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Dating the Hittite Levels at Kinet Höyük: a Revised Chronology

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Abstract

Four Late Bronze levels associated by pottery and other finds with Hittite central Anatolia have been excavated since 1994 at the ancient port site of Kinet Höyük (Iskenderun Bay). The LB settlement consisted of a high citadel, and a lowlying district enclosing a small harbor. Cypriot imports and radiocarbon dating place the introduction of its Hittite material culture in the 16th century BC, during the Old Kingdom (LB I); and its conclusion towards the end of the Empire (late 13th century, LB II). Kinet's final LB II level shows Hittite standards in decline, before the onset of the Iron Age.

The Late Bronze phase at the ancient port of Kinet Höyük, located in the Mediterranean's northeast corner ca. 600 km south of Boğazköy, saw an abrupt cultural reorientation that transformed this Middle Bronze, north Levantine site into a Hittite one. The change in material culture can be gauged especially – but not exclusively – by Kinet's LB ceramic repertoire, which imitated Central Anatolian standards for shapes and wares with remarkable accuracy. I earlier made suggestions to explain how this uniform Hittite ceramic industry was achieved at Kinet and elsewhere (Gates 2001b), and what economic purposes it served. This paper will instead discuss the chronological aspects of this transformation, and revise my previous statements about when it first occurred. Its introduction can now be set as early as the late 16th century BC, during the Hittite Old Kingdom, rather than in the LB II empire of the 14th–13th centuries. A corrected Kinet LB scheme, made possible thanks to reassessments of ceramic chronology in the Hittite heartland, in fact reconciles other findings I had previously sidelined as discrepancies, but which now have the merit of providing an internal consistency to this sequence. Cypriot imports, radiocarbon dates and, finally, the stratigraphic setting for the first Hittite level at Kinet fit in far better with the start of the Late Bronze Age than with its last two centuries, accounted for by another two levels.[1] The conclusion of this era can now also be defined with the discovery, in 2005, of a terminal, "sub-Hittite" phase.

[1] Earlier published statements (Gates 2001a, 2001b) on Kinet's LB dates are superseded by this paper, and should be discounted.

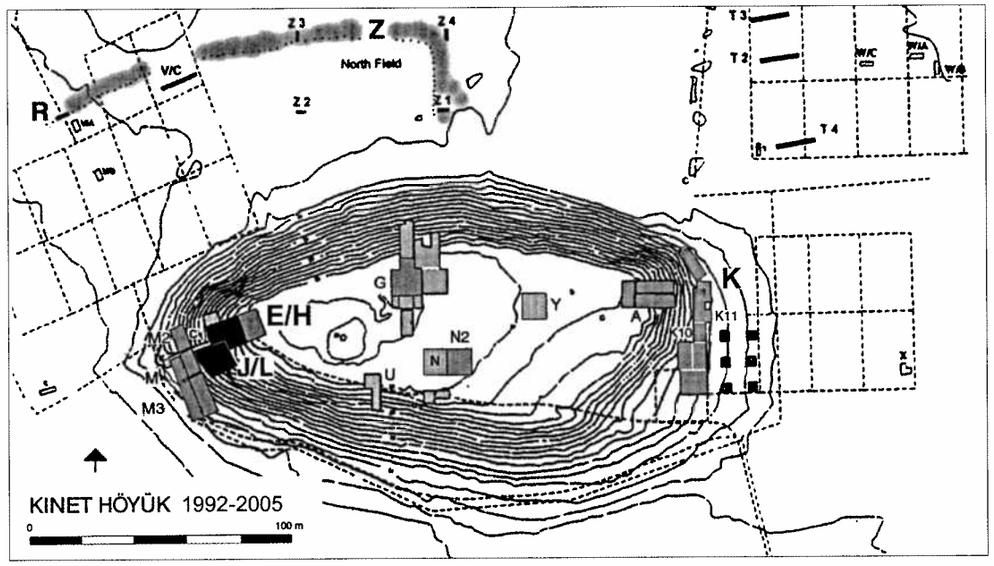

Fig. 1 Topographic plan of Kinet Höyük.

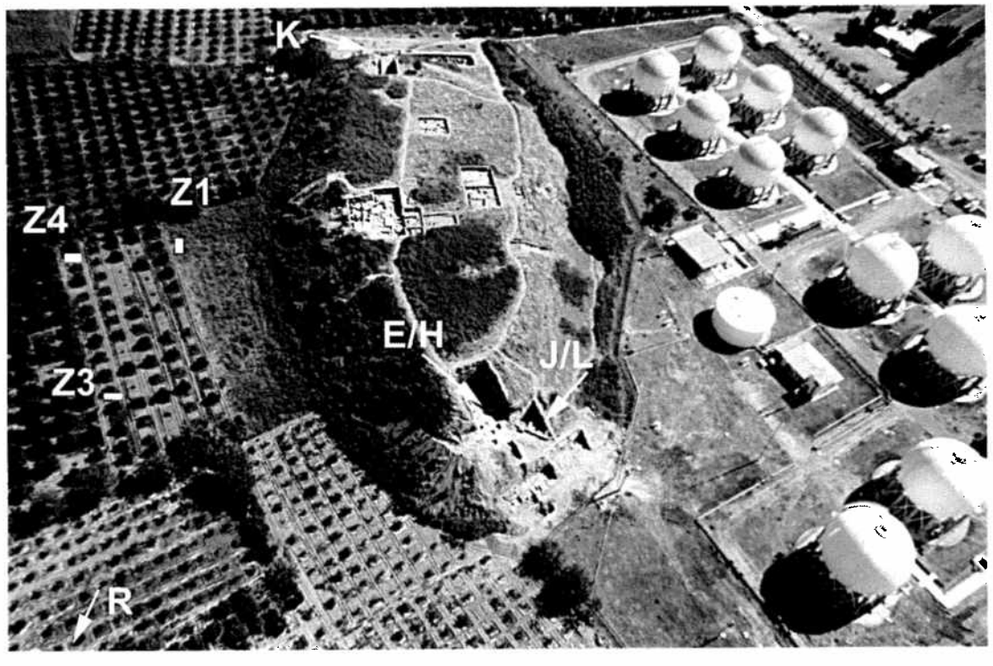

Fig. 2 Aerial photo of Kinet Höyük from the west (Oct. 2004).

The impact of Hittite culture on at least this peripheral site thus spanned the entire period of Hittite historical prominence. Neither Kinet Höyük's isolated location at the back of Iskenderun Bay, nor its current modest size would suggest a place attracting Hittite involvement. The site today resembles a small, land-locked promontory on the bay's east shoreline, where a deep seabed nonetheless still serves for offshore anchorage (Fig. 1–2). Boats approaching ancient Kinet would have had the option of two harbors controlled by the port: a small bay on its north side, and especially the estuary of a river flowing beside the mound's south flank and into the sea a few hundred meters beyond. Both eventually filled in with alluvial and erosional soil that reduced the exposed part of the ancient site to a 3.3 ha mound. Our excavations show, however, that the Late Bronze settlement occupied a more extensive area. It included a residential or commercial district extending around the north bay, dominated by a mound which at that time rose ca. 15 to 17 m above an otherwise flat coastal landscape. This citadel + lower town configuration ensured that the ancient port was visible both from the sea and from the Amanos foothills 4 km inland. Finally, Kinet is situated at mid-point along the narrow Erzin (*Issos*) plain, well attested as a coastal frontier zone between Cilicia and Syria in classical times, and sustaining this role throughout the Middle Ages and into the early 20th century. Port facilities and a landmark on a geopolitically sensitive border may explain why this remote site, at the southeastern limit of Kizzuwatna (Forlanini 2001), was initially drawn into the Hittite sphere.[2]

Three Late Bronze levels, grouped as Kinet Phase IV, were excavated between 1994 and 1999 on the mound's west slope, over an area that eventually reached 130 m^2 (OP. J/L). A fourth and final LB level was newly discovered during the 2005 season in an adjacent trench (OP. E/H), accounting for an additional 160 m^2. The findings presented here are current through 2005, but should increase with one further campaign. Late Bronze deposits were also recovered by a program of small soundings (2000–2002 seasons) in fields to the north of the mound, around a terrace break that may represent the north shore of the ancient bay.

Because most aspects of Kinet's Late Bronze archaeological record reflect the imprint of Hittite material culture, this paper will first review their contexts before discussing the pottery assemblages and other finds. Kinet's final LB level and its "sub-Hittite" features are summarized here for the first time.[3]

The earliest Hittite phase exposed on the mound is an architectural level in OP. J/L, labelled Period 15 in the general Kinet sequence (Gates 2001a). It consisted of several rooms belonging to a single structure of massive proportions, too large to be assessed in overall plan or function from its 10 × 13 m exposure (Fig. 3). The building underwent three distinct stages (Fig. 4): the first version was followed by two separate rearrangements in room

[2] Forlanini (2001, 553-554) would identify Hittite Kinet with Izziya, a town visited by Queen Puduḫepa on the occasion of a seaside religious ceremony.

[3] Kinet's Late Bronze excavations have been supported by the Institute for Aegean Prehistory, the Tarbell Family Foundation, and research funds from Bilkent and Georgetown Universities. Site supervisors for OP. J/L were T.M. Cross (1994–1997) and C.W. Gates (1998–1999); for OP. E/H, C.W. Gates (2004–2005); for the LB north field soundings, C. Bodet (2000); M. Eroğlu, G. Özgönül, A. Vural (2002). Preliminary reports on LB findings appear in Gates 2000a, 2001a, 2002, 2004.

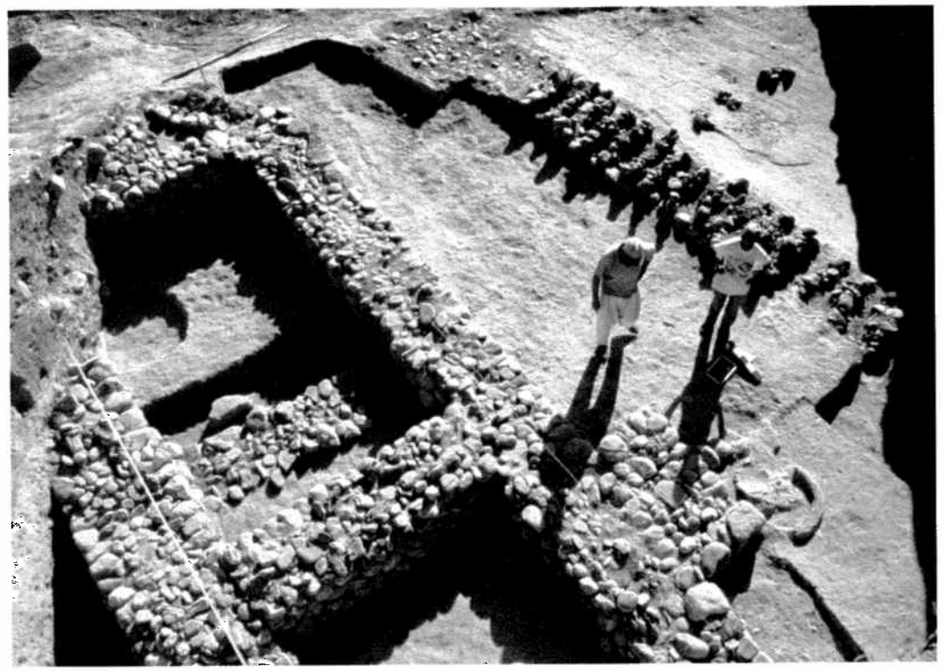

Fig. 3 '99 OP. J/L, Period 15 C building (LB I) photographed from the east.

layout that imply reuse of the foundations rather than modifications to a standing structure. The first two stages were preserved as floors and stone foundations only; the last one retained a thin base of the building's brick superstructure. Two substantial reworkings indicate that the foundations served for a long time before the third version's eventual abandonment and decay. Since none of the three stages was burnt or otherwise showed signs of damage, finds were few and in fill contexts rather than on floors. However, the presence of good surfaces sealing each of the three made attributions of this material to the lifetime of the building reasonably secure.

The first version (15 C) was laid out on a NE–SW axis with thick stone foundations (av. w = 1.0–1.2 m) standing ca. 0.5 m high – probably their original height (Fig. 3, 4a). Walls were built of large river stones, tightly packed with pebbles to fill any interstices. Their uppermost course was coated with thick yellow clay to form narrow transverse ridges, 0.2–0.3 m wide and 0.1–0.15 m high, lined with flat pebbles. The rounded troughs between them must once have held a course of short wood headers, although no traces or impressions of organic materials remained. The brick superstructure was then placed directly on the wooden string course, as illustrated for the building's last version but common to all three of its phases. This masonry technique is not attested at Kinet in any other period, when structural timber was indeed used sparingly if at all.

Excavations exposed a suite of three rooms flanked to their west by a broad hall or corridor 152 whose outer (western) wall, not quite parallel, may initially have belonged to a separate unit now lost to erosion at the edge of the mound. The west wall widened into a

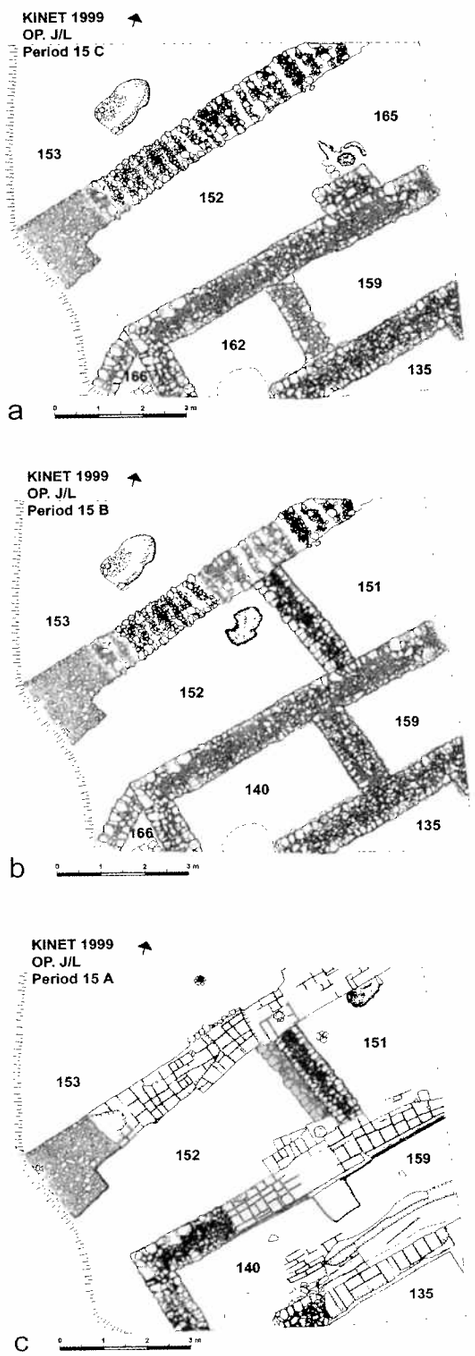

Fig. 4 (a) Plan of '99 OP. J/L, Period 15 C building (LB I); (b) plan of '99 OP. J/L, Period 15 B building (LB I); (c) plan of '99 OP. J/L, Period 15 A building (LB I), with brickwork.

buttress at its south end; it gives a plausible entrance into the hall, which was later separated into two spaces (152 – 165) by a narrow projection against which was set an oven. At the far south end, and barely within the trench, a fourth room 166 shifted the angle of the building inwards; bonded walls show that it was contemporary with the three rooms to which it was attached. There were no doorways in the foundation walls between rooms. Nonetheless, hearths on contemporary floors show that the top three courses of these foundations were free-standing. They beg the question of access into the rooms (as indeed does much Hittite architecture), although one solution is provided by the building's final version (see below).

Two successive reuses of this building (15 B and 15 A) retained its monumental character, while reorganizing its spaces. With version 15 B (Fig. 4b), some of the foundation walls were raised by two to three more stone courses, mainly of small basalt blocks. These were topped by a bedding for another wood string course. New crosswalls were added: the west hall was now firmly divided into two rooms 152 – 151, and the central room 140 was expanded north. Apart from eliminating the misaligned south room, the revised plan was repeated for the final version 15 A (Fig. 4c). Its superstructure was again reerected on top of surviving stone foundations, some of them reinforced by new crosswalls along the same line as their predecessors. Shallow brickwork, plaster lines and floors for this third version indicate that the stone foundations were by this stage buried below their top (wood) course to depths reaching 1.5 m. Doorjambs were entirely brick, without individual footings, but were situated above wall-like foundations running across the

entire width of the room below floor level.[4] White (lime?) plaster was variously preserved – sometimes in multiple coatings – on all wall faces. The stepped plastered face of the westernmost wall may represent a deliberate effect (or the result of later buckling). There is also slight evidence for plastering of floors, which were in all cases firm and well-packed. Burnt depressions in nearly all rooms indicate they were furnished with casual hearths, or held portable installations. Every other aspect of the Period 15 architecture, however, shows that this was a formal project following the same standards in design and construction throughout all of its three versions.

Although there have been no excavations below the building, the start of Period 15 can now be situated within the current Kinet sequence thanks to several indices. Its stratigraphic context on the mound's west slope is known from an adjacent step sounding to the north ('93 OP. C), into which Period 15 C's outermost surface extends at the mound's edge. Below this surface in the sounding lies a very burnt stratum with MB II vessels in situ. This stratum may well be contemporary with the equally burnt monumental complex in Area K on Kinet's "East Terrace", now more accurately designated as the east or inland edge of the Middle Bronze mound (see Fig. 1–2). A rich inventory of ceramic and other finds from a 750 m^2 exposure of that well-preserved building dates its destruction to the very end of MB II, during the late 17th or 16th c. BC (Gates 2000b).[5] The destruction phase produced 15 examples of Cypriot imported pottery, including three Bichrome sherds – an MB II–LB I transitional type whose short production span (one century) makes it a precious diagnostic. In the Period 15 A building were found another two Bichrome sherds,[6] pointing to a close interval between the two levels, and to Period 15's Hittite ceramic assemblage as LB I. Radiocarbon dates in the mid-16th to mid-14th centuries for the beginning and end of Period 15 would support this attribution.[7]

In light of these independent sources, Kinet Period 15 and its assemblage can be assigned with some confidence to the Hittite Old Kingdom. Less evident are the building's function and the historical reasons behind its presence. Its non-domestic scale, rectangular compartments and walls without doorways recall official Hittite structures at Tarsus (LB IIa Temple: Goldman 1956, plan 25) and Alalakh (Level III–II Fortress),[8] enough of whose

4 Doorways in the two earlier phases must also have been constructed in brick above continuous stretches of walling, such that one can no longer determine their placement. Perhaps their high thresholds were provided with wooden steps, of which no trace remained.

5 Overlying the MB building in area K are Hellenistic and especially medieval levels, without the intervening periods attested on the west side of the mound.

6 Kinet's Cypriot pottery is being published by E. Kozal, who kindly supplied these identifications. Together with the certain imports cited here, another three from the MB II building and two from the Period 15 building seem to be Bichrome imitations made outside Cyprus.

7 Period 15 C: 1620–1515 Cal BC [1-sigma] (Beta 137194 [3290±40 bp]: Cal BP 3570–3465; 2-sigma: Cal BC 1670–1485/Cal BP 3620–3435); Period 15 A: 1500–1360 Cal BC [1-sigma] (Beta 137192 [3140±80 bp]: Cal BP 3450–3310; 2-sigma: Cal BC 1540–1215/Cal BP 3490–3165).

8 The Alalakh fortress, with its 4 to 5 m-wide walls and peculiar V-shaped foundation trenches filled with rubble, is otherwise not comparable (Woolley 1955, 167 and fig. 59). The "Hittite Fortification" of Mersin VII is MB II according to the pottery (see Garstang 1953, 241 and 245 fig. 155, including a Cypriot Bichrome sherd [fig. 155: 7]); a more detailed characterization of the architectural features of Levels VI–V, whose ceramic assemblage is LB and Hittite, can be expected from the current excavations there.

plans were recovered to warrant comparison with formal architecture in the Hittite capital. In the case of Kinet, however, there is as yet too little even to speculate on what the building's overall layout might have resembled, and thus what purpose it may have served. Deposits in the various rooms were secondary, but did involve finds in concentrations that may reflect some of the activities involved in this sector. In particular, they included an exceptional number of small metal items: bronze (copper alloy) wire, needles, pins, and a spearpoint; bits of scrap metal and metal sheeting (copper alloy, silver and lead); two crucible fragments with cuprous residue, a copper bun ingot, a terracotta mold to cast wire;[9] and hand tools such as pounders and polishers in a variety of shapes and stones. Together they suggest residual debris from a metal workshop in this sector at the time the building was first established.

These deposits also contained generous quantities of faunal remains and pottery, the discards of residential life. For the pottery, the clear internal stratigraphy in the central rooms, especially, afforded a visible evolution from a broader fabric repertoire in 15 C, to a more restricted production that eventually led to the "drab ware" characterizing Kinet's next two Hittite levels, Periods 14 and 13 (now Period 13.1). This ceramic assemblage, central Anatolian in inspiration but manufactured locally, will be discussed in a separate section below.

Contemporary with Period 15 on the mound was, to its north, a lowlying district that extended inland from the ancient seashore for ca. 160 m, and from the foot of the mound for at least 100 m, the furthest distance sampled by a series of geomorphological test pits in Kinet's north and northwest fields (Fig. 1–2).[10] Late Bronze occupational deposits occurred only in the four soundings along a topographical contour whose curve simulates the outline of a natural bay (OPs. R, Z1, Z3, Z4), although all eight soundings were excavated down to the water table. They also showed a two-meter rise in the Late Bronze ground elevation from the mound edge (Z1) towards the north (Z4), and a similar drop from east (Z4) to west (R), supporting the presence of a narrow Late Bronze bay in this location. The northwest sounding, OP. R, was entirely Late Bronze (LB I), with three thick levels founded on sterile soil and ending 0.5 m below the modern ground surface, for a total accumulation of nearly 3 m. All three levels produced pottery related to the mound's Period 15 assemblage (Fig. 9). A Cypriot White Slip I sherd from the latest deposit, and a 15th c. BC radiocarbon date from the lowest, would confirm this attribution (Gates 2002, 56–57). The other three soundings either reached (Z1, Z3) or contained (Z4) a single Late Bronze stratum (Gates 2004, 409–410); their ceramic samples, while limited, nonetheless also argue for a similar Period 15 date. Finally, although these four soundings were very small (2 × 4 m), they all produced LB architectural remains of a strictly domestic caliber, in contrast to the imposing structure overlooking them from the mound's citadel-like eminence.

9 Copper bun ingot KT 11421 from room 135 L. 541, w = 1.18 kg (much corroded); crucible fragments KT 12575 and KT 12363; terracotta mold KT 12576, all found beside the oven in hall 152 (L. 620 and 589) together with a recut ceramic mortar (KT 12374, diam = 0.43 m). These contexts date to the building's original 15 C phase.

10 Geomorphological research at Kinet is conducted by T. Beach (Georgetown).

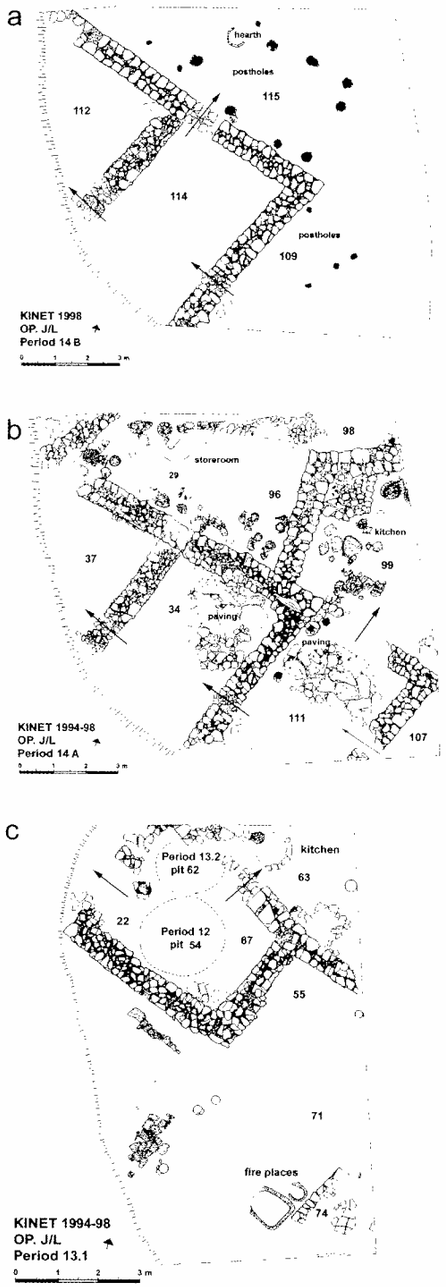

Fig. 5
(a) Plan of '98 OP. J/L, Period 14 B house (LB II);
(b) plan of '94-'98 OP. J/L, Period 14 A house (LB II);
(c) plan of '94-'98 OP. J/L, Period 13.1 house (LB II).

After the third (15 A) massive LB I structure in OP. J/L went out of use and its brick walls were allowed to decay, but without any significant interval of erosional build-up, it was replaced by two separate levels of houses in close succession (Fig. 5): Periods 14 and 13.1.[11] The transformation of this area from the public to the private sector reflects a social change in Kinet's settlement, but its material culture retained the same close ties with central Anatolia. The pottery assemblage became mass-produced, in the limited range of shapes and fabrics that is the hallmark of Hittite ceramics during the Empire of the 14th and 13th centuries B.C. At Kinet, a small collection of Cypriot imports from both Periods 14 and 13.1 would put these levels in Late Bronze II.[12] There is otherwise little to differentiate them, except for the appearance of Red Lustrous Wheelmade Ware in 13.1. The change from one level to the next occurred because of the violent destruction of the Period 14 house, not from any interruption in their cultural continuum. Radiocarbon dates unfortunately do not seem instructive.[13]

The houses of Periods 14 and 13.1 were oriented precisely north, a slight but telling shift in layout from the underlying Period 15 structure. Their low foundation walls (2–3 courses, av. w = 0.80 m) were similarly constructed with a mixture of basalt and river stones for their outer faces, loosely infilled with smaller

11 Period 13.1 is the same as "Period 13" in Kinet publications before 2005. The division of Period 13 into two separate phases results from findings in the 2005 excavation campaign.

12 Period 14: five Base-Ring II, two White-Slip II and two Monochrome sherds; Period 13.1: three White-Slip II sherds. A very small sherd from a closed Mycenaean vessel (LH IIIA/B stirrup jar?) was also found in Period 13.1, in mixed fill.

13 Period 14 A (floor of storeroom 29): 1520–1435 Cal BC [1-sigma] (Beta 137191 [3220±40 bp]: Cal BP 3470–3385; 2-sigma: Cal BC 1540–1415/Cal BP 3490–3365); Period 13.1: 1485–1305 Cal BC [1-sigma] (Beta 137190 [3130±80 bp]: Cal BP 3435–3255; 2-sigma: Cal BC 1535–1205/Cal BP 3485–3155).

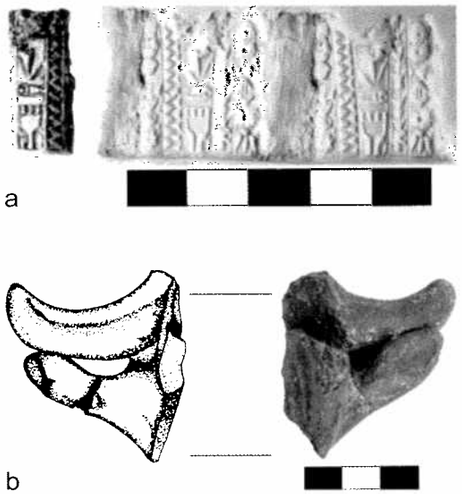

Fig. 6 (a) Cylinder seal KNH-1013; Period 14 A, LB II (Photo T. Çakar); (b) ear and horn from red-burnished bull rhyton KNH-519; Period 14 A, LB II (Photo T. Çakar).

stones – the masonry technique and stone types already seen in Period 15, but without a wood string course. Doorways were now marked by low stone-paved thresholds, clarifying circulation patterns between the rooms. Also new for Period 14 was the use of large slabs of caliche conglomerate for pavements, a practice to continue throughout Period 13 but otherwise unknown at this site. These houses made much use of upright wood posts for attached informal structures, or to support a porch or overhanging upper story. No trace of their mudbrick superstructures was preserved except as collapse and wash within and around the rooms.

The Period 14 house was first built as a neat rectangular structure, whose outer (northeast) corner with two communicating rooms was contained within the trench (14 B, Fig. 5a). Postholes for a shed(?) and a fireplace in the open area 115 to its north provided outdoor installations for domestic life (Gates 2000a, 194–195). This house was later enlarged by – at minimum – four more rooms to its east and north, the eastern wing terraced up to accommodate a higher ground level (14 A, Fig. 5b). Because this second phase was burnt in a hostile attack, attested by spearpoints and other weapons strewn about its western rooms, furnishings left in situ identify the northeast room as a kitchen, and the northwest room as a storage space lined with jars on stands, and filled with tableware. The bulk of this house's large collection of complete and near-complete vessels came from these two rooms (Fig. 8) (Gates 2001b, 138–139). Overlooked by the prosperous owners of the house (or its attackers) were a gold flower-shaped sequin and an ivory cylinder seal (Fig. 6a) (Gates 2002, 59).[14] One of the seal's eight panels imitates writing (it is not a known script); the others contain tight patterns of double spirals and floral motifs favored by the "International Style" of the Late Bronze Levant. This seal, and Canaanite jars in the storeroom and kitchen, were the only signs that this household was located on the Mediterranean coast rather than the Anatolian plateau.

Since the Period 13.1 house followed exactly the same alignment as its underlying predecessor, it must have been constructed soon afterwards (Fig. 5c). It was offset towards the north, so that only one room and part of a paved kitchen were contained within J/L's narrow exposure inside the mound edge. To the south was a yard with more cooking facilities: a two-chambered oven and a hearth (Gates 2000a, 194–195). On present evidence, this

14 Elephant ivory octagonal cylinder seal KNH-1013 ['94 J 15 L. 93], from the fill of room 34; h = 2.5 cm. Burnt and discolored; three of its panels lost to flaking. Commentary on the pseudo-script was kindly offered by J.D. Hawkins.

house was shortlived; it may acquire a longer span when this level is excavated in the adjacent trench E/H, where a 2005 sounding found that its walls extended. It was also destroyed by fire, but floor deposits were subsequently disturbed by dense pitting at the beginning of the Iron Age (Period 12). Nonetheless, it produced a good ceramic sample, virtually indistinguishable from that of Period 14.

A final LB II architectural level was newly discovered in 2005, to the north and northeast of OP. J/L in the adjacent OP. E/H. Although these two trenches are contiguous, the only trace of this new level in J/L was a shell-filled pit cut into the Period 13.1 house's kitchen and north balk (see Fig. 5c); at the time the pit was excavated (1997), it was assigned to Early Iron Age Period 12. Either the mound's sharply eroded slope towards the south and west, or the peculiar topography of this level must be responsible for its restricted extent. It has been labelled Period 13.2 because of residual Hittite features, and because its assemblage is Late Bronze typologically and includes LB II imported pottery. However, its architectural components are stratigraphically distinct from Period 13.1, which a test sounding demonstrated underlies it. Period 13.2 is also fundamentally different from Kinet's earliest Iron Age occupation, characterized by trash deposits, fire installations and pits but no masonry; a new approach to manufacturing pottery; and a radical change in subsistence practices (Gates forthcoming; Ikram 2003).

Excavation of Period 13.2 was not completed in 2005, and the following description should be considered preliminary, with many issues unresolved. In particular, the disorderly collapse of its walling buried wall lines under scatters of stone tumble that have obscured building layouts (Fig. 7a). Their plans will not emerge clearly until the collapse has been removed. Stonework splayed out in a uniform distribution pattern towards the east, one of many indications that the destruction occurred as a sudden and conclusive event, followed by sporadic fires. That the event involved an earthquake was vividly illustrated by sheared surfaces and a trough-shaped depression (1.60 m deep) in E/H's southeast sector 520, where the dramatic slump in ground level was covered with boulders falling from an as-yet undiscovered wall or walls. A narrow, gravel-filled fissure running from the east balk to the trench's southwest corner may also have been caused by this earthquake. Finally, damage varied in intensity despite the small area (160 m^2) of this exposure: only the walling against the east half of E/H's north balk preserved any of its mudbrick superstructure and plastered facing, perhaps because the rooms extending inside the balks had burned.[15] Few items were found on floors or surfaces except for a large jar in room 507 and court 552; the buildings appear to have been vacated, and their portable contents removed, before disaster struck.

The present architectural configuration consists of six small rooms and courtyards belonging to one or several house units (Fig. 7b); breaks in most of the walls made it difficult to determine whether all of these enclosed spaces once connected or communicated with each other, or were independent. Wall foundations used smaller and flatter stones than in

[15] A heap of burnt bricks was also piled up in a gravelled court, 539, south of a domed oven. The bricks did not connect to any construction, and did not lie as though they had collapsed from the wall foundations next to them.

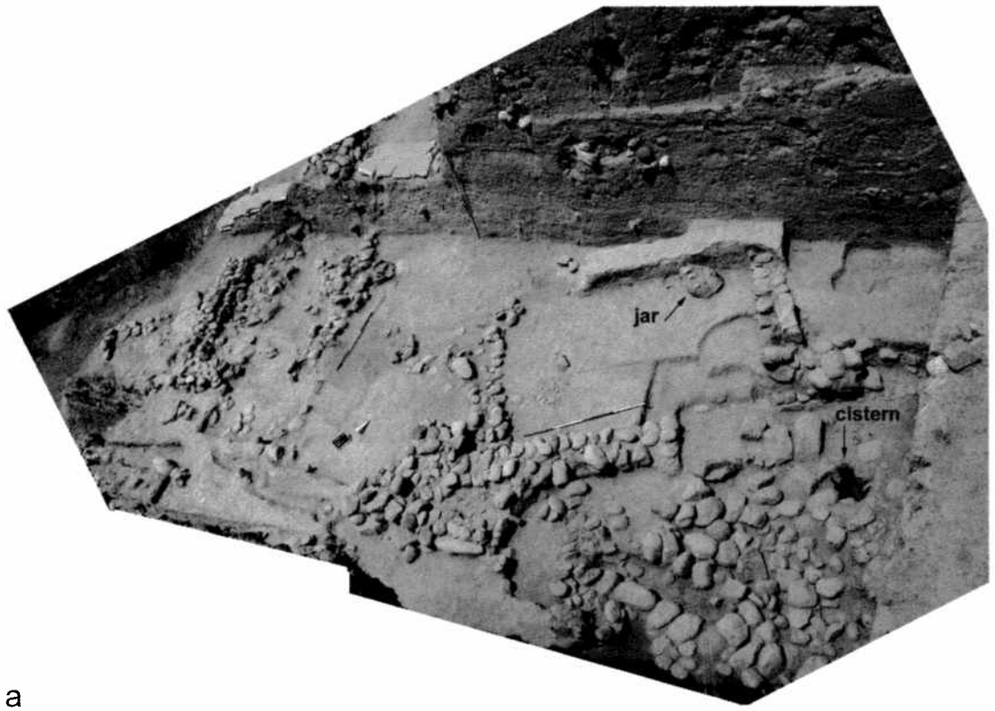

Fig. 7 (a) '05 OP. E/H, Period 13.2 (LB II final), photographed from the south; (b) plan of '05 OP. E/H, Period 13.2 (LB II final).

Periods 14 and 13.1, and laid them differently, with four or five stones spanning the wall width. Also different was wall orientation, which inclined towards the northwest. Large slabs of caliche conglomerate were, however, still favored for paving courts (in the west and northeast) and for an alley or drainage conduit running on the south side of this district. This narrow pavement may have led southwest towards a common walled entrance for the housing unit(s): a wall and the level as a whole here, at the mound edge, are however severely eroded. It may also have led, at the trench's east limit, to a stone-lined cistern or underground channel, not yet excavated to its bottom.[16] In contrast to these remains on a domestic scale, the mass of huge boulders (520) fanning over the steep incline beside the "cistern", together with three large cut limestone blocks, would signal the presence of a more massive structure, one target for the coming season.

In their architectural vocabulary, Period 13.2's builders retained one diagnostic practice of their Late Bronze II Kinet forebears: the idiosyncratic choice of caliche conglomerate slabs to pave open spaces and interior courtyards. Otherwise, their approach to building layouts, orientation and masonry techniques bore little reference to what preceded them. The same transformation occurred in the potter's industry. Although most Period 13.2 fabrics and shapes show a superficial resemblance to the previous Hittite LB II tradition, the strict association of specific fabrics with fixed types of vessels was no longer applied, as though the standards regulating and ensuring homogeneous mass-production had been discarded. Quality of manufacture also declined, at least according to the large sample provided by the 2005 season; and new fabrics and tempers were introduced to expand the repertoire. Another significant aspect of this industry involved the total disappearance of potmarks, which were a common feature for Hittite ceramics especially in its last two centuries, and for Kinet Periods 15 to 13.1 (Gates 2001b).

All of these elements would designate Kinet's Period 13.2 as "sub-Hittite", to describe the dissolution (and eventual eclipse) of a shared cultural tradition beyond and outside the Hittite Empire's geopolitical sphere. A similar phenomenon has been noted and demonstrated for Boğazköy and other central Anatolian sites (Schoop 2003; Genz 2003), and for Kilise Tepe II a–d (Hansen/ Postgate 1999). That the process began at Kinet before the end of Late Bronze II is indicated by imported Cypriot pottery and Red Lustrous Wheelmade wares, both indeed found in larger quantities than in the earlier levels. Unlike Kilise Tepe IIa, where painted wares of Early Iron Age tendency first appeared side by side with the Hittite-derived repertoire, Kinet's Early Iron types do not appear until Period 12, with a complete break between them.[17] Burnt wood from floor contexts of 13.2's northeast rooms may, when processed, provide trustworthy absolute dates for the lifespan of this level. In the meantime, preliminary ceramic analysis can only suggest a circumstantial date ca. 1200 B.C., since the few LH IIIC sherds recovered at Kinet come exclusively from the overlying Period 12 deposits, and may provide an adequate terminus.

16 The presence of a cistern or underground cavity may explain why the ground collapsed so deeply here. It is also not yet established whether this feature belongs to 13.2, or to the preceding level 13.1.

17 Another sign of an uninterrupted lifestyle for Period 13.2's residents is a faunal assemblage typical of earlier Late Bronze Kinet (S. Ikram, end-of-season report), although exceptional concentrations of shells in pits and middens may indicate straightened economic circumstances.

Fig. 8 Pottery from '98 OP. J/L Period 14 A house, LB II (Photo T. Çakar).

The Late Bronze potter's industry for Periods 15, 14 and 13.1 at Kinet, as elsewhere in the Hittite world (Schoop 2003; Ertem et al. 1998), adhered to conservative norms that make it difficult to isolate obvious chronological markers during a period of at least four centuries. The brief overview presented here is based on a first sorting during field seasons of all pottery from stratified assemblages, regardless of whether the contexts were discrete or poor. Sorting has therefore concentrated on recognizing similarities rather than differences. Since contexts from Period 14 A produced an exceptional number of complete vessels *in situ* (Fig. 8), these have also dominated the first impression of general trends for the entire phase. The following statements may therefore be modified or contradicted once the formal study of this assemblage has been completed. It is especially hoped that seriation, and applying the diagnostic indices developed at Boğazköy (Schoop, 2003; and this volume) will highlight contrasts that are at present glossed over.[18]

Fabrics throughout these three phases are well-fired and range in color from light buff to light brown, and light orange to light red for thin-walled to thick-walled tableware and storage vessels. Heavy cooking platters (Fig. 8: center back; Fig. 9.5–6) and thin-walled cooking pots were made in a coarse dark brown fabric, occasionally also used for small jars. All fabrics contained dense grit temper (especially ground shell), inclusion sizes varying in accordance with wall thickness; and minute amounts of fine vegetal temper. The surface of thin-walled vessels was often self-slipped and polished; medium- and thick-walled vessels were rarely finished beyond wet-smoothing. Overall red and brown burnished surfaces for closed vessels are found more frequently in Period 15, and a vertically-burnished yellow or white slip in Periods 14–13.1, but none are common. Red-burnished bands on the rims and

18 A. Gunter will publish the Late Bronze and Early Iron Age pottery. The sample will not be finalized until the conclusion of the 2006 excavation season, with a larger exposure of Period 13.1 in OP. E/H.

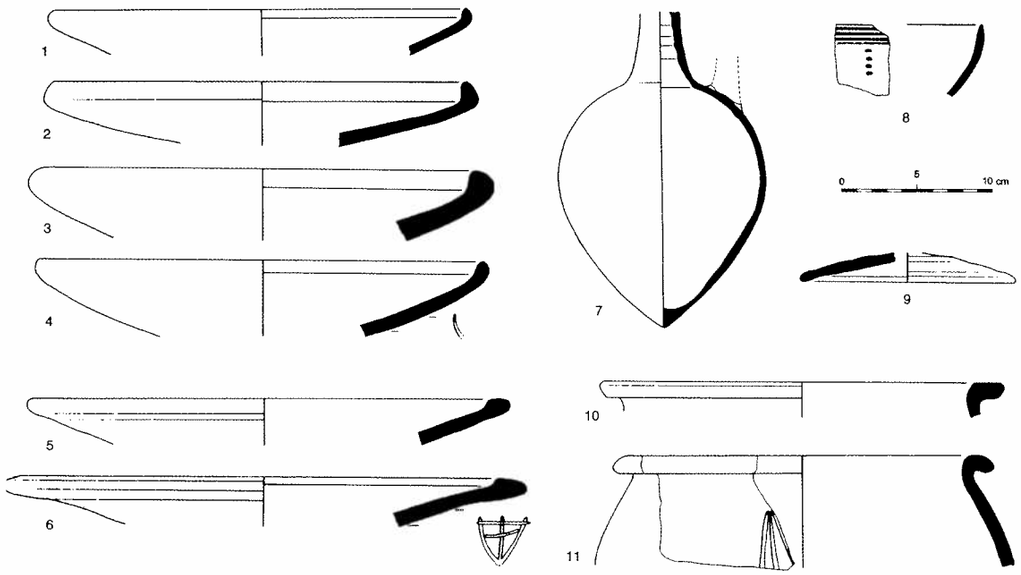

Fig. 9 Pottery from '00 OP. R, Period 15 (LB I).

interiors of bowls occur throughout, becoming popular for small plates (shallow bowls) in Periods 14 and 13.1. The predominant feature of Periods 14 and 13.1 is a narrowing in fabric color to "drab ware" buff/light orange, and the related increase in potmarks on the outside of open vessels (Gates 2001b).

Vessel shapes (Fig. 9) conformed to an equally predictable standard, and are – with the exception of Canaanite jars – all found in the Hittite repertoire: plates with flat or slightly curved profiles, larger bowls and craters, and coarse cooking platters with thickened rims;[19] miniature saucers; domed lids and delicate potstands; pilgrim flasks, spindle-shaped pitchers, small one-handled bottles with pointed bases, and large bottles with tall cylindrical necks and a single handle. Exotica include fragments of zoomorphic vessels (Fig. 6b).[20] More instructive are Hittite features and types that are missing from the Kinet inventory: handles are infrequent, and never V-shaped; carinated forms are entirely absent, as are beaked spouts.[21] Kinet cooking pots are also different: near-spherical, with hole mouths and an incised appliquéd band on the shoulder. A few of these shapes are illustrated here. A wider selection can be found in Gates 2001b.

[19] A cooking platter was found inside a Period 14 A oven, clear evidence for its function.

[20] Ear and horn from a bull rhyton KNH-519 ['94 J 29 L. 122]; pres. h = 5.1 cm. Coarse brown fabric with thick, glossy red slip; from storeroom 29 of the Period 14 A house.

[21] These types derive from the MB central Anatolian repertoire, which may explain their absence at Kinet, where the industry was introduced *ab novo* in LB I.

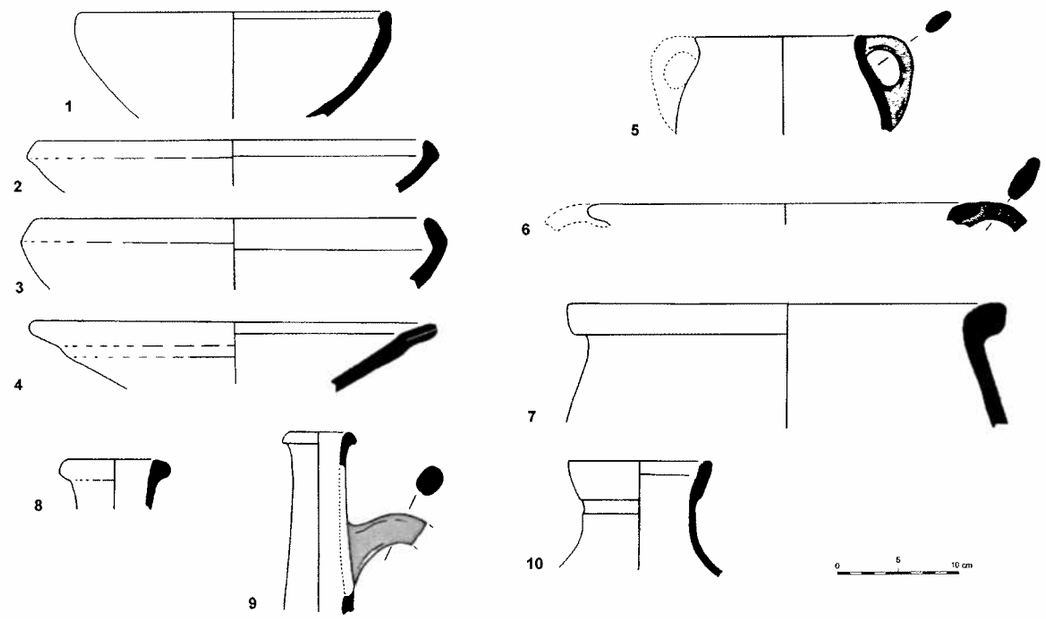

Fig. 10 Pottery from '05 E/H, Period 13.2 (LB II final).

While nearly all these fabrics and types continued into "sub-Hittite" Period 13.2, they were reformulated in unprecedented combinations (Fig. 10). Most striking is the transfer of the coarse brown cooking fabric to craters, shallow plates and small bowls; and the manufacture of the cooking platter in red and buff fabrics, instead of coarse brown. Bowl rims were finished with less care, and often either pinched or casually cut (Fig. 10.1–3). The erstwhile cooking platter (now assuming a different function, it seems) maintained its diagnostic rim, but this was now formed by attaching a broad band of clay on top of the rim without smoothing over the seams between the two (Fig. 10.4).[22] Red banded decoration on bowls disappeared, and was replaced by a thick red slip, crudely burnished. In general, the quality of surface finishing declined, as did firing controls and well-balanced shapes; ring bases offered a poorly-resolved challenge. Some of the production did achieve good results, but there is a definite sense of carelessness in the workshop. Aspects initiated by this industry would support this assessment. They include a marked increase in coarse vegetal temper; a broader variety of heavy wares in red and orange; and a curious hard-fired white fabric with an unattractive pitted surface. Nonetheless, the affiliation of this assemblage with the preceding three Late Bronze levels is certain. Closer study will offer a sharp insight on how a well-rooted tradition in a basic manufactured commodity was allowed, either intentionally or inadvertently, to degrade.

[22] Period 15–13.1 cooking platters are coil-made, with a thicker coil at the rim.

Conclusion

Kinet Phase IV provides a useful illustration of the process that converted the far borders of Hittite political ambitions into a shared cultural entity. At Kinet, this cultural implantation began in the 16th century, when the region was a favored outlet for the military exercises of early Hittite kings. It persisted, through controlled economic policy, during the centuries of the Hittite Empire, and died out at the end of the Late Bronze Age, together with the center that had fueled it. What remains unanswered about the first stage of this process at Kinet is the mechanism that introduced the Hittite style.

Kinet Höyük Hitit Katlarının Tarihlenmesi: Kronoloji Değişikliği

İskenderun Körfezi'nde, 1994 yılından beri kazılan antik liman kenti Kinet Höyük'de Son Tunç Çağına ait dört yapı katı, keramik ve diğer buluntular nedeniyle Orta Anadolu Hitit kültürü ile ilişkilendirilmiştir. Son Tunç Çağı yerleşmesi, yüksek bir sitadel ve küçük limanı da içine alan daha alçak bir bölgeden ibarettir. Kıbrıs ithal malları ve radyokarbon tarihleri Hitit malzemesinin başlangıcını Eski Krallık dönemine (STÇ I), 16. yüzyıla yerleştirmektedir; bitişini de İmparatorluk devrinin sonuna (geç 13. yy., STÇ II) tarihlemektedir. Kinet'in son STÇ II katında, Demir Çağının başlangıcından önce, Hitit standartlarının çöküşe geçmiş olduğu görülmektedir.

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