VASIF ŞAHOĞLU

THE *ANATOLIAN TRADE NETWORK* AND THE IZMIR REGION DURING THE EARLY BRONZE AGE

To Machteld J. Mellink, for the light . . .

Summary. *The monumental Early Bronze Age settlement at Liman Tepe (Levels VI–IV) (predecessor of the classical site of Klazomenai), on the southern shore of the Gulf of Izmir, is a good indication of the emergence of settlements with centralised organisation on the west coast of Anatolia. Similar developments can also be followed in Troy at the northernmost limit of the western coastline, on the islands of the north and east Aegean, and at the inland site of Küllüoba in north-west Anatolia. Over a much wider geographical area, extending from south-eastern Anatolia via central and western Anatolia, the islands of the east Aegean, the Cyclades, and mainland Greece, a distinctive set of cultural features emerged at the end of Early Bronze Age II. An explanation of the cultural changes taking place along the west Anatolian coastline at this time should thus be sought in the perspective of this wider sphere. These features can be summarised as follows:*

- *organised settlement structures indicating the presence of a central authority;*
- *monumental fortification systems;*
- *large settlements with citadels and lower towns;*
- *first introduction of wheel-made pottery (mass production);*
- *first appearance of certain new pottery shapes such as depas, tankard, two-handled cup, wheel-made plate, incised pyxis, cutaway-spouted jug and 'Syrian bottles';*
- *first examples of tin bronzes.*

These cultural changes, appearing suddenly in a wide geographical range at approximately the same time, can only be explained by the presence of wide international contacts. The character and the nature of these relations are becoming clearer as recent excavations yield new information. This paper aims to shed new light on the nature of the Anatolian Trade Network (ATN) period in the light of new archaeological data from Liman Tepe and Bakla Tepe located on the west Anatolian coastline. The importance of the Izmir region as a bridge between the land trade routes of Anatolia and the sea trade routes of

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the Aegean and various effects of this unique location on the region's cultural development are discussed.

The first settlements on a monumental scale in Anatolia, such as the administrative buildings that have been unearthed at Arslantepe (Malatya), with their complex administrative systems indicated by the extensive use of sealing, arose as a result of long-distance trade relations with Mesopotamia as early as the later fourth millennium BC (Frangipane 1997, 2002). These early urban centres were important in the establishment of new trade ties linking areas rich in metals with those where these resources were lacking. The widespread use of metals and the development of metallurgy played an important role in disseminating innovations over a wide area in central and western Anatolia and the Aegean during the third millennium BC. In the second half of the third millennium BC (Fig. 2) material remains and technical developments thus began to appear over a wide area, spreading from northern Syria to southern and central Anatolia (Spanos 1972; Özgüç 1986; Kontani 1995; Zimmermann 2005), and over the Eskişehir and Afyon (Efe and Ay-Efe 2001; Topbaş *et al*. 1998) regions to Thrace and from central and south-western Anatolia (Mellink 1986, 1998; Erkanal 1996; Şahoğlu 2002) and the islands of the north and east Aegean (Kouka 2002) to the Cyclades (Rutter 1979; Sotirakopoulou 1993; Manning 1995; Maran 1998; Wilson 1999; Broodbank 2000a; Rambach 2000a, 2000b) and mainland Greece (Konsola 1984; Pullen 1985; Sampson 1993) (Fig. 1a).

The similarities in material culture which appeared over so wide an area at approximately the same time can be summarised as follows:

- Architectural arrangements demonstrating the presence of different social groups and administrative mechanisms resulted in settlements encircled with strong fortification walls and consisting of lower and upper cities. The large administrative buildings and associated storage areas, along with communal areas or courtyards, suggest a function beyond everyday use.
- A new economic system, indicated by rich metal finds and the first use of tin bronze, was controlled by the use of seals.
- Red, black and grey burnished finewares, consisting mainly of drinking and pouring vessels, appear for the first time. These forms consist of depata, tankards, two-handled cups, incised pyxides, teapots, cutaway-spouted jugs, wheel-made plates and 'Syrian bottles'.
- The use of the potter's wheel, previously known in central Anatolia, passed on with this assemblage to western Anatolia and from there via the east Aegean islands and the Cyclades to the western Aegean.

The appearance of these cultural traits over a large area towards the end of the Early Bronze Age II and at the beginning of the Early Bronze Age III period (Fig. 2) seems to have been the result of more than mere chance. The distribution of these common traits in Anatolia and northern Syria has been dealt with by M.J. Mellink (1986, 1998), T. Özgüç (1986), T. Özgüç and R. Temizer (1993), M. Kelly-Buccellati (1990), R. Kontani (1995), T. Efe (Efe and İlyaslı 1997) and T. Zimmermann (2005) while the Aegean distribution has been discussed by J.B. Rutter (1979), J. Forsén (1992), P. Sotirakopoulou (1993), S. Manning (1995, 1997), J. Maran (1998), D.E. Wilson (1999), C. Broodbank (2000a, 2000b), J. Rambach (2000a, 2000b) and O. Kouka (2002). Information from these two areas, usually considered in isolation from each other and often in different sections of the archaeological literature, has been considered as a whole only by M.J. Mellink (1986, 1998).

At the time that most of the articles/books cited above were written, our knowledge of the coastal western Anatolian Early Bronze Age depended mainly on Troy at the northern border of the region (Blegen *et al*. 1950, 1951). Excavations undertaken within the framework of the Izmir Region Excavations and Research Project (IRERP) in the 1990s at the sites of Liman Tepe (Erkanal 2001) and Bakla Tepe (Erkanal and Özkan 1999) have produced new data (Erkanal 1996, 1999a) concerning the Early Bronze Age cultures of the Izmir region, located at the centre of coastal western Anatolia. The discovery of assemblages characteristic of central Anatolia, western Anatolia and the western Aegean, together in the same context, has contributed greatly to the comparative chronology of different cultural areas (Erkanal and Özkan 1999, 17–19, 113–15; Şahoğlu in press a). These cultural characteristics linking Anatolia to the Aegean can be explained through an extensive trade network (Kouka 2002, 296–302) and associated movement of the population (Doumas 1988, 27–9). Economic reasons should lie behind a movement of such dimensions. As a result of the changing political and social structures at this time, when the first large centralised settlements began to emerge in western Anatolia, the north and east as well as the western Aegean, there must have been an increase in demand for different raw materials and technologies, which in turn gave rise to the establishment of an organised maritime and land trade network (Fig. 1).

While our knowledge of the political, economic and social structures in the north and east Aegean and western Anatolia is rich (Kouka 2002; Şahoğlu 2002), the data from the central Anatolian region during this period are limited to results of small-scale excavations, mainly conducted at cemetery sites (Yiğit 2003). The Early Bronze Age levels of Kültepe form the framework of the central Anatolian Early Bronze Age (Özgüç 1999, 5). Besides Kültepe, Polatlı (Lloyd and Gökçe 1951) – near Ankara – has provided important chronological data. Acemhöyük is another important settlement with a strong Early Bronze Age background awaiting further investigation.[1] Spectacular burials in cemeteries like Alacahöyük (Koşay 1951) and Horoztepe (Özgüç and Akok 1958), and treasure-finds of gold, silver and bronze at Mahmatlar (Koşay and Akok 1950) and Eskiyapar (Özgüç and Temizer 1993), provide further evidence for the rich socio-economic *milieu* of the period. The rich Early Bronze Age cemeteries of central Anatolia demonstrate the development of metallurgy and the emergence of new techniques of producing tin bronze (Palmieri and di Nocera 1999), especially during the Early Bronze Age II period. The silver-rich mines of the Taurus mountains to the south of the region were discovered and exploited by the people of this period. Research at the Kestel mine in the Taurus region (Kaptan 1995; Yener and Özbal 1987; Yener and Vandiver 1993a, 1993b; Yener 2000, 88–98), as well as excavations undertaken at Göltepe (Yener 2000, 98–109), a miners' village, although not universally accepted as a source of tin,[2] demonstrate that the Taurus mountains were an important region for the development of metal extraction from the end of the Early Bronze Age II period and especially during Early Bronze Age III.

When data from the settlements of the end of the Early Bronze Age II period are considered, the most important development is seen to have been in the area of metallurgy. The developments in the field of metallurgy and the fact that metals have always been viewed as a status symbol resulted in shifts in social structure during this period. Within this framework, the extraction and controlled distribution of gold, silver and tin accelerated the hierarchical

1 For the chronological setting and discussion of a group of pottery within the range of the *Anatolian Trade Network* from Acemhöyük cf. Öztan 1989.

2 For example see Muhly 1993.

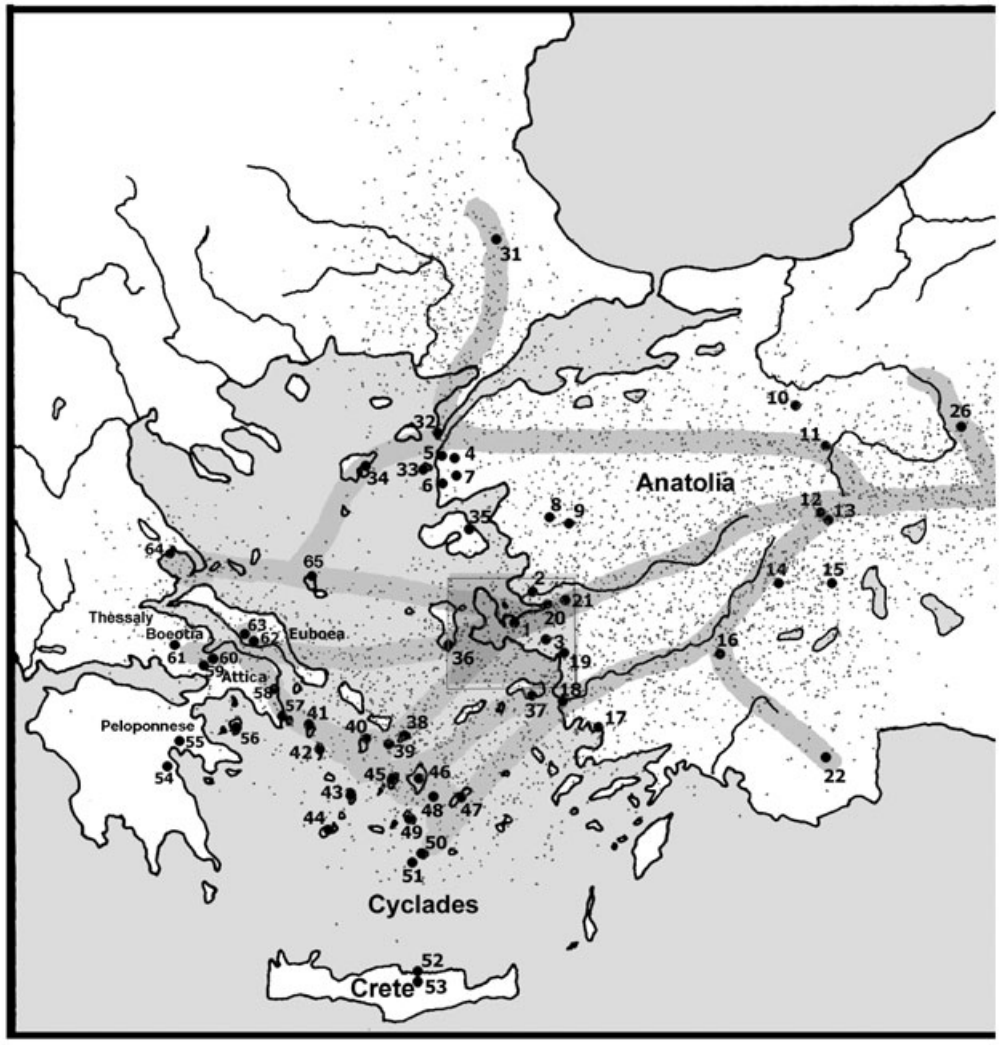
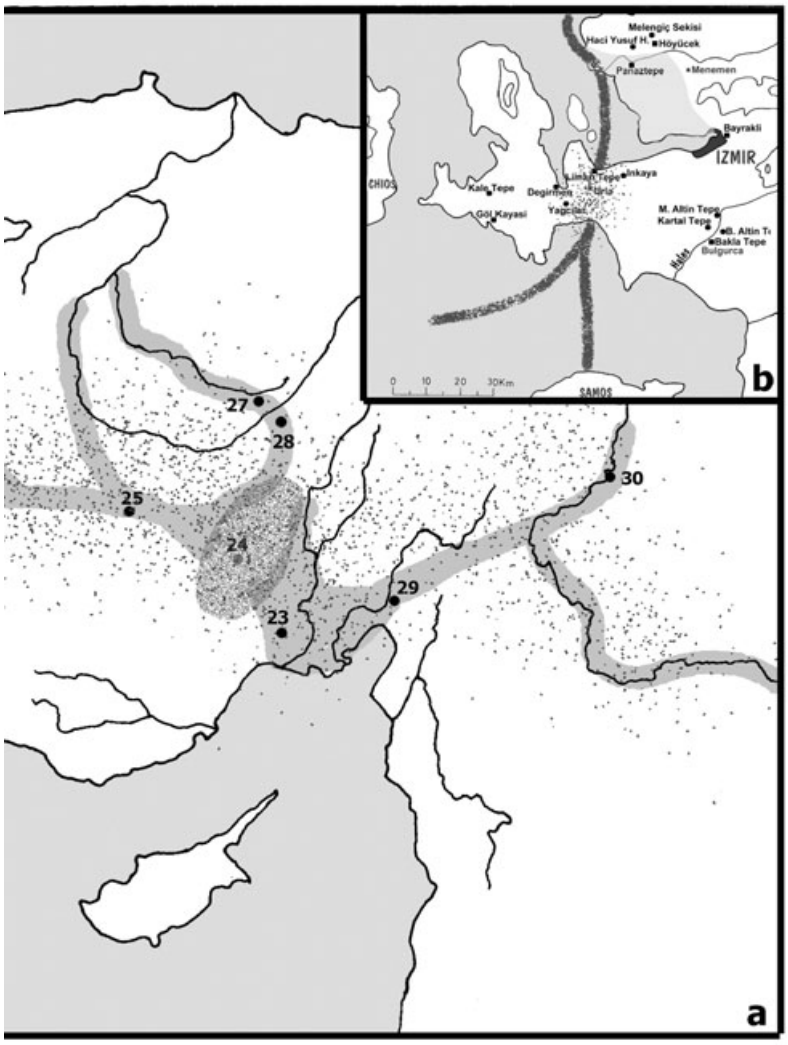


Figure 1
Map of the *Anatolian Trade Network*, active during the Early Bronze Age II (late)–IIIa periods.



34-Lemnos - Poliochni
35-Lesbos - Thermi
36-Chios - Emborio
37-Samos - Heraion
38-Mykonos
39-Delos
40-Syros
41-Keos
42-Kythnos
43-Siphnos
44-Melos
45-Paros
46-Naxos
47-Amorgos
48-Keros
49-Ios
50-Thera
51-Christiana
52-Poros
53-Knossos
54-Lerna
55-Tiryns
56-Aegina
57-Thorikos
58-Raphina
59-Eutresis
60-Thebes
61-Orchomenos
62-Lefkandi
63-Manika
64-Pevkakia
65-Skyros

DATE	ANATOLIA Kültepe	ANATOLIA Tarsus	ANATOLIA Beyce Sultan	CRETE	GREEK MAINLAND	CYCLADES	EASTERN AEGEAN ISLANDS	TROIA	LİMAN TEPE AREA - A	LİMAN TEPE AREA - B	PERIOD
2000 BC.			VIa VIII		Early Helladic III Aegina V	Middle Cycladic Early Cycladic III (Phylakopi I)	Heraion V Poliochni Brown Heraion IV	V IV (?)	?	LMT B IV-1	EBA IIIb
	11b 12 13	EBA III	XII c	Early Minoan IIB	Lerna IV Aegina IV Early Helladic II Late Lerna IIID Aegina III Lefkandi I / Manika Pevkakia VII Aegina II	Early Cycladic IIb (Kastri Group) Ayia Irini III Palamari III Syros-Kastri Zas IV Mt. Kynthos	Heraion III Poliochni Yellow Emborio I Heraion II Emborio II	III Late II	LMT A V-1 LMT A V-2a	LMT B IV-2 LMT B V-1a LMT B V-1b LMT B V-2	EBA IIIa End of EBA II EBA II Late
2500 BC.	14	EBA II	XIII a		Lerna IIIC Pevkakia VI						
	15 16 17			Early Minoan IIA Knossos Poros	Early Helladic II Early Lerna IIIB Lerna IIIA	Early Cycladic IIa Ayia Irini II Palamari II Chalandriani Mt. Kynthos	Poliochni Red Heraion I Thermi V Emborio III Poliochni Green Thermi IV	Early Late I	LMT A V-2b LMT A V-3a LMT A V-3b	LMT B V-3	EBA II Early
	18	EBA I	XVII XIX	Early Minoan I	Aegina I Early Helladic I	(Aplomata Group)	Polio. Blue evoluta Emborio IV Polio. Blue Archaic Thermi III	Middle	LMT A VI-1a LMT A VI-1b LMT A VI-1c	LMT B VI-1	EBA I Late EBA I Middle
3000 BC.			XX			Early Cycladic I (?)	Emborio V Thermi II Thermi I	Early (?) End of Kumtepe 1b (?)	LMT A VI-1d LMT A VII	?	EBA I Middle / Late EBA I Early / Late Chal. (?)

Figure 2
Chronology Table. The *Anatolian Trade Network* period is marked in grey shade.

rearrangement of social status and gave rise to the first chiefdoms of Anatolia, probably through the contribution of rich traders.[3] The rich silver and tin reserves of the Taurus mountains were systematically exploited by Early Bronze Age traders and must have been distributed over a wide area through what we may term the *Anatolian Trade Network* (Fig. 1a), characterised by the use of the cultural innovations discussed above. Besides the western branch of this network, most frequently described in the literature, it should be noted that there were also strong connections to the south, towards Cilicia,[4] Syria and Mesopotamia (Özgüç 1986; Kontani 1995; Emre 1999; Matney 2002; Zimmermann 2005), demonstrating that the rich traders of Anatolia played an important part in interregional trade (Fig. 1). Mesopotamian texts concerning the reigns of the Akkadian kings Sargon and Naramsin provide important evidence for the existence of this *Anatolian Trade Network* and the dominant presence of Anatolian tradesmen in these regions. In one of these texts, the foray of the Akkadian king, Sargon, to the central Anatolian city of Purušhanda, at the request of Mesopotamian tradesmen who were mistreated by the local rulers, is recounted.[5] In another text, the war fought by the Akkadian king, Naramsin, against a

3 Kouka 2002, 122, 128, 238–47, 275, 297–9 defines an elite of metalworkers–traders in Lemnos, Lesbos, Chios and Samos.

4 Especially the settlement of Tarsus-Gözlükule which is an important gateway of the *Anatolian Trade Network* opening to the Mediterranean. For this topic see Goldman 1956; Mellink 1989. Cf. also Zimmermann 2005 for a recent consideration of this topic with a special emphasis on the distribution of the 'Syrian bottles' and Kinet Höyük.

5 For a recent treatment of this text, see van de Mieroop 2000, 136–7.

coalition of 17 Anatolian kings is mentioned (van de Mieroop 2000, 138). New archaeological data provided by recent research shed further light on the *Anatolian Trade Network* alluded to in these texts about events in the Akkadian period. This network can be recognised archaeologically by new vessel forms which appear towards the end of the Early Bronze Age II and at the beginning of the Early Bronze Age III period, and achieved the very wide distribution described above. Depata and tankards form the most immediately recognisable examples. Besides these, wheel-made plates, two-handled cups, cutaway-spouted jugs and Syrian bottles[6] are the other forms characterising this period. Wealth and prosperity are particularly evident in central Anatolia during the Early Bronze Age, especially in its second half, and, when considered in conjunction with the building designated as a 'palace' at Kültepe (Özgüç 1986, 31–4), this suggests that an administrative structure and associated control mechanisms had been formed in that region.

At the inland north-western Anatolian site of Küllüoba (Fig. 1a), a settlement surrounded by a fortification wall and a 'palatial' complex in the inner citadel have been discovered (Efe 2000, 121, figs. 4–6; Efe and Ay-Efe 2001, 48–50, figs. 2–3). The characteristic vessel forms of depata (Efe 2000, fig. 7), tankards (Efe 2000, fig. 8) and wheel-made plates (Efe and Ay-Efe 2001, Resim 22) are also present in this settlement. From the Eskişehir-Afyon plains, access to coastal western Anatolia and the Aegean is facilitated through deep valleys that extend in an east–west direction. The route network that extends from central Anatolia to this region which can be called inland western Anatolia then breaks up into various branches. Amongst the routes following natural passages in the topography of the region, the best known is the north-western route which reaches Troy. The material from Demircihöyük and its associated cemetery at Sarıket (Seeher 2000), situated on this route (Fig. 1a), includes, besides the tankards, teapots and cutaway-spouted jugs that characterise the period, rich metal finds with central Anatolian connections. The route which passes through Demircihöyük reaches the sea further to the north-west, at Troy.

The architectural remains of Troy II that have been excavated at this settlement, which is situated at a very strategic point on the Dardanelles (Fig. 1a) where land and sea routes meet, consist of a citadel surrounded by a fortification wall and a lower city (Korfmann 2001a, fig. 403), in accordance with the characteristics of regional centres at this period. The large megara located inside the citadel represent the central authority and should not be considered mere domestic structures.[7] Besides the depata, tankards and wheel-made plates (Korfmann 2001b, fig. 374) that characterise the period and are associated with these structures, rich metal finds (Tolstikow and Trejster 1996) – the 'Trojan treasures' – form the most convincing evidence, along with the 'Royal Tombs' of Alacahöyük, for the wealth that Anatolian regional centres enjoyed at this period. The planned settlement structure and finds point to the centrally controlled economic and social structure of the settlement. Besides its dominating location on the sea route

6 Syrian bottles are more common especially in the central and south-eastern branches of the *Anatolian Trade Network* (cf. Zimmermann 2002 and 2005 for the most recent studies on the distribution of 'Syrian bottles' and their imitations in Anatolia. See also Zimmermann 2005, fig. 3 for a distribution map) though some similar examples are found in the western branch at sites such as Küllüoba (Efe and Ay-Efe 2001, Resim 27), Troy in north-western Anatolia (Schliemann 1880, 394, fig. nos. 406–7, 408–12) and Skyros – Palamari in the Sporades (Theochari *et al*. 1993, 191, εικ., 3β, pl. 20.e).

7 Compare the buildings with a political-economic significance recognised in Poliochni, Thermi, Emporio and Heraion: Kouka 2002, 295–6.

between the Aegean and the Black Sea, Troy is also a key settlement on the land route between Anatolia and Thrace, and must have been the main centre of the northward branch of the trade network at this period.

Traders reaching Troy, and Trojans themselves, could cross over the short sea route into Thrace and this enabled the *Anatolian Trade Network* to be active in this region as well. In the region of Kırklareli in Turkish Thrace, where Thracian cultures quite different from the cultures of western Anatolia were present, the settlement of Kanlıgeçit (Fig. 1a), dated to this period, displays Anatolian characteristics in all aspects, from its architecture to small finds, and is so far the northernmost centre of this network. The settlement, surrounded by a fortification wall and consisting of a citadel with megara and a lower city, is in every respect a small-scale copy of Troy II (Özdoğan 1999, 20–2, fig. 13, 2000, 73–6, figs. 10, 12). Besides local Thracian wares, tankards, one of the characteristic forms of the *Anatolian Trade Network* (and indistinguishable from their Anatolian counterparts), have been recovered (Özdoğan 2000, fig. 14). These finds, which leave no doubt that Anatolians lived in and even controlled the settlement at Kanlıgeçit, also provide evidence for another facet of the *Anatolian Trade Network*, namely the establishment of trading posts amongst local communities by the more important urban centres. The example of Kanlıgeçit clearly demonstrates that 'colonies' – in the sense of expatriate trading communities established at a distance from a mother-community – were established at certain points in order to facilitate the organisation of trade as early as the third millennium BC. While not on the scale (either of size or distance from the home community) of the Uruk colonies a millennium earlier, nor of the larger first millennium trading centres in the Mediterranean to which the term 'colony' has been attached, it is important to stress the continuity of this phenomenon of expatriate trading centres – of several different types – across the whole of this period, from the fourth to the second millennium, in certain circumstances where trading networks were being extended into new territories.

The branch of the *Anatolian Trade Network* active at the end of the Early Bronze Age II and the first half of the Early Bronze Age III period (Fig. 2) also extended from the Afyon region to the south-west, through large settlements like Beycesultan (Lloyd and Mellaart 1962) and Aphrodisias (Joukowsky 1986), and further south to Karataş – Semayük (Mellink 1986, 1994; Warner 1994) (Fig. 1a). The characteristic pottery forms have been found at all these sites. Besides depata, wheel-made plates and cutaway-spouted jugs, the rarer two-handled cup is attested at Beycesultan (Lloyd and Mellaart 1962, fig. P46, nos. 3–4). The presence of baked-clay and lead stamp-seals associated with storage vessels at Karataş – Semayük (Warner 1994, 181), provides evidence for the existence of control mechanisms and social hierarchy at this settlement.

The *Anatolian Trade Network* continued along the Büyük Menderes and Küçük Menderes valleys and reached the Aegean Sea in areas where large third millennium BC local centres were located, such as those later to grow into Millawanda/Miletos and Apasa/Ephesos.[8] The characteristics of this network can be further clarified once archaeological investigation of prehistoric sites in the region to the south of Izmir is undertaken. The Izmir region, located at the end of one of the most important branches of the *Anatolian Trade Network*, is easily accessible through the natural routes from Afyon, following the Gediz and Küçük Menderes

8 Due to the lack of investigation of levels dating to the Anatolian trade colonies period, the activities of sites like Miletos and Ephesos are largely unknown.

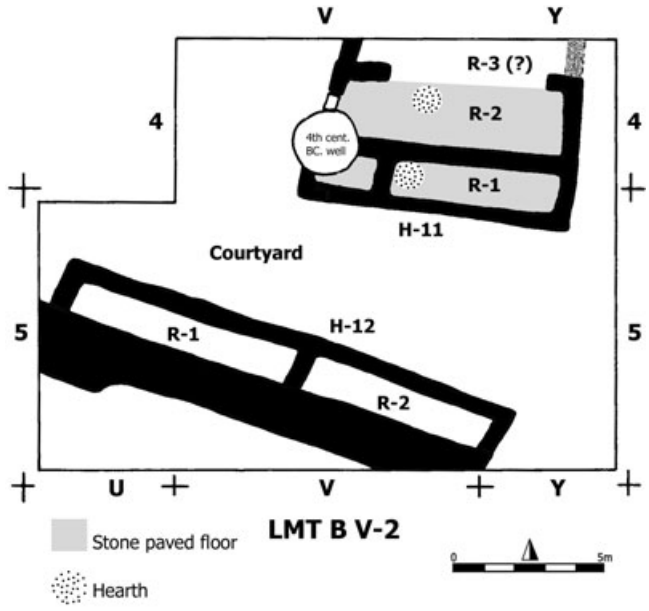


Figure 3
Plan of the central building complex at Liman Tepe (Liman Tepe Level LMT B V-2).

valleys (Fig. 1a–b). An important site which participated in this trade network was Bakla Tepe (Erkanal and Özkan 1999), situated in the Menderes plain, and linked to the Küçük Menderes valley. The settlement is strategically situated, where the sea was within easy reach through a narrow valley (Fig. 1b). In the cemetery area, which belongs to the period of the *Anatolian Trade Network* and consists of pithos burials, burial goods indicating a wide range of links (with central Anatolian, western Anatolian and the western Aegean connections) were deposited together (Şahoğlu in press a). Because of this notably far-flung range of artefacts, Bakla Tepe has greatly contributed to a better understanding of interregional relations (Erkanal and Özkan 2000; Şahoğlu in press a). The pottery from the pithos burials (the traditional burial type in Anatolia at this time) includes the characteristic forms of the *Anatolian Trade Network*. In the graves, depata (Figs. 4–5) (Erkanal and Özkan 1999, Resim 17; Erkanal and Şahoğlu 2000, fig. 5), tankards (Figs. 6–7) (Şahoğlu in press a, fig. 3), teapots (Erkanal and Özkan 1999, Resim 17; Yaylalı 2002; Şahoğlu in press a, fig. 5d), cutaway-spouted jugs (Fig. 8) (Şahoğlu in press a, fig. 2g) and tripod pyxides (Fig. 9) (Erkanal and Özkan 1999, Resim 17; Erkanal and Şahoğlu 2000, fig. 5) were uncovered, the latter indicative of western Aegean influence. Wheel-made vessels have been recovered from the same contexts as handmade examples. At the settlement, situated close to the cemetery, tankards (Şahoğlu in press a, fig. 2b–c), two-handled cups (Şahoğlu in press a, Fig. 4) and wheel-made plates belonging to the same characteristic wares as those from Liman Tepe were present. The rich metal finds from the Bakla Tepe cemetery are indicative of the wealth of the region in this period (Erkanal and Özkan 1999, Resim 18; Keskin 2004, 147–9, Resim 4a–5, 7). Besides the gold and silver jewellery, the earliest tin bronze examples from the Izmir region are also from Bakla Tepe and dated to this

Figure 4
Depas from Bakla Tepe pithos cemetery (BT – 19086).

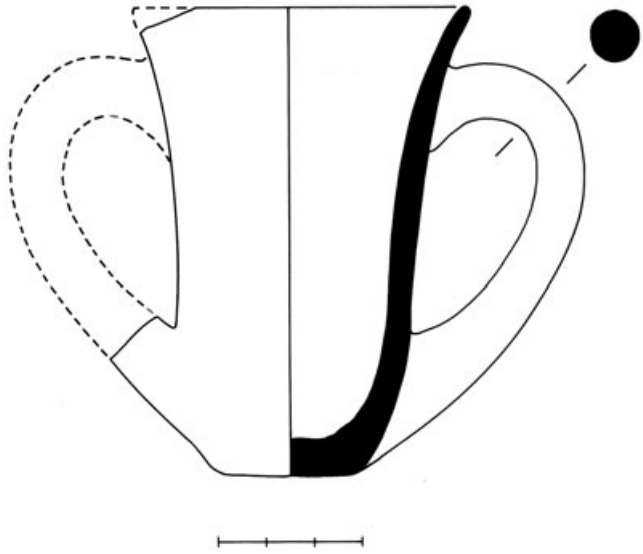


Figure 5
Depas from Bakla Tepe pithos cemetery (BT – 61003/8).

Figure 6
Group of tankards from Bakla Tepe pithos cemetery (BT – 40063, 40121 and 40109).

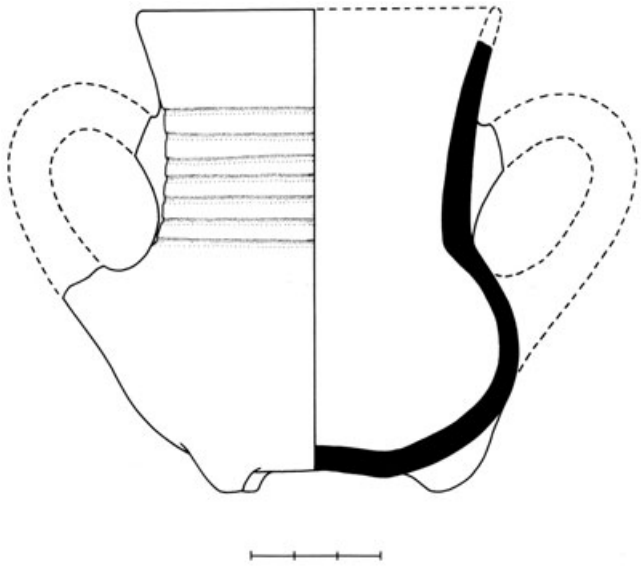


Figure 7
Tripod tankard from Bakla Tepe pithos cemetery (BT – 61031/4).

period.[9] The gold and silver goods and seals from the graves, which might point to the existence of different social classes, betray connections with the central and north-western Anatolian examples on the one hand, and the Aegean on the other.

Another important settlement associated with the *Anatolian Trade Network* is Liman Tepe (Erkanal 2001), situated in the bay of Izmir on the north side of the Urla peninsula (Fig. 1b). Level V of the settlement, which was continuously inhabited during the Early Bronze Age,

9 The preliminary results of the analyses undertaken at the Isotrace Laboratory in Oxford by the Gales indicate that the pins BT 98/222, BT 98/144 and BT 98/143 from the cemetery are tin bronzes.

Figure 8
Cutaway-spouted jugs from Bakla Tepe pithos cemetery (BT – 56007/7 and 46147).

dates to the Early Bronze Age II period, while Level IV dates to the Early Bronze Age III period[10] (Fig. 1). Liman Tepe was surrounded by a monumental fortification wall bearing horseshoe-shaped bastions from the Early Bronze Age II period onwards (Erkanal 1999a, 240). This fortification system most probably continues under the sea to the north of the settlement and forms a harbour complex. Mostly administrative buildings were constructed within the fortified area, while the lower city included residential buildings (Erkanal 1999b, 329, 331, Çizim 2, Resim 5). A large building complex belonging to the levels dating to the later phase of the Early Bronze Age II period must also be associated with the central authority at the site (Erkanal 1996, 77–8). The narrow, rectangular storage rooms (Fig. 3, H-12), a courtyard associated with them and a second building to the north (Fig. 3, H-11) included finds which provide evidence for the function of the complex (Fig. 3). Fine red and black burnished wares, common over a large area extending from central Anatolia to mainland Greece, were found in the storage rooms. Along with this assemblage consisting of tankards, bell-shaped cups (Şahoğlu 2002, Lev. 64a, 2004, fig. 4a, 13), one-handled cups (Şahoğlu in press a, fig. 2d–e), depata (Şahoğlu 2004, fig. 6a, 12), cutaway-spouted jugs (Şahoğlu 2002, Lev. 63c), incised pyxides (Şahoğlu 2004, fig. 4b, 15) and teapots, a bull-head rhyton, possibly of religious significance, was also discovered in one of the storage rooms (Şahoğlu 2002, Lev. 71c). On one of the cylindrical stone phalloi from the courtyard of the building complex, the head of a monkey was sculpted (Erkanal and Günel 1997, 245–6, fig. 10). Besides this find, a baked-clay standard-like object suggests the ritual function of the building complex (Erkanal and Günel 1997, fig. 4). In the northern building, besides various idols (Erkanal 1998, Resim 2), a bell-shaped stamp-seal of green stone (Erkanal 1998, 387; Erkanal-Öktü 2004, 656, 660, Kat. No. 457) attests the presence of administrative control mechanisms at Liman Tepe. The evidence at hand points to the function of the building complex as a religious and administrative building (Şahoğlu 2002, 146). The city-plan consisting of a fortification system, a citadel and a lower city and the presence of buildings testifying to a central

10 For the Early Bronze Age chronology of Liman Tepe see Şahoğlu 2002, pl. 116.

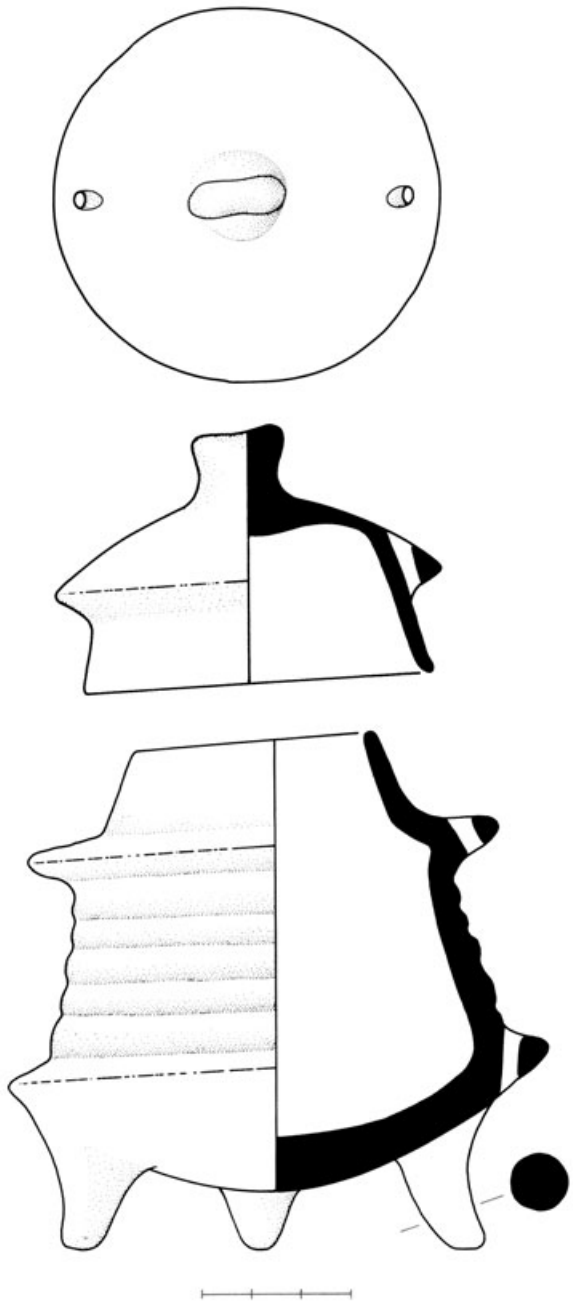


Figure 9
Tripod grey pyxis and its lid from Bakla Tepe pithos cemetery (BT – 65006/5).

authority, all prove the existence of a well-planned political structure at Liman Tepe from the end of the Early Bronze Age II period onwards.

The Izmir region, which lies between the Gediz and Küçük Menderes valleys, is the most easily accessible area of coastal western Anatolia from central Anatolia (Fig. 1a). The importance of the region during the Early Bronze Age can now be recognised as a result of the excavations which started in the 1990s. This importance is further emphasised when its location on the sea routes of the Aegean is also considered. The Urla peninsula extends into the Aegean, dividing coastal western Anatolia into a northern and a southern part. As a result of this topography, the peninsula forms a formidable barrier which could take days for early seafarers, travelling along the coast, to surmount. Although the peninsula is approximately 80 km long in an east–west direction, its width north–south can narrow to 15 km in places (Fig. 1b). The Early Bronze Age seafarers travelling from the north and the south could have taken advantage of the easier and less dangerous land route rather than spending much longer, sometimes weeks, waiting for favourable conditions to travel around the tip of the peninsula. In this respect, the location of Liman Tepe, one of the largest Early Bronze Age settlements in the entire Aegean, on the northern end of the shortest land route connecting northern and southern Aegean is not a coincidence (Fig. 1b). Due to its strategic location, the Izmir region served as a bridge between Anatolia and the Aegean and some of the most important settlements in the *Anatolian Trade Network* were located in this area. The traders in the region played an active role in both the land and sea trade.

The seafaring traders also established 'colonies' through which the *Anatolian Trade Network* extended over the Cyclades and Greek mainland, especially Euboea, like the example at Kanlıgeçit in Thrace. Pottery and certain architectural features with Anatolian connections have been unearthed in the Cyclades, especially in the northern and eastern islands of Syros (Bossert 1967; Marthari 1998), Naxos (Doumas 1972; Angelopoulou 2003), Keos (Wilson 1999), Delos (MacGillivray 1980), Amorgos (Davis 2001, 73) and Keros (Broodbank 2000b) (Fig. 1a). The most interesting settlement to provide evidence for the presence of the *Anatolian Trade Network* in the Cyclades is Kastri on Syros (Bossert 1967; Doumas 1988; Marthari 1998). This small settlement is surrounded by a simple variation of a fortification system with horseshoe-shaped bastions (Bossert 1967, Plan 2; Marthari 1998, fig. 15) like the much more impressive example unearthed at Liman Tepe. Kastri has produced finds especially associated with the production and distribution of metal artefacts (Bossert 1967, Abb. 1–2; Marthari 1998, fig. 22). The depata (Bossert 1967, Abb. 4, Nos. 3–6, Abb. 5, Nos. 7–8; Marthari 1998, fig. 23), a variation of the bell-haped cups (Bossert 1967, Abb. 4, No. 1) and incised pyxides (Bossert 1967, Abb. 4, No. 2) from the settlement are entirely Anatolian in character;[11] while analyses carried out on the metal artefacts show similarities to the tin bronzes from Anatolian settlements (Stos-Gale *et al*. 1984). When reconsidered within the framework of the *Anatolian Trade Network*, Kastri on Syros, which was inhabited only in this period, can be considered as a small 'colony' like Kanlıgeçit, established to facilitate the flow of trade in the region.

Delos – Mt. Kynthos (MacGillivray 1980; Karantzali 1996, 34–35, figs. 44–6a), Naxos – Panormos (Doumas 1972, 165–6, figs. 17–18; Karantzali 1996, 24–6, figs. 17–21;

11 Analysis of pottery assemblages from both Anatolia and the Aegean within the framework of a joint project called 'Kastri Group Project: The Transmission of Style and Technology in the Early Bronze Age II Aegean' (Archaeological Society at Athens, the NRCS Demokritos (Athens), Ankara University (Turkey), University of Sheffield (Great Britain) and University of Western Ontario (Canada)), will contribute furthermore to this topic.

Angelopoulou 2003, in press)[12] in the Cyclades and Palamari on Skyros (Theochari and Parlama 1986, 1997; Theochari *et al*. 1993; Parlama 2003) in the Sporades are other settlements which, like Syros – Kastri, are located at nodal points within the *Anatolian Trade Network* (Fig. 1a).

Keos – Ayia Irini, the most thoroughly researched and published Early Bronze Age site in the Cyclades, possesses the entire assemblage characteristic of the *Anatolian Trade Network* (Wilson 1999, 94–101). Apart from Liman Tepe and Bakla Tepe, only this settlement produced all the most characteristic pottery shapes including depata, tankards, cutaway-spouted jugs, two-handled cups and wheel-made plates. These finds, which attest to relations with Anatolia during this period, suggest that Keos played an important role in acting as a stepping stone for the network to extend to mainland Greece. Recent investigations at Thera – Akrotiri[13] and Zas Cave[14] on Naxos are beginning to show that these settlements are also important trading posts in relation with the *Anatolian Trade Network*.

The *Anatolian Trade Network*, which in mainland Greece extended via the Cyclades to Attica, Euboea and Thessaly (Fig. 1a), can be best followed at sites like Manika (Sampson 1985), Lefkandi (French 1968), Raphina (Theocharis 1952), Thorikos (Spitaels 1984) and Pevkakia (Christmann 1996). At all these sites, the relationships which are demonstrated by the Anatolian pottery shapes point to the wide extent of the *Anatolian Trade Network* which spread over a large area from northern Syria to central Anatolia and from there to coastal western Anatolia, the eastern Aegean islands, the Cyclades and to mainland Greece.

The most important settlements on southern mainland Greece during this period are Lerna and Tiryns in the north-eastern Peloponnese (Fig. 1a). These settlements, like those in Anatolia, possess a fortified citadel with monumental building complexes representing a central authority.[15] Finds pointing to the existence of an organised trade structure with associated control mechanisms have also been uncovered. For example, at Lerna in the two-storeyed central building called 'House of the Tiles',[16] which included large rooms and storage areas, bullae with seal impressions were uncovered (Wiencke 1958, 1969). These bullae, which evidently sealed wooden boxes and door-locks, attest to the presence of a hierarchical society using seals as a control mechanism in the Peloponnese (Weingarten 1997, 2000).[17] Although there is no doubt that the Peloponnese possessed a well-developed social and administrative system,[18] the region has, so far, revealed few traces of the characteristic material culture of the *Anatolian Trade Network* which was active in Attica immediately to the north. The little archaeological evidence available for comparison with Anatolian counterparts consists of the fortification with

12 These two small fortified sites are also short-lived and were abandoned forever at the end of the *Anatolian Trade Network*.

13 See Sotirakopoulou 1999, fig. 34α, pls. 88–90 (for tankards) and fig. 34β, pls. 93–4 (for bell-shaped cups). For some preliminary remarks on the results of the new excavations cf. Angelopoulou in press.

14 A number of clay sealings dating to the period of the *Anatolian Trade Network* were discovered in Zas Cave (Zas Level IV) (Zachos in press). These finds which were found in relation with characteristic pottery types like depata and tankards (Zachos in press) strongly suggest that Zas Cave on Naxos was also an important participant in this wide trade network.

15 For the 'House of the Tiles' at Lerna see Caskey 1955; Wiencke 2000, 213–311; for 'Building BG' see Wiencke 1986, 2000, 185–211; for the 'Rundbau' at Tiryns see Kilian 1986.

16 Cf. Wiencke 2000, 291–304 for the most recent overview of the 'House of the Tiles' at Lerna and other 'corridor houses' in general.

17 Cf. also Kostoula 2000 for the presence of clay sealings at Petri in the Peloponnese.

18 For some works concerning the urbanisation and important changes in social and political life in the Peloponnese during the Early Helladic II see: Konsola 1986; Pullen 1985, 1992, 1994 and Wiencke 1989.

horseshoe- shaped bastions (Wiencke 2000, Plan 18, 20–2, 24, figs. I.10–14, I.16) which is similar to but much smaller than that at Liman Tepe, a two-handled cup of stone (Caskey 1956, fig. 4, pl. 47i) and an 'Anatolian type' beak-spouted jug motif on a seal impression (Wiencke 1958, pl. 22, no. S55; Weingarten 1997, seal impression no. 109). None of the Anatolian-type pottery forms, characteristic of the period, have been found in the Peloponnese. This is the time at which political entities were forged in the Aegean and although the Peloponnese had contacts with the central part of the Greek mainland, especially with settlements in Attica and Boeotia, it is clear that it had almost no direct contact with Anatolian merchants. The finds with Anatolian connections (the stone cup and seal), prestige items used by the elite within the settlement, could have well reached Lerna indirectly through intermediaries like Aegina – Kolonna.[19] That no settlements in the Peloponnese had direct contacts with the *Anatolian Trade Network* suggests that this region might have had a different political alignment or structure than other regions in the Greek mainland.

The *Anatolian Trade Network*, which first materialised towards the end of the Early Bronze Age II period and gradually became active over a wider area, reached its zenith at the beginning of the Early Bronze Age III period (Fig. 2). This organised network not only provided the Aegean and Anatolian peoples with trade goods but, more importantly, accelerated social differentiation and resulted in the formation of the first political alliances. This network – the most important and widespread trade system established in Anatolia until that period – must have been based in large part on metallurgy and the trade in precious metals like silver and tin, an example of which might be observed in the Bolkar Mountains in the Taurus. The merchants who systematically traded these Anatolian metals to distant areas must have acquired, in return, archaeologically invisible materials like textiles, perfumes, scented oils and wine. That the pottery forms which characterise the *Anatolian Trade Network* are almost entirely made up of drinking and pouring vessels suggests that wine, the drink of the 'elite', could have played an important part in the trade.

Most of the western Anatolian and Aegean settlements which participated in the *Anatolian Trade Network* underwent important social and political changes during the second half of the Early Bronze Age III period (Fig. 2). For instance, the monumental administrative buildings within the citadel of Liman Tepe were abandoned, and much smaller residential buildings and workshops were constructed in their place (Şahoğlu 2002). At Troy, the dimensions of the settlement were reduced considerably and the monumental architectural features of the previous period disappeared. In central western Anatolia, Küllüoba, like the other settlements of the period, entered a period of reduced importance. The 'colonies' founded at Kanlıgeçit in Thrace and at Kastri on Syros, founded at the time when the *Anatolian Trade Network* was at its apogee, were abandoned at the end of the period. The developments in central Anatolia, one of the most important regions where the *Anatolian Trade Network* must have been very active, remain elusive due to lack of research into the period.

The conflicts that usually arise among different political entities must have helped to bring about the end of the system of trade at this period, perhaps also reacting to short-term climatic events (Weiss *et al*. 1993; Peltenburg 2000). The extensive trade network, which seems

19 See Berger 2004, 1103, Taf. 6.31 for a 'bell shaped cup' from Aegina – Kolonna III (Keramikphase 2) and Gauss and Smetana 2004, 1106, Taf. 8.7 for an incised pyxis from Aegina – Kolonna IV (Keramikphase 1) which are among the type shapes of the *Anatolian Trade Network*. Cf. also Gauss and Smetana 2004, Taf. 8.1 for the chronological setting of these finds within the EB stratigraphy at Kolonna.

to have collapsed during the second half of the Early Bronze Age III period, was revived at the beginning of the second millennium BC, especially between central Anatolia and Mesopotamia – but this time to supply different needs and raw materials. With the proliferation of writing as a means of everyday communication, a more complex system of contacts (the *karum* system) was formed, as in the case of the *Assyrian Trade Colonies* established in central Anatolia in the early centuries of the second millennium BC, and best known from the archives of the *karum* of Kültepe, ancient *Kaniš*. The reason why western Anatolia remained less involved in this new order is elusive, mainly due to the present state of research. The factors involved in the formation of the *Assyrian Trade Colonies* might actually provide important evidence as to why western Anatolia was no longer as active a member in the trade network. The local Anatolian tin sources became insufficient for the rising demand for bronze in Anatolia and the result was the import of tin from the east, possibly Afghanistan, which arrived through the Assyrian trade network via Mesopotamia. Texts attest to Assyrian merchants bringing tin to Anatolia and, in exchange, taking Anatolian gold and silver back to Mesopotamia (Larsen 1976, 86; Dercksen 1996, 2). The possibility that raw materials and other goods imported into Anatolia through Mesopotamia were better suited to the needs of Anatolian merchants may have resulted in the shift of trade routes eastwards.

Although central Anatolia demonstrates a different development than that reconstructed for western Anatolia at the beginning of the second millennium BC, contacts between the two regions nevertheless continued. The latter region, which had more intensive overseas contacts during the Middle Bronze Age, took its place in the new world order where, in time, the Minoan and Hittite civilisations met.

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Ankara University
Dil ve Tarih Coğrafya Fakültesi
Department of Archaeology
TR-06100, Sıhhiye – Ankara
TURKEY
e-mail: sahoglu@humanity.ankara.edu.tr

ABBREVIATIONS

AANE = EMRE, K., HROUDA, B., MELLINK, M. and ÖZGÜÇ, N. (eds.) 1989: *Anatolia and the Ancient Near East: Studies in Honour of Tahsin Özgüç* (Ankara).

Ancient Anatolia = CANBY, J.V., PORADA, E., RIDGEWAY, B.S. and STECH, T. (eds.) 1986: *Ancient Anatolia. Aspects of Change and Cultural Development, Essays in Honor of Machteld J. Mellink* (Madison).

EHAU = HÄGG, R. and KONSOLA, D. (eds.) 1986: *Early Helladic Architecture and Urbanization. Proceedings of a Seminar Held at the Swedish Institute in Athens, June 8, 1985* (Göteborg, SIMA LXXVI).

Habitat II = SEY, Y. (ed.) 1996: *Habitat II: Housing and Settlement in Anatolia: A Historical Perspective* (İstanbul).

HORIZON = BRODIE, N.J., DOOLE, J., GAVALAS, G. and RENFREW, C. (eds.) (in press): *Όρίζων: A Colloquium in the Prehistory of the Cyclades* (Cambridge, McDonald Institute Monograph Series).

KST = KAZI SONUÇLARI TOPLANTISI.

Poliochni = DOUMAS, C. and LA ROSA, V. (eds.) 1997: *Poliochni e L'Antica Età del Bronzo Nell'Egeo Settentrionale* (Athens).

TAİÜ = BELLI, O. (ed.) 2000: *Türkiye Arkeolojisi ve İstanbul Üniversitesi (1932–1999)* (İstanbul).

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