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## KİNET HÖYÜK IN EASTERN CILICIA: A CASE STUDY FOR ACCULTURATION IN ANCIENT HARBORS (Lev. 87-96)

#### \*Marie Henriette GATES

The ancient coastal site of Kinet Höyük (Yeşil-Dörtyol), 30 km north of Iskenderun, appears well situated to illustrate the economic subsistence strategies of a small eastern Mediterranean harbor over a long chronological perspective. The pattern that has emerged from six excavation campaigns is one of conservative, regional self-sufficiency offset by outside contacts that prompted changes in fashion and industry. The summary presented here selects three instances of an acculturation process that, to a large extent, masked the parameters of Kinet's commercial enterprises during its extended history of occupation.<sup>1</sup>

#### Location and physical situation of Kinet Höyük (fig. 1)

Kinet Höyük, eastern Cilicia's largest mound, is located in the northern Hatay at the south end of the Erzin plain (fig. 1), a fertile and exceptionally rainy corridor bordered by the Gulf of Iskenderun to the west, and the Amanus mountains less than 10 km to the east. The mound proper covers an area of 3.3 ha, rises to a height of 26 m., and was supplemented in the later part of its history by broad residential areas to the north and east. The sea today lies 700 m to the west of the mound.

The mound has suffered little modern disturbance, and is uncultivated. It has been registered as an ancient site since the early part of this century, and is therefore nominally protected. Terraces on the north and east are worked as commercial gardens and citrus groves. The areas immediately to the south and west were bulldozed by the Delta Petroleum Products Trading Company in the late 1980s to set up twelve 5000 m³ propane reservoirs and, in 1993, a gas bottling plant. Archaeological research at Kinet can therefore be classified as a salvage project.

## Historical sources: Kinet = Hisn at-Tinat, İssos, Sissu, Zise

The current name of the site could derive from Hisn at-Tinat (Hellenkemper 1984: 46-48), mentioned by Arab chroniclers from the 10th to the 13th centuries

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<sup>&</sup>lt;sup>1</sup> It is a great pleasure to thank here Doç. Dr. Serra Durugönül, and the enlightened administration of Mersin University, for organizing this stimulating and most informative conference on Cilician archaeology.

A.D. as a fortified seaport on the critical border between the Islamic and Christian powers (al-Istakhri A.D. 951: Le Strange 1965:455; Cornu 1985: 13). represents only the most recent in an extended line of historical associations. Kinet has long been proposed as the best candidate for ancient Issos, near the battlefield where Alexander the Great's victory over Darius III Codommanus in 333 B.C marked the first critical step in his conquest of the Achaemenid empire (Seton-Williams 1954: 127; Hellenkemper 1984). Xenophon described Issos of the fifth/fourth centuries B.C. as the last city in Cilicia before crossing into Syria, and a large and prosperous center with a harbor broad enough to shelter Cyrus's fleet (Persian Expedition I.4). Xenophon's port city would have more commonly been referred to, according to J.D. Bing (1985 [1993]; but cf. Casabonne 1997), by its Phoenician name Sissu, whose early seventh century B.C. ruler Sanduarri formed an unsuccessful alliance with Sidon against the Assyrian king Esarhaddon. Finally, the place name may be traced back several more centuries into the Late Bronze Age as Zise, listed by Idrimi of Alalakh among the Hittite cities he conquered (Pritchard 1969: 557-58).

These historical commentaries all suggest an urban center of some importance that participated actively in sea trade, and occupied a strategic position on the land route along the northeastern Mediterranean coast between Cilicia and the Amuq plain. Kinet Höyük fits these descriptions in size, location and periods Excavations by a Bilkent University team since 1992 have of occupation. presented an archaeological sequence to match this historical outline convincingly.<sup>2</sup> Stratigraphic soundings and ca. 800 m<sup>2</sup> of horizontal exposures indicate that Kinet was settled at least as early as 3000 B.C. and probably much earlier, and was occupied throughout the Bronze and Iron Ages. Toward the end of the Iron Age, settlement expanded beyond the mound itself to broad terraces on the east and north, thus becoming a fair-sized town that lasted into the end of the Hellenistic period (first century B.C.). Ca. 50 B.C., the mound was abandoned. This would explain why Strabo (xiv. 5. 19) referred to the Issos of that time as a small village, in contrast to Xenophon's city of 400 years earlier. Like many high Hellenistic sites, Kinet was left deserted until a brief but prosperous revival in the Middle Ages (12th-13th centuries A.D.). This medieval reoccupation marked the end of Kinet's career until the establishment 10 years ago of the Delta Petroleum and natural gas storage facilities on the south terrace.

<sup>&</sup>lt;sup>2</sup> For reports on the 1991 survey that preceded excavations, see Gates and Özgen 1993, Ozaner, Gates and Özgen 1993, and Steadman 1994. Brief seasonal reports and notices have appeared in Gates 1994a, 1994b:261, 1995:227, 1996:293-94, 1997: 253-54, and 1999 (forthcoming).

#### Kinet's harbors

Although Kinet lies 700 m inland from the sea, and the coastline follows a straight course unpropitious for sheltering boats, this project's geomorphological research, carried out by S. Ozaner (Ozaner 1994), has confirmed that the site originally occupied a promontory controlling two harbors: a small natural bay on its north side, and the estuary of a river immediately to the south. Kinet would thus follow the pattern of other pre-Hellenistic eastern Mediterranean ports, such as its nearest excavated neighbor Al Mina (65 km to the south: Woolley 1938), in being situated on an estuary. The choice of the north shore was determined by the Gulf of Iskenderun's prevailing winds and currents, promoting the automatic creation of a deep pool, sheltered from turbulence and the river flow by the formation of a sandbar in the middle of the estuary (Ozaner, personal communication; Raban 1991).

Erosion and alluvium have modified both of these harbors, silting in the bay and shifting the river, now called the Deliçay, south to its present course 2.5 kilometers away. The bay's demise must have been well advanced by the start of the Hellenistic period, when the north terrace began to be settled. It is probable that the river was also some distance away by this time: a deep trench cut into the south terrace by Delta Petroleum during the construction of their propane reservoirs revealed Hellenistic masonry that may represent harbor installations. Despite these efforts, it can be assumed that the site was abandoned ca. 50 B.C. because its harbor facilities were no longer viable. Reoccupation in medieval times must have been accompanied by the construction of an artificial harbor beside the mound's south terrace, where Delta Petroleum has also installed an offshore pipe and platforms to transfer oil from tankers.

## The Kinet Höyük project, 1991-1998

The Kinet project is concerned with assessing how a medium-sized harbor in the eastern Mediterranean adapted to fluctuating economic, cultural and political situations over the long term. Location afforded access to broad maritime and inland networks. At the same time, this northern sector of the Iskenderun Gulf could be considered quiet, and perhaps at one remove from major routes. The site was thus well situated to investigate regional enterprise, and its diachronic variations, by evaluating remains of all types - including archaeobotanical and faunal data.

The results that are emerging differ somewhat from what was anticipated, although the original premise of Kinet's economic structure remains unchanged. In particular, the obvious archaeological index of long-distance trade - imported pottery - is rare, representing a minute percentage of the ceramic repertoire in any period. The local pottery does reflect varying periods of acculturation, however, which point to changes in the commercial spheres of influence from abroad. This

paper will therefore argue that the archaeological expectations for harbor sites should be recast, as will be suggested in conclusion.

Of the eight archaeological periods that have been investigated so far at Kinet,<sup>3</sup> this paper will touch on three: the Middle Bronze Age, represented by a burnt building on the east terrace; the end of the Late Bronze Age, with two LB II (Hittite Empire period) houses on the west slope; and the first stages of Late Iron Age (seventh-early sixth centuries B.C.) (fig.2). Investigations are on-going in all three periods, and the present results are strictly preliminary.

## Middle Bronze Age: East Terrace Operations K-K2-K3

In 1995, a trench on the east terrace to test a potential "lower town" uncovered part of burnt Middle Bronze Age building, one meter below the present surface and a shallow medieval level. This area (OP. K) was expanded in the following seasons (Ops. K2-K3). By the close of 1998, the building had been enlarged to 150 m² with 10 rooms, all extending beyond the excavated area (fig. 3). Its current plan is divided into two sectors. The western wing, with few finds, may have provided living quarters, at present consisting of a single sector partitioned into three by low benches coated with white plaster. The east wing served as service quarters with small rooms connecting to each other. A peculiar architectural feature on this side is a series of large buttresses inside the thin east wall. Massive brick collapse beside each suggests that they once supported vaults. A stair was set in the narrow compartment against the southern buttress.

The eastern rooms preserved numerous furnishings in situ: storage jars of 50 - 80 l capacity (fig. 4), some still reeking of olive oil, others filled with charred emmer and einkorn glume wheats, barley and linseed (Hynd 1997); and the equipment to convert these supplies into meals, such as grinding stones and firedogs, hearths and an oven. A varied repertoire of tableware was also recovered from these rooms (fig. 5), but it presents a chronological puzzle. The pitchers and cups in Cilician Painted Ware were a hallmark of the local MB II A 18th c. B.C. (Mellink in Tarsus II: 165 and figs. 287, 291; Heinz 1992: 54); they were found together with brown burnished vessels, usually dated two centuries later to the beginning of the Late Bronze (Mellink in Tarsus II: 184), and two sherds of Cypriot Bichrome Ware, which marked the MB II B - LB I transition. The only record-keeping devices so far recognized in this building are sets of notches on several storage jars, and a foot-shaped seal to stamp a simple grill pattern. Although there is no doubt that maritime trade figured prominently in the

<sup>&</sup>lt;sup>3</sup> Medieval (Kinet Phase I); Hellenistic (Phase II); Late, Middle and Early Iron Ages (Phase III:1, III:2, III:3); Late Bronze (Phase IV); Middle Bronze (Phase V); Early Bronze (Phase VI). Stratigraphic levels in this report are referred to by periods (e.g. LB II Periods 14 and 13), determined from the stratigraphic sounding OP. C on the mound's west slope.

local economy during this time, this east terrace building's contents do not yet show any evidence of contacts outside Cilicia and north-west Syria, with which the ceramic repertoire has much in common.

After this building was destroyed, probably by earthquake, it was sealed by a thick deposit of sterile silt, gravel and shell, as the river flooded this portion of the site. Kinet Höyük thus reached its largest extent at the end of the Middle Bronze Age.

# Late Bronze Age: West Slope Excavations (Ops. J-L)

In 1994, three rooms and the court of a Late Bronze II building (Period 14) were first uncovered on the mound's west slope in OP. J. This exposure was doubled to 100 m<sup>2</sup> in 1998 (OP. J/L), to produce the current plan with two paved courts, a room of undetermined function, a storeroom, and a kitchen, occupied over two separate stages (fig. 6). The north-west room, storeroom 29/96, was lined with large jars set on potstands: the jars contained dried fish, barley, wheat, lentil. olive, fruit flesh, walnut (Hynd 1997: 34).<sup>4</sup> Besides many classic LB II/13th century B.C. Canaanite jars, the large containers included a one-handler, tall pitchers, and many pilgrim flasks in burnished white and red slips, some in large sizes (35 cm high) (fig. 7). Kitchen 99/110 was equipped with terracotta braziers. domed ovens, and relics of a gourmet meal: grouper bones, and a lobster claw (S. Ikram, field report). The storeroom and kitchen also produced stacks of smashed tableware (fig. 8). It conformed to standard 13th century B.C. types from the Hittite provinces: "drab ware" bowls in monochrome and (less frequent) redbanded varieties, and potmarks incised on the outer surface before firing. Less expected was a red-slipped terracotta bull's horn and ear from a Hittite-style theriomorphic vessel.

The Period 14 building was destroyed in an armed conflict. Bronze arrowor spearheads were lying about in the rubble, and a socketed bronze axe was found embedded, blade-first, into one of the walls. These typical weapons of the eastern Mediterranean's Late Bronze military arsenal give no clues to the aggressor (nor, indeed, to the victor). An immediate but separate construction followed in Period 13 (fig. 9), still dating to Late Bronze Age and with a similar ceramic inventory.

The homogeneous ceramic tradition of these two LB II levels is currently attested by several thousand sherds, and some 50 complete vessels. The Hittite pottery was locally manufactured, according to parameters of fabric and shape shared by contemporary sites throughout central and southeastern Anatolia.

<sup>&</sup>lt;sup>4</sup> One jar also contained a piece of a plastic fertilizer bag - a cautionary reminder of potential rodent contamination.

Imported pottery, in contrast, is represented by only eight Cypriot vessels, 5 defying a percentage calculation. The percentages of imported pottery at related Cilician harbors, such as Tarsus and Mersin, are similarly small. 6

Middle-Late Iron Age Transition: East and West Slope Operations

Kinet's transitional stage from the Middle to the Late Iron Age (seventhearly sixth centuries B.C.) was marked by a shift from a Cypro-Cilician regional culture to a broader eastern Mediterranean one, dominated by Aegean influence. Two architectural periods, 7 and 6, have been exposed in two 150 m² areas on the upper west and upper east sides of the mound (Ops. E-H-C II, and A-A II-D). The west side was laid out on a larger scale, with the foundations of adjacent rooms aligned in a coordinated plan. On the east, housing was irregular, and included untidy cobbled enclosures. An indication of this period's industries was afforded by large quantitites of smashed murex shells, first harvested for the manufacture of purple dye, and later smashed up and recycled to line floors. Direct contact with the Greek worlds of the mainland and eastern Aegean was demonstrated by a sprinkling of imported pottery: Attic SOS amphorae, Corinthian aryballoi, and "Wild Goat" plates and oinochoai.

Another of the eastern Mediterranean's diagnostic fine- or tablewares, Wave-Line or East Greek Common Ware, first appeared at Kinet in Period 7, and in Period 6 made up 15-18 % of the total ceramic assemblage (fig. 10). With few exceptions, however, these vessels seem to have been locally manufactured (Songu 1997). This suspected industry was confirmed during the 1997 season by the discovery of Period 6 kilns in Op. A II (east side), in association with wasters of Wave-Line vessels, Ionian bowls, Basket-handled amphoras, and other types typical of the ceramic repertoire popular ca. 600 B.C. Kinet's potters were also imitating Orientalizing vessels, both of East Greek and mainland types.

It is likely that many of the seventh-sixth century B.C. eastern Mediterranean's cities, like Kinet or, indeed, Tarsus, followed the fashions in tableware set by potters in Miletus, Chios, Rhodes and even the Greek mainland not so much producing local imitations, but whole-heartedly adopting western styles. The impact of a single style in the ceramic industry is unquestioned for other periods: every Hellenistic household used Eastern Sigillata; it also holds

<sup>&</sup>lt;sup>5</sup> Fragments of four White-Slipped II milkbowls, three Base-Ring II juglets, and one Base-Ring II bowl.

<sup>&</sup>lt;sup>6</sup> Mellink in <u>Tarsus II</u>: 205; Garstang 1953, 241-42.

<sup>7</sup> Of the 500 diagnostics that F. Songu examined in the course of her M.A. thesis research, only one was made in a fabric different from the clean, hard-fired orange ware with lime inclusions characteristic of Kinet's Period 6 fine and medium-fine wares. Ionian bowls from these levels share the same clay, without the inclusions, but were often fired to a darker gray-brown color. Neutron-activation analysis of the Kinet pottery is in progress.

true for the later Hittite period. Thus the presence of these ceramic types outside their traditional places of manufacture should not be automatically interpreted as imports without a careful comparison to the remainder of the local pottery assemblage.

#### **Trade and Acculturation in Ancient Harbors**

Kinet's import and export trade has so far, to a large degree, proved elusive. Shipping containers such as Canaanite jars, or later, amphoras, represent only a small percentage within the total ceramic assemblage of any period. Nor were other ceramic types, as demonstrated here, brought in as commercial items for local use. Thus imported pottery, the standard archaeological reference tool, cannot illustrate what was passing through Kinet's harbor.

The crux here is that Kinet's primary industry was not trade, but the business of shipping traded goods. In the Braudelian perspective (1972: 94-95, 291), harbors exist as transit points along a coastal roadway, to provide outlets for routes leading directly to a manufacturing and consuming interior. When industries do evolve in portuary contexts, they belong to its secondary economic stage - such as purple dye processing in Late Iron Age Kinet - and do not deflect the harbor's primary focus of redirecting goods from place of origin to destination. What harbors do reflect, however, are the cultural spheres with which they are in contact, and the economic dynamics of any given period. The results of the Kinet Höyük excavations are highlighting these trends clearly, whatever the products that sailed in and out of its port.

#### **FIGURES**

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- Figure 1. Map of the Gulf of İskenderun, with Kinet Höyük indicated.
- Figure 2. Topographic plan of Kinet Höyük, 1992-1998 excavations.
- Figure 3. Plan of the MB II burnt building on the east terrace, Ops. K and K2.
- Figure 4. MB II storage jars from the burnt building in OP. K. (Scale is 20 cm.)
- Figure 5. MB II table wares from the burnt building in OP. K. Upper row: Cilician Painted Ware monochrome and bichrome vessels. Lower row: the five vessels on the right are burnished. (Scale is 10 cm.)
- Figure 6. Plan of the LB II Period 14 building on the west slope, OP. J/L. The hatched walls belong to the second building phase.
- Figure 7. LB II containers from the Period 14 building, OP. J/L. (Scale is 10 cm.)
- Figure 8. LB II table wares from the Period 14 building, OP. J/L. (Scale is 10 cm.)
- Figure 9. Plan of the final LB II Period 13 building in OP. J/L, overlying its Period 14 predecessor.
- Figure 10. Local Wave-Line vessels from Period 6, late seventh-early sixth century B.C. (Scale is 5 cm.)

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Fig. 1

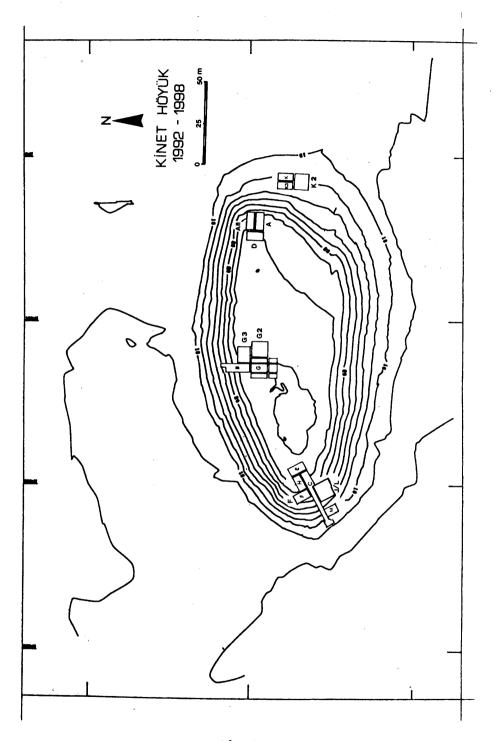


Fig. 2

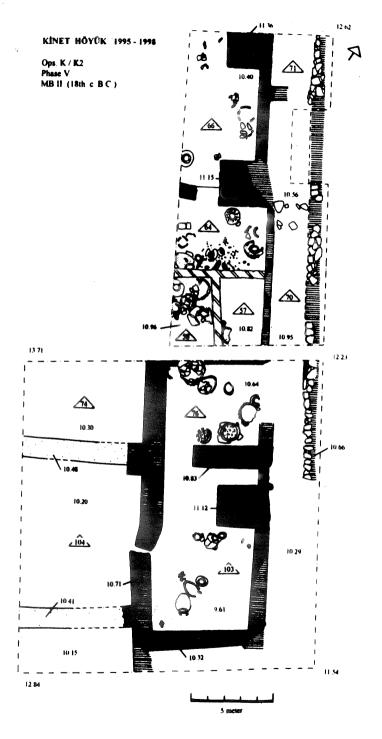


Fig. 3

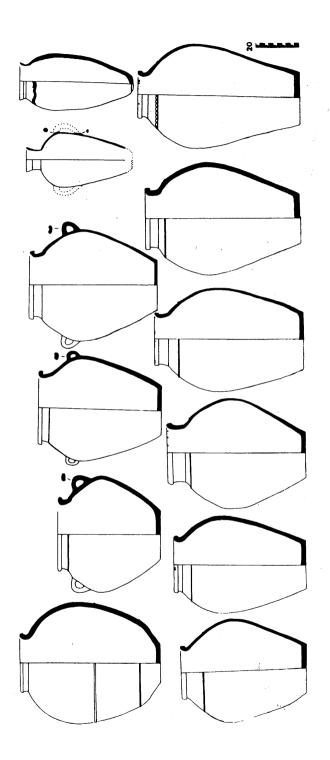


Fig. 4

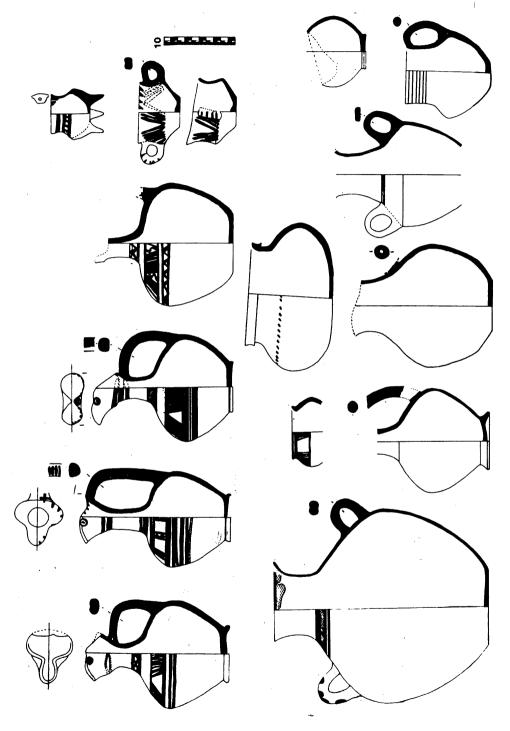


Fig. 5

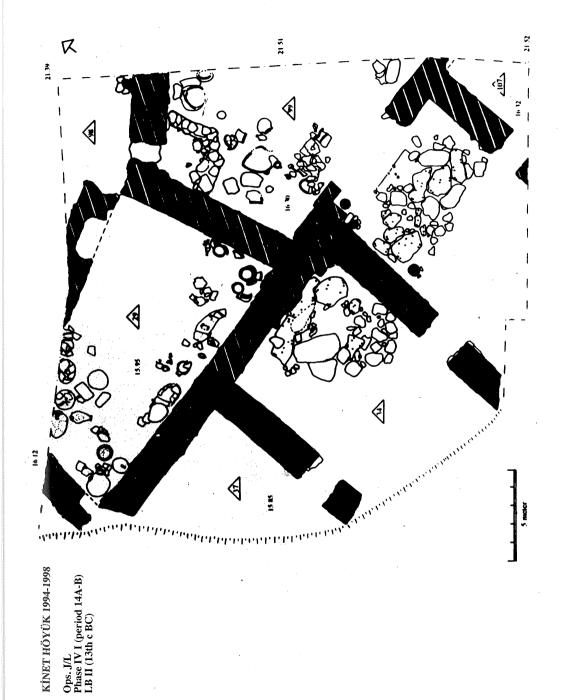


Fig. 6

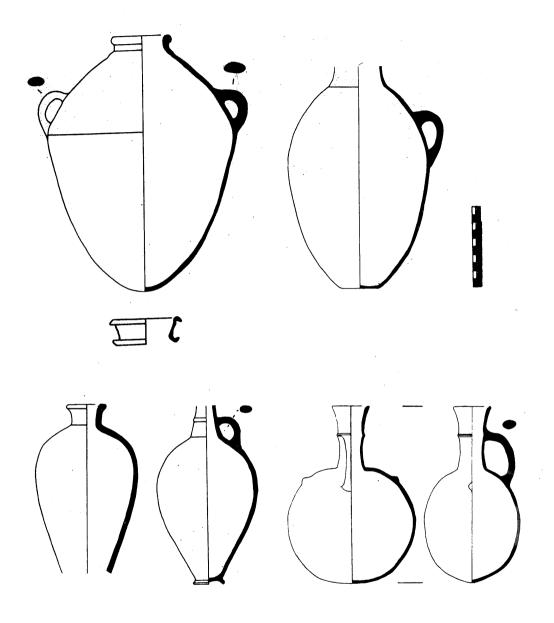


Fig. 7

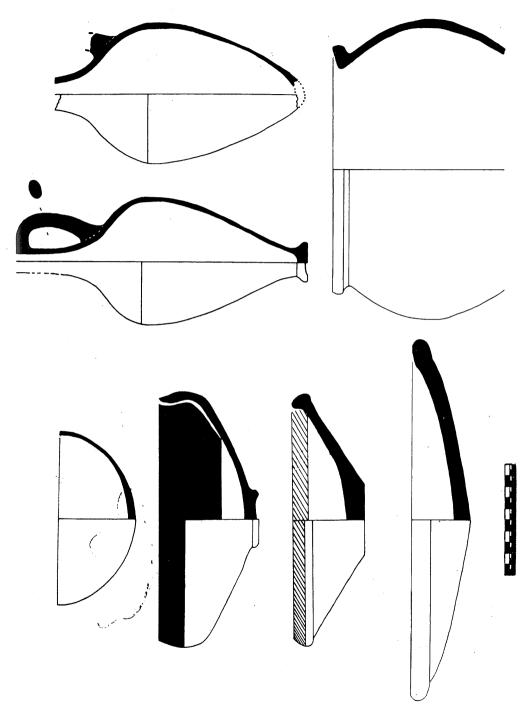


Fig. 8

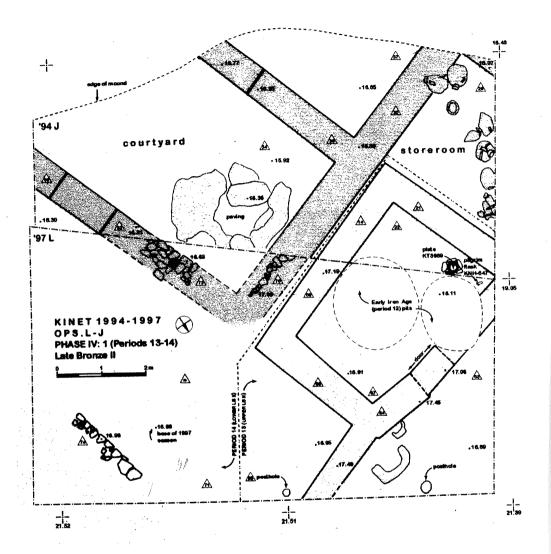


Fig. 9

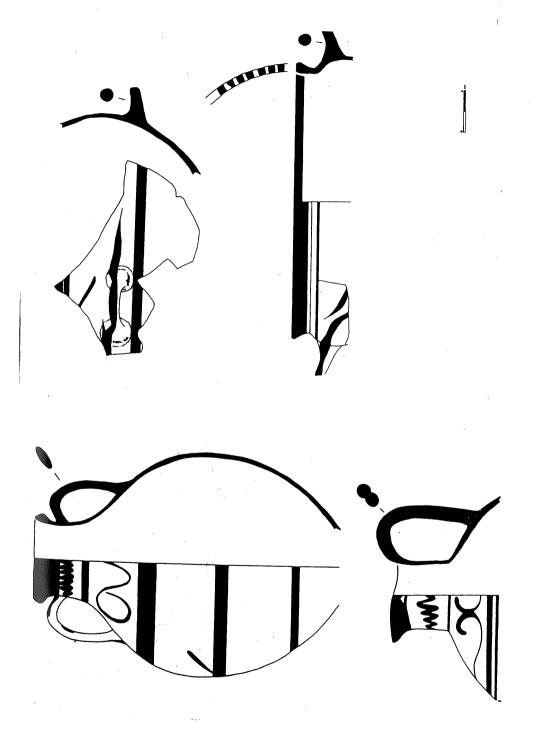


Fig. 10