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Hoarded Treasures: The Megiddo Ivories and the End of the Bronze Age

Marian H. Feldman

The magnificent collection of ivories found in an annex of the Stratum VIIA palace at Megiddo is often cited as illustrative of the internationalism characterizing the Late Bronze Age. This article re-examines the ivories from both a stylistic and archaeological perspective to provide a new reconstruction of their acquisition and deposition. Considering the diversity of the ivories' styles, their incomplete and unreconstructible nature, and the presence of a large, articulated animal skeleton on top of them, I propose that the assemblage is best viewed within an interpretive framework of hoarding and ritual deposition at the end of the Bronze Age.

Keywords: ivories, hoards, ritual deposits, Megiddo, Late Bronze Age

Introduction

The Late Bronze Age (*c.* 1600–1200 BC) witnessed an explosion of ivory carving that stretched from Greece to Iran. Royal expeditions to hunt elephants took place in the Syrian marshes as recounted by the Egyptian kings, Thutmose I (*c.* 1525–1516 BC) and Thutmose III (1504–1452 BC), as well as the Assyrian ruler Tiglath-Pileser I (1114–1076 BC) (Gabolde 2000; Grayson 1991). Representations of tusks also appear in Egyptian tomb paintings of this same period, depicted as tribute being carried by foreigners. Uncarved elephant tusks and hippopotamus teeth accompanied a rich seaborne cargo, including around ten tons of copper and one ton of tin, which met an unfortunate end in a wreck off the southern coast of Turkey near Uluburun (Pulak 1998, 203), while carved ivories comprise some of the finest surviving works of art of the period. One particularly impressive corpus of worked ivories was excavated at Megiddo by the Oriental Institute of the University of Chicago. While this group of ivories is often referenced and frequently illustrated due to the quality and range of material, it also offers a generally overlooked perspective on the fate of a southern Levantine kingdom at the dramatic close of the Late Bronze Age (LBA). In this paper, I re-examine these ivories, first as an assemblage of startling disparity in styles and production locales, and then as a collection discovered in an unusual and potentially telling archaeological context at the very end of the Bronze Age. Rather than view them as representative of LBA ivory carving in general, I propose that we must take the Megiddo ivories as a unique archaeological case that may reveal the machinations of a petty ruler during a period of instability, chaos, and opportunistic possibilities.

Megiddo and the Late Bronze Age

Located on the principal highway connecting Egypt and the Near East, Megiddo commands an impressive situation overlooking the Jezreel Valley. The site was occupied from the Neolithic period onwards, but during the LBA it assumed special importance for the expanding Egyptian Empire. At the beginning of the 15th century BC, the 18th-Dynasty Egyptian king Thutmose III made Megiddo the target of his first major military manoeuvre in Western Asia. The tribute and booty that Thutmose claims to have taken from Megiddo, if even only partly accurate, suggests a wealthy, cosmopolitan centre (Goedicke 2000; Redford 2003). The Battle of Megiddo and the subsequent capitulation of the city mark a major moment for Egyptian control in Canaan and signal the beginning of a great age of internationalism

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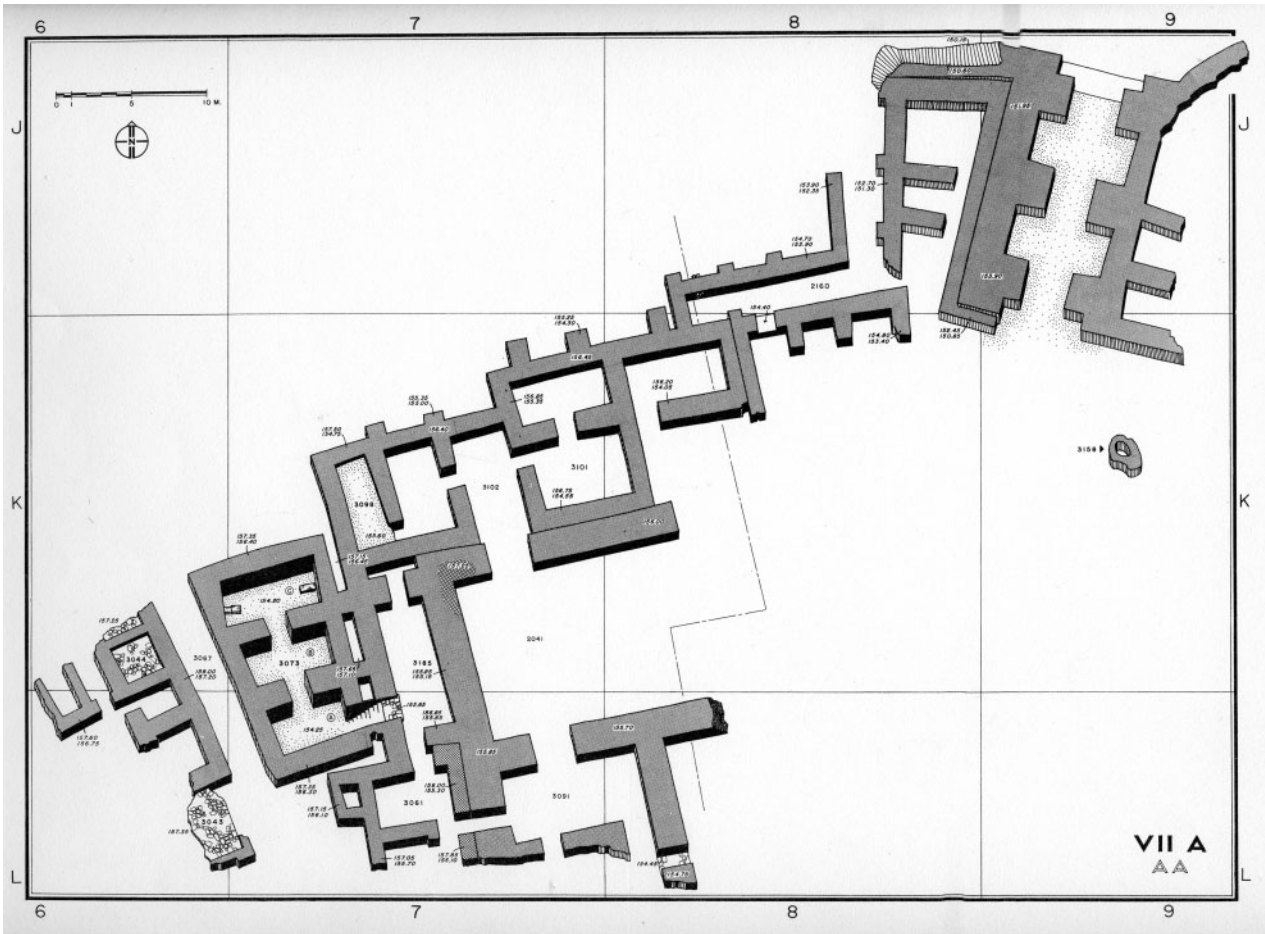

Figure 1 Plan of the annex and western part of the palace, Stratum VIIA, Megiddo (Loud 1948, fig. 384; courtesy of the Oriental Institute of the University of Chicago)

throughout the Near East and eastern Mediterranean that was to last until the collapse of the Bronze Age at the beginning of the 12th century BC (Bunimovitz 1995; Cohen and Westbrook 2000; Liverani 1990).

Despite the strong Egyptian presence at Megiddo, the city apparently remained under the direct authority of its local dynasts who, though vassals to Pharaoh, also exercised significant influence in international affairs and amassed wealth and prestige of their own (Halpern 2000, 542–51). At least one such ruler, Biridiya, is known from correspondence sent between Canaanite vassals and the Egyptian court during the reigns of Amenhotep III and Akhenaten in the mid-14th century BC (Moran 1992; Halpern 2000, 545–50). A fragment of an Akkadian version of the Gilgamesh epic, a surface find from the area around the main mound, further testifies to the cosmopolitan character of the city (Busch 2002, 65–67). The Mesopotamian legend of the heroic king of Uruk formed the core of every LBA courtly scribal curriculum. Its presence thus indicates the flourishing at Megiddo of scholarly training in both the language and culture of Mesopotamia to the east and the city's participation in the international realm in which Akkadian served as the *lingua franca*.

The LBA period is best known at Megiddo from three main occupational levels excavated by the Oriental Institute and numbered VIII, VIIB and VIIA (Loud 1948). Stratum VIII purportedly follows Thutmose III's conquest and thus inaugurates expanded Egyptian influence in Canaan. It boasts a sumptuous palace just inside the massive north gate, whose earliest building phase may have predated Thutmose's campaign. The palace continued through the succeeding levels, though its subsequent rebuildings assumed less impressive form. In the final phase, Stratum VIIA, an annex built of coarse limestone blocks covered with a thick mud plaster was added to the west of the palace (Fig. 1). It consisted of three broad rooms arranged in a line and entered directly from the palace by only one door in the front room (Fig. 2). The annex was set significantly lower than the floor of the palace with its inner walls faced with

Figure 2 Excavation photograph of Stratum VIIA annex with upper walls removed to show the plan, viewed from the south (Loud 1939, fig. 3; courtesy of the Oriental Institute of the University of Chicago)

orthostats, suggesting to the excavators that it was a semi-subterranean storage unit. Loud proposes access from the higher level of the palace by means of stairs or a ramp, neither of which, however, was actually discovered during the excavations (Loud 1948, 31). The identification of the rooms as a 'treasury' seemed confirmed by the finds discovered within it, which included a massive assemblage of more than 382 carved ivories found sealed by destruction debris (Loud 1939, 7, 9). Fischer (2007, 119–25) has recently reviewed this and two other proposed interpretations of the annex: as a royal tomb and as an ivory workshop. She discounts the latter, but feels the archaeological evidence is not conclusive enough to either support or rule out the former. For the purposes of my argument, the original (intended) function of the annex is, however, not directly relevant, since I propose a later opportunistic use at the collapse of the Bronze Age. Fischer (2007, 124) likewise notes that, while scholars have assumed that the ivories belonged to the original, intended equipment of the annex, this assumption is not provable. The destruction of Stratum VIIA, including the annex, has been dated to the second half of the 12th century BC according to an ivory inscribed with the cartouche of the Egyptian king Ramses III (1198–1166 BC)[1] that was found near the bottom of the ivory deposit and a statue base inscribed for Ramses VI (1156–1149 BC) found elsewhere in the city (Harrison 2004, 7–13, 107).

Most of the ivories lay concentrated in the western half of the back (northern) room, which was accessible only by passing first through the outer two rooms (Fig. 3). Loud's published account (1939, 7) records that, 'They were in close confusion, mingled with occasional fragments of gold jewelry and alabastra and with scattered animal bones, the whole mass topped with a complete animal skeleton'. Loud does not identify the skeleton in the published report, but in his field notes (Saturday, 6 March 1937) he writes, '… in the NW corner, is a strange burial, a camel's head (?), probably a complete camel — head, neck, and forelegs now cleared, two human skulls, and some human ribs etc.'. Unfortunately, the skeletal remains were not kept by the expedition; looking at excavation photos, however, suggests that they did not belong to a camel but rather some kind of bovid (Jill Weber, pers. comm.). The ivories' extraction required considerable conservation efforts. They did not appear to have any obvious depositional order; rather, they lay jumbled together at odd angles, many of them clearly already broken before this final entombment (Fig. 4). The other finds from the locus (3073), published separately, include beads, pendants, and amulets of gold, faience, glass, carnelian, and amethyst, alabaster and diorite vessel fragments, various assorted bronze fittings and

[1] Egyptian absolute chronology is much debated. Here, I use the absolute dates proposed in *The Oxford Encyclopedia of Ancient Egypt* (Redford 2001, xi).

Figure 3 Excavation photograph of ivories *in situ* with skeleton (unpublished Oriental Institute photograph no. 3456; courtesy of the Oriental Institute of the University of Chicago)

Figure 4 Excavation photograph of ivories *in situ* (Loud 1939, fig. 7; courtesy of the Oriental Institute of the University of Chicago)

weapon points, and pottery sherds, some of which are Aegean (Fischer 2007, 126–27; Leonard and Cline 1998, 8; Loud 1948, 171). The wealth of material from the back room of the so-called Treasury stands in stark contrast to the cleanliness of the emptied rooms of the main palace structure (see Ussishkin 1995, 241–46 for alternate interpretation, refuted by Fischer 2007, 119).

Stylistic analysis of the ivory collection

Before querying the rationale behind this assemblage of ivories in a 12th-century BC palace annex at Megiddo, it is profitable to look closely at the contents of the collection, which today is housed jointly at the Oriental Institute Museum in Chicago and the Rockefeller Museum in Jerusalem. Kantor's early studies (1956; 1960) provide a basis for my re-examination as her discussions remain among the most astute stylistic treatments of these works (see also, Bryan 1996; Fischer 2007; Liebowitz 1987; Lilyquist 1998). The collection is remarkably diverse, and many of the Megiddo ivories display either direct or indirect connections with areas outside of the southern Levant. Given the pharaonic presence in the

Figure 5 Ivory in the form of Bes, Megiddo (Loud 1939, pl. 8:24; courtesy of the Oriental Institute of the University of Chicago)

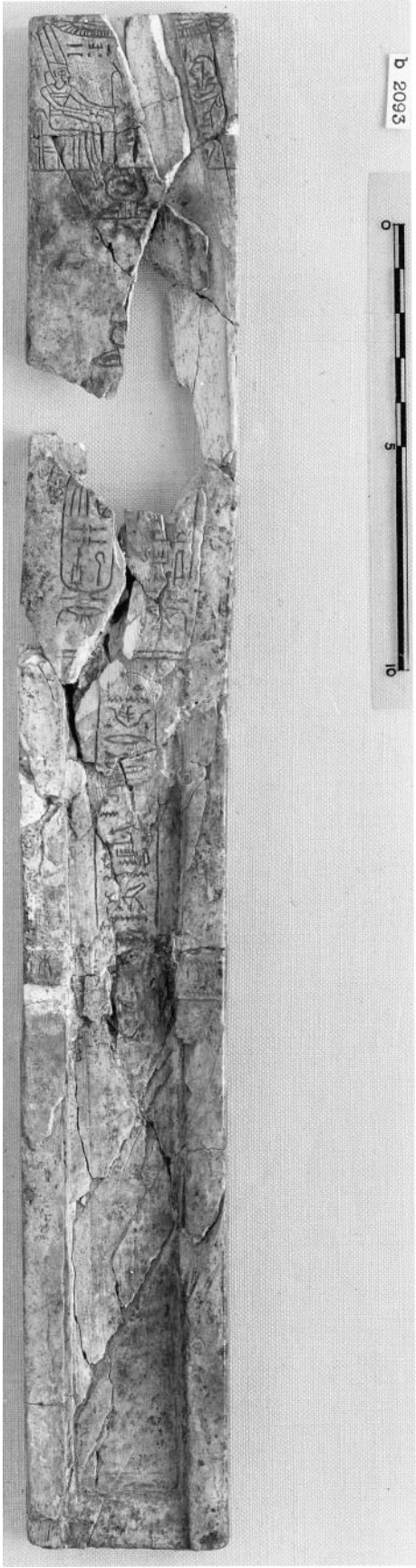

Figure 6 Ivory model writing palette, Megiddo (Loud 1939, pl. 62:377; courtesy of the Oriental Institute of the University of Chicago)

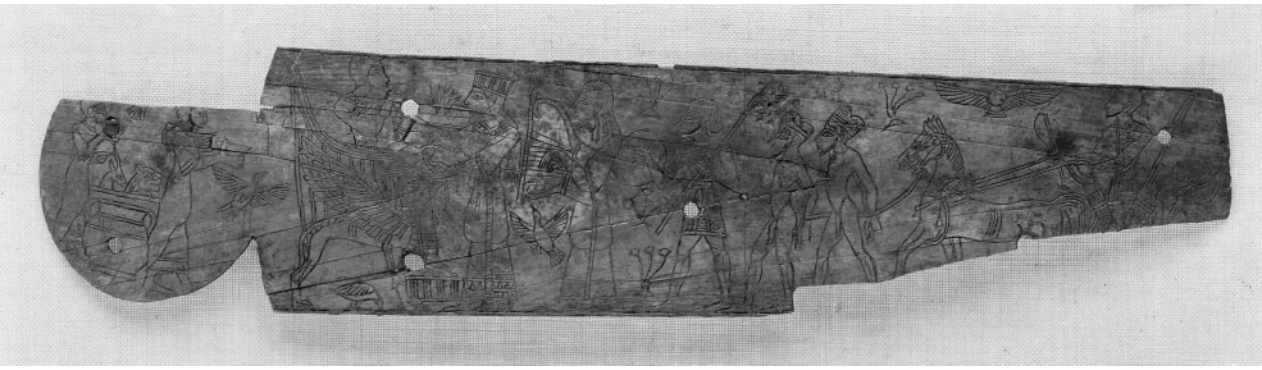

Figure 7 Ivory depicting seating ruler and chariot, Megiddo (Loud 1939: pl. 4:2a; courtesy of the Oriental Institute of the University of Chicago)

Figure 8 Ivory of back of female with braided hair, Megiddo (Loud 1939: pl. 39:175; courtesy of the Oriental Institute of the University of Chicago)

region, it is not surprising that Egyptian motifs are popular. The variations of egyptianization found in the ivories and other objects both at Megiddo and elsewhere in the southern Levant, have been associated with elite emulation on the part of the Canaanite rulers (Higginbotham 2000). Such egyptianiziations include mythological creatures like Bes (Loud 1939, nos 24–26) (Fig. 5), the dwarf god associated with childbirth, and sphinxes (Loud 1939, nos 21–23), as well as Egyptian symbols like the Djed pillar (Loud 1939, nos 168–71), connected to fertility and power in Egypt.

Several ivory pieces bear Egyptian hieroglyphic inscriptions, indicating a much more direct relationship to the Egyptian empire. A model writing palette — often referred to as a pen case — with the cartouche of Ramses III, has already been mentioned with respect to dating (Loud 1939, no. 377) (Fig. 6); the inscription continues with what seems to be the name of an Egyptian envoy, 'Nakht-Amun of the residence', and another individual (perhaps the palette's owner), Thutmose, though there is considerable uncertainty surrounding the translation (Bryan 1996, 57–58; Higginbotham 2000, 67–70; Fischer 2007, 157–63). Other ivory fragments name a certain Kerker, who is associated in the inscription with the neighbouring kingdom of Ashkelon (Loud 1939, nos 379–82). These pieces may belong with another ivory fragment engraved with a hieroglyphic inscription and an image of a seated man identified as a prince, although unfortunately neither his name nor dominion survives (Loud 1939, no. 378; Bryan 1996, 58–59; Fischer 2007, 164–76).

There are also several ivories that can be comfortably classified as part of a local tradition of Levantine (Canaanite) art (Feldman 2002, 10–17; Liebowitz 1987). These include scenes of feasting, battle, and hunting, such as the beautifully incised panel of a seated man receiving homage (Loud 1939, no. 2) (Fig. 7), among numerous other examples

Figure 9 Ivory plaque with griffin, Megiddo (Loud 1939: pl. 9:32a; courtesy of the Oriental Institute of the University of Chicago)

(Loud 1939, nos 36, 125, 159–62). The depiction of women, often nude, has a long tradition in this region and finds several variations among the treasure (Loud 1939, nos 173–75, 186) (Fig. 8).

However, more surprising are several ivories that may be imports from Mycenaean Greece and Hittite Anatolia. Among these are spectacular relief plaques depicting winged griffins (Loud 1939, nos 32–35) (Fig. 9) that can be compared to examples from Greece, including several ivories of both griffins and sphinxes excavated at Mycenae and Spata, or to a gold seal from Pylos (Kantor 1960, 19; Poursat 1977, nos 285, 312, 448, 455–62) (Fig. 10). The most remarkable feature linking the Megiddo griffin plaques with Aegean art is the subtle modelling of the animals' bodies (Kantor 1960, 19). For this feature, the closest comparison comes not from the sphere of small-scale arts, but rather that of monumental stone relief: the famous Lion Gate marking the entrance to Mycenae on the Greek mainland dated to the mid-13th century BC (Fig. 11). Decorative motifs like the so-called sacral ivy and tricurved arch (Loud 1939, nos 37, 41–42, 262–64) (Fig. 12) also appear to be wholly Aegean, displaying close comparisons with Aegean arts of other media, such as a gold cup found in a tomb at Dendra in the Greek Argolid (Kantor 1960, 18; Persson 1942, 75, fig. 88) (Fig. 13).

An intricately carved small rectangular plaque features a complex composition of divine and mythological figures from the Hittite realm (Loud 1939, no. 44) (Fig. 14). Like the Myceanaen ivories just discussed, the individual motifs find almost exact parallels in a region far removed from and ostensibly unconnected to Megiddo. The plaque shows similar composition and themes to a series of carved rock reliefs depicting a procession of gods at the open-air sanctuary of Yazılıkaya near the Hittite capital

Figure 10 Ivory plaque with sphinx from Spata, Greece. National Archaeological Museum, Athens (after Poursat 1977, pl. XLVIII 460/2050; © Hellenic Ministry of Culture/Archaeological Receipts Fund)

Figure 11 Lion Gate, Mycenae, Greece (author's photograph)

Hattusa in central Turkey, seen for example in the bull-men figures (Seeher 1999, 118–51, esp. fig. 132: nos 28 and 29). The motif of the sun-disc held aloft by creatures with outstretched arms finds close parallels to reliefs carved on a Hittite monument marking the spring at Eflatun Pınar toward south-central Anatolia (Akurgal 1962, pl. XXI) (Fig. 15). As is the case with the comparison to the Mycenae Lion Gate, the connection between the small, portable ivory plaque and monumental carved reliefs from Hittite Anatolia suggests the ivory was produced in Anatolia and only later made its way to Megiddo.

Another stylistic group among the Megiddo treasure can be considered a truly international style, found throughout the eastern Mediterranean, Egypt, and the Near East during the LBA (Feldman 2006). Animal attack scenes, fantastical vegetation, and hybridized forms derived from multiple artistic traditions typify this style and can be seen in several of the Megiddo ivories, such as a comb carved in relief on both sides with a hunting dog bringing down a wild goat (Loud 1939, no. 107) (Fig. 16) or plaques carved into elaborate voluted palmettes (Loud 1939, nos 13, 14, 165–67) (Fig. 17). Some of the Megiddo ivories (Loud 1939, nos 5–7, 16–20) even appear to have been produced in the same workshop as ivories found on Cyprus, the Aegean island of Delos, and at Mycenae, underscoring their international character (Feldman 2006, 95–97; Kantor 1956, 170) (Figs 18, 19).

These stylistic classifications do not cover all the ivories found in the hoard and, as is typically the case with any classification system, clear-cut groupings are elusive. Kantor (1956, 168) attributed two roughly cone-shaped ivories of uncertain function and part of a disc, all carved with interlinked volutes and 'pine cones' (Loud 1939, nos 60, 123 and 124), to a Middle Assyrian style that also might have embraced Hurrian/Mitannian characteristics known to have provided a foundation for Assyrian arts of the later LBA (Stein 1989). A casket carved from a single piece of ivory with nearly freestanding striding lions and sphinxes (Loud 1939, no. 1) (Fig. 20) could be attributed to either a Hittite, northern Levantine, or northern Mesopotamian style. Pieces of architectural elements and other fragments remain difficult to classify.

This stylistic review highlights the diversity of the Megiddo ivories and suggests a similarly diverse set of regional origins for their production. This situation can be contrasted with the relatively homogenous stylistic attributes of the ivories excavated at

Figure 12 Ivory with 'sacral ivy' design, Megiddo (Loud 1939, pl. 10:42; courtesy of the Oriental Institute of the University of Chicago)

the northern Levantine site of Ugarit, where few if any of the ivories were foreign imports (Gachet-Bizollon 2007). Particularly revealing are the contrasting interpretations regarding carving production to be drawn for each city. At Ugarit, Gachet-Bizollon (2007) has made a convincing case for large-scale, local production of carved ivory goods. The diversity of styles at Megiddo argues for the opposite: either small-scale or no ivory production. Further support for this conclusion comes from the general paucity of ivory finds at Megiddo apart from this one collection and the absence of any partially worked pieces. This is in clear contrast to the situation at Ugarit, where ivory finds are distributed widely across both the tell of Ras Shamra and the neighbouring site of Minet el-Beida, including the recovery of unfinished pieces, such as a pyxis from a tomb at Minet el-Beida (Gachet-Bizollon 2007, no. 72).

The types of items that these ivories either formed or decorated are likewise diverse. Many of the ivories are part of cosmetic kits, for example the combs and the circular containers and bowls that probably held unguents or perfumes. These, too, show ties to different cultural regions, like the swimming girl bowls and duck-shaped containers that are closely allied to Egyptian prototypes (Loud 1939, nos 157, 158, 177, 178). Perhaps also to be associated with an elite person's toilette is the casket featuring striding lions and sphinxes (Loud 1939, no. 1) (Fig. 20). A relief from the 7th-century BC palace of the Assyrian

Figure 13 Gold cup with 'sacral ivy' design, Dendra, Greece (Photograph: Deutsches Archäologisches Institut Athen, Neg. D-DAI-ATH-Argolis 554, all rights reserved)

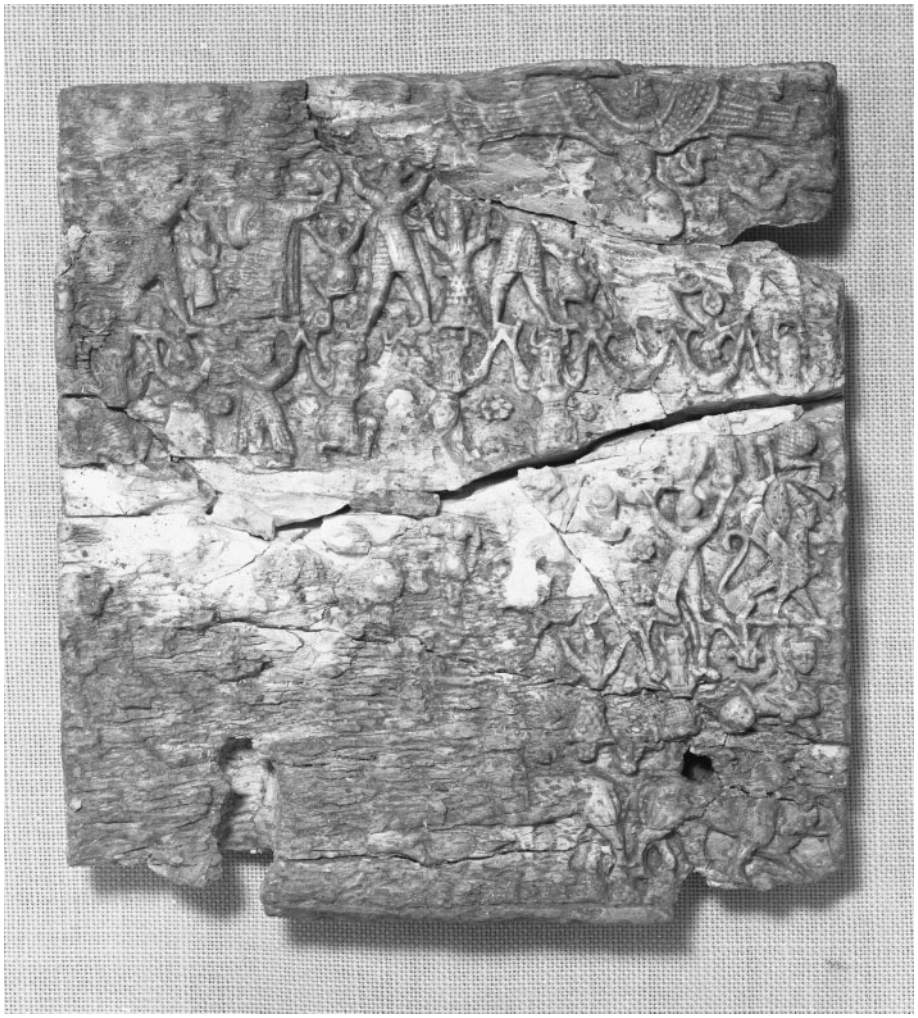

Figure 14 Ivory plaque with Hittite figures, Megiddo (Loud 1939: pl. 11:44a; courtesy of the Oriental Institute of the University of Chicago).

king Ashurbanipal at Nineveh shows a similar type of casket on a table beside the ruler's couch (British Museum WA 124920; Reade 1983, fig. 102). It is probable that virtually all of the carved plaques and cut-out pieces belonged originally to larger chests or furniture, such as couches or chairs, similar to the couch that Ashurbanipal reclines upon in the Nineveh relief. Actual examples of such inlaid furniture, which underlies the biblical injunction against those who lounge on beds of ivory (Amos 6:4), have been found at LBA Ugarit and in 1st millennium BC royal tombs at Salamis on Cyprus (Feldman 2006, 46–54; Gachet-Bizollon 2001; Gachet-Bizollon 2007, 129–82; Karageorghis 1974, pls 61, 66). We also hear about ivory inlaid furniture among the luxurious objects circulated as gifts among the LBA rulers (Cochavi-Rainey 1999).

In addition to these domestic, albeit luxurious, items, there are others that may have served rather different functions. For example, gaming boards appear in two different shapes. One type has a rectangular board incised with rows of squares (Loud 1939, nos 224, 225). A complete example of such a game board was excavated from a LBA tomb at Enkomi on Cyprus (with references to excavation publication, Barnett 1982, 37, pl. 30d). Small disks and button-shaped elements, of which numerous examples occur at Megiddo, may have fulfilled the role of game pieces (Loud 1939, nos 226–57). The second type takes the shape of a 'figure-eight' shield known from Mycenaean iconography, found for example in wall paintings from Tiryns and Knossos (Loud 1939, nos 220–23; Immerwahr 1990, pls XIX and 49). For this game, pegs were inserted in holes drilled into the game board.

The inscribed writing palette is a less common type of ivory product. It is a non-utilitarian model that is typically associated with Egyptian private funerary contexts (Fischer 2007, 164). In many ways it represents the uniqueness of the Megiddo ivory

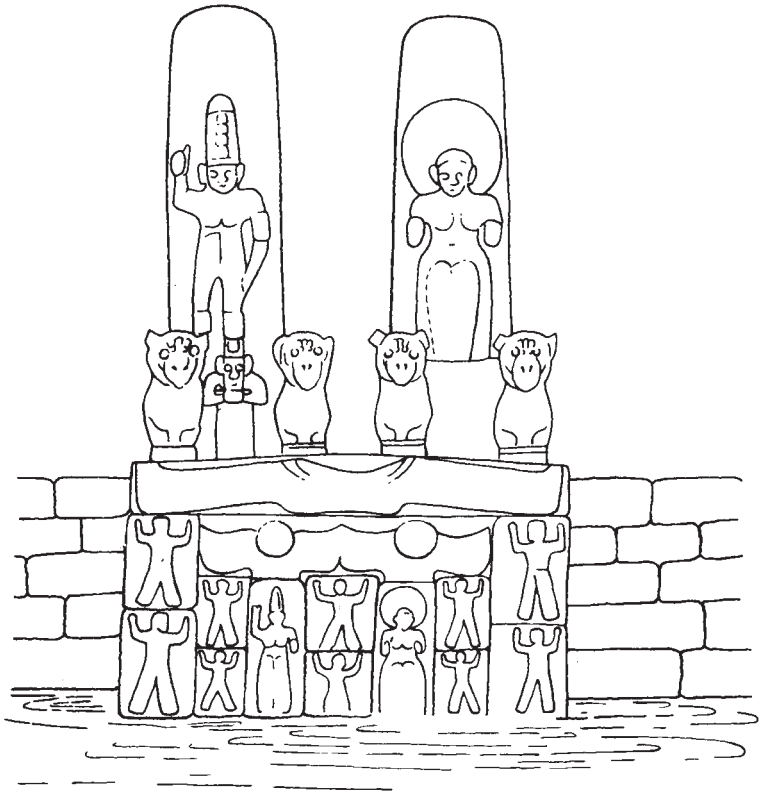

Figure 15 Reconstructed drawing of Eflatun Pınar, Turkey (after Macqueen 1986, fig. 78)

Figure 16 Ivory comb with dog attacking ibex, Megiddo (Loud 1939, pl. 16:107a; courtesy of the Oriental Institute of the University of Chicago)

Figure 17 Ivory voluted palmette, Megiddo (Loud 1939, pl. 34:166a; courtesy of the Oriental Institute of the University of Chicago)

collection, which is by far the most heterogeneous assemblage of ivories from a single locus in the LBA Near East, surpassed only by the vast storerooms of ivories gathered by the Assyrian kings on campaign in the 1st millennium. How should we understand this rich, yet diverse, set of ivories, which includes styles and types known from throughout the eastern Mediterranean and Near East? What were they doing in a semi-subterranean annex of a Canaanite palace at the end of the Bronze Age? Indeed, acknowledging the heterogeneity is critical for assessing the why and how of this material at Megiddo. It suggests a process of collecting from a number of sources without evident preferences. Because the ivories were found so densely packed next to one another, it seems unlikely that they were still affixed to their original furnishings (Loud 1939, 9; see Fischer 2007, 125, for a possible alternative). The absence of evidence for reconstructible furnishings to which the ivories might have originally belonged contributes to an impression of opportunistic collecting unable to procure large or intact specimens. Similarly, the presence of the model writing palette typical of private burials may indicate opportunistic collecting of a kind that might only

Figure 18 Reconstructed drawing of three incised ivories from Megiddo (after Kantor 1956, figs 3B, C, and D)

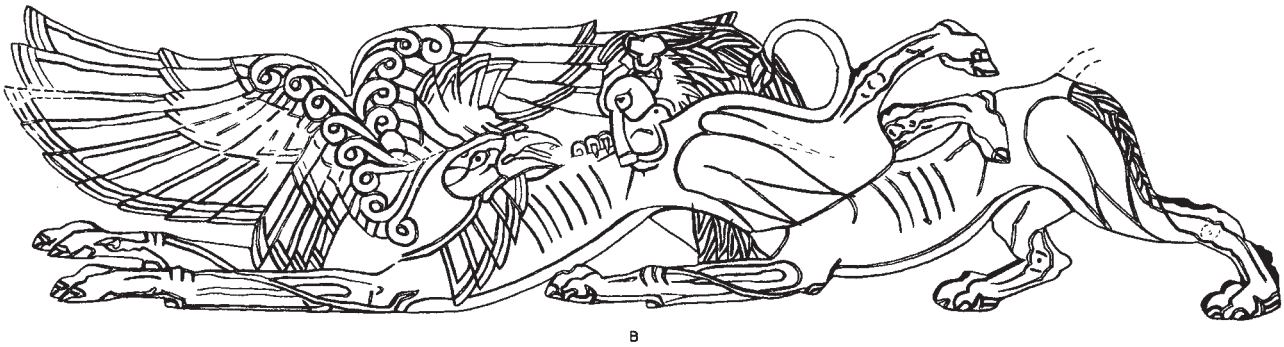

Figure 19 Drawing of incised ivory from Delos, Greece (after Kantor 1956, fig. 2B)

Figure 20 Ivory box with striding lions and sphinxes, Megiddo (Loud 1939, frontispiece; courtesy of the Oriental Institute of the University of Chicago)

have been possible in times of dissolving social and political order, as I elaborate below.

A consideration of the probable dates and locations of production for the different pieces, as well as the archaeological and historical context of their find spots, can provide additional information with regard to this process of collecting. In terms of dates, the inscribed model scribal palette bearing a cartouche of Ramses III, who reigned about 1198–1166 BC, sets a very late terminal date for the collection, sometime after 1200 BC. Stratigraphically, according to Loud's field notes, the palette was one of the last ivories excavated, and thus the other ivories had to have been deposited after it (Loud field diary, 17 April 1937). However, on stylistic grounds, many of the other pieces are almost certainly at least one hundred or more years earlier than the model palette (Bryan 1996; Liebowitz 1987; Lilyquist 1998). From comparisons at other sites around the Near East and eastern Mediterranean, the high point of ivory carving probably took place in the mid-13th century. The stratification of the youngest ivory at the bottom of the pile suggests that the final deposition does not document a process of gradual accumulation over time. One can, therefore, posit that this final pile occurred as one event, prior to the destruction of the building. By whose hand the event took place, however, remains a difficult question.

Assembling an ivory collection at the end of the LBA

In the original publication of the ivories, Loud (1939, 2, 9) suggested that the ruler of Megiddo, along with his contemporaries, enjoyed ivory collecting as a hobby, much as stamp collecting occurs today. This suggestion was later dismissed by Barnett (1982, 25), who countered,

> *… the discoverer, G. Loud, could only suggest rather weakly that ivory collecting at Megiddo was the hobby of an eccentric Canaanite prince of the Late Bronze Age. Today it is clear that ivory was something more than a mere collector's fancy; it was an important form of wealth, in which perhaps either the local prince or princess traded … Consequently, the hoarding of ivory began, and the 'ivory rooms' formed part of his or her Treasury or bank.*

The situation at Megiddo most likely lies somewhere in between these two proposals, which after all are not so dissimilar from one another. As Barnett rightly states, ivories formed a major component of wealth in the LBA and were closely associated with, if not monopolized in some places by, royalty.

Of central importance to understanding how and why the ivory collection at Megiddo came to exist is its extremely late deposition date in the 12th century BC, a time when the Bronze Age courtly system was collapsing throughout the eastern Mediterranean. The luxurious palaces at Mycenae, Hattusa and Ugarit were all violently destroyed between 1225 and 1185 BC (Ward and Joukowsky 1992). Around this same time, in the eighth year of Ramses III, Egypt suffered the indignity of invasion at the hands of a motley group of roving marauders called, by the Egyptians, the Sea Peoples (Edgerton and Wilson 1936, 49–58; Oren 2000). They were eventually repulsed, but the confidence and bravado of the New Kingdom empire suffered considerably. Meanwhile, Assyria retreated to its heartland in northern Mesopotamia, giving up extensive holdings in the west (Van De Mieroop 2004, 179–94). The cause of this massive collapse continues to be hotly debated, with theories ranging from famines triggered by climatic changes, to invading Sea Peoples sweeping across the Mediterranean, to internal instability within the highly complex and convoluted palace bureaucracies (Liverani 1987; Ward and Joukowsky 1992). Most likely it was some combination of all of these, spiralling out of control and leading to the almost complete ruin of previously powerful empires and the dissolution of the tightly interconnected international network.

Whatever the causes, there is evidence, at least in the Near East, of an awareness of impending danger. At Ugarit, tablets record calls for help from the Hittites who claim to be suffering from famine (Singer 1999, 715–19). They also make mention, along with texts from elsewhere, of increasing pirate activity along the coasts (Singer 1999, 719–25). The poor performance of the Egyptian army created a crisis of confidence in this formerly dominant imperial power, a crisis that is evident in the public rhetoric of Pharaohs like Ramses III (Cifola 1988; 1991). In addition, a desire to hoard and conceal wealth seems to have possessed people around the eastern Mediterranean (Knapp *et al.* 1988). Most notable are large hoards of bronze, which have led many scholars to propose a widespread scarcity of the metal alloy that either caused or was caused by a breakdown of international exchanges. These bronze hoards appear during a relatively brief span of time from about 1250 to 1150 BC that exactly corresponds to the period of collapse.

Hoards and ritual deposits

Can we think about the Megiddo ivories also in terms of hoarding? The common assumption views the

ivories as having been slowly amassed over time by the local rulers of Megiddo, who stored them in the annex (hence its designation as a treasury). However, two significant excavation details, when taken together, cast some doubt on this reconstruction, namely, the broken and disorderly state in which the ivories were deposited and the presence of a large animal skeleton lying across them. The first of these, the manner of deposition, might be explained as the result of looters (Barnett 1982, 25; Loud 1939, 9), if it were not for the clearly undisturbed skeleton on top of them, which seems an odd element to attribute to destructive forces. The excavation records are, unfortunately, not as precise as one might hope. Even returning to Loud's field notes in the archives of the Oriental Institute leaves several questions unresolved. However, examining the photographic documentation in conjunction with a close reading of the field notes does shed some light. According to the field notes, ivories were found in all three rooms of the annex, but the great majority of them were discovered in the western part of the furthest room to the back.[2] It is clear in the excavation photos that the animal skeleton lay directly on top of the jumbled mass of ivories, which themselves packed what Loud (1939, 9) recorded as just under 9 sq m of fill directly above the floor.[3] There does not appear to be any debris separating the ivories from the skeleton, which one might expect had the deposit of ivories been left for a considerable amount of time before the deposition of the animal. The almost complete articulation of the skeleton indicates that the beast either died directly on top of the ivories or its body was laid out after death, suggesting that the manner of the ivories' deposition was no less intentional than that of the animal appears to have been; this argues against looting. For these reasons, I suggest that the Megiddo ivories belong to a related form of the widespread phenomenon of hoarding and caching bronze that marks the end of the Bronze Age. Metal, unlike ivory, is an eminently reusable material and thus generally considered a more suitable item for hoards. Nonetheless, the concept of hoarding and ritually sacrificing or burying wealth can extend to other materials such as ivory.

In this light, it is useful to recall that people hoard and deposit wealth for different reasons and with different intentions (Knapp *et al.* 1988). A standard explanation, typically referring to metal caches, is that hoards are gathered in order to safeguard material with the intent to recover it when possible. In such cases, there appear to be two main types of hoards, so-called founders' hoards and merchants' hoards. Founders' hoards comprise material that was collected for its intrinsic value. Such hoards are characterized by scraps and broken pieces that might be refashioned for a new use. Merchants' hoards, on the other hand, tend to contain complete pieces, often with numerous examples of a single type. The Megiddo ivories do not fall clearly into either one of these categories. While the individual ivory pieces could possibly have been refitted into furniture, the diversity of styles and objects makes such a reuse less likely, particularly when compared to more complete examples of inlaid furniture known from elsewhere, such as Ugarit or the 1st-millennium BC examples from Salamis on Cyprus and the Assyrian capital of Nimrud.

In addition, 'sets' of ivories, grouped according to style, rarely exceed a few pieces, suggesting that not only were they no longer part of a larger piece of furniture, but that it would have been difficult to reconstruct any items of furniture based on the pieces available. If one considers merchant hoards to be composed of complete specimens that later could be recovered and exchanged without extensive reworking, then the incomplete and unreconstructible nature of the Megiddo collection does not fit the definition.

Another possible explanation for hoarding invokes a votive or ritual aspect to the assemblage and burial of large stores of wealth (Philip 1988; Bradley 1998, xviii–xxi, 1–42). In these cases, the deposited objects were never intended to be recovered or reused. Such hoards tend to be associated with shrines or temples and contain a spectrum of valuable materials, such as the deposit of ivories and other precious items found cached under the Geometric period temple of Artemis on Delos, or the materials deposited in the intentional

[2] For example, the casket (Loud 1939, no. 1) was found in the first room (called the 'innermost' by Loud; i.e. the room into which one entered from the palace). All the ivories were 'assigned' the same locus number 3073, though in the field notebooks the letters 'C', 'N' and 'S' appear to designate finds from the 'central', 'southern' and 'northern' rooms respectively, with the 3073-N designation being further subdivided into horizontal and vertical loci. Loud (1939, 7) alludes to a grid used to record the ivories' positions, but does not provide any further details in the publication. In the published register of finds, non-ivory artefacts from the annex are given proveniences of 3073 A–C, N=3073, E=3073 and S=3073 (Loud 1948, 171; Fischer 2007, 123).

[3] Fischer (2007, 121) claims that ivories lay on top of the animal skeleton as well. Her evidence for this is the entry in the field diary for 6 March 1937, in which Loud writes, 'For in Locus N-3073, whence so many ivory fragments have come, in the NW corner is a strange burial, a camel's head, probably a complete camel …'. However, in the field diary for dates before 6 March, Loud records only an ivory spoon (Loud 1939, no. 176) from Locus N-3073 (on 2 March 1937). The mention of previously found ivories from this locus must refer to the two other rooms, labelled simply 'Locus 3073' and 'the room north of 3073' (see field diary entries for 17 and 18 February 1937). It appears, therefore, that whatever ivories may have been found before encountering the skeleton in N-3073, the quantity was negligible compared to those found under the skeleton (see, for example, the entry on 7 March, one day after finding the skeleton, 'The amount of ivories appearing in Locus N-3073 becomes alarming').

filling of an Akkadian period temple complex at Tell Brak from the end of the 3rd millennium (Gallet de Santerre and Tréheux 1947–48; Oates *et al.* 2001, 73–91). They can be roughly divided between deposits made before building (generally called foundation deposits), as seems to be the case for the Delos hoard, and those made after the construction of the building, in particular at the end of the structure's life as at Tell Brak. Bjorkman (1994; 1999) has interpreted these activities as ritual 'statements' about how things were appropriately begun and ended.

The Megiddo collection seems best understood through this perspective of ritual deposition, despite some deviation from the normatively defined 'ritual hoards'. Though the Megiddo ivories are not clearly associated with a religious structure, the large animal skeleton still in its articulated form on top of them could signal a ritual character. Similar instances involving articulated animal skeletons in human burials have been considered an indication of ritual use (possibly sacrificial) of the animals (Horwitz 2001, 87; Lev-Tov and Maher 2001, 94). Because the skeleton lay directly on top of the ivories, which together were then covered by destruction debris, the animal must have arrived in the back room and died before the building collapsed. While it is not entirely beyond the realm of possibility that such a large animal might have made its own way into the room before dying on top of the still unburied ivories, the complicated route that the animal would have had to take (from the palace, through the first two rooms of the annex) argues against this reconstruction. The intact nature of the ivory fill and skeleton sealed by the collapse of the annex's superstructure may indicate that, like ritual hoards and deposits, the Megiddo collection was intentionally buried, 'sacrificed' through a ceremonial act of destruction. Zuckerman (2007) has reconstructed in detail such practices, called 'termination rituals,' for the final phases of LBA Hazor, as well as suggested their occurrence in the intentional mutilation and burial of statues in a temple of Stratum VIIA at Megiddo.

Reconstructing the end of the Bronze Age at Megiddo

When we consider the situation of Megiddo at the latest date for the ivory collection — that is, no earlier than the reign of Ramses III in the early 12th century BC and possibly as late as Ramses VI in the later part of the century — it bears remembering that the contemporary occupant of Megiddo's palace was living during a period of extremely destabilized social, political, and economic order. While scholars such as Zuckerman (2007) in her compelling reconstruction of the end of LBA Hazor emphasize, with an almost fatalistic teleology, the inexorable deterioration of the political, and economic situation in which the elites seem to abandon with equanimity their symbols of power, I would argue instead that such destabilized situations may have first provided local rulers an ideal chance to amass wealth by various opportunistic means before the ultimate collapse. In fact, such a lesser ruler would have had more opportunity to acquire tightly controlled luxury products such as worked ivory, during a period of disintegration than he would during the more highly structured, formalized and hierarchical period of high internationalism that marked the 14th and 13th centuries BC. Here, I would like to stress that even though many of the ivories were probably produced in the 13th century BC or earlier, there is no reason to believe they arrived at Megiddo any time before the 12th century BC. Indeed, there is little evidence for ivories in the preceding LBA levels, either in the earlier palace levels, which one might argue had been cleaned out, or in tombs, where one would more likely expect to find ivory objects (Fischer 2007, 113–14).

Taking this evidence into consideration along with the animal skeleton, I propose that the magnificent collection of ivories found in the so-called Treasury at Megiddo represents an assertion of increasing autonomy from Egypt, as well as a response to the crisis of confidence resulting from a destabilized and highly uncertain new economic situation. This very economic instability may have provided the Canaanite ruler the wherewithal to gather such a diverse trove as former palace monopolies disintegrated. As Loud (1939, 7, 9) notes, many of the ivories were broken before deposition, the separate pieces being found apart from one another, and the high density of ivories argues against their attachment to larger furnishings. The palace at Ugarit, with its wealth represented by several ivories found strewn across a courtyard, was destroyed and looted around 1185 BC (Yon 1992), suggesting that precious materials, perhaps once restricted to higher-ranking kingdoms, might have been making their way into less orthodox avenues of exchange. Although Ugarit was not on a par with Eygpt, Hatti, or the other major empires of the LBA, it did occupy a more elevated position in the hierarchy than the southern Levantine vassal states like Megiddo, as is evident in the style of letters that it sent to Egypt during the 14th century BC (Moran 1992, EA 45–49; Feldman 2006, 177–91). A comparison of the depositions of the ivories in the

Ugarit palace with those from the annex at Megiddo reinforces the distinctions between these two groups of ivories. Those found at Ras Shamra appear to have been tossed away by looters; they were found scattered throughout the palace, with at least two large pieces of furniture — a bed or couch and a table — able to be reconstructed according to both archaeological findspot and carving style (Caubet and Poplin 1987; Gachet-Bizollon 2001; 2007, 129–82). In contrast, at Megiddo the unreconstructible ivories were concentrated in a single, out-of-the-way location.

One might speculate (and that is often all one can do when trying to reconstruct former pathways for archaeological artefacts) that the ivories of diverse styles and types found at Megiddo may represent just such spoils, made available to a broader set of rulers. It is becoming clearer that what once was considered a 'Dark Age', following the collapse at the end of the Bronze Age, represents a formative period for the later emergence of vast mercantile enterprises exemplified by the Phoenicians but also involving the North Syrian, Cypriot, and Greek (particularly Euboean) regions (Liverani 2003; Bell 2006). Yet, the apparently ritual cachement of the ivories in a semi-subterranean structure that was connected to, but separate from, the palace may indicate an increasing insecurity felt by this same or a slightly later ruler, an insecurity that appears justified in light of the subsequent destruction of the palace by fire and its replacement by quite different structures.

Might a scenario have played out in which unorthodox opportunities for gathering wealth arose from the collapse of the tightly controlled palace system, but these very opportunities stemmed from a destabilized economic environment that ultimately precipitated dramatic collapse? Our Canaanite ruler of Megiddo may have seen an opportunity to profit from the destabilization before realizing that his own downfall was also approaching. Can we imagine, given the relative emptiness of his palace, that he was able to escape with his belongings, having first ritually sacrificed his treasure of ivories (and other luxurious items found in the annex) along with a large (bovine) animal? The sacrifice of an ivory collection — emblematic of status and prestige — may have seemed a worthwhile price for the promise of survival. Although such a reconstruction must, by nature, remain in the realm of speculation, the many pieces of circumstantial evidence presented here lend it support.

One scholar has used the Megiddo ivories to propose a diametrically opposite reconstruction of Megiddo's political history, that of direct Egyptian rule over and within the city during the 12th century BC (Singer 1988–89). Claiming that a native ruler would be unable to acquire such wealth, Singer (1988–89, 108) writes:

> *Only a high-ranking personality at the top of the Egyptian administration would be in the position to assemble such a large and expensive collection. In fact, the depository housing the ivories and other valuables (alabaster, gold, precious stones) was more probably a central treasury of the Egyptian administration, rather than the personal collection of one leading official … It is far more difficult, almost impossible to envisage a local ruler of Canaan with such a range of international contacts, not to mention expensive tastes.*

Indeed, Singer (1988–89) argues for direct rule of Canaan from Megiddo in the period of Ramses III through Ramses VI, that is for much of the 12th century BC, based almost entirely on the Megiddo ivory hoard. It is, therefore, worth examining his argument in some detail vis-à-vis the scenario proposed in this paper. Though Singer (1988–89, 102) touches briefly on the stylistic and archaeological aspects of the ivories, he dwells on neither at any great length, instead focusing on the inscribed ivories, that is those bearing Egyptian inscriptions, as indicative of 'ownership'. He associates the model writing palette with an official, Thutmose, known as the father of a highly placed Egyptian officer at nearby Beth-Shan in the Jordan River Valley, asserting that the owner of this palette must have been a major Egyptian authority figure based at Megiddo; although, he (1988–89, 105) acknowledges, 'Of course, one could argue that the find-place of this object is accidental and there is no proof that the owner of the pen case was actually stationed at Megiddo'. He (1988–89, 105) continues his argument with the ivory plaques that refer to an Egyptian (or egyptianized) singer Kerker and the city of Ashkelon, querying how the personal possessions of Egyptian officials could have found their way into the collection of a Canaanite ruler. He discounts the possibility of gift exchange (contra Higginbotham 2000, 70–71), making the point that such items were typically intended for funerary contexts in Egypt proper. According to Singer, if they did not arrive at Megiddo as gifts, then their presence must indicate that the Megiddo Stratum VIIA palace was no longer the seat of a Canaanite ruler, but rather the residency of an Egyptian governor.

Singer's argument rests heavily on these inscribed ivories. However, the inscriptions are fraught with

problems at the level of both translation and interpretation. The inscription on the model writing palette, including the name, is extremely difficult to read (Bryan 1996, 57–58; Higginbotham 2000, 67–68; Fischer 2007, 157–63), and nowhere on it does it include a mention of Megiddo in the presumed owner's titles. Likewise, the inscriptions on the plaques are ambiguous regarding the gender of Kerker and his or her relationship to a possible prince of Ashkelon or to a cult of Ptah based at Ashkelon (Bryan 1996, 58–59; Higginbotham 2000, 68–70; Fischer 2007, 168–76). Recently, Fischer (2007, 151–76) has published a thorough review of the evidence and different interpretations surrounding the inscribed Megiddo ivories. She (2007, 164) concludes that the identity of the owner of the model palette remains hypothetical and that there is no clear evidence to point to any direct ties between the palette's owner and Megiddo. Similarly, she (2007, 176) finds nothing to associate Kerker with Megiddo.

My proposal that the ivory collection at Megiddo was not amassed until the 12th century BC, perhaps even well into that century, during a period of military and political upheaval, might better account for the presence of *personal* possessions of a funerary type belonging to various Egyptian officials from other cities. For example, one might ask why Singer's proposed Egyptian governor, Thutmose, should have Kerker of Ashkelon's personal ivories at Megiddo. Thalmann (1999, 112), citing Helck, explains the presence of Egyptian personal (that is, funerary) items in the Levant at the end of the Middle Bronze Age as the result of the looting of Egyptian cemeteries and sanctuaries during the Hyksos period of rule. Perhaps the Megiddo pieces also came from tombs of Egyptian or egyptianized officials that were plundered in the wake of collapsing Egyptian control in Canaan.

A similar explanation may apply to one of Singer's other pieces of supporting evidence: the Hittite plaque also found in the ivory cache. Of this he (1988–89, 106) writes, 'Again, we are faced with a serious crux: how could this exquisite Hittite ivory find its way to the collection of a local ruler of Canaan? Its very presence in this region can only be understood within the context of Hittite-Egyptian diplomatic relations …'. Yet, if the ivory came to Megiddo sometime during or even after the reign of Ramses III, the Hittite empire would already be in disarray or even collapse, its capital at Hattusa sacked and burned in the early years of the 12th century BC (Bryce 1998, 378–79), making Hittite-Egyptian diplomacy moot.

This leaves only one piece of evidence for Singer's theory: the bronze statue base with a cartouche of Ramses VI, which was said by the excavators to have been buried under a wall of Stratum VIIB, though it has been reassigned in date to Stratum VIIA (Harrison 2004, 9). Statues and other objects with royal cartouches have been discovered at Ugarit, Ebla and other independent Levantine cities (Caubet 1991, 213–14; Scandone Matthiae 1997; Thalmann 1999, 109–13; Yon 1997, 178), while the written documents from earlier periods point to a semi-autonomous local ruler at Megiddo, even if a vassal. In this light, the presence of the Ramses VI statue on its own seems hardly conclusive evidence for a total domination of Megiddo, including the occupation of its palace, by an Egyptian imperial administration.

The enterprising ways of Megiddo during the collapse of the Bronze Age proposed in this paper may find further purchase in the Early Iron Age levels that immediately succeed the destruction of Stratum VIIA. Though it seems unlikely that the same ruler occupied the city — the Stratum VIIA palace having been built over with different and less substantial structures — a comparative flourishing is seen at the site (Halpern 2000, 551–55; Harrison 2004, 15–21, 108). This stands in contrast to, for example, Ugarit which was abandoned after its destruction, never to be reoccupied in any significant manner. Perhaps indicative of the greater decentralization and entrepreneurial spirit of the Early Iron Age, Stratum VI at Megiddo records an 'inventory of luxury finds … altogether fairly substantial …Yet, overall, one has the impression of wealth of a lower order, more widely diffused, than is present in the preceding strata' (Halpern 2000, 553). This wealth, lesser than the preceding period but still significant compared to the rest of the eastern Mediterranean and Near East during this post-collapse period, may signal Megiddo's participation in the emerging mercantilism that marks the Early Iron Age — a mercantilism that was born, perhaps, in part from the opportunistic ways of the 12th-century BC Canaanite rulers newly released from vassalage.

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