Forum Article

Troy VI: A Trading Center and Commercial City?

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Abstract

Fascination with Homer's *Iliad* has led scholars, even before Schliemann, to postulate that Ilios/Troia was not only a real place but also that Homer gave an essentially realistic account of the topographical features and the historical importance of Priam's splendid city. The present excavator of the prehistoric site on the hill of Hisarlık not only continues this strand of scholarly tradition but also raises the economic significance of Troy to new heights. From its location close to the Dardanelles, he deduces a strategic importance as a trading center, commercial city and even a commercial metropolis, which functioned as a hub for trade among the Black Sea, the Aegean, Anatolia and the Eastern Mediterranean.

This article presents evidence to show that these ideas are unfounded by defining the structures of Late Bronze Age trade and the factors conditioning the rise of commercial cities and by checking the archaeological evidence as it results from the excavations at Troy and at Beşik Bay, its alleged harbor. The present state of research indicates that Late Bronze Age trade was largely palace- and elite-directed, comprising gift exchange and organized trade providing important raw materials and precious objects. The volume of this trade was obviously very limited compared with later epochs of antiquity, but considerably higher in the Eastern Mediterranean than in the Aegean. Thus, opportunities for the rise of commercial cities were limited, essentially, to the Levant. Troy was situated off the great east–west routes of sea-trade. In addition, there is evidence neither for overland trade routes from the Hittite empire to the west coast of Asia Minor nor for sea-trade through Dardanelles and Bosporus into the Black Sea during the Late Bronze Age.

The excavation results at Troy VI and Beşik Bay show a remarkable poverty of imports in general and of precious objects in particular and no connections at all with the Black Sea region. Troy's role in trade was peripheral and restricted to the Aegean. Furthermore, evidence for writing and even for sealing as well as for any commercial architecture is missing on the hill of Hisarlık. Troy VI was not a commercial city and cannot even be proven to have been a city at all, since the alleged evidence for a densely built-up lower city, encircled by a city wall and defensive ditch, does not bear close scrutiny.*

"The archaeologist is or should be cautious, prefers to state the facts as he knows them quite frankly, and as for anything further would declare he does not know rather than indulge in free reconstructions of pre-history for which he has little or no real evidence."[1]

THE PROBLEM

The search for the site of Troy was conditioned by the desire to prove that the *Iliad* was based on fact, that Troy was a real place and the Trojan War a real war. From the first excavations of Troy onward, the excavation reports have been conditioned by what one may call the *Iliad* Syndrome. That is to say, no matter how the excavators themselves interpreted their finds, whether or not confirming the historicity of the Homeric texts, and no matter how historians and archaeologists evaluated the excavation reports, the entire history of investigations has been so polarized by the fascination exerted by Homer's Troy that data provided by more recent excavations at other sites and the factual data offered by the Troy excavation itself have not been sufficiently taken into account.

Historians have in general been more skeptical towards the efforts of excavators to demonstrate that the archaeological record confirms the literary tradition, in particular when this tradition concerns *mythos*, as in the case of Early Rome and Troy.[2] Mythos may contain historical elements, but over the centuries oral tradition tends to amalgamate more and more events, personalities and topographical

* This article is a revised and expanded version of a paper given at the Tübingen Troy Conference "Die Bedeutung Troias in der späten Bronzezeit", 15–16 February, 2002. I am deeply obliged to Judith Binder (Athens) for intensive discussion and her careful revision of the English text. R.A. Bridges, B. Hänsel, J.D. Muhly and J.P. Sickinger gave me valuable advice. The author visited the Troy excavation in 1989 and in 1997, when he spent one whole day with the excavator M. Korfmann in the excavation area, thoroughly discussing the archaeological evidence. At that time, the discoveries that the excavator considers as being of prime importance had already been made: the alleged settlement wall, the so-called defensive ditches, and the majority of the house remains in the so-called lower city. Since 1998 the excavation activities have been systematically reduced year by year and no significant discoveries have been made.

[1] Wace and Blegen 1939, 131.

[2] Cf. e.g. Hampl 1962; Raaflaub 1998; Cobet 2001; Cobet and Gehrke 2002. But cf. also the opposite view represented by Carandini 1997 with regard to Early Rome, criticized by Kolb 2002, 56–8, 752–3.

situations as well as political, social and religious conceptions that serve to legitimatize contemporary societies. Such highly artificial complex concepts can not be neatly fitted into archaeological strata, as the history of research on the Homeric epics clearly shows.

Furthermore, well-documented cases serve as a control, demonstrating that the role played by a site in the context of an epic poem, legendary history, or myth can by no means be considered as a reliable source for its architecture, topography, and history. The Nibelungen saga describes Worms on the Rhine as the outstanding place in the conflict between the Burgundian Kingdom and the Huns of Attila. In reality, Worms was neither a particularly impressive site nor the main theater of events at the time of this historical clash. The battle of A.D. 436 between Huns and Burgundians took place somewhere else, and the most important event of those years, the decisive battle on the Catalaunian Fields in the year 451 is not mentioned at all in the poem. Jericho has been proved to have been a small and poor settlement without any defensive walls at the time for which the Old Testament claims the siege of a splendid city surrounded by a massive defensive circuit which was nevertheless easily destroyed with God's help through the mere sound of the war trumpets of the Israelite army.[3] These examples demonstrate that to search for archaeological confirmation of an epic narrative may be a futile, scientifically problematic enterprise.

Although he has occasionally issued a denial, the present excavator of Troy, M. Korfmann, tries to suggest that his archaeological discoveries on the hill of Hisarlık confirm the description of Troy in Homer's *Iliad:* "After ten years of the reopened excavations it is obvious that for the first time archaeology and the text of the *Iliad* come close to each other in a convincing manner."[4] Korfmann stands out not only as continuing the long tradition of scholars who account for the historic significance of Troy as revealed in the Homeric epics by its strategic importance controlling the entrance to the Dardanelles, but also as attributing to Troy hitherto unprecedented economic importance.

The key points of his presentation are as follows. Troy had a "strategic position within the trade system of the 2nd millennium B.C."[5] Troy VI was a "commercial city,"[6] even a "commercial metropolis *(Handelsmetropole)*,"[7] and "a turntable of trade,"[8] activity beginning as early as Troy II (ca. 2550–2250 B.C.). Troy's trade with the Black Sea region was a "trigger for the Trojan civilization *(Hochkultur)*"[9] of Troy VI (ca. 1700–1300 B.C.). More specifically: "The Trojans must have dealt in … horses from the steppes north of the Black Sea and the highlands of Central Anatolia, amber from the Baltic region, carnelian from Colchis … and the Crimea, copper (from the north of Anatolia, the Balkans and/or Central Asia), gold from the Troad or from Colchis …, tin from Bohemia or Central Asia …, iron from the coastal regions of North-eastern Turkey…, and slaves";[10] in addition, "timber and even finished ships from the Turkish Black Sea coast, textiles from the Crimea and the Caucasus region, lapis lazuli from Afghanistan over a distance of 4000 km, faience from Egypt."[11] It is, "obvious enough that such goods coming to Troy from the north and east could subsequently be delivered to Aegean destinations in order to supply the growing markets of the 2nd millennium B.C."[12] Moreover, according to Korfmann, the function of Troy VI as a turntable of trade is the clue for understanding the historical background of the Trojan War: "If Troy at the height of its prosperity was allied with its main overseas trade partners and suppliers of goods, if there existed a kind of Hanseatic League *(Hansebund)*[13] and much was regulated by contract—as must necessarily have been the case—it becomes clear that in particular the harbor towns and surrounding peoples of the eastern and northern Aegean, the Marmara and southern Black Sea region … had a vital interest … in the safety and continuing existence of a transfer point like Troy. This network [of trading partners] … is thoroughly reflected by the catalogue of Trojan allies in the *Iliad*."[14]

This is an utterly amazing description of Troy's far-flung foreign relations since the standard

[3] Ehrismann 1987; Finkelstein and Silberman 2002, especially 96–7.

[4] Korfmann 1998b, 12; Korfmann 2001d, 20; 2001e, 64–9. For criticism from an archaeological point of view see Hertel 2002.

[5] Korfmann 2001a, 355.

[6] Korfmann 1997a, 93.

[7] Korfmann 2001a, 366.

[8] Korfmann 2001a, 360.

[9] Korfmann 2001a, 357.

[10] Korfmann 1997a, 94. Cf. Korfmann1998a, 382–85.

[11] Korfmann 2001a, 360.

[12] Korfmann 1997a, 95.

[13] For the Hanseatic League see below p. 12–3.

[14] Korfmann 2001a, 357, 60. Cf. Korfmann 1998a, 382; 1997a, 83–90.

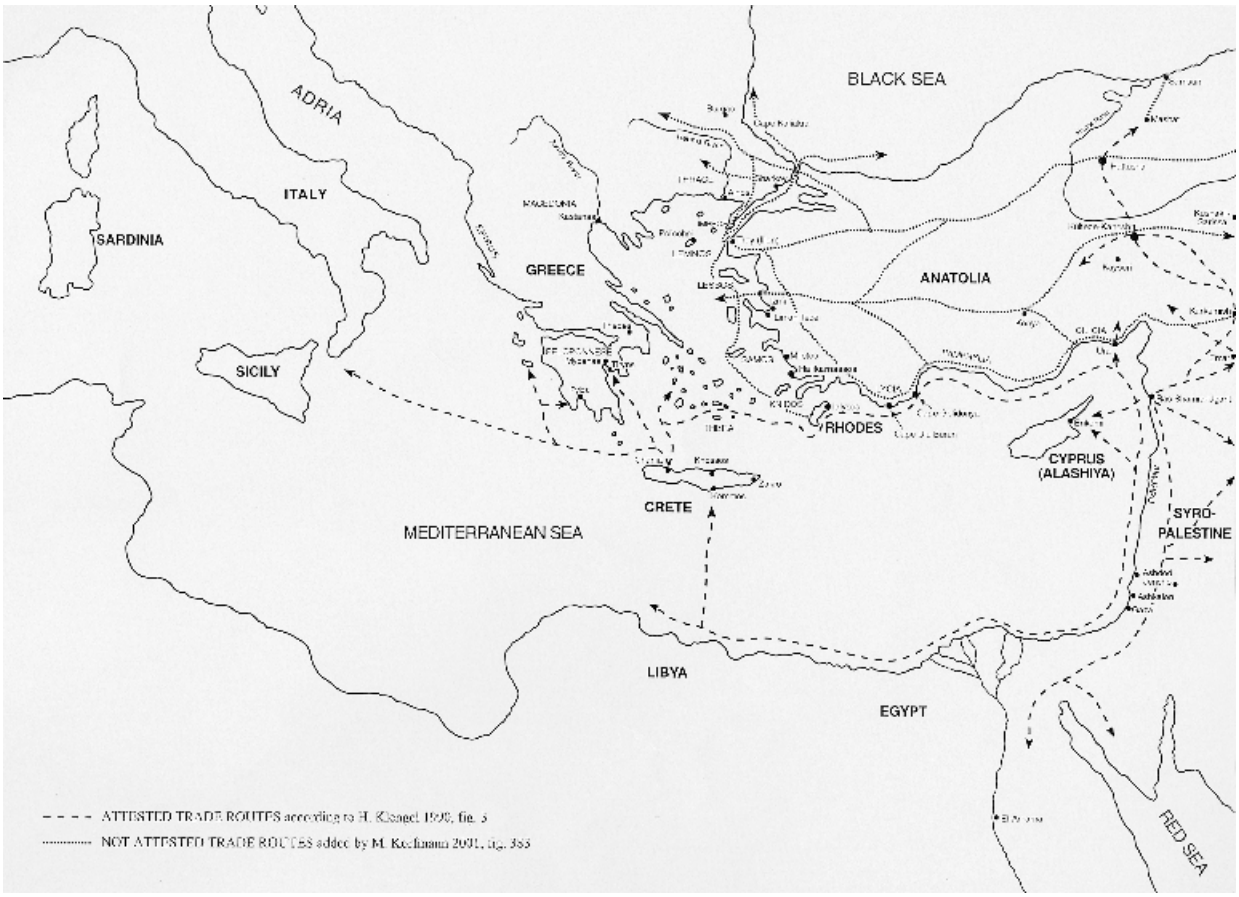

Fig. 1. Trade routes of the second millennium B.C.: attested and not attested.

works dealing with Bronze Age trade mention Troy briefly if at all.[15] Therefore the evidence on which these assumptions are based merits examination. But first we turn to the fundamental question of the nature of the trade system in which Troy is supposed to have played such an important role. It should be noted that the scholarly discussions of Bronze Age trade in general and Korfmann's argumentation in particular focus on the Late Bronze Age (ca. 1500 to 1200 B.C.) and, in regard to Troy VI, on Troy VI Late (ca. 1400 to the beginning of the 13th century B.C.).

THE CHARACTER OF (LATE) BRONZE AGE TRADE

An archive found at El-Amarna, capital of the Egyptian kingdom during part of the 14th century B.C. (fig. 1), includes parts of the correspondence which Egyptian pharaohs carried on with kings of the Near East and Anatolia. In these letters mutual gifts play an important role. Thus, the Egyptian ruler sends to the king of Babylon, among other objects, 12 kg of gold, 3 kg of silver, 8.5 kg of bronze, more than 1000 textiles, more than 1000 stone vases filled with aromatic oil and 163 empty ones, finger rings, necklaces, mirrors, ivory boxes, and so on.[16]

This was a fairly generous shipment, and it would be a mistake to regard this as a present in the proper sense. This is demonstrated by a letter that the Hittite ruler Hattusili III addresses to the king of Babylon around 1300 B.C.: "My brother], I want to make [images…Send me] a sculptor! … Why did you send me lapis lazuli of poor quality?" The Hittite king nevertheless sends return presents and asks the Babylonian ruler to tell him if he needed something else.[17] In this correspondence demands are put forward and the quality of goods is being

[15] For example, H.-G. Buchholz's 812 page book on the subject (see Buchholz 1999). P. Jablonka (2002, 265) characterizes Korfmann's statements as enthusiastic exaggerations.

[16] Moran 1994, 14; cf. 33, 34.

[17] Beckman 1999, 143 no. 23 §16–17.

checked. It is not a question of making presents, but of exchanging gifts on the basis of at least nearly equivalent value.[18]

This exchange of gifts was also practiced among the social elites who surrounded the rulers and their families. Its purpose was the mutual provision of needed raw materials, finished products, animals, and human beings. In the first two instances, precious and prestigious objects were involved. This kind of exchange not only constituted a commercial procedure, but also was politically and socially important. Goods of high prestige served the social definition of elites through conspicuous consumption and this had a socially stabilizing character. In international relations, the failure to send to or receive gifts from another ruler was considered as an offense. In our sources those who consigned these goods are called merchants and envoys at the same time.[19] Transactions of this kind certainly aim at gaining a useful advantage, but obviously lack an important component of what we call trade, that is, the desire for making profit in the sense of gaining material surplus. Instead, approximate equivalence of value and reciprocity are the principles on which exchange of gifts are based.

Around 700 B.C. Hesiod, in *Works and Days*, advises his brother Perses how to arrange for overseas trade.[20] Hesiod calls to mind the opportunities for profit and the risks of seafaring. He is thinking of trade in the "proper" sense, that is, exchange of goods in a private sphere, independent of political authorities and directed towards making surplus profit.

The sources quoted above are separated from each other by more than 600 years; they describe different stages of development in the history of the exchange of goods. Economists and ethnologists are interested in this subject, and researchers on Bronze Age trade have been confronted with the theories formulated by Karl Polányi, in particular.[21] Polányi considers the phenomenon of reciprocal gift exchange as an essential characteristic of ancient archaic economies, among which he reckons the Bronze Age palatial systems of Mesopotamia, Egypt, Hittite Anatolia and the Aegean civilization in Minoan and Mycenaean times. Exchange of goods was embedded in an economic system in which the palaces realized their income from booty, tribute, taxes, and reciprocal gifts. This income was partly stored in treasuries and partly redistributed to functionaries, employees, servants, military personnel, craftsmen, merchants, and so on. The craftsmen produced for the palace, the merchants traded for the palace,[22] and both received a guaranteed remuneration in kind, that is, food stuffs, precious metal, or land. Contractual agreements between the different palace centers tried to ensure the safety of trade routes and traders. So-called ports of trade—sea or river harbors or markets placed at important crossroads, for example in areas of transition between highland and plain or on the borders of the desert—tried to safeguard the inviolability of traders and undisturbed exchange of goods at fixed price rates. This was done under the protection of sanctuaries and political powers. According to Polányi, there was no price-making market. Trade was "passive" and not directed towards maximization of profit.

Polányi and his school did not entirely deny the existence of profit-oriented trade in the Bronze Age, but they regarded it as marginal. The principles of distribution and reciprocity that governed Bronze Age palace civilization also constituted the framework for Bronze Age trade. More recent scholarship on Late Bronze Age trade[23] is divided in its opinions on Polányi's theory. There are those who more or less fully accept his "minimalistic" or "substantivist" model.[24] Others tend to assume that various systems of exchange coexisted: on the one hand palace- or elite-directed exchange of varying importance, and on the other hand independent, profit-oriented trade were carried on at different times in different regions.[25] Some even assume a preponderance of independent, market-oriented

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[18] Mauss 1986; Knapp 1998, especially 202–205; Zaccagnini 1973.

[19] Moran 1994, 39; Keilschrifturkunden aus Boğazköy XIV 3 I 53–5.

[20] Hes. *Erga* 641–45.

[21] Polányi et al. 1957; Polányi 1963. Cf. Finley 1957.

[22] Cf. e.g., Schaeffer et al. 1968, 11, 799, a consignment of merchandise for trade to the merchant Ybnn by the Ugaritan palace administration.

[23] Klengel (1995) and Faist (2001a, 2001b) have shown that it is important to differentiate clearly between the Middle and Late Bronze Age. In the MBA there seems to have existed considerable trade independent from palaces, but not independent from social elites. In the LBA, however, palace authority became prevalent. See also Postgate 2003.

[24] Chadwick 1976, 156–8; Snodgrass 1991; Catling 1991, esp. 10. Voutsaki 1995; Möller 2000, 2001.

[25] Klengel 1979; Wiener 1991; Cline 1994, 85, 106; Knapp 1991; Knapp and Cherry 1994. For Central Europe see Shennan 1999. Gillis (1995, 64–5) thinks that in long-distance trade

trade.[26] As for the tribal societies of the Bronze Age Balkan region and contacts among communities in the Northern Aegean, including Troy, profit-oriented, price-making trade is thought to have played an episodic role at best, and it is thought preferable not to assume the existence of professional traders and to use the term "exchange" rather than "trade."[27] A similar point of view might be adequate for the whole Aegean world, as we will see, and the use of the term "trade" on the following pages should be seen with this reservation in mind.

The basic assumption underlying the following discussion is that theories have to be adapted to different kinds of evidence and not vice versa. With regard to the Greek and Roman world, the minimalist approach, as represented by K. Polányi and M.I. Finley, did not sufficiently take into account the ancient evidence and, therefore, has justly been dismantled. For Bronze Age trade, the situation is different. In this field a host of theoretical considerations and speculative discussions tends to be superimposed on top of meager factual evidence. The relative lack of material evidence for Bronze Age exchange of goods (see below p. 583–6) makes it tempting to construct theoretical models into which the few available data might be inserted. And as P. Rehak aptly complains: "There is an unfortunate tendency in much recent work on interconnections to transform hypothesis into established fact."[28]

While for the Roman world attempts at developing economic models can be based on at least some written sources about population numbers, taxes, rents, state budgets and so on, no such knowledge is preserved for the Aegean Bronze Age. This means that cliometric approaches, as they have been proposed for the Roman world, are not applicable to the Bronze Age.[29] As in the case of the classical Greek and Roman world, a discussion of the importance of trade in the Bronze Age has to start from the available written sources, since they alone can provide us with explicit information about economic structures. The archaeological evidence has to be checked to see if it confirms or contradicts the written testimony. Only if the latter is the case, would developing a model based on archaeological findings be justified.

For the Late Bronze Age, written testimonia from the Near East, Anatolia and the Aegean world point to a palace- and elite-directed trade and redistribution of imported goods without any demonstrable exception, whereas opposite interpretations based on the archaeological evidence remain highly hypothetical. Mycenaean vessels found in Egyptian workers' settlements, for example, are not necessarily evidence for independent trade, since they may very well have arrived there through the distributive system of the palace. In general, Aegean objects in Egypt do not attest to trade on a regular basis, not even direct trade between these two geographical areas. Egyptian tomb-paintings show merchant ships from Syria, but no ships from the Aegean.[30] The fact that a far higher concentration of Cypriote and Mycenaean pottery and their imitations has been discovered in those Canaanite towns which functioned as administrative centers under Egyptian control, particularly in those of Southern Palestine (Asdod, Askalon, Gaza etc.), than has been found at relatively independent places of the region, like Jericho,[31] also might indicate distribution by state authorities.

In Hittite documents trade and merchants play a marginal role, and in the Linear B texts of the Mycenaean world a large number of craftsmen, workers, and administrative staff as well as foreign goods are mentioned, but not a single one of the texts has any words for "trader," "buy" or "sell," nor do they have any term for "money" in the sense of a standard medium of exchange, as it is represented by the silver shekel in the Near East and without which "trade" seems hardly possible. Thus, the evidence supports the conclusion that the goods accumulated within the Mycenaean palace administration were not traded within the realm of Mycenaean

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it was "more likely that middlemen (that is, professional shippers and traders) did the trading, on a commercial and/or a commission basis," and only "in addition to their cargoes, they could naturally carry diplomatic embassies, consignments of gifts." "State and privately owned ships could co-exist," but "local and regional Aegean trade was quite likely different from long-distance trade.… Commercial trade could be unnecessary in the local and regional scene." Here "reciprocity/gift exchange" was prevalent.

[26] Cf. Sherratt and Sherratt 1991, esp. 376 for market economy in the formal sense, but see Sherratt and Sherratt 1998, 341–2, stressing the importance of palace-directed trade, cf. Bass 1997; E.S. Sherratt (1999) now distinguishes between palace-directed exchange "of high prime or convertible value" and "the exchange of goods such as pottery. … which was aimed at an increasingly mass market" and "better facilitated by unofficial, undocumented, entrepreneurial 'grass-roots' trade" (p. 179).

[27] Hänsel 1995, 2003; Heese 1995; Köhler 1985. Cf. Harding 2000, 185–96.

[28] Rehak 1997, 401.

[29] Finley 1973; cf. the recent criticism by Mattingly 1997. For a recent cliometric approach to the Roman world see Hopkins 1995–6.

[30] Gillis 1995, 68–9; Merrillees 1998, 153–4; Bass 1998, 186.

[31] Buchholz 1999, 447.

states but redistributed as remunerations or gifts, and that even small retail trade was therefore excluded, whereas long-distance trade with the Eastern Mediterranean was organized through gift exchange and/or traders from Cyprus and the Levant.[32] Large Mycenaean stirrup-jars, which evidently served as containers and were transported from Crete to the Greek mainland, were inscribed with the word *wa-na-ka-te-ro*, "property of the ruler," and thus speak in favor of exchange directed from the palace. The only document that explicitly attests long-distance exchange of goods is a clay tablet from the House of Shields at Mycenae. It assigns folded garments for transport to Boeotian Thebes.[33]

One might argue that the available written sources are essentially limited to palatial documents, in the Aegean entirely so. However, private archives in the Near East, for example from Ugarit, do not contradict the picture conveyed by the palace archives. The few documents that have been adduced as evidence for private, independent traders, are by no means clear in this respect and may very well be interpreted differently. In sum, with regard to the Late Bronze Age, the time for which Korfmann postulates a trading center at Troy VI, the sources point to a clear preponderance of palace-centered, "passive" trade that aimed at supplying the palace-states and their elites with raw materials and prestige goods. In such a system, merchants are commissioned with exchange of goods as needed, and this means only occasionally; although the merchants may have carried on some private trading, this state of affairs is not a favorable precondition for market-oriented and extensive trade.

Still other factors hampered trade in the Bronze Age World. This world was composed of agrarian societies that tended to be self-sufficient. This sets strict a priori limits to commercial activities. Accordingly, there existed only rudiments of a money economy. While the interpretation of a few finds of miniature copper ingots in the Aegean world as something like a standard for exchange does not carry conviction, in the Near East silver is clearly used in this way, but its high value is not suitable for minor transactions.[34] It is therefore not surprising that within the Late Bronze Age palace states we have hardly any evidence for local trade and market places, even in the Near East. Furthermore, local imitations of coveted goods often tended largely to replace the original imports, as is particularly obvious in the case of Mycenaean and other pottery, but it also applies to metal objects.[35] This necessarily reduced the volume of long-distance trade, as did insufficient maintenance of roads, which were also notoriously threatened by robbers who ambushed donkey caravans.[36]

Sea commerce was doubtlessly more important, but its risks were also great because of pirates and the state of seafaring, which did not come into being in any amount worth mentioning before the 15th century;[37] its volume also appears to have differed regionally. While rather large, bulky sailing ships plied between Syria/Palestine and Egypt, smaller galleys of 10–15 m length, equipped with about twenty rowers, seem to have been the usual carriers in the Aegean, being equally suited for commerce and as warships. They used a sail too, but they were mainly driven by oars.[38] This difference in seafaring may have had various reasons: wind and sea currents in the Levant enabled ships equipped with a fixed square sail to use sailing only, but in the Aegean this was impossible. Furthermore, in the Levant and on Cyprus artificial harbors with moles and quays enabled larger ships to moor, while in the Aegean and on the coasts of Asia Minor, Bronze Age harbors of that kind have not yet been found. Here, the keelless boats were pulled ashore on beaches.[39] This difference in seafaring is also indicated by the relative difference in size and quantity of stone anchors. Compared

[32] For the Hittite world see now Bryce 2002, 87–97. For the Mycenaean world see Palaima 1991; Halstead 1992; Panagl 1995; Gillis 1995, 65–86; Shelmerdine 1997, 1998; Haskell 1999; Voutsaki and Killen 2001 (in particular the contribution of Voutsakis on p. 195–213).

[33] Tablet X 508; cf. Killen 1985, 268–9; Wachsmann 1997, 154; Shelmerdine 1998, 293.

[34] For silver see now Postgate 2003.

[35] Buchholz 1999, 466 shows a casting mold for an Italian axe-type, found at Mycenae. For further examples see Rehak 1997, 401.

[36] Faist 2001a, 197–9; Bryce 2002, 88–90.

[37] Buchholz 1999, 105.

[38] Höckmann 1985, 44; Artzy 1985; Sherratt and Sherratt 1991, 357–8, 364; Wachsmann 1997, with some questionable arguments for a Late Bronze Age *pentekonteros* (123–68).

[39] Schäfer 1992, 346–7. For the construction of the Uluburun ship see Pulak 1998, 210–11; 1999, especially 225: the ship had a kind of keel, "which amidships protruded into the hull rather than outward." The existence of man-made Bronze Age harbors has been postulated for Liman Tepe near Izmir (Erkanal 1998, 77), but without clear evidence for dating, and for Pylos (Zangger et al. 1997, especially 617–623), where not only the dating but also the assumption of a harbor seems strongly hypothetical.

with the "massive sizes and quantities of these artifacts recovered in the east Mediterranean,"[40] only a few specimens of no great size have been discovered in the Aegean. Most of the stone anchors were found on Crete, in particular at Kommos,[41] but the latter, according to H. Frost, "qualify as fishermen's weights" because of their small size.[42]

These different conditions for seafaring are evidently reflected in the differing volumes of (long-distance) trade, and are also indicated by the fact that many more large Canaanite jars and transport pithoi have been found in the Levant than in the Aegean. Though some jars of Canaanite type were transported into the Aegean or even produced there and although large coarse-ware stirrup-jars of the 13th century document a certain growth in the capacity of transport vessels, the evidence for production and use of such vessels is incomparably higher in the East. In the Aegean world of the Late Bronze Age a "standardized local equivalent of comparable ubiquity, size or function," to the Canaanite jars, did not develop.[43]

Thus, everything points to a substantially larger volume of exchange of goods—which, for convenience, will be subsumed under the term "trade" in this article—in the Levant than in Anatolia and the Aegean. The much greater prominence of trade and traders in the written sources of the Near East in comparison with Hittite documents, not to speak of Mycenaean ones; the considerably higher agrarian production and, consequently, larger population numbers; and the much higher degree of urbanization all supports and confirms the impression evoked by the statistics on archaeological finds, especially transport vessels and stone anchors.

THE VOLUME OF BRONZE AGE TRADE IN THE AEGEAN WORLD

For our purpose, trade relations of the Aegean with other regions and the position of Troy in this context are of special interest. In an Egyptian written document, a travel route lists localities on Crete and the Peloponnese. Gift bearers in South Aegean outfits are represented on Egyptian wall paintings, but as we have seen (above p. 589–90), trade relations between the Aegean and Egypt seem to have been fairly sporadic.[44] Archaeological evidence for contacts between the Aegean and the Levant is much better. However the loss of perishable goods and of metal wares that could be melted down for reuse creates a major difficulty in estimating the volume of this trade. Written and pictorial evidence, as well as chemical analyses on containers and occasional finds of vessels with preserved remains of their contents, make it clear that spices, perfumes, first class wines, olive oil, resin, and apparently opium formed a considerable portion of traded goods. Furthermore, trade in textiles and slaves is also attested, but metal seems to have been the most important trade commodity. Pottery sherds, of course, are best preserved and our safest indicators for the intensity of trade relations in general,[45] followed by finished products made of metal, glass, ivory, (precious) stones, and so on.

Recent statistical compilations have registered about 1000 objects imported from the east and—to a much lesser degree—from the west into the Aegean between about 1700 and 1100 B.C.[46] More than one third of them are pottery sherds or vessels. Schematically distributed, this amounts to only one and a half objects a year, but the large majority of these imports belong to the 14th and 13th centuries—clear evidence for the growth of sea trade during the second half of the Late Bronze Age. Moreover, there can be little doubt that these objects, which were mostly found during excavations, constitute only the famous tip of the iceberg. There must have been many more imports into the Aegean, since the number of recorded specimens of so-called Mycenaean pottery—about 2500 at almost 200 sites in the Levant, and an even larger number on Cyprus —far exceeds the number of Eastern imports found in the Aegean.[47] Although it is not yet clear, how much of this Mycenaean style pottery consists of local imitations,[48] the percentage of true imports seems to be high.[49]

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[40] Sherratt and Sherratt 1991, 364–5; Frost 1991, 369–71.

[41] Watrous 1992; Bass (1998, 189) stresses the difference between Eastern Mediterranean and Aegean stone anchors.

[42] Frost 1991, 370.

[43] Sherratt and Sherratt 1991, 364. For Aegean imitations of Canaanite jars at Kommos see Rehak 1997, 401.

[44] Edel 1966; Helck 1979, 26; Cline 1994, 112 A. 24; 115 A.34, where the identification of *Wirios* with *Ilios*/Troy is certainly wrong, since *Wirios* is clearly situated on the Peloponnese or on Crete. Haider 1997, 112–3; Rehak 1998. For a skeptical view of the historical background of this list as a travel route see Merrillees 1998, 150.

[45] Buchholz 1999, 386; Sherratt 1999.

[46] Cline 1994, 1995, 1999; Dirlmeier-Kilian 2000.

[47] Gillis 1995, 69; Killebrew 1998. See also the contributions in Cline and Harris-Cline 1998.

[48] Catling 1991, 5; Leonard 1994; 1998, 100.

[49] At Hala Sultan Tekke on Cyprus over 4300 pieces of imported Late Helladic and Late Minoan III A–B pottery are said to have been found: Sherratt 1999, 169–70.

This startling inconsistency of exchange between the Aegean and the Eastern Mediterranean may, however, be only an apparent one. The comparison of imports is not only a question of quantities, but also of value, and Mycenaean vessels with or without contents (perfumes, oil, etc.) may not have been equivalent in value to ivory, tin, bronze, etc., shipped from the East into the Aegean. In addition, the metal objects in particular were mostly melted down in later epochs and are therefore lost from the record.

In any case, the discovery of hundreds of such goods in two shipwrecks off the south coast of Turkey proves that the volume of trade was considerably larger than that indicated by those 1000 objects found in the Aegean world. Their cargoes offer valuable insights into the volume, composition, and character of sea trade in the 14th and 13th centuries B.C. The larger of them (ca. 15 m long), found at Cape Uluburun off the coast of central Lycia, had suffered its fate during an east–west trip about 1300 B.C.[50] Its rich cargo includes, among other objects, about 400 copper ingots with a total weight of approximately 10 tons, roughly one ton of tin ingots, almost 200 glass ingots, several bronze tools and weapons, ivory and ebony, ostrich eggshells, jewelry and other precious metal objects, a ceremonial stone axe of possibly Balkan provenance, various Near Eastern and Mycenaean seals, two wooden writing diptychs, about 150 weights of predominantly Near Eastern standards, particularly of the Ugaritic/Syrian shekel standard, and a large amount of pottery including Mycenaean style and Cypriote white slip table-ware and about 150 Canaanite transport vessels many of which contained resin and fruits of *Pistacia atlantica*. In regard to quantity, quality, and composition this multicultural cargo strikingly recalls the above-mentioned lists of gifts exchanged between the courts of Near Eastern rulers, but it also reflects the variety of objects found in the Aegean, and it seems therefore to be a plausible suggestion that at least a great part of this cargo was destined for a ruler of the Aegean world.[51] The metal would have sufficed to equip a Mycenaean army.[52]

The ship wrecked around 1200 B.C. at Cape Gelidonya at the Western entrance of the Pamphylian gulf, was smaller and carried a much poorer cargo of predominantly Cypriote and Syro-Palestinian provenance,[53] about one ton of copper ingots, some bronze scrap-metal, and small quantities of tin and lead. Several hammers and stone anvils are of special interest. They may point to the presence of a bronze smith on board who, on request of customers, would have manufactured metal objects. Lead weights, the various standards of which have equivalents in the Levant and Egypt, and on Cyprus and Crete, suggest that the ship had more than one destination, that is, it practiced tramping and retail trade. Tramping does not necessarily mean that such trade was not directional.[54] The crew of this ship may very well have known its potential or guaranteed customers; it may have traveled largely on firm commissions, finding occasional buyers at the same ports. Also, it seems by no means certain that its owner was an independent, private merchant who practiced freelance commercial trade.[55] The ship may just as well have traveled in the service of a palace administration, charged with providing certain goods from the Aegean. In any case the data contributed by these two shipwrecks does not contradict our knowledge of the *structure* of Bronze Age trade provided by the written sources.

Whereas these two shipwrecks create the impression that metal trade was of paramount importance, a third wreck, discovered at Point Iria in the Argolic Gulf and recently explored, is characterized by the complete absence of metal objects. It is roughly contemporary with the Cape Gelidonya ship and may have been of about the same size. The makeup of its cargo consisted mainly of large transport vessels, in particular Cypriote pithoi that probably contained food or fruit and may point to Cyprus as the starting point of its voyage. The presence of Cretan stirrup jars with oil and some Mycenaean two-handled jars may suggest that it had unloaded copper ingots at some Cretan or Mycenaean harbor besides taking up new loads there, but the fact that it continued its voyage to other ports without metal wares indicates that other trade goods were important enough to make a sea voyage profitable. Furthermore, in contrast to the ships of Uluburun and Gelidonya, the Iria ship did not contain any objects coming from civilizations outside the Cypro-Mycenaean world. This, of course, does not exclude the possibility of its trading in the service of some central authority.[56]

Those ships obviously followed the usual sea routes, which can be reconstructed from Near East-

[50] Bass, 1991; Pulak 1988, 1995, 1998, 2000.

[51] Bass 1991, 76; Pulak 1997, 256; 1998, 215–20; 2000; Hänsel 2003, 117–8.

[52] Snodgrass 1991, 18.

[53] Bass 1967; 1991, 69–74.

[54] Cf. Cline 1994, 86.

[55] Cf. Bass 1997.

[56] Vichos and Lolos 1997; Phelps et al. 1999.

ern documents and concentrations of archaeological finds. They led from Egypt to Palestine, Syria and Cyprus, along the south coast of Asia Minor towards Rhodes and Crete, and also from Egypt along the Libyan coast to Crete. From this island ships went to mainland Greece, in particular to the Peloponnese, and from there and from Crete towards the Western Mediterranean where they carried their goods to Sicily, Italy, Sardinia, and sometimes even to the Iberian peninsula.[57]

At first glance this looks impressive, but in spite of the evidence noted above, one has to remain aware of the limited overall volume of this sea traffic and of Late Bronze Age trade in general. The quantities of transported wares, which thin out from east to west, diminish markedly in the Aegean where only a few hundred specimens of imported pottery have been found up to now, and do not compare with those of Classical Antiquity, even if one excludes from the record Monte Testaccio at Rome or the huge amounts of fine table-ware traded within the confines of the Roman empire.[58] The large quantities of Attic fifth- and fourth-century pottery spread across the whole Mediterranean and Black Sea area sufficiently demonstrate the difference. For example, about 700 sherds of Attic fifth- and fourth-century pottery collected from the surface and a very limited excavation area in a dynastic settlement of central Lycia situated on the hill Avşar Tepesi amounted to almost five percent of the total amount of pottery found there.[59] This is about twice as much as the total amount of imported pottery found in the entire Late Bronze Age Aegean during numerous excavations, many of them conducted year after year. By contrast, almost no imported pottery of the Late Bronze Age has been found in the whole of Lycia until now, although the two Bronze Age shipwrecks discussed above were discovered off its coast. The coastal population of Bronze Age Lycia hardly seems to have been involved in trade at all.[60] All this has to be seen in the light of a Late Bronze Age pottery production that comprised not only transport vessels but also highly diagnostic fine tableware which was traded in its own right and made primarily for export.[61] The small quantities that have been found of this relatively important and imperishable merchandise, clearly indicate the low bulk of Late Bronze Age trade.

Finally, the statistics of shipwrecks found in the Aegean and Eastern Mediterranean support this statement. While the number of shipwrecks from the Bronze Age is minimal (less than a dozen in the whole Mediterranean!), the number starts to increase for seventh/sixth century B.C. ships and reaches a peak for Hellenistic and Roman period vessels. The 210 shipwrecks from antiquity found in the Eastern Mediterranean until about 1990 A.D. (63 of them off Turkish coasts) ensure a statistically representative basis (especially since their dating by pottery is valid for the whole of antiquity). Since the basic conditions of seafaring (i.e., winds, preference for coastal traffic, etc.) have remained the same throughout antiquity while the seaworthiness of ships doubtlessly increased over time, the chances of a shipwreck in the Late Bronze Age were greater and should therefore influence the statistics in favor of Bronze Age trade.[62]

As evidence for large bulk trade, scholars sometimes refer to the up to 100 ships which are attested to have carried a total of about 500 tons of grain from North Syrian Ugarit to Cilicia towards the end of the 13th century B.C.,[63] but this happened on the order of the Hittite king during a serious famine in the Hittite empire and has nothing to do with normal trade. For information on the bulk of overland trade we have only the clay tablets of the Assyrian trading station *(karum)* at Kültepe-Kanis in Eastern Anatolia, but they date from the Middle Bronze Age (19th–18th centuries B.C.). Estimates based on these tablets reckon that a total of 160 tons of tin were transported by donkey caravans from Assur to Kültepe-Kanis within roughly 100 years and about 100,000 textiles were transported within

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[57] Cline 1994, 91–94; Warren 1995; Gillis 1995; Lo Sciavo 1999.

[58] Greene 1986.

[59] Thomsen 2002, 7–8, 399–400. Precise statistics will be offered in the final publication of this pottery.

[60] Mellink 1995 thinks that the find situation is due to a lack of serious search for prehistoric remains in coastal Lycia. However, there is hardly another region in Asia Minor where archaeological research has been more intensive, and though pottery of the fifth to third as well as of the early first millennium B.C. has been found, there is very little diagnostic imported pottery of the second millennium. Cf. Tietz 2002, 29–31. Who would overlook Mycenaean or Cypriote pottery sherds? A specialist for pottery of the second millennium did not find a single sherd belonging to that period during a two week intensive search in our survey area in the hinterland of Kaş. For pottery of the Chalcolithic and Early Bronze Age found in this region, see Thomsen 2002, 5–6.

[61] Sherratt and Sherratt 1991, 362.

[62] Parker 1992; Horden and Purcell 2000, 371–2.

[63] Knapp and Cherry 1994, 128.

50 years. These goods were distributed from Kültepe-Kanis to the numerous Assyrian trading stations in east and central Anatolia where they were exchanged, mainly for silver.[64] This kind of trade seemingly constituted one of the most important overland transactions of the time. But examined more closely, it amounts to just 1.6 tons of tin and 2000 textiles a year, and this for the whole of central and east Anatolia up to the Halys River.

For the Late Bronze Age, copper from Cyprus is often regarded as a bulk commodity of trade, and it may have been relatively important, as the two shipwrecks off the Turkish coast apparently attest. From the quantity of slag resulting from ancient mining activities on Cyprus an estimated production of about 200,000 tons of copper within 3500 years has been inferred.[65] This would amount to 170 kg a day—but not necessarily for the Bronze Age. It is hardly possible to separate Bronze Age slags from those of the Greek, Roman, and Byzantine periods, and it is likely that the major part of this mining was done after the Bronze Age.[66] In addition, chemical analyses have shown that not all of the copper ingots found in the Mediterranean were produced on Cyprus. Recent data speak in favor of a Cypriote provenance only in regard to the so-called oxhide ingots, and the copper of most of the ones that are later than about 1250 B.C. may have been extracted from a single mining area.[67] This does not suggest a very voluminous production, and it means that although Cypriote copper was imported into the Aegean, neither the volume of this trade nor perhaps its value should be overestimated. Recent analysis of the ingots found on the shipwreck of Uluburun concluded that their quality was "low."[68] Furthermore, it appears that Cypriote copper did not become important before about 1300 B.C., since almost all oxhide ingots have been found in 13th or 12th century contexts.[69] This implies that Troy VI, which ended around 1300 B.C., could hardly have profited from this growing copper trade.

The low volume of Bronze Age trade, compared with that of later times, does not mean that trade was not important for the development of Bronze Age civilization. The Sherratts are certainly right in underlining the importance of conspicuous consumption by elites as a social and qualitative incentive for "local production and the extraction of surplus, in order to provide goods for exchange," but they also rightly admit that "the quantities of goods moved over long distances was undoubtedly small in relation to total production."[70]

COULD TROY VI BE A TRADE CENTER AND COMMERCIAL CITY?

Turning back to the problem of Troy VI, it has to be emphasized that a commercial city or trade center is by definition a place whose economic life is dominated by (long-distance) trade, and to become such a place the conditions favorable to attracting a large volume of trade have to be present. As B. Hänsel has rightly stated,[71] terminological clarity and precise definitions are important for a proper understanding and description of prehistoric phenomena. Applying the terms "commercial city," "commercial town," or "trade center" to a settlement merely because some imported objects are found there, serves to obscure rather than elucidate historical differences and developments. The fact is that commercial cities or towns in the proper sense are rather poorly represented even in those times of antiquity of which we have much more precise knowledge than of the Bronze Age. In the Roman Empire, where conditions for trade were incomparably more favorable than ever before, and consequently an enormous quantitative rise in the exchange of goods can be observed, the large majority of towns and cities lived on the agricultural produce of their territories, while a not negligible percentage had a "mixed" economy based on agriculture, handicraft, and trade. But among the thousands of communities within the Roman empire, only a small number deserve to be called a commercial city or trading center.[72]

In the Bronze Age, with its much lower volume of trade, only very few commercial cities or towns can have existed, and these only in regions where the most important routes of long-distance trade intersected, and agrarian production, population num-

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[64] Larsen 1976; Wiener 1991, 328; Dercksen 1996; Kuhrt 1998. The total *attested* amount of tin does not exceed 40 tons moved over five generations (Veenhof 1988).

[65] Buchholz 1999, 203.

[66] Buchholz 1988, 198; Koucky 1982; Zwicker 1982; Gale et al. 1997.

[67] Hauptmann et al. (2002, 18) doubt this.

[68] Hauptmann et al. 2002,19.

[69] Muhly et al. 1988; Catling 1991, 9; Cline 1994, 63; Budd et al. 1995, 1996; Pulak 1998, 197–8; Gale et al. 1997; Gale and Stos-Gale 1999; Stos-Gale 2001.

[70] Sherratt and Sherratt 1991, 304.

[71] "Selbstverständlich brauchen wir begriffliche Klarheit und Definitionen, wenn wir die Verhältnisse in der Prähistorie richtig beschreiben wollen (Hänsel 1995, 12)."

[72] Kolb 1984, 238–254.

bers, and urbanization (with its complex social and economic organization) were at their highest. During the Late Bronze Age such conditions seem to have prevailed on the Syro-Palestinian coast and in its hinterland.[73] There, the overland routes from Mesopotamia, Anatolia, the Caucasus region, and Egypt joined the sea routes of the Eastern Mediterranean. Trade centers and ports of transshipment existed which had the chance to become commercial cities, as the case of North Syrian Ugarit may demonstrate (see below p. 596–7).

Neither Anatolia nor the Aegean region offered similar opportunities, and, in fact, no commercial city has up to now been identified in these regions. Even the Hittite capital, Hattuša, evidently was a political and cult center but by no means a trade center.[74] The palatial settlements of Knossos, Mycenae, Pylos, Thebes, and so on were political and economic centers, but not trade centers or commercial towns. Perhaps the Cretan harbor of Kommos, which seems to have been a port of transshipment, might deserve such a qualification, but an insufficient knowledge of this settlement does not yet allow a definite judgment.[75]

Does Troy, which was situated off the great trade routes outlined above, fulfill the criteria for a commercial city, trade center, or turntable of trade? A look at the maps of trade routes presented by Korfmann to substantiate his views is enlightening. One map, admittedly conjectural, with the caption "The provenience of important raw materials and Troy's possible connections with Early Bronze Age neighbours as a working hypothesis,"[76] creates the impression that as early as the Early Bronze Age, Troy maintained direct trade relations as far as Afghanistan, the Persian Gulf, the Baltic region, Egypt, and the western Mediterranean. Another map bearing the caption "Trade routes of the 20–18th century B.C.," presented as offering documented data, is in fact a dubious hypothetical picture of the trade network of the Middle Bronze Age in which actual trade routes of that time, attested by written and archaeological evidence, have been arbitrarily extended and new ones added *ad libitum* in such a way that essential routes intersect at Troy,[77] thus giving the impression that Troy at that time was a hub for trade, a role which is supposed to have increased from the 17th century onwards.[78]

Figure 1 is designed to illustrate the relationship between attested trade routes and Korfmann's unfounded supplements. The old Assyrian trading colonies and the trade routes associated with them have been arbitrarily extended in time and space in the absence of any written or archaeological evidence. Although political contacts between the Hittite kings and states of western Asia Minor are clearly attested, no sources indicate the existence of trade and trade routes from the interior of the Hittite empire into western Asia Minor.[79] In the whole Aegean region only about a dozen objects from Hittite Anatolia have been found for the time from about 1700 to 1050 B.C., and not a single one, not even a Hittite pottery sherd, has been discovered at Troy. On the other hand, in the Hittite realm nothing at all from Troy has been found and only a few objects from the Aegean! At Hattuša, where excavations have been conducted almost without interruption during the past 80 years, not a single sherd of Trojan Grey Ware or Mycenaean pottery has come forth. A Mycenaean style belt and a sword of Mycenaean provenance[80] may indeed derive from booty taken in Hittite wars with Western Anatolian states, as the inscription on the sword implies, but these objects did not necessarily reach Hattuša directly and such isolated finds do not suffice to outweigh the evidence indicating that contact between the Mycenaean world and the Hittite sphere was of a rather indirect nature, going via Cyprus, Northern Syria, and Cilicia. Possible Hittite architectural influence on wall construction may have reached the citadels of the Greek mainland (e.g. Tiryns) via Miletus.[81] This picture is confirmed by Mycenaean Linear B tablets in which some ethnic names of communities of the southwestern coastal region of Asia Minor, such as Miletos, Halikarnassos, Knidos, etc., have apparently been preserved, but none from inner Anatolia nor, by the way, has that of Ilios/Troy been preserved, although this has been suggested.[82]

The very few Mycenaean-type objects found outside Hattuša in central and Eastern Anatolia consist

[73] Klengel 1979, 1990; Sherratt and Sherratt 1991, 355.
[74] Seeher 2002a, 2002b, 2002c.
[75] Knapp and Cherry 1994, 138–41; Shaw and Shaw 1995.
[76] Korfmann 2001a, 357 fig. 385.
[77] Korfmann 2001a, 356 fig. 383.
[78] Korfmann 1997b, 84–5; 2001a, 357.
[79] Cline 1994, 70.
[80] Cline 1994, 70–1.
[81] Cline 1994, 69; Niemeier 1998; Iakovides 1983. But see Küpper 1996, 118–9, 122.
[82] Cline 1994, 6; Shelmerdine 1998, 295; Parker 1999, esp. 495–6. Cf. Latacz 2001, 288.

of a few partly questionable sherds in the surroundings of Konya, in the bend of the Halys river, and in the region of Kayseri; they are regarded by Özgünel not as trade goods, but as presents made by Hittite merchants.[83] The only site to have Aegean type pottery in a quantity worth mentioning is the Hittite settlement at Maşat Höyük, "where one LH III A 2 fragment and six fragmentary LH III B (or III A 2–B) vessels have been found, … all but one … in a level dating to the 13th century B.C."[84] The distribution of these Mycenaean style objects—and of Cypriote pottery—speaks in favor of transport on overland routes starting from the Cilician harbors (especially Ura, see below) into the interior of the Hittite empire. The northernmost finds at Maşat do not prove Mycenaean Black Sea trade, as is sometimes suggested (see below p. 591–5), since this site is situated about 75 km as the crow flies from the Black Sea coast, fairly close to Hattuša.

If the state of Ahhijawa, mentioned several times in Hittite sources, is in fact identical with a Mycenaean state on the Greek mainland or the Aegean islands, the three objects, which Hittite texts describe as originating from there, would still not attest real trade. One of these objects is specified as a gift of the king of Ahhijawa, the other two are mentioned without further explanation.[85]

It is true that Hittite objects are also rare in the Levant and on Cyprus. Most of the gifts exchanged between the Hittite kings and Near Eastern rulers consisted of perishable and meltable material, furniture, horses, raw metal, and so on. On the other hand, objects from the Levant, Mesopotamia and Cyprus have been found at many sites in the Hittite realm, offering archaeological confirmation for the exchange of prestigious goods, as known from the written documents.[86] And whereas no Anatolian products are mentioned in Mycenaean texts, merchandise from the Levant, Cyprus, and Egypt seems well attested in the same documents.[87] Cilician harbors, like that of Ura, and the North Syrian vassal states of Emar, Karkemiš, and Ugarit were the ports of trade used by the Hittite empire.[88] Cyprus (Alašiya), too, apparently maintained close trade relations with Ura and Ugarit. Cypriote Enkomi may even have been a commercial town. There, at least, "hardly a house or tomb" has been found, "which is without Mycenaean pottery."[89] On the Levantine coast, Cypriote white slip pottery has been discovered in far greater quantities than Mycenaean style ceramics; the quantitative relation between them has been estimated at about 20:1.[90] So, Cyprus may have played a major role in trade between the Aegean, Anatolia, and the Levant.

Again, what was Troy's role in this system of exchange? As we have seen, Korfmann, who once regarded Troy VI "as a pirate fortress which exercised control over the straits,"[91] now attributes to the settlement on the hill of Hisarlık a central role in (Late) Bronze Age trade. He even regards the allies of the Trojans in the *Iliad* as trading partners in a kind of Hanseatic League and the Trojan War as a trade war. The historical Hanseatic League, which emerged in the course of the 13th and 14th centuries A.D. as a union of German cities with trade interests in northern, eastern, and western Europe, had the purpose of promoting the commercial interests of its members, and it did engage in wars in order to acquire or defend trading privileges,[92] but Homer certainly did not know about such a historical phenomenon. In the *Iliad*, Troy is not brought into connection with ships and trade, whereas the Achaean army receives supplies from the nearby island of Lesbos.[93] Homer does not even mention a genuine harbor; the ships of the Achaeans have been pulled onto the beach, as was done in Homer's day. The Trojans of the *Iliad* are neither mariners nor merchants but stock-farmers, herdsmen, and peasants; only a few basic crafts are mentioned: weaving, wood-cutting, pottery, and so on.[94] The allies of the Trojans are not traders either; they are non-Greek, "barbarian" peoples living close to the sea, that is within the horizon of the seafaring Greeks of Homer's time around 700 B.C. There is

[83] Özgünel 1996, 7–8; Mee 1998, 141; Cf. Cline 1994, 70–1.

[84] Cline 1994, 68. See also Todd 2001. The excavator himself believes they were transported on the land-route from Cilicia: Özgüç 1978–1982, 1:66, 2:102–3 (contra Mellink 1984, 445; 1985, 558). See also Schachner 1997, 224.

[85] Cline 1994, 122–4, C. 8 (?), 14, 16. Cf. 13.

[86] Cline 1994, 69.

[87] Knapp 1991, 42–7.

[88] Klengel 1990, 44; Knapp 1991, 45–7; French 1993, 157; Buchholz 1999, 34–5. For the Hittite harbor of Kinet Höyük in Cilicia see Greaves and Helwing 2001, 490–2.

[89] Buchholz 1999, 404.

[90] Buchholz 1999, 447. Cf. Knapp and Cherry 1994, 128–30; Artzy 2000. See also the contributions in Karageorghis 2001.

[91] Korfmann 1986, 13.

[92] Dollinger 1998.

[93] Hom. *Il.* 7, 467–75. The reference to Sidonians as producers and to Phoenicians as those who transported a silver jug to Greece does not concern Troy (*Il.* 23, 740–5).

[94] Mannsperger 2001, with reference to sources and scholarly literature.

no evidence that during the Late Bronze Age trade relations existed between them and Troy. By far the most important allies of the Trojans in the *Iliad* are the Lycians. The reason why Homer gives the Lycians this prominent role, cannot be discussed in this context, but quite certainly he did not think of them as the most important trading partners of the Trojans. In Lycia, finds of the Late Bronze Age are extremely rare, and there is not one single object that would indicate a connection with Troy.

The picture of Troy as the center of a network of trading settlements and of an organization operating along the lines of the Hanseatic League projects back into the Bronze Age a late mediaeval phenomenon based on totally different political and economic conditions, including extensive trade of essential goods for daily consumption and the existence of largely autonomous cities.[95] The theory that a Trojan War may have been caused by a hostile coalition determined to control access through the Dardanelles in order to enforce free trade between the Aegean and the Black Sea is not supported by the evidence but depends on an anachronistic scenario. Some scholars, however, do seem to believe in Bronze Age "trade wars." In the so-called Šaušgamuwa-treaty, transmitted in a letter of the Hittite king Tudhaliya IV to Šaušgamuwa, prince of the Syrian state Amurru in about 1250 B.C., the latter was prohibited from allowing Ahhijawa ships to enter into contact with the Assyrians, and this has been interpreted as an embargo lasting for 200 years. According to Cline, this would explain the paucity of objects exchanged between the Hittite empire and the Aegean world.[96] But this fragmentary text, in which the reading of a largely erased word as "Ahhijawa" has been called into question,[97] has recently been plausibly interpreted by B. Faist[98] as an attempt to prevent political contacts between Assyrians and Ahhijawa. Previous interpreters of this text have been misled by its reference to Levantine merchants. Yet, the possible Ahhijawa *passus* is separated from this reference by a passus in which the Hittite king calls upon the king of Amurru to get ready for war against the Assyrians. This is followed by the Ahhijawa passus in which merchants and trade do not appear. If the cancelled word was in fact Ahhijawa, this subsequent erasure may be due to changed political circumstances.

In any case, the Sausgamuwa letter does not contain evidence for trade wars in the Late Bronze Age. Near Eastern powers sometimes led wars for economic purposes, trying to control trade routes and ports of trade, as is evident for example in the case of successful Hittite military campaigns in Northern Syria which led to the establishment of client principalities, Ugarit among them. These were no trade wars. They aimed at securing access to important raw materials and precious objects, but not at protecting or fostering "national" trade or "free trade" for merchants of different states. Trade wars are a more recent phenomenon, arising from previously unknown volumes of trade and the development of "national" merchant fleets. With regard to Troy, not only is a trade war at the Dardanelles a highly improbable scenario; it is extremely doubtful that the settlement on the hill of Hisarlık might have been a commercial center, since, as we have seen, conditions and volume of Aegean Bronze Age trade did not favor such a development. Does the archaeological evidence on the hill of Hisarlık confirm or contradict this statement?

ARCHAEOLOGICAL EVIDENCE FOR (LATE) BRONZE AGE TRADE AT TROY

A survey of the objects found in the excavation levels of Troy VI on the hill of Hisarlık and in the 14th century cemetery at Beşik Bay southwest of Troy, which Korfmann regards as Troy's harbor, fails to support the hypothesis that Troy maintained strong contacts with other regions. The sources of information about the finds are incomplete and uneven; Blegen and his team were the only excavators who published detailed statistics on the finds. Dörpfeld presented a selective overview, more or less confined to the most important objects. The preliminary reports of the present excavation do not give any clear statistics of types and numbers of excavated objects.

Dörpfeld refers to the difficulty of distinguishing several classes of objects (metal, bone, stone etc.) of Troy VI from those of Troy VII,[99] though he sometimes tries to separate them chronologically. On the whole, his statistics are therefore neither specific for Troy VI nor does he differentiate between Troy VI Early, Middle, and Late. Furthermore, Dörpfeld emphasizes the general paucity

[95] Dollinger 1998.

[96] Cline 1994, 72.124, with discussion of different interpretations.

[97] *Keilschrifturkunden aus Boğazköy* 23:1; Beckman 1999, 103–107 no. 17, esp. §13; Steiner 1989.

[98] Faist 2001b, 213–25, especially 218–24.

[99] Dörpfeld 1902, 393–412, esp. 393–4. Cf. Blegen et al. 1958, 7 (with regard to Trojan Grey Ware).

of precious objects for that whole period. "In particular, larger and more precious metal implements are almost absent."[100] As possible or probable Troy VI objects, which appear worth mentioning in this context, he enumerates 1 double axe, 1 celt, 3 sickle-shaped knives, at least 3 bronze needles, 3 disks of embossed gold sheet, 2 bronze knives, 2 bone or ivory needles, 1 carnelian bead, 1 faience bead, a fragment of a faience bowl, an ivory comb, a cylindrical ivory object, a few bread-shaped objects of blue glass, some fragments of alabaster and marble vases.

Blegen's statistics are much more detailed:[101] for Troy VI he specifies 914 objects, pottery not included. Of these objects 81 belong to Troy VI Early, 85 to VI Middle, and 748 to VI Late. Blegen emphasizes that "the total number of miscellaneous objects from Troy VI (if beads are counted by strings rather than individually) is substantially greater than that from any one of the preceding settlements,"[102] and it is evident that Troy VI Late, the settlement that is particularly relevant in this context, stands forth conspicuously. Nevertheless, an analysis of Blegen´s statistics somewhat alters the general impression: about 400 of the finds from Troy VI are clay spindle whorls and loom weights, and 345 of them belong to Troy VI Late. When one compares the amounts of "precious" objects, differences are somewhat smaller. While ten metal objects have been registered for VI Early and Middle, VI Late comes up with 34. Of these many are tiny: Two of them consist of electron or gold, two of lead, 31 of bronze. None of these finds is really impressive, and there is no indication that they were imported as finished objects, whereas the raw material they were made of, at least copper and tin, as well as nine ivory objects and 157 beads of glass paste are indeed evidence of trade. Amber, which according to Korfmann was a trading good of the commercial city of Troy, has, in fact, not been found there.

The publications of the present excavation offer hardly any precise information on such finds and their dates. Possible imports of Troy VI Late recorded in the excavation reports include one or two necklaces made of glass beads as well as faience beads.[103] In the Troy exposition which toured Germany in 2001/2, 38 objects (beads and fragments of objects not counted individually) of Troy VI levels were shown, but without precise dating. Among them were six imports: a small altar of Cretan serpentine; a spindle and whorl of hippopotamus ivory (?); small decorated ivory plaques which were parts of intarsios; faience and glass beads; an ostrich egg; and fragments of Cypriote white slip pottery (about two dozen fragments).[104] It is not clear how many of these objects belong to Troy VI Late. Some of the Cypriote pottery, for example, may be Troy VIIa in date. This exhibit was garnished with many objects from the Balkan and the Caucasus regions which conveyed the misleading impression of otherwise unattested trade relations between Troy and these areas.[105]

The paucity of precious finds, in particular the lack of treasures, had led Dörpfeld to suggest that Troy VI might have been thoroughly plundered.[106] Yet, Troy VI does not consist of one single settlement but has at least eight levels, and the Troy VI Late period, which would be the most plausible candidate for such plundering, has produced the greatest density of finds. Furthermore, the small amount of imported pottery is most striking; plunderers surely did not carefully collect and remove fragments of broken pots. In addition, Blegen found only three stone weights of Troy VI—not really an indication of lively trade. Finally, Troy VIIa is even poorer in finds than Troy VI: Blegen counts only 196 objects, among them just seven made of metal. The few objects presented in the Troy exposition confirm this impression.[107] The famous treasures of Troy are confined to a period of about 300 years, essentially equivalent to Troy II. During that period there could well have been local production of jewelry and trade with such objects.[108]

To explain the paucity of finds in Troy VI levels, the present excavator argues that the right (meaning regal or aristocratic) graves have not yet been found.[109] Blegen discovered a cemetery about 500 m south of the citadel. It was largely destroyed, but enough was preserved to show that the grave offerings were not rich.[110] Assuming the existence of regal or aristocratic tombs not only presupposes a knowledge of the social structure

[100] Dörpfeld 1902, 402.
[101] Blegen et al. 1953, Part 1, 20–33.
[102] Blegen et al. 1953, Part 1, 21.
[103] Korfmann 1992a, 31; 1998b, 34; 2000, 28–9.
[104] Vetter and Büttner 2001, 170–4.
[105] Vetter and Büttner 2001, 166–7, 170–1.
[106] Dörpfeld 1902, 402.
[107] Blegen et al. 1958, Part 1, 13–9; Vetter and Büttner 2001, 175–6.
[108] For the gold of Troy II see Mannsperger 1992.
[109] Interview in: *Literaturen* 10, 2001, 22.
[110] Blegen et al. 1953, Part 1, 370–91.

of Troy VI for which we have no evidence; it also implies that a Trojan aristocracy on the one hand built an impressive citadel and large houses, and on the other hand invested its wealth in grave offerings rather than in representative decoration and furniture of those residences. The lack of frescoes and other luxury items in the Troy VI houses, even in those within the citadel, is striking when compared to 14th/13th century Mycenae, where most of the imported orientalia were not found in graves![111] In sum, there is no escape from the conclusion that in interpreting the settlement of Troy VI Late, one has to take into account the conspicuous lack of wealth and luxury; elite representation seems to have been confined to architecture of some size.

TROY VI AND THE BLACK SEA

What does the evidence surveyed above tell us about the trade connections of Troy VI Late as a supposed trade center and port of transshipment for trade between the Aegean and the Black Sea? Nothing at all; not one single object excavated on the hill of Hisarlık points to contacts between Troy and the Black Sea region. But what about a possible harbor settlement? During the Bronze Age, the hill of Hisarlık was situated close to an inlet oriented towards the north. Because of the strong northern winds which blow throughout most of the year, ships anchoring in this bay, however, would have enormous difficulties in sailing out again. Furthermore, at the time of Troy VI, "the sea in the Karamenderes delta plain was very shallow, and the land was covered by swamps …. The geographical environment [of Troy VI] has never been suitable for the establishment of an important harbour or city development based on harbour activity."[112]

The assumption that a shallow bay to the southwest of Troy, protected from northern winds by a promontory called Beşik Tepe, was Troy's harbor[113] is not supported by any evidence. Many Bronze Age stone anchors have been found at sites in the Mediterranean, but none at Beşik Bay (nor on the hill of Hisarlık).[114] A largely undisturbed cemetery of the Troy VI Late period, dated 1360 to 1320, has been discovered at Beşik Bay. It is worthwhile to quote M. Basedow's recent conclusions. She interprets this cemetery in the context of similar coastal cemeteries of Western Asia Minor, for example at the site of Panaztepe, and she stresses the Mycenaean influence on grave architecture, offerings, and ritual. She also writes:

> What we do not see in the coastal cemeteries [i.e., including the one at Beşik Bay] is any indication of the variety of grave types, many clearly identifiable as foreign, common in the cosmopolitan Bronze Age trade cities of the southern Levant. That is not what the coastal Anatolian cities were about. The local burial of actual resident Mycenaeans seems unlikely in this context.[115]

The cemetery at Beşik Bay did not necessarily belong to a harbor settlement, of which no trace has been found; it may very well have belonged to a settlement placed further inland. The graves, two of which are "freestanding stone structures in the form of houses,"[116] show social differentiation in architecture and grave offerings. The latter, taken as a whole, are somewhat richer than those in the cemetery at Hisarlık, probably because the cemetery at Beşik Bay was less disturbed.[117] Nevertheless, the number of precious objects is very limited: 3 very tiny gold objects, a bronze sword of possible Aegean provenance (Dini type), 41 other bronze objects (knives, tools, rings, needles, etc.), 208 carnelian beads, 65 glass beads, and 5 Mycenaean seals (or imitations of Mycenaean seals). The number of imported finished objects is small: the carnelian beads probably come from the Syrian/Palestine region, but carnelian was rather cheap. Three of the burial pithoi are *perhaps* imports.[118] Otherwise, imported pottery is rare. The considerable amount of Mycenaean style pottery—the percentage is higher than on the hill of Hisarlık—is, with one possible exception, entirely local production (see below p. 595–8). And since Mycenaean style seals were widely diffused in the Eastern Mediterranean and West Anatolia, their use was not necessarily limited to Mycenaean traders.

Is there anything from the Black Sea area? A pair of bronze anklets found in the Beşik Bay cemetery cannot be proved to be from Europe or the Caucasus region, as Basedow emphasizes.[119] Furthermore, she explicitly states that the Beşik Bay cemetery does

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[111] Cline 1995.

[112] Kayan et al. 2003, 379.

[113] Korfmann 1986.

[114] Stone anchors have often been found on land, in particular in sanctuaries, where they were deposited as votive offerings, cf. Frost 1991.

[115] Basedow 2002, 469.

[116] Basedow 2002, 473.

[117] Basedow 2000.

[118] Basedow 2000, 62–144.

[119] Basedow 2000, 125–6. For the Mycenaean style pottery see also Basedow 2002, 469.

not show verifiable connections with the Black Sea area,[120] and, not one single object identifiable as being of Trojan provenance has been found in the Black Sea region.

The probability that Troy might have served as a hub for trade between the Aegean and the Black Sea is a priori very slight, since there is no evidence for Bronze Age trade passing through the Dardanelles and the Bosporus. Distribution maps do indeed show that swords, double axes, and spear heads of Mycenaean type and so-called oxhide copper ingots have been found in the Balkan region and—less frequently—on the north coast of the Black Sea and in the Caucasus.[121] There is, however, no indication that such objects were transported by ship through the Dardanelles and the Bosporus; they may very well have been carried on overland routes. Moreover, many or even most of them are local products adapting Mycenaean motifs, as is evident in the case of the swords. Some may have reached these regions by gift exchange.[122] In turn, objects like the stone ceremonial axe head and a few other "northern" objects found in the Uluburun shipwreck[123] certainly reached the Aegean region by this type of exchange. The axe seems to have its best parallel in a bronze axe from Drajna (Romania).

In general, Mycenaean impact does not necessarily mean Mycenaean trade of those objects; it does mean cultural influence and presupposes contact, which was certainly connected with some exchange of goods. As for the Caucasus region, the Mycenaean-type swords discovered there seem to belong to the Early Mycenaean period, and not to the 15th–13th centuries that are of interest in this context. These swords may have reached that region by way of the well-known trade routes connecting the Caucasus with Mesopotamia and the Levant.[124]

The distribution maps for the Balkans show the greatest concentrations of finds in the Western and central Balkans, while find density decreases towards the coast of the Black Sea, "a fact that appears to argue against a Mycenaean penetration into the northern Balkans by means of ships sailing along the Black Sea coast."[125] This speaks in favor of trade routes along the Adriatic coast of Greece and the river valleys of Macedonia and Thrace. It is no accident that excavation reports describe discoveries of important Late Bronze Age settlements and trading posts on the coast of southwest Epirus and at Kastanas at the mouth of the Axios River in Macedonia.[126] From there, Aegean objects and cultural influence penetrated into the Balkan region and towards the Black Sea coast. It is also possible that ships landed on the west coast of Thracian Chersonnesos, where at Ainos, on the mouth of the Hebros River, vestiges of a Bronze Age settlement have been discovered,[127] whence merchandise could have been transported by mules or donkeys parallel to the west coast of the Marmara Sea and the Bosporus to the shore of the Black Sea. As the Sherratts point out,[128] it was often preferable to transport goods across an Isthmus instead of shipping them on a dangerous waterway. Such a solution would certainly have been time- and cost-saving in the case of Aegean–Black Sea traffic, compared with waiting weeks or even months for favorable winds at Beşik Bay, as Korfmann suggests in order to explain the profit which Troy might gain from supplying the ships' crews with food and so on.[129] Such a land route would also easily explain the discovery of some Cypriote pottery sherds at Istanbul and of a treasure of the 11th century B.C. containing metal objects of Mycenaean style and the corner piece of an oxhide ingot at Şarköy, on the northwest shore of the Marmara Sea.[130] In the present state of research, however, the striking density of *Early* Bronze Age sites along the west coast of the Sea of Marmara compared with an almost complete absence of *Late* Bronze Age pottery finds, may rather point to a shifting of the main trade routes towards the west.[131]

Aegean objects may, of course, have been traded by ship within Black Sea waters. Two copper ingots, one of them somewhat similar in shape to

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[120] Basedow 2000, 164.

[121] E.g. Hiller 1991, pl. LVIII; Wardle 1993, 118.

[122] Hänsel 1970, 1982; Harding 1984, 262; Buchholz 1999, 91–104; Panayotov 1980; Bouzek 1985, 30–239; 1994.

[123] Bass 1991; Pulak 1988, 1995, 1998. Cf. Bouzek 1985, 82.

[124] Klengel 1979, 1990.

[125] Pulak 1998, 219. Cf. Pulak 1997, 255.

[126] For find distributions see Bonev 1996, 325. For trading posts see Tartaron 2001; Hänsel 1979, 1989; Wardle 1993; Kopcke 1990, 69. On the way north, Lemnos probably played an important part not only in the Early Bronze Age, but also in later times.

[127] Casson 1926, 125, 174.

[128] Sherratt and Sherratt 1991, 358; Easton et al. 2002, 104.

[129] Korfmann 1986. Cf. Neumann 1991.

[130] Jablonka 2003, 92; Harmankaya 1995; Stos-Gale et al. 1997, 112.

[131] Özdogan 2003, 111 with fig. 1 on p. 110.

Mediterranean ones, have been found in Bulgaria.[132] These finds as well as stone anchors resembling those used in the Bronze Age Mediterranean and a few supposedly Mycenaean potsherds found at the Pontic Coast of Turkey, have been used as arguments for the existence of direct sea trade through the Dardanelles and the Bosporus. The potsherds, however, have been identified as Galatian.[133] The above mentioned copper ingots, one of which was found 30 km inland to the west of Burgas, the other underwater at Cape Kaliakra, may easily have got there by land transport, as in the case of fragments of oxhide ingots from Southern Germany.[134] The so-called oxhide shape with two or four handles, "probably evolved merely to facilitate loading of the ingots onto specially designed saddles or harnesses for ease of transport over long distances by pack animals."[135] In addition, one of those two ingots has been found in an area where pottery does not date before the seventh century B.C.[136] The other one is of miniature size, weighing just 1.6 kg, that means it is one of those copper ingots which are thought to have been used as "currency"; in any case, it could be easily transported on land routes and used for exchange. The oxhide ingot in the 11th century treasure found at Šarköy confirms that such objects may have been transported into the Black Sea area long after the breakdown of the Mycenaean world.

There remain the stone anchors, most of which were probably made of local stone and cannot, in any case, be dated precisely.[137] As in the case of the swords and other objects mentioned above, these may be local imitations of Mediterranean shapes, since Eastern Mediterranean anchors were certainly known to Balkan traders who were in contact with the Aegean World. Frost[138] considers the stone anchors found at the Bulgarian coast as being of "indigenous shapes" and indicating "a flourishing seatrade based on Thracian ships"; he emphasizes that the period to which they belong is uncertain. In fact, within the Eastern Mediterranean and the Aegean, it is unclear when different types of Bronze Age stone anchors went out of use. The so-called stone stock type of anchor does not seem to be securely attested before the seventh century B.C., and in the Western Mediterranean not before the sixth century B.C.[139] Thus, Bronze Age type anchors may very well have remained in use down to the Archaic Period.

In sum, at present, not one single object found in the Black Sea region can safely be considered to be the result of Bronze Age sea trade through the Dardanelles and the Bosporus. St. Hiller deplores the fact that, "unfortunately," potsherds found at the Pontic coast have not been confirmed as being Mycenaean.[140] In the light of the undeniable fact that tracing Mycenaean trade-routes—or rather, the distribution of traded Mycenaean objects—is inevitably connected with the presence of Mycenean pottery, it is indeed very unfortunate that until now not one single Mycenaean potsherd—not to mention Cypriote pottery—has been found on or near the shores of the entire Black Sea region or north of the Rhodope range that marks the border between modern Greece and Bulgaria. There could hardly be a better proof for the non-existence of Bronze Age sea trade between the Aegean and the Black Sea.[141]

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[132] Buchholz 1999, 89–90; Karaitov 1978. Excavations in the harbor area of Sozopol, where, according to the somewhat obscurely phrased reports, one of the ingots was found, have shown that there existed Eneolithic, Early Bronze Age and Iron Age settlements, but none of the Late Bronze Age: Draganov 1995, 233–9.

[133] Hiller 1991; Özgünel 1996, 8.

[134] Primas and Pernicka 1998.

[135] Pulak 1998, 193.

[136] Cf. Pulak 1998, 199; 1997, 255; Harding 1984, 45, 52, 261; Dimitrov 1978, 70, 73 (who also discusses the date of the pottery). According to Gale (1991, 200) and Mee (1998, 144) the larger ingot resembles Late Minoan IB ingots from Ayia Triada rather than Mycenaean or Eastern Mediterranean specimens. G.F. Bass (1998, 147) remarks that the smaller one is not an oxhide ingot.

[137] Dimitrov 1978, 77.

[138] Frost 1970, 1979; Lazarov's (1984) article lacks precision in respect to both typology and chronology.

[139] Mc Caslin 1980, esp. 47–52; Gianfrotta 1977. Some Bronze Age anchor types continued to be used even down to the Middle Ages: Phelps et al. 1999, 78.

[140] Hiller 1991, 208. Cf. 213–5. Some scholars believe in *some* trade between the Aegean and the Black Sea: besides Hiller, see e.g. Buchholz 1999, 89–90, 98; Camassa 1999 (highly speculative); Mee (1998, 144) is skeptical. Benzi (2002, 349) thinks that the evidence only hints "at sporadic and far between contacts and cannot substantiate the hypothesis that trading was so vital to the Mycenaeans as to compel them to attack Troy". Even Korfmann's assistant P. Jablonka (2003, 90–3) states that "finds which prove contacts between the Mediterranean and the Black Sea region are sparse".

[141] In spite of their apparent defense of Korfmann, the Sherratts (Easton et al. 2002, 104) admit that "it is not clear (at any stage in the Bronze Age) whether Aegean vessels passed along the Dardanelles and the Sea of Marmara into the Black Sea". This destroys the core of Korfmann's arguments, and one wonders why the Sherratts characterize Troy's "position in the trading networks of its day" as "pivotal" (ibid., 106).

Furthermore, the argument that the Bronze Age types of ships were hardly able to penetrate into the Black Sea has not been refuted.[142] Korfmann[143] argues that in more recent times ships are attested as waiting for favorable winds at Beşik Bay in order to pass the Dardanelles, and he concludes that this must have been the case in the Bronze Age too. This conclusion is doubly anachronistic: seafaring techniques of modern times were much more developed than in the Bronze Age, and geopolitical conditions were completely different since the capital of the Ottoman Empire was situated on the Bosporus. Similar arguments hold true for the archaic and later periods of classical antiquity when progress in shipbuilding and sailing techniques and new political and economic incentives resulting from Greek colonization on the shores of the Black Sea made the passage through the straits easier and economically remunerative. Though even then sailing ships met real difficulties in passing the Bosporus, as ancient sources confirm.[144] In the Bronze Age, the strong currents running north–south from the Black Sea through the Bosporus and Dardanelles, and the northern winds blowing almost continuously during the seafaring season (April–September), prevented sailing ships and the majority of oared boats then in use from passing the straits. Even the oared boats were barely able to reach 5 knots needed to overcome the current in the Bosporus; and in the Dardanelles very favorable conditions and at least 2–3 knots were needed for working up "under shelter from the prevailing wind and current"[145] to pass into the Propontis. This could only be managed by lighter craft, not by boats loaded with trade goods. The legend of the Argonauts—who make a stop at Lemnos and not at Beşik Bay—demonstrates that passing the straits was possible life-risking even for a light warrior craft and was valued as a heroic action and an exceptional adventure, not as an element of regular trade. There is a Greek literary tradition that the hospitable Black Sea, the *pontos euxeinos*, had in earlier times been called *axeinos*, that is, inhospitable.[146] In the Late Bronze Age it must have been more or less a *mare clausum* for Aegean navigators, and in Homer´s time it was associated with horrifying tales, which betray a considerable lack of knowledge about that region and do not attest any remembrance of intensive Mycenaean activities there.[147]

Only with the invention of the *pentekontoros*, the fifty-oared long boat, in the eighth century B.C., was it possible for warships to pass through the straits without major difficulties. Trade in the proper sense did not take place before the founding of Greek colonies in the Marmara and Black Sea region during the seventh and sixth centuries.[148] G.R. Tsetskhladze rightly criticizes historians and archeologists who "believe that the Greeks were interested primarily in obtaining raw materials" from the Black Sea area.[149] He considers trade "not as the reason for the establishment of colonies but as a consequence of colonisation, with agriculture and craft production giving rise to trade rather than the other way round."[150] This contrasts sharply with Korfmann's anachronistic statement that "similar to the time of hellenization of the Black Sea region with its various mother cities and colonies, there must have existed, during the 13th century B.C., a trading network based on contracts"[151] between the Aegean and the Black sea region. H.-G. Buchholz, declares such a comparison, "naive and methodically inadmissible."[152]

Troy's geographical position at the Dardanelles, which at that time were not yet conceived as separating Europe from Asia, did not by itself involve commercial functions of the settlements on the hill of Hisarlık, as is sufficiently documented by the unimpressive Troy III–V levels. Favorable geographical situations have to be activated by external factors, as numerous examples, such as Gibraltar, Rome and Alexandria, show. The rise of commercial functions requires a specific geopolitical incentive, which, in the case of the Dardanelles and the Bosporus, did not arise before the age of Greek colonization. Even then it was not the site of Ilion

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[142] Carpenter 1948; Contra Graham 1958, 26–31, but his arguments for sailing through the straits are deduced from the situation during the 5th/4th centuries B.C. and later.

[143] Korfmann 1986.

[144] Dionysius Byzantius, *Anaplus Bospori*, ed. by R. Güngerich, Berlin 1927, p. 21, 11 and 15–18 .Cf. Höckmann 1985, 57–9; Casson 1994, 41–6.

[145] Carpenter 1948, 2.

[146] Pind. *Pyth.* 4.203; Eur. *Andr.* 793; *Iph. Taur.* 253, 341.

[147] Hom. *Il.* 3.189; *Od.* 12.70 (Argonauts). For Homer's lack of knowledge see Strabo VII 298.Cf. the myths of the Amazons and Taurians in Hdt. 4.103, 9.27; Ehrhardt 1990. Evidence of knowledge of the Black Sea region in the poems of Homer and Hesiod listed by Drews (1976) does not presuppose sea passage through the straits.

[148] Lordkipanidze 1996, esp. 36–46; Tsetskhladze 1998.

[149] Tsetskhladze 1998, 9–10.

[150] Tsetskhladze 1998, 9–10.

[151] Korfmann 2001a, 360.

[152] Buchholz 1999, 90.

that assumed an important role in this commerce but Lemnos, Imbros, Sigeion and colonies on the Marmara Sea and the Bosporus. Nor is there Bronze Age evidence for an important east–west overland trade route crossing the Dardanelles, the control of which might have been essential for the development of Troy VI.[153] Contacts of the Troy VI culture with the Balkan region seem not to have extended beyond the Thracian Chersonnesos (now Gelibolu) directly opposite Hisarlık.[154] Furthermore, Troy, situated 30 km from the narrowest point of the Dardanelles, was hardly capable of exercising effective control of this transit way. Finally, traffic and trade between Asia Minor and the Balkans would probably have preferred a route across the Bosporus, where a possibly important prehistoric settlement is buried under the Serail. The apparent prominence of Troy on the west coast of Asia Minor and in the region of the straits may be due to the incomplete or uneven state of research caused by the attraction exerted by the *Iliad* on Schliemann, his predecessors, and those who followed him.[155]

TROY VI: A SITE ON THE PERIPHERY OF THE AEGEAN AND ANATOLIAN WORLD

The archaeological finds at Hisarlık and Beşik Bay offer evidence for only one trade route connecting Troy VI with the outer world—that across the Aegean Sea. The imported objects of Troy VI, as well as those of Troy VIIa, can easily be explained by assuming that Troy constituted the northernmost point of one or more branch lines that diverged from the main trade routes running east–west from the Levant to the Aegean and the Western Mediterranean. One branch line turned off towards the west coast of Asia Minor. It is rather improbable that larger ships involved in overseas trade between the Levant and the Aegean traveled into the North Aegean and came to anchor at Beşik Bay. One might rather think of intermediate trade carried out by agents in the service of Mycenaean principalities that, as has been suggested, may have controlled the Aegean islands and parts of the southwest coast of Asia Minor, as for example Miletus.[156] Find distributions of imported objects in the Aegean point to such directional exchange of goods: Larger quantities of imports were found only at the more important centers, Mycenae and the harbor site Tiryns, Knossos and other Cretan sites (Kommos, Zakro, etc.), and Ialysos on the island of Rhodes.[157] It has been suggested that some of the imported goods were distributed from these centers to minor sites in the surrounding areas.[158] According to recent investigations, the few imported Mycenaean-style potsherds found at Troy and in the Beşik Bay cemetery do not originate from the Peloponnese and Crete, where the Levantine ships came to anchor, but from regions closer to Troy: the southwest coast of Asia Minor, the islands opposite to Troy and the east coast of the Greek mainland.[159] The roughly two dozen specimens of 14th/13th century Cypriote pottery at Troy may also have been transmitted through such intermediate agents. The Base-ring II vessels might have contained opium, while the White Slip II bowls were probably used for drinking milk or wine, or for yogurt and feta. These few imported goods are of less significance than the rarity of imported large transport containers. A slide showing one Canaanite transport amphora, apparently not mentioned in the excavation reports, was presented during the Troy Conference at Tübingen in February 2002. This type of container, frequent in the Near East, has been found in some quantities on the Uluburun wreck, and about 100 of them have been discovered at sites on Crete (about 50 of these at Kommos) and on the Greek mainland (e.g. seven at Mycenae). One would expect to have a considerable number of them, and large coarse-ware Mycenaean stirrup-jars, at a hub for trade, since these were the types of containers used for perishable goods such as olive oil, wine, spices, resin, etc.[160] Even within the Aegean trade system Troy VI does not appear to have been a site of primary importance. For example, there seems to be no evidence that Troy VI took part in the weight system valid in the South Aegean,[161] and no "Trojan" Grey or Tan Ware has been found in the Aegean west of Kos and Rhodes. Basedow has drawn the reasonable

[153] This had already been suggested by Leaf 1912, 257–8, 262, 268–9. But see now Özdoğan 2003, 115.

[154] Mountjoy 1998; Hoddinott 1989, 65–6.

[155] For the east–west trade route see Leshtakov 1996, 254–5. For other prehistoric sites in the region see Kolb 2003a, 25–6 with note 69, and the recent research report by Greaves and Helwing 2001, 506.

[156] Niemeier 1998; Greaves 2002, esp. 57–73.

[157] Mee 1982, 81–92.

[158] Smith 1987, 61–2, 65–6, 133–4, 136, 138; Cline 1994, 86–7; Voutsaki 2001.

[159] Mommsen et al. 2001.

[160] Cf. Sherratt and Sherratt 1991, 364–5; Knapp 1991, 30.

[161] Lindsten 1943; Petruso 1978, 1992; Michailidou 1999; Alberti 1999.

conclusion that the finds in the Beşik Bay cemetery provide evidence of a regional connection with international trade.[162]

The evidence presented here has to be seen in the light of more than thirty excavation campaigns conducted on the hill of Hisarlık. No other prehistoric site in the Aegean world has been investigated more thoroughly than Troy. Consequently, the meager import and export statistics of this site do not support the claim that a trade center, a hub for trade, a commercial city, or even a commercial metropolis existed on the hill of Hisarlık, as Korfmann maintains. If Troy VI was known as Wilusa to the Hittites,[163] the latter were not aware of it as a trade center, since their trade routes were directed towards the east. While the state of Arzawa, which seems to have occupied the coastal strip between Izmir and Miletus, is mentioned in both Hittite and in Egyptian sources (its king receives gifts from Amenophis III during negotiations over an Arzawa bride for the pharaoh[164]), Wilusa is never attested outside an Anatolian context.[165]

In any case, there is no evidence that the settlement on the hill of Hisarlık, whatever its Bronze Age name may have been, maintained direct trade relations to distant areas. To the north, the Black Sea was a mare clausum, and the tribal societies of the Balkan region were obviously not oriented towards Asia Minor but towards the Aegean world.[166] Within the Aegean world, Troy VI is likely to have taken part in an exchange of goods that was conducted from one harbor to another and from one island to the next. Regional trade and gift exchange between Aegean rulers and aristocrats, rather than long-distance trade, offer the best explanation for the archaeological evidence on the hill of Hisarlık.

Troy seems to have been rather isolated in the northeastern corner of the Aegean Sea. As J.C. Wright states, "Troy is like settlements in Northern Greece, in Thessaly, Macedon and Thrace, poised on the periphery of the Aegean sphere of interaction."[167] Surprisingly, Korfmann himself remarks: "Significant is the almost complete absence of such findings and objects, pottery included, which might point to … relations of Troy with the Aegean and Greece, respectively. A view towards the north, towards Bulgaria, yields little comparable, as well."[168] This statement conflicts with his image of Troy VI as a hub for trade. It is difficult to harmonize an "international" trading center Troy VI with a purely Anatolian Troy VI, as Korfmann wants to have it.[169]

To conclude, given the evidence of trade goods, the claim that Troy VI was a commercial city is not even admissible as a hypothesis, an assumption that tries to explain factual evidence. Rich imports at Troy, considerable finds of goods from the Black Sea region, and so on, would justify the hypothesis that Troy functioned as a hub for trade. In reality, there is no evidence to support such a hypothesis. B. Hänsel refuses to talk of trade or commercial activities with regard to Bronze Age Troy and prefers to explain the few imported goods on the hill of Hisarlık as the result of exchange of gifts and precious objects.[170]

IS THERE OTHER EVIDENCE FOR TROY VI AS A COMMERCIAL CITY?

Architecture

Since Korfmann has admitted that trade goods are very rare at Troy, he now focuses on the impressive architecture of the acropolis, which, in his view, must have been financed with income from trade.[171] A fleeting glance at the many cities of antiquity whose splendid architecture was financed from agricultural income, suffices to refute this.[172] Furthermore, the settlement structure and architecture of Troy VI in no way indicates the existence of a large city with commercial functions. A comparison with North Syrian Ugarit may be helpful in demonstrating this.

The Late Bronze Age city of Ugarit[173] was divided into three parts. The central settlement, modern

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[162] Basedow 2000, 160. See Blegen et al. 1953, Part 1, 17–8. For "Trojan" pottery on Kos and Rhodes see Schachner 1997, 219.

[163] See for this hypothesis, presented as proven fact, Starke 1997. However, the question is still open: cf., e.g., Klengel 1999, 111; Heinhold-Krahmer 2003.

[164] Moran 1994, 31, 35; Knapp 1991, 30–1; Heinhold-Krahmer 1977, 50–5.

[165] For an erroneous identification of Trojan *Ilios* in an Egyptian text (see supra n. 44).

[166] See the literature quoted in supra n. 27.

[167] Wright 1998, 360; Cf. Hänsel 2003, 115–9.

[168] Korfmann 2001a, 397–9.

[169] Korfmann 2001a, 399. See the criticism of B. Kull (2002, 1182) with regard to Korfmann's "Anatolism" which she calls "politisch motiviert." Korfmann's characterization of the Trojan pottery as "Anatolische Grauware" is also criticized by Hänsel 2003, 116–7.

[170] Hänsel 2003, 118.

[171] Korfmann in *Literaturen* (2001) 10, 22.

[172] Kolb 1984.

[173] For Ugarit see Yon 1997; Yon et al. 1995; Heltzer 1978; Knapp and Cherry 1994, 135–7; Buchholz 1999, 130–66; Watson and Wyatt 1999; Kropp and Wagner 1999.

Ras Šamra, consisted of a large palace, covering an area of about 120 × 85 m, with about 90 rooms, among them administrative and economic complexes containing archives of writing tablets. Other public buildings in the city included four temples, a library, and a school for the education of scribes. Besides densely built-up living quarters with workshops and a public square, there was a residential quarter for the well-to-do with large, multi-storied houses, some of which had more than 30 rooms, private libraries, archives, sanitary installations and shared water supply. Written documents have been found in almost every house at Ugarit.[174] They include texts in seven different languages, the contexts of which are not only of private, diplomatic, legal, and administrative nature but also of literary (poetic, mythological, medical and religious) character. The cosmopolitan character of this city is illuminated both by these documents and also by the presence of numerous foreigners, some of whom were employees of the palace.

On an island immediately off the coast 4.5 km southwest of Ras Šamra, a settlement founded during the second half of the 14th century contains two palaces, an archive, other large buildings, paved streets, workshops for the manufacturing of metal and bone, and a bakery. This settlement was used for the palace administration during the political disturbances of the 13th century.[175]

Imported pottery has been found in almost all houses of both settlements, even modest ones.[176] This points to the significance of trade in the life of the city. Although the kingdom of Ugarit had its economic basis in its rich agricultural hinterland, it was trade that made the difference. It was responsible for the kingdom's important role in the Near Eastern economy and politics and it distinguished the economic and social life of its capital. A few kilometers from Ras Šamra a well-planned harbor settlement has been excavated. It was administered by a "supervisor of the harbor" and had large warehouses filled with huge storage jars and spacious residences of rich merchants. Considerable quantities of Cypriote and Mycenaean imported pottery have been found here, as well as metal objects, weights in different international standards (in particular Mesopotamian and Egyptian), stone anchors, etc. A large accumulation of murex shells confirms written documents that indicate that Ugarit was a center for the production of purple dye and textiles. Archaeological and written evidence attest dockyards, shipbuilding, metal working, pottery and bone tool manufacture, and numerous other trades and crafts.

This is what a commercial city, a trade center, and a hub for trade (or in this case a port of trade) under the political control of the Hittite empire looked like in the Late Bronze Age. In such a city a rich merchant such as Sinaranu could be active in trade with the island of Crete, at the same time own considerable landed property, and also enjoy exemption from all personal obligations in the service of the palace—except for his engagement in palace-directed commerce.[177]

Which of the above-mentioned characteristics of a commercial city do we find on the hill of Hisarlık? None at all.[178] Besides the almost complete lack of imported objects, the settlement structure and architecture have nothing in common with what one would expect to find in a commercial city. No large palace with dozens of rooms that could have housed archives, administrative and economic complexes can be imagined on the acropolis of Troy VI, as K. Bittel has already noted.[179] Although it is true that the center of the citadel was razed in Hellenistic times in order to construct the temple of Athena, it by no means could have offered enough space for a palace of Anatolian or Near Eastern style. The model of Troy VI shown in the 2001/02 Troy exhibition with the caption "Reconstruction of Troy VI: the citadel with its palace-houses and parts of the lower city," shows a large house on the highest point of the acropolis which is called a "palace."[180] That is to say, given the spatial limitations, it would not have been possible to reconstruct a true palace whose dimensions even remotely approximate those of known Anatolian and Near Eastern palaces. Furthermore, no public buildings, no residences of merchants with luxurious living rooms, no archives with writing tablets and no libraries have been found; and nor are there any warehouses, only pithoi sunk into the floor, serving for storage of privately owned agricultural supplies.

[174] Buchholz 1999, 516–7.
[175] Lagave and Lagave 1995.
[176] Buchholz 1999, 404.
[177] Schaeffer, et al. 1968, 16.238, 1–11; Heltzer 1988.
[178] See also Hänsel 2003, 115.
[179] Bittel 1976, 138.
[180] Korfmann 2001a, fig. 23.

Was Troy VI Late a Center for Craftsmanship and Market Activities?

There is no evidence that Troy VI was a production and market center. The thousands of spindle whorls found at Hisarlık are spread over one and a half thousand years, leaving a few hundred for about 400 years of Troy VI.[181] They might testify to textile production that went beyond local consumption, but it has rightly been pointed out that the locally produced pottery, which usually repeats decoration patterns of textiles, is conspicuously monotonous at Troy and therefore does not speak in favor of the manufacture of attractive, much sought after textiles.[182] Ten kilograms of murex shells found in the excavation area 170 m south of the citadel, have been interpreted as evidence for a textile industry of high quality.[183] Yet not only is the production of purple dye from murex attested for many sites in the Eastern Mediterranean from the Middle Bronze Age onwards,[184] but the quantity found at Troy would have sufficed to extract no more than a few grams of purple dye. Finally, those murex shells do not belong to the Troy VI Late period, but to the VI Early/Middle periods, and the same is true in the case of some vestiges of metal- and flint-working in the same excavation area.[185]

Bronze Age potteries have not yet been found on the hill of Hisarlık. The so-called Trojan Grey Ware and Tan Ware, whose distribution points to a "relative isolation" of Troy,[186] and the rather small quantities of local Mycenaean style ceramics[187] may have been produced somewhere in the vicinity. It is not necessary to postulate the presence of Mycenaean potters to explain the production of Mycenaean style ceramics.[188] Foreign demand for "Trojan" pottery seems to have been virtually non-existent. There are a few specimens of Grey Ware of possible Trojan provenance in settlements and graves of the Eastern Mediterranean, on Cyprus, at Ugarit, and at four more sites in the Levant, but they belong to the 13th–12th centuries, that is to Troy VIIa and b; they are so rare that according to H.-G. Buchholz they cannot be considered as evidence for trade. They do not consist of transport vessels but mostly of symposium tableware (often *krateres*) and may have been the private property of travelers, for example sailors, mercenaries, or sea people groups.[189]

In sum, as Basedow rightly states: "Tatsächlich ist es schwierig auszumachen, was die Troianer dem Fernhandel hätten bieten können, außer—möglicherweise nicht faßbaren—Gütern aus organischen Materialien."[190]

No Evidence for Writing at Troy VI

In a highly differentiated society with specialization or even division of labor, one would expect the use of writing. In the levels of Troy down to about 1100 B.C., however, not one written document has been found. In a stratum of Troy VIIb, a Hittite-Luwian bronze seal, once owned by a scribe and his wife, has been discovered.[191] But around 1100 B.C. Troy was an unimportant small settlement, inhabited by invaders from the Balkans who certainly did not have a palace administration or the art of writing. Similar Hittite or Luwian, as well as Near Eastern, seals have been discovered outside their proper functional context at various sites of the Aegean world, including the Peloponnese.[192] They may have got there as booty or gifts, collected for their metallic or artistic value, and so on. A single seal of this kind at Troy has no historical importance.

The really striking thing is the complete lack of other written documents. It is highly unlikely that the destruction of the alleged palace-building on top of the acropolis has not only annihilated the archives and but also destroyed all written documents. Numerous written documents have been retrieved from the surroundings of the wrecked palaces at Knossos and Pylos. Even at Thebes, where the Bronze Age palace has been destroyed by continuous ancient and modern settlement, important written documents have been found. In an important city,

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[181] Ballfanz 1995. Cf. Barber 1990, 54, 93, 103–4, 110, 118, 171–2, 174 note 12, 304, 306–8.

[182] Åström 1980. For decoration of pottery as deliberate echo of textile patterns see Barber 1990, 346–7; Sherratt 1999, 186–189.

[183] Korfmann 1997c, 59; 1998b, 4: "anspruchsvolle Textilindustrie".

[184] Knapp 1991, 43–4; Burke 1999.

[185] Korfmann 1994, 45; 1997c, 59–60; Vann and Hohlfelder 1998, 31; Buchholz 1999, 18; Blum 1998, 20–1. 8000 mussels were needed to produce one gram of purple dye.

[186] Åström 1980. Cf. Allen 1994, 25–6: "Direct contacts [i.e., between Troy and the Eastern Mediterranean] must have been quite limited." Schachner 1997, 225. For Trojan Grey Ware see now Bayne 2000.

[187] Mommsen et al. 2001; Schachner 1997, 217–8.

[188] So rightly Mee 1998, 144; Sherratt 1999, 168 with note 15; Schachner (1997, 217) points out that the local Mycenaean ceramic at Troy does not show the development of a particular style of painting, as it can be observed e.g. at Rhodes.

[189] Buchholz 1999, 429; Schachner 1997; Allen 1994; Åström 1980.

[190] Basedow 2000, 163.

[191] Korfmann 1996, 25–33; 1997b, 75–9.

[192] Cf. e.g., Erlenmeyer 1966, 47–57; 1996a, 118–20. Meriggi 1966, 58–60. Grumach 1966, 109–14. Branigan 1966, 115–7.; Aruz 1998; Neumann 2001.

particularly in a trade center, one would also expect to find archives outside the palace, especially in the houses of merchants (as is the case at Ugarit) or of other members of the political and social elite (as at Kuşaklı-Sarissa).[193] Furthermore, no writing utensils *(styloi),* which have been found frequently in Bronze Age excavations, including on Cyprus,[194] have been discovered at Troy. The diptychs of the Uluburun wreck (see above p. 584) attest that merchants coming to the Aegean used writing, but they probably did not reach Troy. Even more illuminating is the total lack of seal impressions on containers, although they appear in Early Bronze Age settlements such as Lerna on the Greek mainland and in Bronze Age settlements of central and eastern Anatolia (for example at Karahöyük, Acemhöyük, Noşun Tepe and Kuşaklı-Sarissa). At Mycenae such seals or seal impressions have been found in the House of the Oil Merchant.[195] Containers have indeed been found at Troy, but the pithoi there had not been sealed, which means that they were not part of a highly organized administrative and economic system based on writing. "Troy, so far as we know, remained in the dawn of literacy."[196]

The Economic Basis of Troy VI was Agriculture

Proximity to the sea was not the determining factor in the economic life of the settlement on the hill of Hisarlık. Towards the south and the west of the hill a partly swampy plain was suitable for stock farming, and in general the Troad offered fertile agricultural soil and was rich in springs and rivers, among them the Skamander. Together with the cool northern winds providing fresh air during the summer heat, these conditions made the hill of Hisarlık a favorable site for settlement. The first settlers would have chosen this site not because of its proximity to the Dardanelles and its opportunities for seafaring, but for its suitability for agriculture, stock-farming, and fishing. Fairly large amounts of cattle and horse bones, fish remains and cultivated plants[197] have been found in Troy VI.[198] Cattle, horses, and fish might have been Trojan trading goods, but there was certainly no horse trade with the South Russian steppes, as Korfmann implies (see above p. 578). Large animals, such as horses and cattle, could occasionally be transported on ships, as is demonstrated by Near Eastern written sources attesting such transport between Cyprus and the nearby Anatolian and Levantine coast, but this was limited to very small numbers and rather short distances; even then it was probably a rather risky operation.[199] It is difficult to imagine that herds of horses were transported by ship across the Black Sea or driven on a land route across the Balkans or the Caucasus.

Troy's aristocratic elite, who probably resided in the large houses of the acropolis, doubtlessly drew its income from its landed property in the fertile Troad and from tribute or taxes paid by the rural population living under its protection and control. If Troy was identical with Wilusa, it may be relevant that in making a contract with Alaksandu of Wilusa the Hittite king Muwatalli II takes it for granted that Alaksandu's income derives from vineyards, threshing floors, fields, and stock-farming.[200] The fertility of the Troad provides a sufficient explanation for the impressive architecture of the acropolis wall, which could easily have been financed and constructed by exploiting the natural resources of the Troad and by forced labor of the rural population, as happened so often throughout antiquity.[201] The citadel of Troy VI testifies to a need for protection and is no proof of great material wealth. The paucity of imports, especially of high quality pottery that, among other goods, seems to have played a role in the conspicuous consumption of Bronze Age elites, points to a very small number of well-to-do inhabitants of Troy VI. The almost complete prevalence of local imitations of Mycenaean pottery demonstrates that at Troy most people could not afford to buy foreign luxury goods.[202] Troy VI was a political, military, and administrative center for at least a great part of the Troad, but economically it seems to have been rather unimportant.

WAS TROY VI LATE A CITY AT ALL?

Although Korfmann's statement that Troy VI was an Anatolian palatial city that covered an area of at least 27 ha and housed up to 10,000 inhabitants is not supported by the evidence, it has been accepted by several scholars.[203] Other scholars, however,

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[193] Hänsel 2003, 113–5. For Kuşaklı-Sarissa see Müller-Karpe 2002.

[194] Buchholz 1999, 518.

[195] Hauptmann 1976; Porada 1980; Knapp 1991, 29; Müller-Karpe 2002.

[196] Wright 1998, 366–7.

[197] Korfmann 1994, 45; 1997c, 59–60; Uerpmann 2001.

[198] Cf. Blegen 1953, Part 1, 10.

[199] Buchholz 1999, 34–5.

[200] Friedrich 1930, 50–83 with §21 (A IV 31–46); Beckman 1999, no. 13. The passage is certainly topical, but *topoi* are usually deduced from reality.

[201] Bodei Giglioni 1973.

[202] Melas 1993, 374.

[203] See e.g. Korfmann 1997a, 93; 1997b, 68; Mee 1998, 143–5; Bintliff 2002.

have been skeptical. K. Bittel had emphasized that the settlement structure of Troy VI had little in common with settlements of Hittite Anatolia. B. Kull has criticized the presentation of Troy VI in the recent exposition as misleading and thinks that the so-called "lower city" *(Unterstadt)* of Troy VI is "zu großen Teilen erfunden."[204] Even this is understated, as becomes clear on closer inspection of what has actually been found on the hill of Hisarlık.[205] Since up to now "reconstructions" and computer simulations but no complete actual state plan of the remains of Troy VI have been presented, one has to comb through the excavation reports in order to obtain a somewhat reliable estimate of the findings. The results of these efforts are—very briefly—the following statements and the provisional plans offered in figures 2 and 3:

1. No Bronze Age levels at all have been found in the southern half of the supposed lower city, and this cannot be explained as a consequence of erosion.[206]
2. In the northern half of the lower city, in a large excavation area roughly 170–200 m distant from the citadel, the only clear evidence for houses that could possibly be dated to Troy VI Late consists of one single house corner; it was followed by a Troy VIIa building. Otherwise, this area was free of solid Troy VI Late/VIIa buildings. There are only some scattered postholes for possible wooden structures (sheds, stalls, fences?) and a few short pieces of thin stone foundations of uncertain function and uncertain date within the ca. 500 years covered by Troy VI/VIIa. Furthermore, traces of agrarian and craft activities in this area, datable to Troy VI Early and Middle, suggest that this was then the periphery of the settlement. Perhaps, this was still the case in late Troy VI.[207]
3. Immediately outside the citadel scattered vestiges of Troy VI (and VIIa) houses have been discovered and a rather densely built-up area in a topographically privileged position close to the southwest gate (VI U) of the acropolis.[208] Dörpfeld and Blegen had excavated a couple of house remains, in particular the so-called *anta*-house, close to the citadel wall and had come to the conclusion that there must have been a "lower settlement." But Blegen's soundings at a greater distance from the citadel were unsuccessful—with the exception of the discovery of the so-called Crematorium close to the Troy VI cemetery—and he gave up searching for house remains in this area.[209] The recent excavations have yielded a greater number of house remains in the immediate proximity of the citadel, but it has not been proven "that the area immediately around the citadel was heavily built up on all sides."[210] The new excavations have not resulted in an essential increase in our knowledge with regard to the settlement structure.
4. Korfmann concluded that his excavations provide evidence that a 27 ha lower town was protected by elaborate fortifications consisting of: a fortification wall completely encircling the lower town, two defensive ditches (the so-called inner and outer ditch) preventing war chariots from approaching the fortification wall, and palisades protecting a causeway crossing the inner defensive ditch.

Without an actual state plan of the excavations, superimposed on the excavation grid, maximum clarity as to what exists on the ground cannot be obtained. Figures 2 and 3 try to convey an impression of what has actually been found.

Fortification Wall

The excavations have not proven the existence of a lower city wall. The sole piece of evidence is a

[204] Bittel 1976, 138; Kull 2002.

[205] For the following presentation and review of Korfmann's "Troy" see Hertel 2002; Kolb 2003a, 2003b; Hertel and Kolb 2003.

[206] Korfmann 1991, 26–8; 1992b, 138; 1997c, 55; Easton et al. 2002, 89–91. But see Kolb 2003b.

[207] Korfmann 1994, 25–9, 45; 1997c, 55–62; 1998b, 4, 51–6; 1999, 21–2; 2000, 28–9. Easton's presentation of the evidence (Easton et al. 2002, 87) is misleading. The plan shown in fig. 8 on p. 88 was published in 1997 and constituted the basis for Korfmann's statement in 1998 "that the area was thinly built with fairly large open areas between houses." This statement was not "preliminary". There has not come forth any new evidence since then and no new interpretation by Korfmann. Accordingly, the computer simulation in the Troy exposition at Bonn in spring 2002, which ostensibly showed a model of the actually known buildings of Troy VI, presented one single house with a small shed in this area. Thus, if something was preliminary, it must be the excavation plan in *Studia Troica* 7, 1997 on which Easton's argument is based. Cf. also the excavation reports on the areas H 17 and KL 16/17 in Korfmann 1994, 25–9; 1997c, 51–2, 57–9; 1998b, 51; 1999, 21 which clearly contradict Easton's conclusions. See now Hertel and Kolb 2003.

[208] Korfmann 1994, 31; 1998b, 35–7, 41–2.

[209] Blegen 1953, Part 1, 347–52. Cf. Weilhartner 2000.

[210] This is the misleading statement of Easton (Easton et. al. 2002, 94).

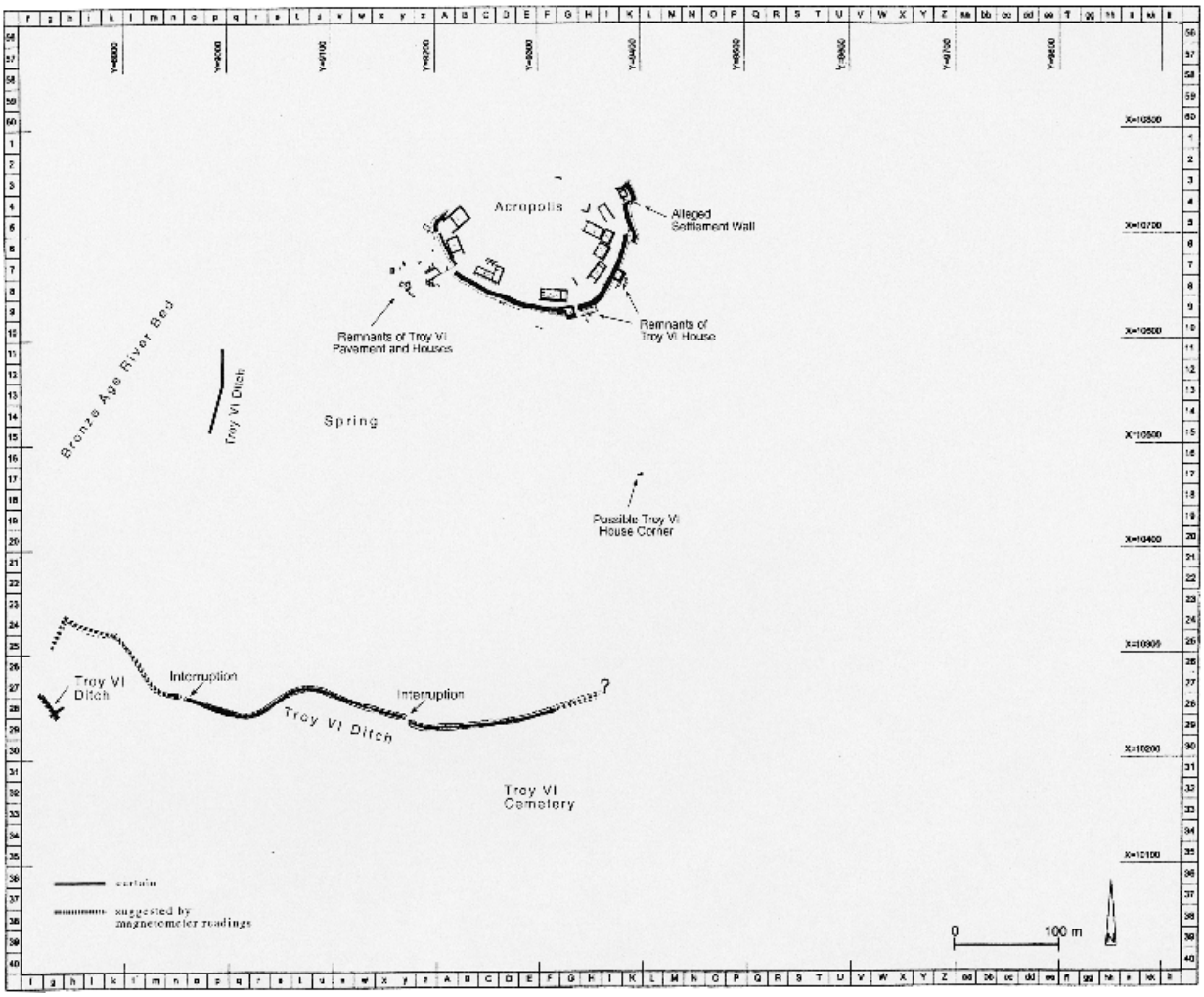

Fig. 2. Schematic plan of remains of Troy VI discovered up to the year 2001 (F. Kolb, C. Drosihn, A. Thomsen). Based on drawings of the Troy project.

low stone socle, surrounded by a mud brick platform, close to the northeast bastion of the citadel. It is only about 7 m long and 1 m wide. The excavator has tried to support his identification of this wall as the lower city wall by positing a gate at the east end of this wall. The identification is questionable.[211] In order to make it more plausible, another short section of wall, starting about 5 m further to the east, has been entered into the plans of Troy VI and VII—first as "reconstructed," later as "supplemented" *(ergänzt),* and finally as actually existent.[212] Yet this section of wall, according to the excavation report, has never been found. Furthermore, the presumed settlement wall differs in its construction not only from the Troy VI citadel wall, but from all types of defensive walls known from Late Bronze Age Anatolia, the Near East, and the Aegean.[213] Moreover, it is not connected with the northeast bastion of the citadel but separated from it by a gap of about 2 m. Finally, it is dated to Troy VI/VIIa on the basis of ceramic evidence. This, of course, can only be regarded as a *terminus*

[211] Korfmann 1996, 39–43; 1997c, 3, 49–52. Even Easton has to admit this (Easton et al. 2002, 91–3). See now Hertel and Kolb 2003.

[212] Korfmann 1996, 40 fig. 33; Korfmann 2001b, 349 fig. 368; Becks and Thumm 2001, 420 fig. 480.

[213] Cf. e.g., the recent discovery of a Late Bronze Age settlement wall at Torbalı-Bademgediği Höyüğü near Izmir: "A 750 m long section of a broad (4 m) Late Bronze Age wall of "Cyclopean" stone construction was found. A sondage was made near the north gate … Late Bronze Age material was found, including pottery from the 12th–14th centuries B.C. … (Greaves and Helwing 2001, 506)."

post quem, and it means that this wall can hardly have been constructed before the 13th century and can not be safely attributed to Troy VI.

No matter what the function and the date of this short stretch of wall may be, it cannot serve as the basis for reconstructing a massive fortification wall encircling the lower town. Moreover, even supposing that Korfmann's reconstruction of Troy VI is right; it would not support his view that the archaeological evidence matches the description of Ilios in the *Iliad*. On the contrary, Korfmann has two fortification walls (that of the citadel and the supposed settlement wall), whereas the *Iliad* knows only one.

THE DITCHES

The inner ditch, dated to Troy VI, runs about 400 m south of the citadel in an east–west direction. It was, in fact, already discovered by Blegen, but has now been traced over more than 500 m as the crow flies, and it consists of a series of rock-cut trenches, 2–3 m wide and 1–1.50 m deep, interrupted by causeways up to 10 m wide where the rock has been left unworked (fig. 2).[214]

Korfmann's interpretation of the rock-cut trenches as a defensive ditch founders on several facts:

1. Defensive ditches no more than 2–3 m wide and 1.50 m deep are not attested at any other site of the ancient world. The Troy VI rock-cuttings could easily be bridged or filled by an aggressor. A Late Bronze Age defensive ditch against war chariots can be seen at North Syrian Emar, where a 500 m long, 30 m wide, and 15 m deep ditch protected the west side of the city.[215]
2. The reconstructed defensive ditch encircling the settlement area[216] is unfounded. No ditch has been found in the east, especially in the northeast, where the terrain was flat, offering the best opportunities for war chariots to approach the settlement. Here, a defensive ditch would have been most needed. A test trench at the eastern end of the so-called inner ditch has not confirmed the assumption that it turned northwards towards the citadel.[217] With regard to its western end, the magnetometer survey shows that there it turned not to the north but to the south in the direction of the so-called outer ditch (fig. 2) with which it may have been connected.
3. Not only is the inner ditch too narrow and too shallow to fulfill a defensive function, it is much too far away from the hypothetical fortification wall. A settlement wall has not been discovered anywhere behind the ditch, as one would expect to find in a functioning defensive system. Korfmann[218] postulates a settlement wall about 100 m behind the ditch—without any evidence. Defending the ditch from a wall 100 m away would be practically impossible, and there is no evidence of such a strange arrangement in antiquity. In addition, around 1300 B.C., parts of the so-called defensive ditch had already been filled up and were out of use.[219] This means that the above-mentioned wall (now dated to the 13th/12th century) and the ditch were not contemporary and never formed a coherent defensive system.
4. About 100 m further down the hill, in the southwest corner of the area, another, similar rock cutting, called the outer ditch and dated to Troy VI/VIIa, was traced over a short distance (fig. 2) and has been interpreted as indicating an expansion of the settlement area at the very end of Troy VI or in Troy VIIa. In later times a Hellenistic and a Roman ditch have been cut into it (fig. 3).[220] A test trench in square f 26 was not able to trace the Bronze Age rock-cutting at this point, but only the

[214] Blegen, et al. 1953, 391–4 describe a ditch 2 m wide and 1 m deep that is at least 10 m in length and located under the so-called Crematorium. It contained Troy VI Late pottery. Compare to measurements taken by Jansen and Blindow 2003, 330. The excavators sometimes give a width of 4 m, which is exaggerated. Cf. Becker et al. 1993, 122 (here still believed to be a defensive *wall*); Korfmann 1994, 4–5; Jablonka et al. 1994, 51–66; Becker and Jansen 1994, 106–10; Korfmann 1995, 28–9; Jablonka 1995, 39–49; Korfmann 1996, 2–3, 44–9; Jablonka 1996, 65–96; Korfmann 1997c, 62–3.

[215] Chavalas 1996, 14.

[216] Korfmann 1996, fig. 1; Kolb 2003a, fig. 12.

[217] Korfmann 2002, plan opposite p. 4.

[218] Korfmann 1996, 46–7; Blindow et al. 2000, 127–8.

[219] Korfmann 1994, 35; 1995, 39; Jablonka 1995, 46–7, 61–76; Korfmann 1996, 2; Jablonka 1996, 73. With regard to the question of a contemporaneous existence of the alleged settlement wall and the ditch, Easton reproaches me for relying "on the excavator's first impression, ignoring the more considered judgments made later" on the date of the ditch (Easton et al. 2002, 89). But on p. 87–8 he quotes the same excavation reports as I did in Kolb 2003a, p. 35 note 42. Ibid., on p. 17, I stated that at least *some parts* of the ditch were filled up *towards the end of the 14th century*, thereby acknowledging that, according to the excavators, other parts were not. Easton himself (op.cit. 87) says that "the ditch was filled up with deposits dateable to Troy VI". The end of Troy VI is dated to about 1300 B.C. by Korfmann. Thus, Easton and I agree about the date.

[220] Korfmann 1996, 48–9; Jablonka 1996, 65, 78–87; Korfmann 2001c, 29, 34.

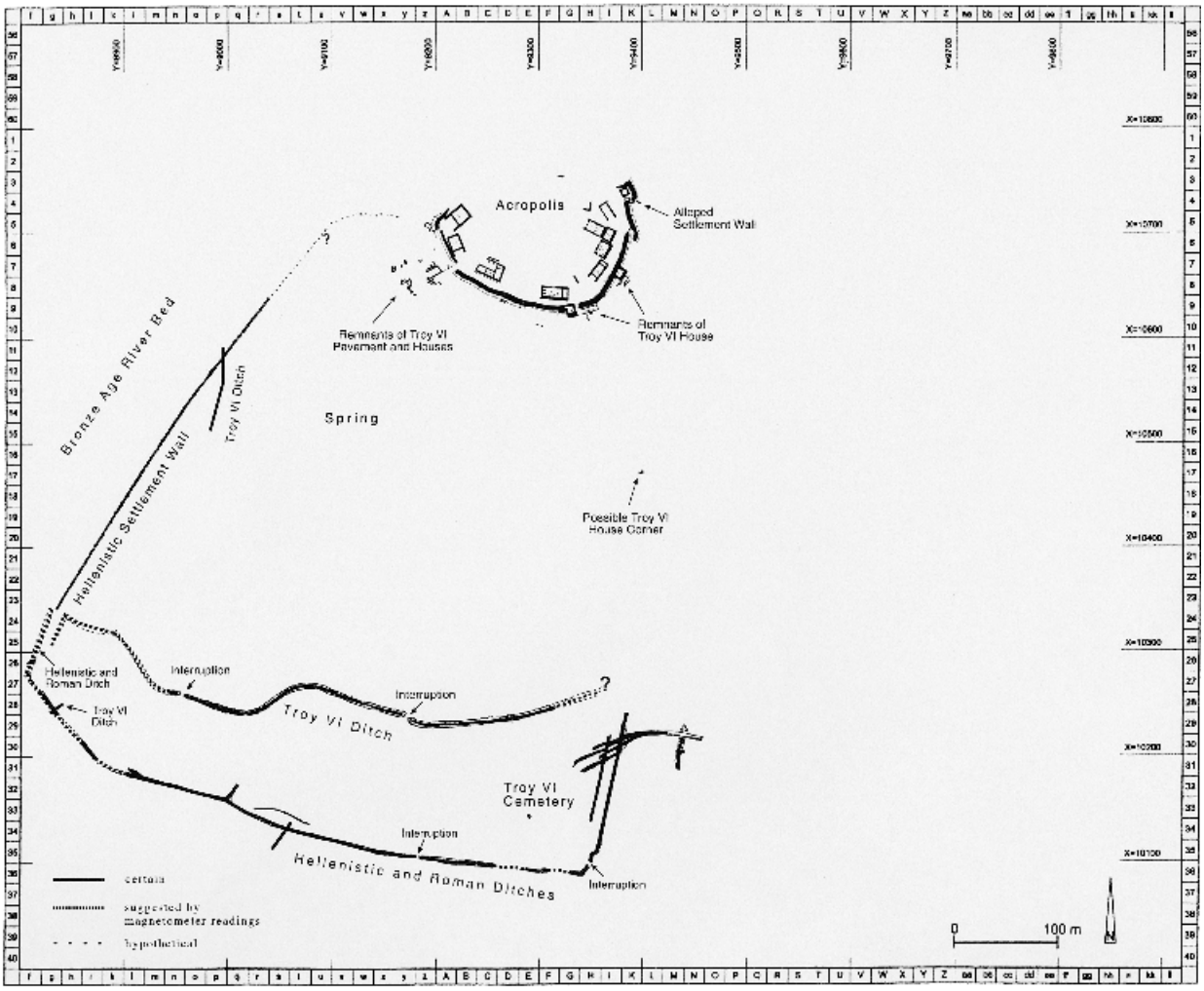

Fig. 3. Schematic plan of remains of Troy VI discovered up to the year 2001 (including the Hellenistic settlement wall and the Hellenistic/Roman ditch system) (F. Kolb, C. Drosihn, A. Thomsen). Based on drawings of the Troy project.

Hellenistic/Roman ones (fig. 3).[221] Thus, it has also not been proven that the so-called outer ditch turned northwards.

5. A short rock-cut trench of similar dimensions was found in the northwest (figs. 2, 3).[222] There is no indication that it was ever connected with the sections discovered in the south. In fact it does not run where Korfmann previously reconstructed it, i.e., along the western edge of the settlement plateau, but almost 150 m further to the west in the plain. Moreover, its northern edge turns away from the settlement area towards a Bronze Age river-bed that runs fairly close to and parallel with the western flank of the hill.[223] In this zone, at least, a defensive ditch against war chariots was superfluous because of the river-bed and the steep slope at this side of the settlement hill; the rock cutting must have had a different function.
6. The features of the ditches, carefully hewn rectangular trenches interrupted by causeways, and, in the case of the inner and outer ditch in the south, an undulating course following the natural contours of a terrace, are best explained by the suggestion of the excavator P. Jablonka that they have to do with quarries from which rectangular blocks were extracted to be used in the construction of Troy VI/VII buildings.[224] The rock cuttings for quarrying had a secondary use as water channels

[221] Korfmann 2001c, 23, 34; Jansen and Blindow 2003, 336.

[222] Jansen and Blindow 2003, 339 with fig. 16; Korfmann 2001c, 28, 42–3.

[223] Kayan 2002.

[224] Jablonka et al. 1994, 66; Jablonka 1995, 44, 54; 1996, 87; Korfmann 2001c, 36.

and reservoirs for agricultural, and possibly, industrial uses. The low gradient of the bed of the trenches and their interruption by causeways are both also features of the Hellenistic and Roman rock-cuttings (fig. 3) which the excavators call "*Römische Wassergräben.*"[225] The Troy VI trench in the northwest could collect the water flowing down from the spring situated in the upper part of the sloping terrain (fig. 2) and divert at least part of it into the river-bed. The rock-cuttings in the south collected the water running down the southern slope of the hill, in order to prevent the area of the Troy VI cemetery and the plain at the foot of the hill from becoming swampy. Some of the water was probably diverted into the plain. Yet, the low gradient and the interruptions point to a use of some parts of the trenches as water reservoirs. A system of water reservoirs has also been found immediately outside the Late Bronze Age settlement of Hittite Kuşaklı-Sarissa.[226]

The vestiges of cultivated plants (figs, olives, etc.) and of other vegetation as well as animal remains found in the inner ditch point to the existence of pasture land and agricultural activities as well as to industrial establishments (e.g., fullers) in the area to the north, i.e., in the direction of the citadel.[227]

THE PALISADES

The causeways between the trenches of the inner ditch presented the excavator with a problem. The Eastern causeway has a width of about 10 m, more than amply wide enough for war chariots to drive across the inner ditch presumably constructed to prevent war chariots from approaching the wall. Consequently, the causeway is supposed to be protected by palisades. Two rock cuttings, one 10 m long, the other 2.50 m long and both 40 cm wide and less than 30 cm deep, run north of the inner ditch and parallel to it at a distance of 3.50 m. The two cuttings are separated from each other by a 5 m wide gap.[228] Their interpretation as the foundation for a palisade construction with a gate presupposes a huge degree of erosion which would have removed all traces of post-holes for the timbers of the palisade, as they are preserved in the case of a palisade structure about 200 m further north (see Kolb 2003a: 127–128). Moreover, a gate 5 m wide would be extremely unusual, compared with the gates of the Troy VI citadel, which are only 1.30–3.60 wide. Furthermore, there are no traces of a gate construction. The rock cuttings have certainly nothing to do with a palisade but may have served as watering places for animals or for the activities of fullers, etc.[229] Interestingly enough, no attempt has been made to verify the hypothesis about palisades with a gate by excavating north of the second causeway at the west.

To conclude, Korfmann's reconstruction of a lower city of Troy VI and his very definition of Troy VI as a city are unfounded. He has neither discovered a defensive line that would define the contour of the settlement, nor produced evidence for a large densely built-up area. Furthermore, there are no indications for a truly urban character of Troy VI, such as urban planning, a differentiated public architecture (there is only the acropolis wall), an advanced differentiation of labor and specialization, market functions, and so on. Finally, the current presentation of the so-called lower city is inconsistent. The settlement area of the supposed lower city, confined by a wall running about 100 m behind the ditch as the model[230] and the computer simulation presented in the Troy exposition in fact showed it, would not be equivalent to 27 ha but only to about 11 ha. The bungalow houses of the model could have housed at most 2000 people instead of the up to 10,000 postulated by Korfmann, which is in any case an absolutely unrealistic number if one takes into consideration the present estimates for Hattuša (3000–6000) and Ugarit (about 5000).[231] Due to the salutary effects of the Troy controversy, however, the computer simulation presented during the final exposition at Bonn showed a thoroughly thinned-out "lower city" with at most 150 houses, besides many sheds and fields. This revised

[225] Korfmann 2001c, fig. 23.

[226] Müller-Karpe 2002, 179.

[227] Jablonka et al. 1994, 60.

[228] Korfmann 1996, 2; Jablonka 1996, 72; Korfmann 1997c, 62; Kolb 2003a, 17; 2003b, 127–8.

[229] Kolb 2003a, 19.

[230] Vetter and Büttner 2001, 73, fig. 77.

[231] Ugarit see supra n. 173. Hattuša, Jürgen Seeher (personal communication, 2001). Korfmann's published views on the importance of Troy VI also are somewhat inconsistent; see e.g. Korfmann, 1997b, 93: "Troia stands out as an exception when we look westward, viewed in an Anatolian context, it fits in quite well"; Korfmann 1998a, 377: "Although Troia was impressive in size, it was still a modest city on the periphery when measured against Syria, Mesopotamia, and central Anatolia". The acropolis of Mycenae, by the way, is almost twice as large as that of Troy VI.

restoration of the settlement could hardly have accommodated more than about 1000 inhabitants and might come closer to the real Troy VI.

After this article had been sent in for publication, it turned out that further examination of the area below the northwest bastion during the excavation campaign in the summer of 2003 identified the structure formerly thought to be a section of the settlement wall as cover slabs of a water channel dated to Troy VIIA.

CONCLUSION

The assumption of a large Anatolian palatial and commercial city is unfounded. Although we continue to have no clear idea either of the extent of the Troy VI settlement or of the number of its inhabitants, nevertheless the published excavation reports and the conclusions that can reasonably be drawn from them, provide no evidence for a large commercial city, not to speak of a center of a Bronze Age Hanseatic League. In the case of Troy VI, the cumulative lack of positive evidence is overwhelming, and it is methodically unsound to postulate that what has not been found nevertheless once existed. As H.-G. Buchholz[232] wisely wrote: "We archaeologists have to proceed from what has been preserved, and not from what does not exist."

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[232] Buchholz 1999, 520.

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