoothed over, the rim while the handle of the other vessel,
though very similar in positioning and attachment to those of SD4 and SD5, is attached below
the rim.

First-hand examination at the Archaeological Museum of Kos revealed that the third
jug (inv. 1214) from Kos constitutes a more convincing parallel. Though decorated and
slightly smaller than the Şeytan Deresi specimens, it resembles them closely in body shape and
proportions. Since no fragment of neck, lip or handle survives, the restored configuration of
the neck, with the handle attached below the rim as illustrated in the publication, is
conjectural; in fact, the handle may have been attached to, and even smoothed over the rim, as
is the case on the Şeytan Deresi specimens. This vessel, moreover, exhibits a pronounced
groove at the junction of neck and shoulder, visible at the two places where the base of the neck
survives; as mentioned earlier, a similar groove appears on both SD 4 and SD 5.
The Şeytan Deresi jugs have several good parallels in the Aegean. Given their affinities to Cretan specimens, as well as to the Minoanizing example from Kos, it is not necessary to derive them from less similar Anatolian vessels.

Finds SD 6, SD 7, and SD 8

Amphora SD 6 (Fig. 6). H. 0.674; max. diam. 0.353; rim diam. 0.117; base diam. 0.950. Vessel restored from six original fragments to its complete profile despite several missing pieces.

Amphora fragment SD 7 (Fig. 7). Pres. h. 0.630; max. diam. 0.359; rim diam. 0.105. Restored fragment comprises three original pieces (one recovered during 1973 survey).

Amphora fragment SD 8 (Fig. 8). Pres. h. 0.460. Restored vessel fragment comprised five original pieces (one recovered during 1973 survey), joins have become loose since restoration.

An example preserving its complete profile and fragments of two other vessels, in addition to an unnumbered, well-preserved item in the Bodrum Museum's amphora depository, represent a distinct type of amphora characterized by an elongated ovoid-conical body. The most complete representative of the group, SD 6, has a flat and narrow base, narrow straight neck, thick rolled lip, and two cylindrical horizontal handles placed slightly below the body's greatest diameter. The neck is not perfectly cylindrical, but tapers very slightly upwards from its base. A plastic element resembling a knob, button, or rivet head is located below the lip on the vessel's vertical axis. The same feature also occurs on the neck of SD 7. Vessel SD 8 does not preserve the neck.
Fig. 6. Amphora SD 6 (1:4)
Fig. 7. Amphora fragment SD 7 (1:4)
Fig. 8. Amphora fragment SD 8 (1:4)
The fabric of all three vessels is coarse and gritty with frequent inclusions. Surfaces are pitted and spotted with white marine deposit. Color varies between lighter and darker shades of reddish brown (2.5 YR 4/2 to 2.5 YR 4/6).

The presence of this vessel type among the Şeytan Deresi material is the strongest indicator of a connection with Minoan Crete. Basset observes the parallel of a Middle Minoan III vase from Knossos, and notes the earlier origins of the shape in a squatter variety exemplified by a Middle Minoan IIB polychrome vase from Phaistos. At Palaikastro the excavators have restored fragments of polychrome ware to the same shape. Evans discusses the development of the shape in his presentation of a Middle Minoan I pot from the "Kouloura" Houses in Knossos and in his treatment of the Middle Minoan III Layer above the Royal Pottery Stores. He groups the Middle Minoan III specimen with a collection of vessels, the fabric of which he describes as "rustic" and the pots themselves as "rough vessels". Being coarse and undecorated, the Knossian variety is thus reminiscent of the Şeytan Deresi items, not only in shape but also in fabric and style.

Lolos has drawn my attention to an additional Middle Minoan example from the sanctuary at Anemospelio, near Archanes on Crete. In size and proportions this decorated item is almost identical to the Middle Minoan IIIB vase from Phaistos mentioned earlier.

The type has a long history in Crete. Resembling SD6 closely but for its slightly squatter shape, a ovoid-conical jar with a collar neck and two horizontal handles from the Platikvola cave in the Khania region, Western Crete, is dated to the Final Neolithic. Early examples, smaller and squatter than the Şeytan Deresi specimens, also occur at Myrtos within Early Minoan II contexts. Their spreading rim differs from the configuration of both the Şeytan Deresi vessels and their close parallels of Middle Minoan date. Notably, however, some of the Myrtos jars feature a small clay protrusion at the base of the neck.
Outside Crete similar shapes appear in Middle Bronze Age Thessaly, at the Middle Helladic II levels of Asine, in a Middle Helladic house at Lerna, and at Kalymnos. A squatter variety of the type, with a wider base and lug handles, occurs frequently in the last Early Bronze Age level at the prehistoric settlement underneath the Heraion of Samos. The excavator claims that the form is common in Western Anatolian, from Troy to Tarsus, and further west, and quotes parallels from Troy, Tarsus, Zygouries, Korakou, Eutresis and Orchomenos. While seemingly akin to the above-mentioned parallels of the Şeytan Deresı amphoras in general shape, this type proves considerably different from the vessels in question when body proportions, as well as form and placement of handles are considered.

Plastic knobs appear quite frequently on pottery from various periods and contexts. Bass mentions examples in Middle Bronze Age Thessaly, Knossos, and Beycesultan. In Crete plastic knobs occur in several sites besides Knossos. At Early Minoan Myrtos vessels of the type that resembles SD6 occasionally exhibit, at the base of their collar neck, single plastic elements, which the excavator describes as "pimples." A squat, two-handled vessel from Middle Minoan Phaistos features a centrally located plastic knob that resembles those on SD6 and SD7 in shape and positioning along the vertical axis of the vessel. In mainland Greece, at the site of Eutresis, decoration with "pellets" in handle- or rim- areas, as well as use of large flat knobs on the sides of bowls, are not uncommon.

Plastic knobs may bespeak a metallic origin for some of the shapes they decorate. In Middle Minoan Crete they appear on Classical Kamaxes and Post-Kamaxes vessels in association with other metallic features. Often, however, form and placement of plastic elements are clearly not in imitation of metallic features, and suggest a decorative or other function. P. Warren, for example, has proposed that the "pimples" on the Myrtos vessels could indicate their specific contents, such as wine or oil, or could be purely decorative.
The unnumbered vessel in the amphora depository of the Bodrum Museum of Underwater Archaeology is identical to SD 6 in terms of general shape and proportions (with a height of 0.670 m). Thick and lumpy white marine deposit obscures its surface, yet showing in places is the same dark reddish brown fabric of the Şeytan Deresi specimens. The preserved part of the neck does not bear a plastic button, which, however, may have been located on the eroded area. Unfortunately, information on provenance is entirely lacking, as its acquisition must have preceded the foundation of the Museum. Its presence in the Bodrum Castle suggests that the vessel may well have been recovered in the Gulf of Gökova.

The most satisfying parallels for vessel SD 6 and related fragments come from Minoan Crete, while Greek Mainland and Samian specimens bear a more distant resemblance to the specific type. Anatolian material provides no adequate comparanda. It seems, therefore, that this group testifies to direct influence from Minoan pottery production.

Find SD 9

Krater SD 9 (Fig. 9). H. 0.470; max. diam. 0.652; rim diam. 0.580; mouth diam. 0.515; base diam.; 0.191. Intact vessel.

Vessel SD 9, a deep bowl or krater, is the only open vessel in the ceramic assemblage from Şeytan Deresi. It is conical in shape and features a flat but somewhat uneven, slightly splaying base, broad horizontal lip of variable width, and two horizontal cylindrical handles attached at the body's greatest diameter. Below the rim a narrow ridge in low relief runs along the circumference. A small, pointed clay protuberance on either side of the attachment gives each handle the appearance of a "reflex handle." At closer inspection, however, these protuberances are not continuations of the ends of the handle, as in true reflex handles, but appear to have been applied or formed separately.
The fabric is coarse and gritty with frequent inclusions. Surfaces are pitted and spotted with white marine deposit. Color varies between lighter and darker shades of reddish brown (2.5YR 3/4 to 2.5YR 4/6). Interior surfaces are uneven.

Krater SD 9 was one of the two complete vessels raised during the 1973 survey. As noted earlier, its shape led some to date this vessel, and by association the whole assemblage, to the Archaic period, but further research has not produced any close parallels from that time period.

Bass compared the shape to that of much smaller open vessels from Tylissos but noted that the poor quality of the published illustrations do not permit comparison of handles. Firsthand examination of these Late Minoan vessels in the Archaeological Museum of Herakleion revealed that the handles, attached very close below the lip of the vessel and slightly upturned, do not resemble those of SD9 nor are they flanked by protuberances. Due to their small size, their fine clay and painted decoration and their different handle configuration, the Tylissos vessels do not, after all, constitute close parallels for the Şeytan Deresi krater. The similarity in body shape, however, remains a valid point. Also from Tylissos, a steatite krater of comparable shape is closer in size to the Şeytan Deresi specimen.

In mainland Greece, a Middle Helladic bowl of the Argive Minyan type from Eutresis is, like the Tylissos examples, much smaller than the Şeytan Deresi krater, and compares to the latter primarily in lower body shape. Two other Middle Helladic bowls from Eutresis deserve mention here: a red-burnished vessel with cylindrical handles, distinct lip, and body shape that closely resemble corresponding features of SD 9, and a matt-painted bowl reminiscent of the Şeytan Deresi specimen in lip and base configuration. In the Peloponese, bowls of comparable shape were found at Asine and Mycenae.

A deep bell-shaped krater from a tholos tomb at Moutsiana in east Crete, probably of Late Minoan IIIC date, may not resemble SD9 as closely as some of the small bowls mentioned
above, but its general character, larger size, and handle configuration qualify it as a possible parallel.\textsuperscript{79} Despite the placement of the handles at an oblique angle to the body, the similarity of the clay protuberances at the points of attachment is especially noteworthy.

Similarly, a plain pithoid bowl from Trianda on Rhodes,\textsuperscript{80} though not strictly comparable in form, compares to the Şeytan Deresi bowl in general character. Its two horizontal handles, placed at right angle to the body, feature a small depression next to their points of attachment much in the same way that the handles of the Şeytan Deresi krater are flanked by the pointed protuberances. Furumark has reassigned the bowl to the Late Minoan Period and compares it in shape to the Tylissos bowls mentioned earlier, and to deeper Late Minoan IIIB vessels from Knossos.\textsuperscript{81} One of the kraters that he lists among the latter, however, actually dates to the Middle Minoan IIIB period according to Evans who relies on safe stratigraphic data. Despite its narrower shape, this vessel, with its flat, splaying base, horizontal lip, and coarse fabric provides a more satisfying parallel for the Şeytan Deresi krater than the Late Bronze Age specimens.

Anticipating arguments by proponents of a later date for the assemblage, Bass admits that the handle type was common in the Archaic period but also mentions examples from earlier times.\textsuperscript{82} According to Coldstream, handles of the reflex form are characteristic of the Late Geometric I period and survive into the Late Geometric II.\textsuperscript{83} True reflex handles, however, differ from the handles of vessel SD 9. More importantly, the occurrence of handles similar to those of SD 9 in various contexts, including Early Bronze Age Thessaly,\textsuperscript{84} disqualifies the feature as an indicator of late (Archaic or Geometric) date.

In view of the relatively short list of good Bronze Age parallels for SD9, it seems at least worthwhile to mention a type of deep bowl that not only has similar handles, but also resembles the Şeytan Deresi example in body shape. The items in question are common domestic and storage ware from Level II of the Assyrian merchants' karum at Kültepe/Kanış.\textsuperscript{85}
They are slightly smaller than the Şeytan Deresi krater and exhibit a torus base and thicker rim, but the narrow ridge in low relief around the circumference below the rim, their body profile, flat lip, and the handles (despite their upright position) resemble corresponding features of the Şeytan Deresi krater.

The significance of the Cappadocian comparanda is hard to assess. The karum's level II ends sometime in the first half of the 19th century B.C., perhaps around the time of the earliest known traces of Minoan influence or presence in the Eastern Aegean and the only extant evidence for contact between Crete and Central Anatolia. If not a mere coincidence, the similarities in body shape and form of handles could represent a style in local utilitarian ware that remained popular in certain parts of Anatolia, at as yet undiscovered sites, for a long time after the departure of the Assyrian merchants. The Minoan parallels, on the other hand, offer a more plausible scenario, suggesting that the shape may have developed in the Eastern Aegean under the general influence of Minoan pottery styles. The lack of precise parallels does not speak against a Bronze Age context more conclusively than it does against a later dating.

Finds SD 10, SD 11, and SD 12

Two-handled pithos SD 10. H. 0.826; max. diam. 0.694; rim diam. 0.321; base diam. 0.163; handle h. 0.130. Vessel preserved intact.

Two-handled pithos SD 11 (Fig. 10). H. 0.820; max. diam. 0.700; rim diam. 0.295; base diam. 0.185; handle h. 0.130. Vessel restored to complete profile from 21 fragments. Three fragments of lower belly missing.

Two-handled pithos SD 12. Mouth diam. 0.300. Vessel in fragments, including one handle and part of the rim.
Fig. 10. Two-handled pithos SD 11 (1:6)
Two complete vessels and one in fragmentary condition belong to a type of two-handled pithos that is unique to the Şeytan Deresi assemblage. Pithos SD 10 is one of the two intact vessels raised during the 1973 survey; the 1975 excavation yielded the other two examples of this type. In addition to SD 10 and SD 11, an intact pithos of the same type but not from the Şeytan Deresi excavation was, until recently, on display in the Bronze Age Hall. According to the Museum's inventory, a customs official recovered the vessel from the sea in the general vicinity of Şeytan Deresi and presented it to the Museum in November 1980.88

The type has a piriform-ovoid body that rises from a narrow flat base and reaches its greatest diameter at about two-thirds of its height. It has no neck, but is hole-mouthed and features a thick spreading lip. Just below the lips of SD 10 and SD 11, a very narrow ridge in low relief runs around the circumference of the exterior surface. Two opposing horizontal handles, attached at the shoulder, point straight upwards and rise above the line of the mouth. They are round in section and appear heavy enough to have been used in lifting and transporting these large containers. Their height above the top walls of the vessel ensure that poles or heavy ropes, about 3 cm in diameter, could pass through to serve as lifting devices. One of the handles of pithos SD 10 exhibits two slits different in arrangement but similar in depth of incision to the slits on the handles of amphora SD 1.

The fabric is coarse and gritty with frequent inclusions. Surfaces are pitted and spotted with white marine deposit. Interior surfaces are uneven. Color varies between lighter and darker shades of reddish brown (2.5 YR 4/4 to 2.5 YR 3/4).

Horizontal loop handles of this type, often referred to as "basket handles," are common in the Archaic period but, as Bass notes, none of the vessels that feature them, stamnoi and amphorae, provide good parallels to the Şeytan Deresi pithos.89 The Eastern Mediterranean in particular has yielded basket-handled vessels, widely distributed from Rhodes to Naucratis, that date between the seventh and fourth centuries B.C.90 Although they are present in Rhodes in
large quantities since the seventh century B.C., the case for their Cypriot origin appears strong. Their frequent occurrence in underwater archaeological contexts may suggest a special connection to maritime trade, although their basket-handles certainly render them suitable for transport by land or sea. With cylindrical bodies that taper to pointed bases and handles that rise high above the mouth openings, these common vessels cannot compare with the Şeytan Deresi pithoi. Since basket handles appear in diverse contexts, ranging chronologically from the Early Bronze Age to late antiquity, and are spread geographically over the entire Eastern and Central Mediterranean, they are not, in themselves, diagnostic of date or provenance. For meaningful comparisons, parallels should demonstrate a combination of the handle type with other characteristics of the Şeytan Deresi pithoi.

Horizontal handles pointing upwards appear frequently in Cretan shapes from Early Minoan times through the Late Minoan Period. They occur mostly on bridge-spouted jars, but also on pyxides and kalathoi. While exemplifying the existence of the handle type in Minoan times, most of these vessels cannot compare with the Şeytan Deresi examples in body shape. Bass, however, draws specific attention to the Middle Minoan III spouted skyphoi from Mallia. Characteristic features of both the Şeytan Deresi and the Mallia groups include not only the handles, but also the hole-mouthed form, which has a long history in Minoan Crete. The type may derive from large storage jars; in his discussion of slightly different skyphoi from Tylissos, Hazizidakis asserts that they developed from conical pithoi.

Collar-necked and slender in body proportions, the Tylissos skyphoi seem comparable to the Şeytan Deresi pithoi only in handle form and placement. The Mallia vessels, however, resemble the Şeytan Deresi pithoi in body shape as well as handle configuration. Although the small size of some Mallia specimens may render the validity of the comparison somewhat questionable, other examples are considerably taller. Bass mentions an additional spouted vessel from Mallia, of slightly later date (Late Minoan I), which is relatively tall—it measures a
little more than half the height of the Şeytan Deresi pithoi—and exhibits handle placement and hole-mouth configuration that encourage comparison with the Şeytan Deresi specimens. The site of Anemospelia has also yielded a large spouted vessel that may be of relevance, particularly as its body shape differs from that of the Şeytan Deresi pithoi only in its proportionally slightly wider base. Spouted, hole-mouthed vessels with raised horizontal handles pointing straight upwards also appear at the site of Phylacopi in Melos, where Minoan influence was strong in the beginning of the Late Bronze Age. A similar Late Minoan IB specimen reached as far as Tell Ta'annek near Megiddo.

Spouted vessels are not the only Minoan type that sometimes combines the pithoid, hole-mouthed form with upright horizontal loop handles. Most other types with these characteristics also feature a second pair of handles attached vertically. On plain and painted Late Minoan II barrel-shaped jars from Palaikastro the horizontal handles are set low on the vessel’s shoulder and barely surpass the line of the mouth. Also dating to the Late Minoan II, a number of storage jars from the Unexplored Mansion at Knossos have piriform bodies and the horizontal handles that point upwards, but they lack the characteristically narrow base of the Şeytan Deresi vessels. The Knossos vessels also differ from the Şeytan Deresi pithoi in that they exhibit a low collar neck and a set of vertical handles; furthermore, the horizontal handles do not rise higher than the rims of collar necks. At Zakros however, at least one LMI pithos does not feature a collar neck and, though set relatively low on the vessel’s shoulder, its handles point straight upwards, surpassing the line of the mouth. In the only published illustration of the find, the pithos, shown in situ, appears to have a conical or piriform shape but, due to the nature of the illustration, a secure comparison with the body of the Şeytan Deresi pithoi is not possible. Betancourt compares the Zakros pithos with a LMIIb hole-mouthed vessel from Gournia, now part of the Cretan collection at the University Museum of The University of Pennsylvania. The body shape of the Gournia specimen bears little
resemblance to the Şeytan Deresi vessel, but it also seems to differ from that of the Zakros pithos.

A possible parallel for the SD 10 group came to light recently at the site of Mochlos in Eastern Crete. While not allowing proper comparison, the published illustration of three LMI pithoi, in situ, nevertheless demonstrates that the upper bodies of the two larger vessels resemble the upper bodies of the Şeytan Deresi pithoi in their hole-mouth form, rim configuration, and horizontal handles pointing upwards. Despite their set of vertical handles and the testimony of their excavator, according to whom their shape and phyllite-tempered fabric preclude any relationship between the two groups, the shared features of the Mochlos vessels and the Şeytan Deresi pithoi may indicate some connection.

Bass notes that a type of “Adriatic ware” cooking vessel from Malthi in Messinia provides the best body profile parallel for the SD 10-12 group. Although the similarity of this type with the Cretan skyphoi did not escape the attention of its excavator, the early date, small size, and different handle and neck configuration of this vessel preclude any demonstrable connection with the Şeytan Deresi material.

Within the general geographical area of the Şeytan Deresi site, the Minoan settlement at Trianda has yielded at least one large domestic vessel type that exemplifies the occurrence of upright horizontal handles on storage vessels. The vessel may be a Minoan type, as are other domestic wares from the same contexts according to Furumark’s reassessment of the Trianda evidence. Its shape, however, does not resemble the body profile of the Şeytan Deresi pithoi; moreover, the quality of the schematic illustration does not permit comparison of mouth and handle details. True pithoi with narrow bases are reported from the later Minoan strata at Trianda.
Bass mentions Trojan examples of vessels with horizontal handles pointing upwards but correctly refrains from drawing connections with the Şeytan Deresi material; the Trojan vases are too small and their profiles are not really similar to those of the pithoi in question.  

The Cretan parallels for the handles, piriform body shape, and hole-mouthed form of the Şeytan Deresi pithoi suggest a Minoan connection. Specialized use in maritime trade may explain the lack of more satisfying parallels for this type at excavated settlements in Crete, the Aegean islands, or Anatolia. While probably not from Crete, these vessels may be local, Eastern Aegean products that owe their form partly to the influence of the Minoan ceramic tradition.

Finds SD 13, SD 14, SD 15, SD 16 and SD 16A

Handleless ovoid-conical pithos SD 13 (Fig. 11). H. 0.949; max. diam. 0.766; rim diam 0.422; base diam. 0.157. Vessel initially complete, cracked on the seabed. Raised in eight pieces and restored to its complete profile. Part of lip eroded.

Handleless ovoid-conical pithos SD 14. H. 0.965; max. diam. 0.722; rim diam. 0.402; base diam. 0.161. Restored to its complete profile from 12 fragments. Part of base eroded.

Handleless ovoid-conical pithos SD 15, Pres. h. 0.825; max. diam. 0.713; rim diam. 0.403. Restored to complete profile. Parts of lip, neck, shoulder, belly, and base missing.

Handleless ovoid-conical pithos fragments SD 16 and SD 16A. Two halves of a vessel preserved in several fragments each, missing from storage at the time of this study.

The second type of pithos in the Şeytan Deresi assemblage, handleless and piriform-conical in shape, is represented by a group of three almost complete vessels and fragments of a fourth, all recovered during excavation. The three whole vessels were, until recently, on
Fig. 11. Handleless pithos SD 13 (1:6)
display in the Bronze Age Hall of the Bodrum Museum. Rising from a very narrow and flat base, their bodies attain their greatest diameter below the splaying neck. A low and narrow ledge runs along the circumference of the body at the base of the neck, probably indicating a two-piece construction process in which neck and belly were formed as two separate pieces and then joined to form the pot. The rim is horizontal and wide; a raised ridge with flattened top runs along its inner edge.

The fabric is coarse and gritty with frequent inclusions. Surfaces are pitted and spotted with white marine deposit. Interior surfaces are uneven. Color varies between lighter and darker shades of reddish brown (2.5 YR 4/4 to 2.5 YR 3/4).

It is this shape, and not krater SD 9, that provides the strongest argument for dating the wreck to a later rather than an earlier period. Some of its closest --yet not exact-- parallels belong to ceramic traditions of the eighth and seventh centuries B.C.. Bass mentions two examples: a pithos from Thera, which is significantly smaller than the Şeytan Deresi pots, and a much larger vessel from Rhodes. Other pithoi of this type from post-Bronze-Age contexts include vessels from the Argolid, Eleusis, and Oinoe at Marathon. All are funerary urns that bear a lesser resemblance to the Şeytan Deresi examples.

Although at first sight some of these late pithoi appear to be very similar to the Şeytan Deresi pots, closer examination reveals significant differences. The funerary pithoi from Thera and Rhodes exhibit wide rims with squared outer edges, a sharp, almost carinated transition between body and neck, and very globular bellies, whereas the Şeytan Deresi specimens have narrower rims with rounded outer edges, smoother joining of neck and body, and a more elongated body shape. Additionally, the Theran pithoi that come from excavated contexts and are, therefore, safely dated, feature ringed bases visible in their *in situ* illustrations. As for the Theran pithos that features a flat base and in all respects most closely resembles the Şeytan Deresi group, it is part of a private collection and is dated only by comparison to the excavated
material. Since none of the securely dated vessels provide satisfactory parallels to the Şeytan Deresi material, it is worth exploring the possibility of a Bronze Age origin of the shape. The Şeytan Deresi pithoi may belong to earlier stages of development of this type.

Bass has noted that the ridge along the inner edge of the flat rim appears on Middle Helladic matt-painted pithoi from Eutresis and Phylacopi.\textsuperscript{114} Neither site, however, has yielded anything that resembles these Şeytan Deresi pithoi in shape; pithoi with narrow bases from these and other Middle Bronze Age sites have opposing handles and no neck.\textsuperscript{115}

The site of Nichoria in the Southwestern Peloponese provides examples of coarse pithoi with narrow bases and piriform-ovoid bodies from both Late Bronze Age and post Bronze Age strata.\textsuperscript{116} The Bronze Age specimen, found at the settlement, resembles the Şeytan Deresi examples in its lower body shape, whereas the Geometric vessel, a funerary urn, has a more symmetrical, ovoid body. The excavators note that inhumation in large pots, common in Geometric Greece, dates back to the Middle Bronze Age and cite examples from Middle Minoan Crete.\textsuperscript{117}

A late Middle Helladic pithos from Eleusis also features a narrow base, but its ovoid body with two handles just below the maximum diameter is quite unlike the piriform-globular form of the Şeytan Deresi pithoi.\textsuperscript{118} The missing upper portion, however, may well have comprised a neck similar to those of the latter. Mylonas proposes a “well made vertical neck” and assigns these ovoid vessels to a transitional type closer to the Mycenaean pithos than to their Middle Helladic predecessors. Although the Eleusis pithos may well represent a later, transitional stage in the development of the pithos, Furrmark observes that ovoid pithoi were in use since early Middle Helladic times.\textsuperscript{119}

A Middle Helladic pithos from Krisa, Phocis, exhibits the variety in shape within the Helladic ovoid pithos type. This specimen has no handles, a very narrow base, and a well-developed neck. In these features, the shape differs considerably from other Middle Helladic
pithoi, and, despite its elongated ovoid body shape, approximates analogous characteristics of the Şeytan Deresi pithoi.\textsuperscript{124}

Furumark's vessel type 13 is a Mycenaean shape that may compare with the Şeytan Deresi handleless pithoi, despite its symmetrical, ovoid body. Furumark claims a Middle Helladic ancestry and notes its divergence from Minoan types.\textsuperscript{125} The Şeytan Deresi specimens could be related to this Helladic tradition of "two-storied", hand-made storage vessels, yet the possibility of Minoan affinities, and particularly affinities with eastern Aegean Minoan elements, should not be overlooked. Piriform shapes are, after all, common in the Minoan repertoire of storage jars.\textsuperscript{126}

In the eastern Aegean, the Archaic funerary pithoi from Rhodes mentioned above are not the only pithoi that may pertain to the study of the Şeytan Deresi assemblage. Other relevant specimens, both from Rhodes and from Kos, date to the Bronze Age indicating that the shape has a long history of development in the region. Furumark demonstrates the Minoan character of a Late Minoan I b to Late Minoan II pithos from Trianda. Made of dark brown coarse fabric, this large vessel along with its Cretan parallels may not be strictly similar to the Şeytan Deresi pithoi, but it resembles them in general shape and character.\textsuperscript{127} An undecorated funerary vessel from the cemetery of Langada on Kos appears to be a squatter, smaller, more globular version of the Şeytan Deresi shape.\textsuperscript{128} Although it lacks the ridge along the inner edge of the lip, its flat base, shape of the neck, and flat rim are comparable to features of the Şeytan Deresi pithoi. Near the base, two very irregular, horizontal ridges recall similar ridges at the bases of both the pithos from Rhodes mentioned above and the pithoi from the wreck. Its excavator assigns the vessel to the local ceramic tradition that derives some of its shapes from the Middle Minoan III and early Late Minoan periods.

In view of the Minoan traits, and, more significantly, of the Eastern Aegean Minoanizing parallels for the Şeytan Deresi handleless pithoi, it is not unlikely that this plain
type was a local Bronze Age product of the Eastern Aegean, designed for shipment and created under the influence of the Minoan ceramic traditions that produced great numbers of the ornate household storage jars at Cretan palatial centers.

Find SD 20

Neck, shoulder, and handle fragment SD 20 (Fig. 12). Pres. h. 0.230; rim diam. 0.175; thick. 0.040-0.060; handle width 0.028; handle thick. 0.016

Find SD 20, comprising the neck, shoulder, and handle of a vessel, is the only representative of its type in the Şeytan Deresi Deresi assemblage. It was recovered during the 1973 survey; there is no recorded information concerning its position on the site. Initially a single fragment, it is now in two pieces, as part of the shoulder was broken in storage.

The fragment features a splaying neck, thick rounded horizontal lip, and one vertical handle, flattened in transverse section. The lip is well-shaped and smoothed. The handle is attached at the middle of the neck and at the shoulder, and is almost perpendicular, or very slightly sloping. Concentric ridges on the interior surfaces of the neck may be indicative of the use of a slow wheel. The fabric is coarse and gritty with frequent inclusions. Its dark reddish brown color (2.5 YR 4/4 to 2.5 YR 4/6) and white grit betray that it belonged to the main assemblage uncovered at the site.

For this item Bass draws Middle Helladic parallels, including a neck fragment from Krísa, and the top of a four-handled pithos from Eutresis. The Krísa find, however, is part of an amphora with two vertical handles at the neck, one fully preserved and one broken. The excavators note its similarity to a neck fragment of a Middle Helladic Yellow Minyan hydria
Fig. 12. Neck, shoulder, and handle fragment SD 20 (1:3)
from Eureis, which may itself be considered a parallel to the Şeytan Deresi pot, despite its squared, moulded horizontal lip. A group of hydriae from Eleusis, which Mylonas dates to the final years of the Middle Helladic period, provide additional comparanda. Despite the dissimilarity of their handles, which are round rather than oval or flattened in section, these vessels are similar to the Şeytan Deresi specimen in their handle placement, the splaying neck, and rounded lip.

In his analysis of Mycenaean pottery, Furumark refers to the hydriae from Eureis and Eleusis mentioned above as predecessors of the Mycenaean hydria. This Mycenaean type occurs at the latest stratum at Trianda, but the placement and round section of its handles, and the straight neck, render it less similar to the Şeytan Deresi specimen.

Given the rather small mouth diameter and thin walls of our specimen, it seems to be a fragment of a hydria rather than a pithos. In terms of lower body shape, the Helladic hydriae mentioned above are globular or globular-conical in shape and usually feature a set of opposing, horizontal handles at the belly.

The similarity of this single item from Şeytan Deresi to Helladic vessels is potentially indicative of a connection with the ceramic traditions of the Greek Mainland. The nature of the connection must remain in the realm of speculation; in the highly interactive world of the Aegean at the beginning of the Late Bronze Age an eastward flow of ideas form the Mainland, via the Cyclades with or without Minoan intervention, is not hard to envisage.

Find SD 17

Pointed base fragment SD 17 (Fig. 13). Pres. h. 0.125; base diam. 0.045.

Pointed base SD 17, presumably part of an amphora, was found inside handleless pithos SD 13 during the 1975 excavation. Wave action or marine life may have transported...
Fig. 13. Pointed base fragment SD 17 (1:2)
this piece over considerable distance to deposit it inside the pithos along with other items from
the immediate area of the wreck or from the general vicinity of the site. SD 17 is obviously a
stray; its brown, gritty clay is quite unlike the fabric of most Şeytan Deresi ceramics.

The tip of the base is a flat disc or knob, eroded on one side, and develops into a
splaying stem. Surfaces are very irregular. Due to its generic nature its provenance remains
uncertain.

Find SD 18

Amphora neck and shoulder fragment SD 18 (Fig. 14). Pres. h. 0.135; rim diam. 0.110

Amphora neck SD 18 was also found inside handleless pithos SD 13 during the 1975
evacuation. Like SD 17, it need not have come from the immediate area of the wreck material,
but could have been transported from some distance by marine life. Whatever its origin and
the circumstances that led to its migration into the pithos, it too is clearly an intrusive piece, one
which fabric sets apart from the main assemblage. The surface is very dark but the gritty biscuit
is lighter brown in color.

The neck is nearly cylindrical and its surface grooved with eight sharp ridges. The
handles are vertical, symmetrically arched, and flattened in section; they are attached just below
the rim and at the beginning of the shoulder. The neck ends in a thickened, rounded lip.

SD 18 could be of late Roman, Byzantine, or even post-Byzantine date. An amphora
of unknown provenance in the Bodrum Museum has a cylindrical neck and vertical, arched
handles that resemble the corresponding features of the Şeytan Deresi specimen, but it does not
exhibit the same pronounced grooving. Alpözén dates this find to the third or second
century B.C., yet its grooved surface seems to indicate a later date. Less similar in shape and
Fig. 14. Amphora neck and shoulder fragment SD 18 (1:2)
handle configuration, but closer in the character of the surface grooving, an amphora in the Avenches Museum, Switzerland, is, unfortunately, also of uncertain date range.\textsuperscript{135}

Find SD 19

Amphora neck and shoulder fragment SD 19 (Fig. 15). Pres. h. 0.215; rim diam. 0.150

Amphora neck SD 19 was recovered during the 1973 survey; its precise location does not appear on the site plan. The fragment preserves the neck, a small part of the shoulder where it joins the neck, and one intact handle; of the other handle, only the upper part survives. Its light brown, smooth fabric testifies to its intrusive nature among the Şeytan Deresi wreck assemblage.

The vessel fragment exhibits a tall, concave neck with a thickened, rounded rim. The handles are vertical, very slightly sloping, and flattened in section. The preserved part does not bear a stamp.

Bass compares this fragment to a seventh-century B.C. amphora type from Chios.\textsuperscript{136} Made of red and gritty clay, the Chiote vessel bears a general resemblance to the Şeytan Deresi specimen, but has a shorter neck and proportionally wider mouth, and its handles slope more dramatically than those of SD 19. The same applies to a seventh-century amphora neck from Clazomenai, which may constitute a better parallel as regards the angle of the handles, but in terms of proportions is closer to the Chiote specimen than to SD 19.\textsuperscript{137}
Fig. 15. Amphora neck and shoulder fragment SD 19 (1:3)
CONCLUSIONS ON THE CERAMIC ASSOCIATIONS AND DATING
OF THE ŞEYTAN DERESI ASSEMBLAGE

In the conclusion of his preliminary report on Şeytan Deresi, Bass dated the wreck to c. 1600 BC, that is to the late Middle Bronze or early Late Bronze Age. The present study places the loss of the cargo more definitely in the Late Bronze Age. Supporting a slightly lower date is the proportionally larger number of Late Minoan parallels proposed here, as well as the expected delay in transfer of stylistic traits from Minoan Crete to the periphery.

Specifically, Bass states that a date for the wreck c. 1600 B.C. agrees with the assigned dates of both the Beycesultan IV b parallel for amphora SD 1 (1650-1550 B.C.), and the Troy VI parallels for jugs SD 4 and SD 5 (c. 1800-1300 B.C.). Regardless of the validity of the Beycesultan parallel, other comparanda presented here, such as the Late Helladic I vessels from Mycenae and the Sub-Late Minoan I vessel with slit handles from Rhodes, indicate that the amphora SD 1 group probably belong to the lower end of the proposed lifespan of the Anatolian vessel type. The jugs do not contradict the case for a slightly later dating; while their potential Trojan parallels are dated only within very broad brackets, their closest Minoan counterparts date to Middle Minoan III or Late Minoan I in Crete and to the local Middle Minoan III on Kos.

Although they closely resemble Middle Minoan III vessels, amphorae SD 6-SD 8 are more elongated in shape than their Cretan counterparts. According to Evans, elongation of shape is a trend characteristic of advanced stages in the type's development. The closest parallels proposed for the Şeytan Deresi krater (SD 9) are late: the Late Minoan kraters of Tylissos, the Middle Minoan IIIB krater from Knossos, the Late Minoan pithoid bowl from Rhodes, and the much later Mouliana krater. Being rather tenuous, the connection with the Kültepe/Kanesh kraters cannot serve as dating evidence. The spouted vessels that have been compared to the two-handled pithoi (SD 10-SD 12) date to both the Middle Minoan III and
Late Minoan I, while their spoutless—yet less similar in terms of body shape—parallels all belong to the Late Bronze Age. Bass rightly notes that apparent Archaic parallels for the handleless pithoi (SD 13-SD 16) cannot negate evidence indicating a Bronze Age date for all the other pots; although no Bronze Age ceramic assemblage provides adequate parallels for these vessels, similarities with storage jars from Kos and Rhodes are perhaps indicative of affinity between the Şeytan Deresi specimens and these Late Minoan vessels from the Dodecanese.

Admittedly, most parallels proposed for the ceramic types of the Şeytan Deresi assemblage are not identical to the pots in question. Lack of entirely satisfying parallels, however, while complicating the study of the wreck, probably bears out Bass’s proposition that the pottery came from “a hitherto undiscovered site not far from where it was lost,”129 a site located either on the Anatolian coast, as Bass seems to believe, or, arguably, on one of the islands of the Dodecanese. Production of pottery of the type found at Şeytan Deresi cannot have been highly standardized outside palatial centers in the beginning of the Late Bronze Age. While specialized use in maritime trade could partly explain the unique character of the two pithos types from the wreck, localized production patterns may account for the uniqueness of the Şeytan Deresi assemblage as a whole.

To sum up, the ceramic associations of the Şeytan Deresi assemblage indicate that the ship came to grief sometime within the first half of the 16th century B.C., or, in terms of relative chronology, in the early part of Late Minoan I.130
THE MINOAN CONNECTION IN THE EASTERN AEGEAN: LITERARY SOURCES AND ARCHAEOLOGY

Literary sources, from the 8th century B.C. to late antiquity, preserve a memory of Minoan presence, indeed of Minoan colonization and dominion, in the Aegean. The origins of the tradition they record are shrouded in myth and folklore, which necessarily render these stories suspect as regards their historical validity. References to a Cretan thalassocracy, however, are widespread in ancient sources, and it was only in this century that a historian cast serious doubt on the reliability of the tradition and challenged the then-established view of Minoan military and political control over the Aegean.  

Although Homer deals with Cretan legend and, in the Iliad, mentions the Cretan contingent with its eighty ships under the command of Idomeneus, the poet is silent concerning the position of the island as a maritime power in the Aegean. Hesiod, on the other hand, describes Minos as the "most princely" of mortal kings and alludes to Cretan dominion beyond the island. By the fifth century B.C. the concept of a Minoan thalassocracy had developed such firm roots in Greek historical conscience that classical antiquity's outstanding historians, Herodotus and Thucydides, treated Minos as a historical figure and Cretan supremacy in the Aegean as a historical fact of their antiquity.

In their versions of the Minos story, both Herodotus and Thucydides included a people whose identification as Carians and/or Leleges may have been as vague at the time they wrote as it appears to us now. All but acknowledging the confusion, Herodotus quoted the Cretans' traditional view of the Carians as islanders called Leleges, living on the islands under Minos's rule, and later moving to the mainland, but added that the Carians themselves claimed autochtony from Anatolia. He also reported that, during Minos's rule, they paid no taxes but manned Minos's ships and thus enjoyed a special status of power among the peoples of the Aegean. The elusive people in question may have been natives of the Carian, i.e. 
southwestern Anatolian coast, whom Minoan expansion found residing or trading in the islands of the Aegean. But regardless of the origins and precise associations of the Carians/Leleges, their story carries the memory of a special link between Crete, Anatolia, and the Aegean islands.

Touching upon the controversial issues of Carian identity and the Minoan connection in the Eastern Aegean is the traditional view identifying the islands of the Cretan legend in question with the Cyclades of the Middle and early Late Bronze Age. Both the passage from Herodotus mentioned above, and the well-known account of Minoan thalassocracy in Thucydides’s *Archaeology,* are often taken to refer to the Cycladic islands alone, an interpretation that overlooks the role of the Eastern Aegean. Herodotus is vague; he talks generally about “the islands.” At first glance, Thucydides appears to be more specific:

> For Minos is, of those whom we know by oral tradition, the earliest to have possessed a navy and to have controlled the greatest part of what is now the Greek sea; *he both ruled over the Cycladic islands and became the first coloniser of most islands,* having expelled the Carians and having installed his own sons as rulers.\(^\text{146}\)

The statement “he both ruled over the Cycladic islands and became the first coloniser of most islands,” however, leaves room for debate. Does “most islands” refer to islands in general, or to Cycladic islands in particular? Syntax and grammar of the original Greek allow for both translations. Archaeology, on the other hand, has shown that Minoan expansion beyond Crete was not limited to the Cycladic sphere; in fact, the two strongest candidates for Minoan “settlement colonies,” K. Branigan’s term for purely Minoan settlements outside Crete,\(^\text{147}\) lie on the fringes of the Aegean area: Kastri on Kythera in the West and Trianda on Rhodes in the East. Additionally, recent excavations have revealed strata with Minoan material at several
eastern Aegean island sites and on the Anatolian coast; surface surveys also attest to Minoan presence in the region. Regardless of whether or not Thucydides was counting the Dodecanese, as well as the Cyclades, among the Aegean islands under Minos's rule, archaeology may vindicate other sources that explicitly make the connection between Minoans and the part of the Eastern Aegean that constitutes the general vicinity of the Şeytan Deresi wreck.

According to one tradition, preserved in Diodorus and Strabo, the first inhabitants of Rhodes were the crafty Telchines, who, according to Strabo emigrated to the island from Crete. While Diodorus is rather vague concerning the origin of the Telchines, whom he describes as "children of the Sea," he relates a story of later colonization of Rhodes from Crete. Two Rhodian historians, on the other hand, Zenon and Ergias, speak of the colonization of Rhodes by Phoenicians. In an article well-known for drawing attention for the first time to early Middle Minoan pottery from the Acropolis of Ialysos (Mount Philerimos). Coldstream speculates that the tradition may actually preserve the memory of Minoans, whom local lore identified with Phoenicians due to their dark complexions and foreign origin.

If ancient lore appears inconclusive, the archaeological record offers compelling evidence for substantial Minoan presence on Rhodes and other eastern Aegean islands during the Middle and Late Bronze Age. As noted, the Bronze Age settlement at Trianda exhibits all the characteristics expected of a Minoan colony: Minoan architecture, Minoan frescoes, imported Minoan pottery, both coarse and fine, imitations of Minoan pottery in local clay, Minoan bronze figurines. Dating to Middle Minoan III, the earliest strata at Trianda succeeded a Middle Minoan I-II installation on the defensible peak of Mt Philerimos, also known as Acropolis of Ialysos, while in the beginning of the Late Bronze Age, five new sites with Late Minoan I material indicate that Trianda became a center of Minoan expansion. Beyond the plain of Ialysos, possible Minoan sites are reported from the eastern coastal zone
of the island.\textsuperscript{154} The island of Kos also boasts a settlement site with strong Minoan affinities.

Earlier in this century, the excavations of the site of Seraglio, on the southern edge of the modern town of Kos, produced Minoan and Minoanizing pottery dating from Middle Minoan III onward;\textsuperscript{155} more recent excavations revealed material predating the Middle Minoan IIIB-Late Minoan IA settlement.\textsuperscript{156}

In addition to evidence for substantial Minoan presence in the two largest islands of the region, surface surveys have brought to light Minoan material in smaller islands of the Dodecanese. In the immediate vicinity of Kos and Rhodes, from north to south, Minoan sites are reported from Kalymnos,\textsuperscript{157} Nisyros,\textsuperscript{158} Sisakli,\textsuperscript{159} Telos,\textsuperscript{160} Chalke,\textsuperscript{161} Saros (Seria),\textsuperscript{162} Karpathos,\textsuperscript{163} and Kasos.\textsuperscript{164} A glance at the map makes it immediately apparent that these islands form a convenient string of stepping stones along the route between Crete and the Eastern Aegean. Minoan material from Samos\textsuperscript{165} and recent Minoan finds from Samothrace\textsuperscript{166} indicate that this route along the Anatolian coast extended farther north than previously thought. While literary references to the Minoan presence in the Dodecanese focus almost exclusively on Rhodes, archaeology shows that the Minoan site at Trianda was only one of several Minoan installations in the area.

Regarding the Anatolian coast, Hesiod mentions the emigration of Sarpedon, brother of Minos, from Crete to Lycia; this story is also featured by Herodotus, who is interested in the reasons behind Sarpedon’s departure from Crete.\textsuperscript{167} Ephorus, on the other hand, claims that Sarpedon was the founder of Miletus, and Strabo, quoting directly from Ephoros, repeats the story.\textsuperscript{168} Earlier excavations at Miletus yielded fragmentary evidence for imports of Minoan pottery dating from Middle Minoan III onward, as well as local imitations of Cretan shapes,\textsuperscript{169} but until recently the waterlogged deepest strata of the site had not been properly investigated. With the help of pumps the latest excavations at Miletus reached these previously inaccessible levels and revealed mostly Minoan or Minoanizing pottery, as well as fragments of Linear A,
jewelry, architecture, and fresco remains, all of Minoan character and dating from Middle Minoan III to Late Minoan IB. If the almost exclusively Minoan material is indeed lying over virgin soil, it corroborates ancient lore claiming Miletus as an originally Minoan settlement.

Miletus is not the only settlement on the Carian coast with potential traces of Minoan presence in the area. The team that conducted this latest work at Miletus reports a "Minoan" site about 25 km south of Miletus with Late Minoan IA pottery surface finds. In the same area, the site of Didyma has also produced Late Minoan sherds that "correspond to those of Miletus," while substantial Minoan remains, including architecture and pottery, seem to qualify Iasos as a Minoan "colony" or "emporium." Next in this string of Minoan sites along the Anatolian coast is the wreck of Seytan Deresi, and, further south, Knidos, where Minoan or Minoanizing fine and coarse ware dates as far back as the Middle Minoan I period.

Lore and tradition are silent regarding the Minoan heritage of these settlements, but their optimal location on the coast, close proximity to one another, as well as to Minoan sites in the Dodecanese, coupled with shared Minoan vestiges cannot fail to paint the picture of bustling Minoan trading and shipping in this part of the Eastern Aegean between the end of the Middle and beginning of the Late Bronze Age.

It seems, moreover, that Minoan activity in Anatolia was not restricted to the southwestern coast. Quoting the seventh-century B.C. elegiac poet Kallinos, Strabo reports yet another story of Minoan colonization on the Anatolian coast. According to this tale, told as an explanation for the worship of Apollo Smimtheus in the Aeolis and the Troad, a group of Cretan colonists landed in the Troad where soon thereafter their gear was eaten by field mice. Heeding an oracle that had advised them to settle at the site of such an attack, the Cretans remained in the Troad and named Mt Ida after the Cretan mountain. The tale was dismissed
as "poetical invention"; and the dearth of Minoan material in the Troad provided no reason to argue otherwise. The few random Minoan finds did, however, provide a hint at some kind of Minoan connection. In the words of Troy's excavators, "whether these Cretan objects came directly or by way of some intermediate Cycladic port to Troy is not clear." Very recent research may add to this sparse record and warrant the reconsideration of the hitherto discredited myth. L. Godart identified Linear A inscriptions on two spindle-whorls discovered by Schliemann; if correct, this interpretation pushes back the date of the earliest evidence for Minoan contacts with Anatolia, but also extends the geographical range of such contacts to the northern part of the Anatolian coast. The latest discoveries of Minoan material at Samothrace further corroborate the evidence for such contacts.

Apparently active along the Carian coast, Minoan presence or involvement in Central Anatolia remains a problematic issue. The paucity of material evidence for contacts between Minoans and Hittites is a well-established fact; most recently, in his comprehensive studies of orientalia found in the Aegean, E. Cline reconfirmed the impression that there was little contact between the Aegean and Central Anatolia in Late Minoan and Mycenaean times. I. Ström, on the other hand, noted a group of sealings and the lobed kantharos, a vessel type known from both Central Anatolia and Middle Minoan Crete, as indicative of possible contact, if only indirect, between the two regions. Access to the Anatolian hinterland from coastal settlements like Miletus, at the mouth of the Meander, may have ensured interaction between the coast and the interior as early as the Old Assyrian karum period. The likelihood of such interaction reinforces the relevance of the Kültepe-Kanis comparanda for the Şeytan Deresi krater.

Regardless of the nature and extent of the Minoan contacts on the North Anatolian coast and in Central Anatolia, the archaeological data presented here demonstrate that, as noted by R. Hope Simpson and J. F. Lazenby, and by E. M. Melas, the islands of the
Dodecanese and the southwestern coast of Turkey constitute a geographical and cultural unit that should be treated as a broad but distinct region in studies of relations and contacts within the cultural sphere of the Aegean. Recognizing the region's special character, Niemeier speaks of an "Eastern String" and "a system of 'Minoanized' settlements in the Eastern Aegean." Although its primary driving force had roots within Crete itself, Minoan expansion in the Middle and Late Bronze Age was concomitant with trade and exploitation of natural resources overseas and followed several routes including an Eastern direction. Located on the way to the Anatolian coast, the islands of the Eastern Aegean must have served as stepping stones, a role in some respects similar to that played by the Cyclades in the relations between Crete and the Mainland. It seems unreasonable to deny that the Şeytan Deresi wreck must be studied as an integral part of the Minoanized cultural sphere of the Eastern Aegean, not only for geographical reasons but also for the cultural associations evident in the wreck's ceramic assemblage.
CONCLUDING REMARKS

The present study of the Şeytan Deresi assemblage and its possible parallels relies on the assumption that a search for specimens identical to the Şeytan Deresi pots would, at present, be futile, since small-scale local pottery production, such as was probably practised outside the palatial centers of Crete in the beginning of the Late Bronze Age, may have precluded product uniformity concomitant with mass production. Given the absence of better parallels, similarities between the Şeytan Deresi material and Middle to Late Bronze Age, primarily Minoan, pottery, uphold a Minoan connection, also suggested by the wreck’s geographical location within a region with demonstrable Minoan activity during the proposed time-frame.

Several resources of the Anatolian coast and hinterland were likely to have drawn Minoan shipping to the Eastern Aegean. In view of the Minoan demand for a variety of colorful stones, used in the manufacture of vases as well as seals, Warren suggested stone, such as red marble from Iasos and obsidian from Yali, as a commodity that the Minoans may have sought along the Anatolian coast. C. Laviosa added silver, alum, wood, and foodstuffs, such as salted fish, to the list of items that the Minoans might have acquired in the region. Furthermore, it appears that Minoans were involved in the shipping of tin from the Syro-Palestinian coast to the Eastern Aegean and that the Minoan centers on the Anatolian coast may have served as entrepots in the distribution of imported tin to settlements of the interior.

These commodities are hard to recognize as imports in the archaeological record; they often leave virtually no detectable trace. If the Şeytan Deresi vessel was not carrying exclusively empty ceramics, then some of these jars may have contained precisely such perishable goods. The relatively small number of extant pots from the wreck indicates that their carrier was a modest coastal trader running small consignments of local commodities along the routes between the Anatolian coast and the adjacent islands of the Dodecanese. None of the finds contained any recognizable materials and, as the excavation of the shipwreck took place at
a time when sieving waterlogged contents of ceramic containers had not yet been established as a standard archaeological procedure, no record of the contents of the wreck's closed shapes exists. Traces of such contents, however, may not have been present in the first place. Despite the development of scientific techniques for the identification of ancient organic materials, often detection of perishable commodities must rely primarily on indirect evidence, such as container types and associated artifacts. With capacities ranging between approximately 165 and 235 liters, both types of large pithoi from Şeytan Deresi would have served as adequate containers for water, oil, foodstuffs, or alum (a water-soluble solid), and as merchandise in their own right. The amphoras and jugs may have held liquids, such as water or wine, destined for consumption on board or for sale, while the krater, an open shape unsuitable as a seaborne container, was probably empty and intended as a trade item.

Faced with the riddle of site formation, Bass offered plausible answers to some basic questions concerning the wreck at Şeytan Deresi. In view of the relatively concentrated distribution of the finds on the seabed, it seems unlikely, as he rightly argued, that the cargo consisted exclusively of empty jars. The absence of any traces of the hull support Bass's theory that the vessel capsized, a scenario in which empty pottery would have floated away, as did at least one pithos. In other words, the pots that formed the site's main artefact concentration are likely to have contained water, other victuals, or merchandise.

Several questions, however, defy definite answers. The fate of the hull, once it capsized, must remain conjectural; it is impossible to establish with any certainty whether it was smashed against the rocky shore shortly after capsising, or simply floated away. Since no part of the hull survived, the specifics of the vessel, other than its probable small size, also remain in the realm of speculation. Bass points out that even the assumption that the hull was made of wood may be untenable. Skin boats can be made seaworthy and large enough to carry over a ton of cargo, but while it would be rash to rule out the possibility that Bronze Age boatbuilders made boats with animal hides, hardness and durability render timber a superior
building material for seagoing trading vessels and therefore the boatbuilders' natural choice in Bronze Age Aegean where it was widely available. Of the four other excavated Bronze Age shipwrecks, both the 14th century B.C. Uluburun wreck\textsuperscript{15} and the 13th-century B.C. Cape Gelidonya wreck\textsuperscript{13} yielded positive evidence that their hulls were made of wooden planks held together with pegged mortise-and-tenon joints. Scraps of timber, possibly the remains of a wooden hull, were reported from the Early Helladic II Dhokos wreck\textsuperscript{14} while no relevant data exist for the 13th century B.C. Cypro-myceanaean wreck at Cape Iria.

Even some of the best-preserved shipwrecks never disclose the ship's origin and ultimate destination. At Şeytan Deresi, the absence of small finds and hull remains, combined with the peculiarity of the ceramic assemblage, preclude the possibility that any conclusions concerning the vessel's provenance or route will ever be reached. Future archaeological discoveries and scientific analysis may eventually reveal the provenance of the wreck's ceramics, but even that information will not necessarily pinpoint the site of shipment. At present, only the most general realities of the ship's career may be inferred: that she was a small coastal trader plying the waters of the Eastern Aegean.

Despite unresolved problems, the wreck at Şeytan Deresi constitutes an important find. According to the results of the present study, it is, to date, the only known shipwreck dating to the time of the much-discussed Minoan Thalassocracy and therefore sheds light on coastal trading in the Eastern Aegean during that period. The uniqueness of the Şeytan Deresi pottery assemblage should be regarded as symptomatic of small-scale local production under the influence of Minoan traditions in the region.
ENDNOTES


3 Bass 1976.

4 Sakelarakis and Lolos, personal communication, December 1995.

5 The samples came from pithoi SD 12 and SD 16. The SD 12 sample was dated to 320±210 AD and SD 16 to 640±130 AD. In the laboratory report submitted to the Institute of Nautical Archaeology, S. Hall and M.S. Tite state that "errors quoted in association with the age estimates take into account both systematic and random errors (at 68% confidence level) in TL measurements, dose-rate measurements and calibrations of radioactive sources and equipment. However any errors associated with anomalous fading are not included...The most significant errors in this case came from those associated with the calculation of the archaeological dose and uncertainties associated with the environmental gamma dose."


7 Bass 1976, 297 fig. 4. Making underwater drawings, Cemal Pulak and Sina Mandalinci assisted Netia Piercey in the production of the master plan of the site. Since the original is now lost, this report relies entirely on its reduced and simplified, published version.

8 Bass 1976, 296.

9 Bass 1976, 295.

10 Bass 1975 (supra n. 6) 4.


12 Bass, personal communication.
Cf. A. J. Parker, "Method and Madness: Wreck Hunting In Shallow Water," *Progress in Underwater Science* 4 (1979) 11. Parker states that "There is, in fact, no reason why any site at which a ship can be shown to have sunk should not be called 'wreck', no matter how severely the remains have been disturbed or destroyed by forces acting on the site". Agreeing with this statement, I call the site at Şeytan Deresi "the Şeytan Deresi shipwreck", despite the absence of hull remains.


Ibid., 312.


A. Furumark, *Mycenaean Pottery: Analysis and Classification* (Stockholm 1941) figs. 4-9 for shape; fig. 22 for lips and necks; fig. 24 for handles and bases.


Bass 1976, 299. Bass refers to J. Jannoray and H. van Effenterre, "Fouilles de Krisa (Phocide)" *BCH* 62 (1938) 133 no. 38, pl. XXIV: 2. The Krisa amphora measures 0.210 m in height and 0.168 m in diameter.


Goldman (supra n. 21) 166, fig. 232:1. In its original state, this vessel was larger than SD1 (Pres. h. 0.370).

C. W. Blegen, *Prosopa: The Helladic Settlement Preceding the Argive Heraeaum*. 
Vol. 2 (Cambridge, Mass. 1937) 387, pl. IV, fig. 651. These vessels range from 0.223 m to 0.372 m in height.

24 Bass 1976, 299. Bass refers to G. Karo, *Die Schachtgräber von Mykenai* (Munich 1930) 95, fig. 24, pl. CXIV. This vessel is 0.122 m high.

25 Karo (supra n. 24) 117, 165, 254, pls. CLXXI: 590/591 and CLXXIV: 948. All three vessels are about 0.550 m in height.

26 G. Jacopi, “Nuovi scavi nella necropoli micenea di Jaliso.” *ASAtene* 13-14 (1930-1931) fig. 22-23. This vessel is smaller and slightly squarer than SD1. Ialysos is the name of the plain to the Southwest of the city of Rhodes, where archaeological evidence attests to occupation from Minoan and Mycenaean times to late antiquity. Within this plain Minoan remains were first discovered at a settlement site near the modern village of Trianda; the settlement site, initially assigned to the Mycenaean period by its excavator, appears as “the settlement of Ialysos” in Furumark’s pivotal reassessment of the evidence (infra n. 28) but as “Trianda” or “the settlement of Trianda” in recent literature. Likewise the Middle Minoan site on Mt. Philerimos, a hill overlooking the plain, features as either “the Acropolis of Ialysos” or simply “Mt Philerimos.” Extensive Mycenaean cemeteries cover the hills of Makria Vounara and Moschou Vounara. For a succinct description of the complex archaeological topography of Ialysos, see L. Papazoglou-Manioudaki, “Anaskaphe tou minoikou oikismou sta Trianda tes Rhodou,” *ArchDelt* 37 (1982) 139-40.

27 For some examples, see L. Morricone, “Eleona e Langada: sepolcreti della tarda età del bronzo a CoO,” *ASAtene N.S.* 27-28 (1965-1966) figs. 36, 46, 47, 73, 85, 143.

28 Morricone (supra n. 27) 66 with n. 4, fig. 36; cf. Furumark, “The Settlement at Ialysos and Aegean History c. 1550-1400 B.C.,” *OpArch* 6 (1950) 169, note 1, fig. 7:117-118. On the vessel from Rhodes see infra n. 37 and n. 38.

29 Morricone (supra n. 27) figs. 46 and 47.
30 Furumark (supra n. 17) 38, 594, fig. 8: 58.

31 S.E. Iakovidès, Perate: To nekrotaphion II (Athens 1970) 262-3, fig. 114:590.

32 W.A. McDonald, W.D.C. Coulson and J. Rosser, Excavation at Nichoria in Southwest Greece III: Dark Age and Byzantine Occupation (Minneapolis 1983) 71, 113, 256, fig. 3:15; W.D.E. Coulson, The Dark Age Pottery of Messinia (SIMA-PB 43, Göteborg 1986) 51, 102-103, pl. 12:304. The vessel from Nichoria is 0.405 m high. The vessel from Kokevi is 0.350 m high.


34 Bass 1976, 299. Bass refers to S. Lloyd and J. Mellaart, Beycesultan II (London 1965) 126, fig. P.29-6. This vessel is about 0.365 m high.


37 G. Monaco, "Scavi nella zona micenea di Jaliso (1935-1936)," CIRh 10 (1941) 150-51, fig. 109. The slits are not discernible in the published photograph but I noticed them while studying the vessel in the stores of the Archaeological Museum of Rhodes.

38 Furumark (supra n. 28) 151, 167-69, 184, fig. 7-117. The shape of the Trianda vessel is not really comparable to SD1, but will be discussed for its possible affinities to the handleless pithoi SD13, SD14, SD15, and SD16 (infra n. 128).

42 Blegen, Caskey and Rawson (supra n. 41) 16-17.
43 Bass 1976, 299. Bass refers to Blegen, Caskey and Rawson (supra n. 41) 56-57, 385, fig. 320: 34.366.
44 Blegen, Caskey and Rawson (supra n. 41) 56.
45 L. Pernier, Il palazzo minoico di Festos (Rome 1935) pl. XXXI. This vessel is slightly smaller than the Şeytan Deresi jugs (H. c. 0.350).
46 J.N. Coldstream and G.L. Huxley, eds., Kythera: Excavations and Studies Conducted by the University of Pennsylvania Museum and the British School at Athens (Park Ridge, N.J. 1973) 239, pl. 72-45. Probably of Middle Minoan III date, this vessel is smaller than the Şeytan Deresi examples (H. 0.270).
47 Demargne and de Santerre (supra n. 39) 47, 57, pl. XXXI-1. The jugs from Mallia come from House Da, dated by the excavators to MMIII-LMI.
48 Pernier (supra n. 45) 285, fig. 167-5. This coarseware jug is about half the size of the Şeytan Deresi examples (H. 0.198). It dates to MMIII-LMI.
49 N. Momigliano, "MMIA Pottery from Evans' Excavations at Knossos: A Reassessment," BSA 86 (1991) 236, pl. 54: 125. This jug is of coarse fabric but smaller than the Şeytan Deresi specimens (H. 0.298), and features a strap handle. It comes from House B and Momigliano dates it to MMII-III.
50 Morricone, "Coo-Scavi e scoperte nel ‘Seraglio’ e in località minori (1935-1943)," ASAtene N.S. 34-35 (1972-1973) 176, 193-94 with notes 1 and 2, figs. 60 and 83 (inventory numbers 1214, 1206 and 1205). In July 1995, I studied all three vases in the
Archaeological Museum of Kos under permit from the Department of Prehistoric and Classical Antiquities of the Dodecanese.

51 Moricone (supra n. 50) fig. 60, inv. no. 1206 (H. 0.392; max. diam. 0.267), and fig. 83, inv. 1205 (H. 0.445; max. diam. 0.305).

52 Moricone (supra n. 50) fig. 60, inv. no. 1214 (H. 0.365; max. diam 0.268).

53 Moricone (supra n. 50) 176. Moricone states that the neck, mouth, and handle of jug no. 1214 have been restored according to the configuration of jug no. 1206 (illustrated to the right of no. 1214 in fig. 60), which, however, is not more similar to the jug in question than is vessel no. 1205, the jug with the handle attached to the rim (shown in fig. 83).


56 R.C. Bosanquet and R.M. Dawkins, *The Unpublished Objects from Palaikastro Excavations (1902-1906)* (BSA Suppl. 1, 1923) 26, fig. 16. The Palaikastro jar, restored from fragments, is smaller than SD6 (H. c. 0.460).

57 Evans (supra n. 54) 83-84 with fig. 52; 571-72 with fig. 416a.


59 L. Godart and Y. Tzedakis, *Temoignages archéologiques et épigraphiques en Crète*
occidentale du neolithique au minoen recent IIIB (Rome 1992) pl. XLVIII. The site of Platysvola was published by Tzedakis in *ArchDelt* but, unfortunately, neither the site reports nor the published illustration contain information on the dimensions of the amphora in question.

P.M. Warren, *Myrtos: An Early Bronze Age Settlement in Crete* (Oxford 1972) 141-42; 193 figs. 77, 78. Of the examples illustrated, P 576 is closer to the Şeytan Deresi specimen in size. The type exhibits a considerable height range (from 0.300 to 0.600).

Warren (supra n. 60) 141.


Bass 1976, 299. Bass refers to O. Frödin and A.W. Persson, *Asine* (Stockholm 1938) 274-77 and fig. 191, see also color-plate I. The Asine jar, which contained an infant burial, is similar to SD6 only in belly shape and handle configuration; since it preserves parts of its rim, it seems to be a pithos with a wide mouth rather than an amphora with a straight neck of the SD6 type. Also, it features a vertical handle near the rim; cf. Persson, "Rapport préliminaire sur les fouilles d’Asine, 1922-1924," *BLund* 1924-25, 71 with pl. XXX.

Bass, personal communication, February 1996. The vessel comprises several fragments and large missing areas restored with plaster. It measures approximately 0.550 m in height.


Milojevic, *Samos I: Die Prähistorische Siedlung unter dem Heraion, Grabung 1953 und 1955* (Bonn 1961) 47, pls. 22.1, 2; 26.4; 40.5, 7; and 41.30. Of the items illustrated, the pot in pl. 40.7 is closer to the Şeytan Deresi amphorae in size (H. c. 0.595).

Milojevic (supra n. 66) 47 with n. 8.

Bass 1976, 299. For examples from Thessaly, Bass refers to Milojevic (supra n. 62); for examples from Knossos, he refers to Evans (supra n. 54) 557, fig. 404e, and 567; for
examples from Beycesultan, he refers to Lloyd and Mellaart (supra n. 34) 105, 127, and fig. P.30:4.

69 Warren (supra n. 60) 141 and fig. 77: P 565.

70 Pernier (supra n. 45) 308 and fig. 184.

71 Goldman (supra n. 21) 84, figs. 98 and 100.


73 Warren (supra n. 60) 141.

74 Bass 1976, 300. Bass refers to J. Hazzidakis, Tyliossos a l’ époque minoène (Paris 1921) 27, 29, fig. 12c; "Tyliossos Minoike," ArchEph 1912, 207, fig. 12c. The Tyliossos vessels are too small to qualify as kraters (H. 0.100-0.120), and would be more accurately described as bowls. The French translation renders Hazzidakis’s generic term γαστρα as krater because, as the translator notes, the shape resembles that of footless kraters, cf. Hazzidakis 1921 (supra) 27 note 1.

75 Bass 1976, 300. Bass refers to Hazzidakis 1921 (supra n. 74) 53-54, fig. 28c.

76 Goldman (supra n. 21) 133-34, fig. 181.

77 Goldman (supra n. 21) 127-28 and fig. 171 for the red-burnished bowl; 152-53 and fig. 210 for the matt-painted bowl.

78 For the bowl from Asine (H. 0.140), see S. Dietz, The Argolid at the Transition to the Mycenaean Age (Copenhagen 1991) 51, fig. 10:41. For the bowl from Mycenae (H. c. 0.150), see G.E. Mylonas, O ταφικός κυκλός τον Μυκηνον (Athens 1973) pl. 106: c.2.

79 S.A. Xanthoudides, "Ek Kretes," ArchEph 1904, 32-33 and pl. 3; V.R.d’A.

Desborough, The Last Mycenaeans and their successors: An Archaeological Survey c.1200-c.1000 B.C. (Oxford 1964) 177, 188: Desborough, Protogeometric Pottery (Oxford 1952) 269-70, 327; Betancourt (supra n. 55) pl. 31E. Also cf. Furumark (supra n.
17) 47. Containing two different types of burial, inhumation and cremation, tholos A presents chronological problems and may have span two distinct periods. Thus, the Mouliana krater (H. 0.440), which held the cremation, is of disputed date. Xanthoudides calls it "Geometric". Furumark assigns it to the Late Minoan IIIB:2c on stylistic grounds, Desborough contradicts the latter and tentatively dates the find to the Protogeometric period, while Betancourt quotes a Late Minoan IIIC date with a question mark.

Monaco (supra n. 37) 151-52, fig. 111. The bowl measures 0.550 m in height and 0.720 m in maximum diameter.

Furumark (supra n. 28) 173, 185 note 195, fig. 10:195. The first Knossos krater Furumark mentions in note 195 is actually dated to the MMIIIB period by Evans. Cf. Evans (supra n. 54) 365, fig. 279.

Bass 1976, 300.


T. Öğuz, *Kültepe-Kanış* (*Türk Tarih V*, Seri-No. 19, Ankara 1959) 112, especially pl. XLII:1; also see pls. XLI:3, XLII:2.3, XXXI:2, and XXII:2. The bowls measure 0.280-0.300 m in height and 0.380-0.400 m in maximum diameter.


Aegean dates to Middle Minoan I and includes pottery from Samos, Knidos (cf. infra n. 165 and n. 173) and the Acropolis of Ialysos (Mt Philerimos) on Rhodes (cf. infra n. 152). In terms of absolute chronology, Middle Minoan I spans the 20th and 19th centuries B.C. (Warren and Hankey, supra, 169 table 3.1). For evidence of contact between Crete and Anatolia, cf. infra n. 180. Also, recent research on material from Troy may indicate early contacts with Minoan Crete. Cf. infra n. 177.

I am indebted to Museum Director Öğuz Alpözen for granting me permission to study this find and access to the Museum inventory. Under entry number 1-10-81, a designation also inscribed in black ink on the pithos itself, the inventory provides the following information: area of Şeytan Deresi/16th century B.C./perimeter 2.20 m/height, 0.94 m/mouth diameter, 0.305 m/base diameter, .014m/presented to the Museum on 28 November 1980 by a customs' official, who found it while diving.

Bass 1976, 300.

A. Zemer, Storage Jars in Ancient Sea Trade (Haifa 1977) 31, pl. 8:24.


Hazzidakis 1912 (supra n. 74) 203-204, and figs 7 and 8; 1921 (supra n. 74) 20, and figs. 7 and 8.

Chapouthier and Charbonneaux (supra n. 94) 54. The smaller vessels are barely 0.200 m tall, while some of the taller examples measure up to 0.600 m.

Demargne and de Santerre (supra n. 39) 83, and pl. XXXIX:3. This vessel is 0.530 m in height.

Sakellarakis 1991 (supra n. 58) fig. 123.


Warren and Hankey (supra n. 87) 142.

R.C. Bosanquet and R.M. Dawkins, *The Unpublished Objects from the Palaikastro Excavations, 1902-1906* (*BSA Suppl.* 1, London 1923) 98, fig. 82 and note 2. The height of the LMII vessel illustrated is approximately 0.330 m; according to the report, LMIII examples of the same type are larger.

M.R. Popham, *The Minoan Unexplored Mansion at Knossos* (*BSA Suppl.* 17, Oxford 1984) pls. 67:f, 75:c and d, 76:b, c and d, 78:b. Heights range from 0.320 to 0.640 m.


109 Monaco (supra n. 37) pl. XIIIc: 6.

110 Furumark (supra n. 28) 183-85.

111 Monaco (supra n. 37) figs. 73-76; Papazoglou-Manioudaki (supra n. 26) 147.

112 Bass 1976, 300. Bass refers to Blegen, Caskey and Rawson (supra n. 41) 67, 137, 384, and figs 429: 5, and 327: 34.265. The vessel in fig. 327: 34.265 is about 0.360 m high.

113 Bass 1976, 301. Bass refers to Dragendorff (supra n. 19) 226-27, and fig. 424:b; and G. Jacopi, "Scavi nelle necropoli camiresi, 1929-1930," *CIrh* 4 (1929-1931) 333, pl. VIII: CLXXXVI. The Theran pot is 0.640 m tall, the Rhodian pithos 1.410 m.

114 P. Courbin, *La Geometrique de l’Argolide* (Paris 1966) pl. 106. Some of these pithoi are comparable in size to the Şeytan Deresi specimens, others are much larger (H 0.900-1.780).

115 G.E. Mylonas, *To dytikon nekrotapheion tes Eleusinos* (Athens 1975) 84-87 with pl. 216 (dated to the 5th century B.C.); 97, 99 with pls. 230 and 231 (dated to the 8th century B.C.); 114, 115 with pl. 243 (dated to the 7th century B.C.). These pithoi (H. 0.800-0.900) are roughly comparable in size with the Şeytan Deresi specimens.

116 X. Arapoyianni, "Nekrotapheio tou 7ou kai 6ou aionas p. Ch. sten Oinoe Marathonos," *ArchDelt* 40 (1985) 213, 214, pl. 88 and pl. 89a. This pithos (H. 0.480) is significantly smaller than the Şeytan Deresi specimens.

117 Dragendorff (supra n. 19) 93, fig. 294.

118 Bass 1976, 301. Bass refers to Goldman (supra n. 21) 151-52, fig. 208: 6-9; and Edgar (supra n. 100) pl. VII: 5, 14.

119 For examples of this type, see Edgar (supra n. 100) pl. XXXIV: 1; Mylonas,
Preistorike Eleusis (Athens 1932) 96, fig. 79.

120 For a large LHIII pithos (H. c. 1.235, restored), see W.A. McDonald and N.C. Wilkie, eds. Excavations at Nichoria in Southwest Greece II: The Bronze Age Occupation (Minneapolis 1992) 508, pl. 9:73. There seems to be a discrepancy in the description of this LHIII pithos. The photograph shows what appears to be only the lower body of the vessel, yet the text describes it as almost complete. For an even larger Late Geometric example (H. 1.720) see McDonald, Coulsdon and Rosser (supra n. 32) 256, 260, pl. 3:162.

121 McDonald, Coulsdon and Rosser (supra n. 32) 262.

122 Mylonas (supra n. 119) 100-101, fig. 81.

123 Furumark (supra n. 17) 74 and note 3.

124 Jannoray and van Effenterre (supra n. 20) 117, fig. 7. The pithos is 1.055 m tall.

125 Furumark (supra n. 17) 74, 586, fig. 21.

126 Betancourt (supra n. 55) 105, fig. 77 (MMIII "pitharaki"); 156, pls. 23:8, 24:2-A-C (LMII "palace style amphora").

127 Monaco (supra n. 37) 129-30, fig. 82; cf. Furumark (supra n. 28) 173 with n. 3, 185.

In the summer of 1995, I was granted permission to examine this large vessel (H. 1.200 m) at the Archaeological Museum of Rhodes but it proved impossible to locate.

128 Morricone (supra n. 27) 254, 294, fig. 280. Morricone states that the date of this find is uncertain, and compares it with the Minoanizing four-handled pithoid jar from Trianda that bears incisions on the handles (supra n. 37 and n. 38). Firsthand examination in the Archaeological Museum of Kos confirmed Morricone's description of the jar's very irregular shape (lopsided); it also led me to the conclusion that the irregular ridges near the base are not necessarily decorative, as Morricone claims, but may be the result of the manufacture process.

129 Bass 1976, 301. Bass refers to Jannoray and van Effenterre (supra n. 20) 120, fig. 10;
and Goldman (supra n. 21) 166, 170, fig. 232:2.

150 Goldman (supra n. 21) 165, fig. 230: 1.

151 Mylonas (supra n. 119) 92-3, figs. 72, 73.

152 Furumark (supra n. 17) 34 with note 3, 604, fig. 7.

153 Furumark (supra n. 28) 175-76, fig. 11: 204, 205; also cf. Monaco (supra n. 37) 151-52, fig. 112: 1, 2.

154 O. Alpözen, Bodrum Müzesi Ticari Amphoralari (Bodrum 1975) 17, pls. 9:2 and 9a:2.


156 Bass 1976, 301. Bass refers to J. Boardman, Excavations in Chios, 1952-1955: Greek Emporio (BSA Suppl. 6, London) 140, fig. 87: 507. The fragment has a height of 0.170 m and a mouth diameter of 0.168 m.

157 E. Doger, "Premières remarques sur les amphores de Clazomènes," in Empereur and Garlan (supra n. 91) 462-63, fig. 3.

158 Bass 1976, 301.

159 Bass 1976, 302.

160 The present work follows the "low" chronology proposed by Warren and Hankey, cf. supra n. 87.


162 G. Huxley, Minoans in Greek Sources (Belfast 1968) 1-2. The relevant passage appears in Hom. Il. 2.645-52.

163 Huxley (supra n. 142) 3.

164 Hd. 1.171.2-3.

165 E.g. Huxley (supra n. 142) 8-9.
Thuc. 1.4. Italic indicates the phrase in which the present translation by the author diverges from the traditional interpretation.

K. Branigan, "Minoan Colonialism," BSA 76 (1981) 26, 32. Branigan's definition of a settlement colony is "towns or cities founded by a foreign people on unoccupied land and populated by people resettled there from the foreign homeland." For a recent summary of the Trianda evidence, see Manioudaki-Papazoglou (supra n. 26) 139-42.

Papazoglou-Manioudaki (supra n. 26) 139-41; R. Hope-Simpson and J.F. Lazenby, "Notes from the Dodecanese III," BSA 68 (1973) 131; G. Konstantinopoulos, "Rodiaka III," ArchDelt 24 (1969) 177. The relevant passages are Diod. 5.55-56 and Str. 16.654. Despite the absence of a direct connection between the Telchines and Crete in Diodorus, Konstantinopoulos argues that Diodorus's description of the first inhabitants of Rhodes indicates some knowledge or memory of the Minoan past.

Diod. 5.59.1-3. Althaemenes, son of the Cretan king Catreus, fled Crete upon receiving an oracle warning him that he would kill his own father. He and his numerous companions reached Kameiros in Rhodes, built a temple to Zeus, and settled among the natives. This is as much of the story as concerns us here; the rest is yet another tragic example of fulfillment of fate.


For the pivotal study on the Minoan settlement at Trianda, see Furumark (supra n. 28) 150-271. For recent discoveries and good summaries of new and old evidence, see Papazoglou-Manioudaki (supra n. 26) 139-85, and T. Marketou, "New Evidence on the Topography and Site History of Prehistoric Ialysos" in S. Dietz and I. Papachristodolou, eds, Archeology in the Dodecanese (Copenhagen 1988) 28-31. Marketou expresses reserved skepticism concerning the Minoan colonial nature of the Trianda settlement and notes northwestern Anatolian elements in the culture.
Coldstream (supra n. 150) 6; M. Benzi, "Evidence for a Middle Minoan Settlement on the Acropolis at Ialysos," *Thalassocracy*, 96-102. Also, for additional recent finds from Mt Philerimos, see Marketou (supra n. 151) 27.

Marketou (supra n. 151) 32.


Morricone (supra n. 50) 139-396; R.E. Jones, *Greek and Cypriot Pottery* (Athens 1986) 291, 508-509. Jones reports pottery of Middle Minoan III style from Seraglio proved in analysis to be local wares, strengthening the case for Middle Minoan settlement on Kos.


Melas (supra n. 154) 288-92.

Melas (supra n. 154) 284 with fig. 1, 294-95. Melas mentions newly discovered prehistoric sites from the north and east of Syme and from Seskli, but does not provide a date. In his map illustration, however, he marks the find from Seskli as Minoan.


Melas (supra n. 154) 304, 307.


165 Melas (supra n. 162) 28-44; Hope Simpson and Dickinson (supra n. 157) 357.

Diodorus connects Karpathos with Minos, if only in rather vague terms; he claims that the first inhabitants of the island were "certain men who joined Minos in his campaigns" at the time of his thalassocracy (Diod. 5.54.4).

166 Melas (supra n. 162) 46-50; Hope Simpson and Dickinson (supra n. 157) 359.


168 D. Matsas, "Samothrace and the Northeastern Aegean: the Minoan Connection," *Studia Troica* 1 (1991) 159-79. Matsas presents evidence for Minoan presence in Samothrace from excavations at the site of Mikro Vouni; he dates a fragment of Linear A script to 1800/1700 B.C., a dating that roughly corresponds to that of the Trojan Linear A inscribed spindle-whorls.

169 Huxley (supra n. 142) 3. The relevant passages are *Hes. F.* 141 and *Hd.* 1.173.2.

170 Huxley (supra n. 142) 8. The relevant passages are *Eph.* 70.F.127 and *Strab.* 14.1.6.


"International Congress of Classical Archaeology" (Ankara 1978) 1093-99; "The Minoan Thalassocracy, Ilasos and the Carian Coast," Thalassocracy, 183-85. In the latter article, Laviosa reports "conical cups, parts of large pithoi, lamps, and Kamares ware, together with local imitations of them", as well as Neopalatial imported and local pottery.


Huxley (supra n. 142) 10. The relevant passage appears in Str. 14.1.6.

E.g. W. Leaf, Strabo in the Troad (Cambridge 1923) 243, 245.

Blegen, Caskey, and Rawson (supra n. 41) 17.


Supra n. 166.


Hope-Simpson and Lazenby (supra n. 148) 178.

Melas, "Prehistoric Survey and Ethnoarchaeology in the Dodecanese: Current
Problems and Future Research Strategies," in French and Wardle (supra n. 169) 430.

184 Neimeier (supra n. 165) 206.


186 Warren (supra n. 185) 185.

187 Laviosa 1984 (supra n. 172) 185.

188 Yakar (supra n. 181) 122-24.

189 Don Shatto estimated the total capacity of the smallest pithos (SD 11) at 165.7 l, and that
of the largest pithos (SD 13) at 235.1 l. The method he used involved dividing the vessels
into numerous finite cylinders and adding up their calculated volumes. Since the
assumption is that each of the segments that make up the vessel is a perfect cylinder the
margin of error depends on how eccentrically shaped a vessel is and how rapidly contours
change at its different parts.

190 An experimental skin boat of small dimensions (6 m in length, 1.4 m in maximum beam
and weighing about 180 kg) could reportedly contain more than a metric ton of cargo and
proved to be "stable, dry and seaworthy" in sea trials. Cf. S. Marstrander, "Building a Hide
carry up to four or five tons of cargo. Cf. L. Casson. Ships and Seamanship in the Ancient

191 Cf. Casson (supra n. 190) 35. Casson speculates that a distinct waterline projection at
the bow of Minoan boat models may be indicative of "a bifid stem...characteristic of many
forms of primitive craft, skin boats, dugouts, and even planked boats."

192 C.M. Pulak, "Excavation at Uluburun: The Final Campaign," INA Quarterly 21


194 G. Papathanassopoulos, Y. Vichos, and Y. Lolos, "Dhokos: Anaskafike periodos
At Dhokos, several pieces of wood came from among the dense deposit of Early Helladic II pottery.
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