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ANATOLIAN CHRONOLOGY IN THE EARLY AND MIDDLE BRONZE AGE

By JAMES MELLAART

MODERN SCIENTIFIC EXCAVATION did not start in Turkey until the nineteen-thirties and it is therefore not surprising that Anatolian chronology has been somewhat neglected in the past.

Since the war, however, Anatolian archaeology has made rapid progress. New excavations, publication of old ones and systematic field-surveys have added a vast amount of new material, much of it stratified. These new results call for a reconsideration of Anatolian chronology, not as an adjunct to that of Syria and the Aegean,¹ but in its own right. The recent excavations at Kültepe, near Kayseri, undertaken by T. and N. Özgüç for the Turkish Historical Society, have produced literary evidence for relating the Anatolian culture-sequences to those of Mesopotamia in and before the Hammurabi period. This new material has a direct bearing on the vexed problem of dating the Hammurabi period and the rise of the Hittite Old Kingdom and at last enables one to establish the chronology of the area, not only in relation to Mesopotamia, but also in absolute dates.

With Kültepe as a firm basis, an absolute chronological framework can be constructed for the regions with which this site had cultural relations, i.e. Central Anatolia and Cilicia. Unfortunately it is not yet possible to do the same for another important region, the Konya plain, as the results of S. Alp's very important excavation at Kara Hüyük have not yet appeared in print. Cilicia is closely linked to both Western Anatolia, where Troy and Beycesultan are now the two main stratified sites, and to North Syria, in particular the Amuq plain, in which Alalakh is the main site.

Western Anatolian evidence can be used to anchor the Macedonian and Thracian cultures of the Early Bronze Age; and Aegean chronology, until now dependent for its absolute dates on Egyptian chronology, can now be cross-checked by its Anatolian connections.

THE KÜLTEPE SEQUENCE

Since the 1956 season at Kültepe, the following sequence can be established in the *karum* and on the city mound ²:

KARUM.

CITY MOUND.

Destruction c. 1190 B.C.

Two building levels of Hittite New Kingdom date.

¹ C. Schaeffer, *Stratigraphie comparée*, Oxford, 1948, chapter VI, pp. 215-327. S. S. Weinberg, "Aegean chronology," *AJA*. LI (1947), pp. 167, 178 f. V. Milošević, *Chronologie der jüngeren Steinzeit Mittel und Südosteuropas* (Berlin, 1949), pp. 22 ff.

² See *AS*. VI, 1956, p. 25 f., and VII, 1957, under "Summary of archaeological work in Turkey" (Kültepe). *The Times*, 11th December, 1956, "Beycesultan and Kültepe." The writer is much indebted to Professor T. Özgüç and Dr. K. Balkan for their kindness in allowing him to make use of unpublished material from Kültepe.

KARUM.	CITY MOUND.
	Two building levels of pre-Hittite New Kingdom date.
	Destruction by conflagration. Series of large buildings, including Hrozny's " Temple ". Probably of Hittite Old Kingdom date.
<i>Karum</i> Ia (deserted).	?
<i>Karum</i> Ib (destroyed by fire).	Public building with Anita's spearhead (destroyed by fire).
<i>Karum</i> " Ic ", no occupation, graves only.	Public building with tablets of Waršama, king of Kanesh (destroyed by fire).
<i>Karum</i> II (destroyed by fire).	Contemporary occupation material.
<i>Karum</i> III.	?
<i>Karum</i> IV. Monochrome wheel-made pottery accompanies the painted Cappadocian ware.	Late Cappadocian building level.
(Virgin soil.)	Middle Cappadocian building level.
	Early Cappadocian building level. Private houses and large public building of megaron plan.
	Latest Alishar Ib (Central Anatolian Early Bronze Age) level.
	Earlier Alishar Ib level(s).
	(Beginning of C. Anatolian E.B.A. not yet reached.)

The famous " Cappadocian " tablets, letters and contracts of Assyrian and native merchants, which mention the Old Assyrian kings Sargon and his son Puzur-Assur, are now known to belong to *Karum* II. K. Balkan, the Kültepe epigraphist, had established about sixty *limu* names by 1954 and estimates the total of *limu*s in level II at about eighty.³ As the finds in a burnt building inevitably belong to the period immediately preceding the destruction, we need not wonder why only the last two kings of Assur, under whose protection the trade flourished, are mentioned. Archives of this nature are bulky and the merchants' houses often very small, nor is there any necessity of keeping the records of one's grandfather's time. It is therefore possible that the length of *Karum* II may be a little more than eighty years, say a century. As Puzur-Assur is the last Assyrian king mentioned in these records, one must conclude that the destruction of the *karum* fell in his reign, most probably at the end of it.⁴ Basing his conclusions on the latter assumption, K. Balkan argues that with a duration of about eighty years, *Karum* II must have been founded in the 26th

³ K. Balkan, *Observations on the chronological problems of the kârum Kaniš* (Ankara, 1955), p. 46 (abbreviated here as *Observations*).

⁴ *Observations*, p. 60.

year of Erišum I.⁵ If, on the other hand, it lasted a century, its foundation would still fall in the reign of the same king. In both cases the Assyrian trade lasted throughout the reigns of four successive Assyrian kings: Erišum I, Ikunum, Sargon and Puzur-Assur. Only one king of Kanesh, Labarša, has yet been found mentioned by name in the *Karum* II tablets.

About half a dozen tablets have been found in the later Ib level of the *karum*, which is separated from the second level by a thick layer of burnt debris. A marked change is found in the archaeological material of the Ib period as well as in the Assyrian grammar and writing of the new texts.⁶ These appear to be contemporary with the more numerous Assyrian tablets from level 10 Tc at Alishar and those recently found in the *karum* of Boghazköy, the ancient Hattus. Pottery and other objects confirm this chronological equation.⁷ A tablet, found long ago at Kültepe and now in the Louvre, belongs to this period and records dealings of Pithana, king of Kussara, and a group of Anatolians. On the same tablet Anita, the king's son, is mentioned and both are again mentioned in the Alishar texts as kings.⁸ Recently a bronze spearhead was found in a burnt public building on the mound at Kültepe, which upon cleaning disclosed an engraved inscription, reading in Assyrian "Palace of Anita, the ruler".⁹

Several imported vessels of Khabur type, metal vessels, weapons and toggle-pins, found in the houses and the graves of *Karum* Ib show close contact with Northern Mesopotamia.¹⁰ Most important of all is, however, the discovery that several of the *limu* names found in the Alishar and Kültepe Ib texts are identical with those on tablets of Shamshi-Adad's reign, found at Chagar-Bazar and Mari.¹¹ This proves beyond doubt that *Karum* Ib at Kültepe, and those at Alishar and Boghazköy, are contemporary with the reign of Shamshi-Adad, and that Pithana and Anita are contemporaries of Shamshi-Adad and Hammurabi.^{11a}

THE INTERVAL BETWEEN THE DEATH OF PUZUR-ASSUR AND THE ACCESSION OF SHAMSHI-ADAD (KÜLTEPE IC PERIOD)

According to the Khorsabad king-list, Puzur-Assur was succeeded by a Naram-Sin, now known to be the well-known king of Eshnunna, who made wide conquests in Assyria and Northern Mesopotamia. After a short reign, his successor, Erišum II, was ousted from his throne by Shamshi-Adad, son of Ilu-Kabkabu. The latter is known from a treaty made with Iagit-Lim, king of Mari, but his kingdom is not mentioned. It must have been in Northern Mesopotamia and A. Parrot suggests that he may have been king of Assur after Puzur-Assur's death.¹²

⁵ *Observations*, p. 59.

⁶ *Observations*, p. 43, f. 47.

⁷ T. and N. Özgüç, *Ausgrabungen in Kültepe*, 1949, pp. 215-16, note 407.

⁸ *RHA.* III (1934), pp. 1-8. I. J. Gelb, *Inscriptions from Alishar and vicinity*, p. 50.

⁹ *Belleten* XX, no. 77 (1956), p. 34. *Observations*, p. 78.

¹⁰ *Belleten* XVIII, no. 71 (1954), pp. 379, 383, figs. 14, 15; *Belleten* XIX, no. 73 (1955), p. 69 f., figs. 40a, 42, 90.

¹¹ *Observations*, p. 43.

^{11a} See postscript, pp. 87-88.

¹² A. Parrot, *Archéologie Mésopotamienne* II, 1953, p. 353.

The interval between the latter's death and the accession of Shamshi-Adad was calculated by K. Balkan at twenty years, comprising the combined reigns of Naram-Sin and Erišum II.¹³ Assuming that trade with Anatolia was not resumed until the tenth year of his reign, the Kültepe Ic period would amount to about thirty years. T. Özgüç would prefer a fifty-year interval to account for the changes in culture, the new orientation of the houses and, most important of all, the fact that the rich domestic equipment left in the houses at the time of the destruction was not removed by their owners, who took refuge within the city walls of Kanesh. Perhaps some religious taboo was involved, for in a few cases the old merchant was buried in the destruction debris overlying the ruins of his house by his relatives inhabiting the city mound. A mere difference of twenty years in the estimates of the two scholars may be overlooked.

THE PROBLEM OF MESOPOTAMIAN CHRONOLOGY

Although the relative chronology of Northern Mesopotamia and Central Anatolia in the so-called Hammurabi period has now been firmly established, the absolute dates of Shamshi-Adad and Hammurabi still present one of the most vexed problems of Near Eastern chronology. In spite of over fifteen years of intense discussion, we still have three different chronologies ; a high one, proposed by A. Goetze ; a middle one, held by S. Smith, and a low one, defended by W. F. Albright. Each of these chronologies has many followers and whereas in general British scholars favour S. Smith's chronology, the low chronology has found most adherents in Germany. The high chronology is finding more and more favour in Turkey, as many of the new discoveries there are difficult to reconcile with the other and lower chronologies.

According to these various chronologies Kültepe *Karum* II is dated as follows ¹⁴ :

20th century	. A. Goetze, B. Landsberger, T. Özgüç
1970-1870	. S. Smith
1952-1872	. K. Balkan (who otherwise follows B. Landsberger)
1860-1780	. W. F. Albright

As far as the earlier period is concerned, there is unanimity between the high and middle chronologies, but on the low chronology a reduction of about one century affects all dates in the third millennium. Shamshi-Adad's accession is dated 1852, 1823 and 1749 B.C. respectively in the high, middle and low chronologies and the *Karum* Ic period is therefore in each case forty to fifty years, which agrees with the excavator's estimate. The rule of two kings of Kanesh, Warsama and his father Inar, falls within this period, preceding the reigns of Pithana and his son Anita, kings of Kussara contemporary with the *Karum* Ib.¹⁵

¹³ *Observations*, p. 60.

¹⁴ A. Goetze, "Cultures of Early Anatolia," *Proc. Am. Phil. Soc.* 97, no. 2 (1953), p. 218. S. Smith, *Alalakh and Chronology* (London, 1940), p. 33. W. F. Albright, *BASOR.*, 1948, p. 126.

¹⁵ *Observations*, p. 60, and information kindly supplied by Professor T. Özgüç.

The length of *Karum Ib* is not yet known and though only about twenty *limu* names^{15a} have so far been found, one must remember that the number of tablets belonging to this second phase of Assyrian trading activity is much more restricted and was again found in a burnt level and therefore belongs to the last years of the settlement. At Boghazköy this settlement was twice rebuilt, but the tablets belong to the last floor and it would be rash to assume that the twenty *limu* names cover the whole length of the period. K. Bittel's estimate of a duration of about fifty years for the Boghazköy *karum* seems reasonable and agrees with K. Balkan's calculations of about forty to fifty years for the length of *Karum Ib* at Kültepe and the combined reigns of the two kings of Kussara. The Alishar *karum* belongs to the same period.

What caused the successive destructions of *Karum II*, the public building on the mound in which Waršama's tablets were found, and *Karum Ib*?

In an article entitled "The end of the Early Bronze Age in Anatolia and the Aegean", which I hope soon to publish, I have tried to show that the destruction of *Karum II* may be ascribed to the invasion of the Hittites. What the cause of the destruction of Waršama's palace was, is not so easily determined, as long as other contemporary buildings on the mound remain unexcavated. Political disturbance at this period is the subject of a letter written to Waršama by Anumhurpi, king of Mama, and it is significant that the *karum* area was not reoccupied, but used as a cemetery instead. In the Kültepe Ib period a *karum* was re-established and once more there is evidence of great prosperity, which comes to a sudden end, not only at Kültepe but also at Boghazköy. At both places not only the *karums* but also the royal citadels fall a prey to the flames and at contemporary Alishar the *karum* disappears. Although occupation continues at Alishar and Kültepe (Alishar 10 Tb and *Karum Ia*), no more tablets are found and a marked decline in the pottery sets in at Kültepe. After the destruction Boghazköy appears to have lain deserted for a considerable length of time.

An historical interpretation of these destructions is furnished by the so-called Anita-text, long considered a semi-legendary document, but in view of the recent discoveries probably a copy of an old historical document. It describes the destruction of Hattus (Boghazköy) and the other conquests of Anita. Although Kanesh (Kültepe) is not mentioned in the extant portion of the text, the archaeological evidence points to a destruction at the same time, and the finding of a weapon bearing the inscription "palace of Anita, the ruler", i.e. part of Anita's armoury, is liable to two explanations. It either means that the building in which it was found was Anita's palace or that it belonged to the enemy who sacked the building in which it was found, which, one should not forget, was burnt. A third explanation, that it was a royal present or precious booty sent by or taken from Anita, we may discard in view of the very ordinary quality of the weapon, which is made of bronze, not gold or silver.

^{15a} This number represents the total of *limu* names of the *Karum Ib* period from all sites, after the 1956 excavations, as Prof. W. F. Albright kindly informed me.

If we take it that the spearhead belonged to one of Anita's soldiers, who sacked the city and *karum* of Kanesh, we have a parallel for the destruction of Hattus and we may consider Anita's conquests responsible for the end of the Assyrian trading colonies in Central Anatolia.

The case of the *karum* at Alishar is slightly different ; here there is no destruction, but it may be significant that on several tablets Pithana and Anita take an active part in the affairs of its merchants. This suggests that Alishar was part of the kingdom of Kussara and perhaps we may go even further and suggest that it is the city of Kussara. None of the tablets found at Alishar give an indication of the ancient name of the place. Ankuwa has been suggested, but Ankuwa figures in later records as a winter residence of the Hittite kings of the new kingdom and the absence of any remains attributable to this period at Alishar rules out that identification. Kussara, on the other hand, is found in texts from the Kültepe II period to the Hittite Old Kingdom, after which Hattusili I shifted the capital from Kussara to the old site of Hattus, uninhabited since its destruction by Anita. In later texts Kussara is no longer found, which agrees well with the archaeological remains found at Alishar, where the last remains (level 10 Ta) date from Hittite Old Kingdom times. Its desertion may be the result of Hattusili's shift of capital westward.

The building levels following the end of the Assyrian trade, *Karum* Ia at Kültepe and Alishar 10 Tb, end in desertion and destruction respectively. At Kültepe a new phase follows on the mound, inaugurating a new building tradition, hitherto not found there. Instead of mud-brick walls heavily reinforced with vertical and horizontal wooden beams on weak and shallow stone foundations, we now find very thick stone walls, consisting of a rubble core faced with large orthostats on heavy stone foundations, in a tradition associated with Hittite architecture. To this building level, marked everywhere on the mound by great fused blocks of vitrified mud-brick—the result of a fierce conflagration which destroyed the entire city on the mound—belongs the large building excavated by B. Hrozný. Like the gate at Alaca Hüyük, it seems to have been decorated with orthostats bearing reliefs.¹⁶ We cannot go far wrong in assuming that in this building level we have reached the period of the Hittite Old Kingdom. The violent destruction of the site may be related to the end of that period, when internal disorder and Kaskaean invasions wrecked the newly established kingdom after the death of Mursili I. The unfinished state of the Alaca Hüyük reliefs may be related to the same disaster. The break-up of the Hittite Old Kingdom took place soon after Mursili's sack of Babylon, variously dated 1650, 1590 or 1531 B.C., according to the different chronologies. The introduction of a new phase in the history of Kültepe we are inclined to associate with the incorporation of the town into the Hittite state. This must have happened under the first king of the dynasty, Labarna, who still resided in Kussara. It is unbelievable to think that Labarna, who waged war against Arzawa and made the "two seas his frontiers" had no

¹⁶ *Syria* VIII (1927), p. 2 f ; fig. I and pl. I, 3 and 4, pl. II, 1.

control over Kanesh. The length of time involved between the beginning of the Hittite Old Kingdom and the sack of Babylon can only be measured in time of generations, of which there are four : Labarna, Hattusili I and his *grandson* Mursili I. If we assume that Labarna ascended the throne about a century before the sack of Babylon by his great-grandson, we cannot be far wrong.

THE LENGTH OF THE INTERVAL BETWEEN THE DEATH OF MURSILI AND THE BEGINNING OF THE HITTITE NEW KINGDOM

Two building levels appear to span the gap between the end of the Old Kingdom and the beginning of the new, a period sometimes referred to as the Hittite Middle Kingdom. All chronologies agree in placing the beginning of the New Kingdom between 1450 and 1430 B.C. How long was this interval, during which seven generations of kings (and independently queens) reigned? The high chronology allows for two centuries, the middle for 140 years and the low one for 81 years. Two building levels at Boghazköy, one of monumental character (IV b and a), and seven generations, hardly favour a period of 81 years¹⁷ and not even H. Otten's ingenious theory of two overlapping dynasties, strongly attacked by A. Goetze,¹⁸ who points out that there is no evidence whatsoever to support such a view, will remove this stumbling-block to adherents of the low chronology.

There remain the middle and the high chronologies and a case can be made for both ; 140 years is not impossible for seven generations but they may equally well have lasted longer, especially if the archaeological evidence is taken into account.

OBJECTIONS TO BOTH MIDDLE AND LOW CHRONOLOGIES

The most serious criticism of both middle and low chronology is, however, that they are based on two tacit assumptions which, in spite of the fifteen years or so that have passed since they were first proposed, have not been substantiated. The first of these is C. Schaeffer's statement that cylinder seals of first dynasty of Babylon style were found by him in levels overlying those containing monuments of the twelfth dynasty of Egypt, the latest of these being a fragment of a sphinx bearing the name of Amenemhet III (1842-1797 B.C.).¹⁹ The conclusion drawn from this statement was that Hammurabi must be later in date than Amenemhet III. Similar seals were said to have been found in tombs dated by scarabs to the 18th-17th centuries B.C. Whereas the former cylinder seals have still not been published, those from the tombs have been, and A. Parrot and A. Goetze have clearly shown that the said seals are not of the first dynasty

¹⁷ *BASOR.* no. 122 (1951), pp. 18 ff. ; no. 127 (1952), pp. 21 ff. *JAOS.* 72, no. 2 (1952), pp. 67 ff. Against this view : *BASOR.* no. 126 (1952), pp. 20 ff., 24 ff.

¹⁸ *MDOG.* 83 (1951), p. 60, and *JAOS.* 72 (1952), pp. 71 ff.

¹⁹ S. Smith, *Alalakh and Chronology*, p. 15.

of Babylon style or date.²⁰ They are therefore naturally suspicious of the unpublished ones, which are used by S. Smith to prove that the end of the XIIth dynasty of Egypt antedates the beginning of the Hammurabi period.

However that may be, a cylinder seal of the first dynasty of Babylon type was found in a tomb at Platanos, in the Mesara plain in Crete, which, according to F. Matz, using Egyptian dates, contained nothing later than the middle of the 19th century B.C.²¹ This would imply that the cylinder seal dates from the same period as the rest of the funerary equipment and that Hammurabi was a contemporary of Amenemhet III, as the high chronology maintains.

The second assumption, on which the low and middle chronologies are based, is that the Egyptian pharaohs of the XIIth dynasty had an empire in Syria which, according to S. Smith, even included the Amuq plain.²² This empire, which has left no records in the Egyptian inscriptions, is reconstructed from Egyptian monuments (none of which record victories or tribute) and Egyptian small objects found on several Syrian sites, such as Byblos (always a special case), Mishrife and Ugarit. To reconstruct an Egyptian Empire from such material is on a par with such fanciful theories as B. Hrozný's Hyksos Empire under Khyan which, on similar grounds, was supposed not only to have included Syria and Palestine, but to have stretched from Babylon in the east to Crete and Cythera in the west. There are other ways in which Egyptian objects found their way abroad and trade is one of them. The only Egyptian XIIth dynasty inscription of foreign conquest northward is that of Senwesret III's campaign to Shechem, in Palestine. Egyptian records, the so-called Execration texts,²³ show that even if a temporary suzerainty over Palestine was claimed, North Syria was well outside the sphere of Egyptian political ambitions during the XIIth dynasty.

An Egyptian empire there cannot be admitted and there is therefore no ground for assuming that the campaigns of Iaḥdun-Lim, of Mari, and Shamshi-Adad, of Assur, to the Mediterranean are to be dated to the period subsequent to the break-up of the supposed Egyptian empire in Syria, i.e. after 1800 B.C. A date of c. 1850 B.C. for Shamshi-Adad's campaign to the Mediterranean, reached on other grounds, is therefore not only possible but, in view of the Platanos seal, the most likely.

It is for these reasons that we are inclined to follow the high chronology, with A. Goetze, B. Landsberger, T. Özgüç, K. Balkan and S. Alp.

ABSOLUTE DATES FOR THE KÜLTEPE SEQUENCE

On the basis of the synchronism: Kültepe *Karum* Ib = Shamshi-Adad = 1850 B.C. we obtain the following dates. Tentatively we add the corresponding levels at Alishar Hüyük.

²⁰ *Archéologie Mésopotamienne* II, 1953, pp. 393 ff., and *BASOR.* no. 127 (1952), p. 25, n. ii.

²¹ F. Matz, *Handbuch der Archaeologie* II, p. 231, and *Historia* I (1950), pp. 173-194.

²² *Alalakh and Chronology*, p. 13 f., and *BASOR.* no. 127 (1952), p. 25.

²³ G. Posener, *Princes et pays d'Asie et de Nubie* (1940).

KÜLTEPE.		ALISHAR HÜYÜK.	
<i>Mound.</i>			
Two Hittite New Kingdom building levels.			
c. 1450-1180 B.C.		(Alternative)	
Two earlier levels.		—deserted—	
c. 1650/1600-1450 B.C.		squatters	
Large buildings on the mound.		—deserted—	destroyed—
Hittite Old Kingdom level.		Alishar 10 Ta	Al. 10 Ta
c. 1750-1650 B.C.			
deserted		destroyed	
<i>Karum</i> Ia	c. 1800-1750 B.C.	Alishar 10 Tb	Al. 10 Tb
Ib	c. 1850-1800 B.C.	= Alishar 10 Tc	
Ic	c. 1900-1850 B.C.	Alishar 11 Ta	
destroyed		destroyed—	
II	c. 2000-1900 B.C.	Alishar 11 Tb	
III pre-2000 B.C.		Alishar 11 Tc	

N.B.—The six Alishar building levels are often called the Alishar II period.

ALISHAR

In the light of the new Kültepe evidence it is possible, though not always easy, to reinterpret the stratification of Alishar Hüyük.²⁴ The one firm link is the contemporaneity of *Karum* Ib with Alishar 10 Tc and the three phases of Alishar 11 T are therefore earlier. Its middle phase II Tb is the most important,²⁵ destroyed like Kültepe II, possibly in the Hittite invasion,²⁶ and in the following phase the impoverished people actually inhabit the chambers of the town wall.²⁷ This phase probably equals the Ic phase of Kültepe. Alishar 11 Tc has only produced fragmentary walls and may be contemporary with the third *karum* level at Kültepe. The middle level of Alishar 10 T (b) is again heavily fortified, but so far poorly represented at Kültepe, and the large building, the "mansion" in Q 30 with its orthostat-faced walls and rich graves, obviously represents a period of prosperity,²⁸ not reflected at contemporary Kültepe (*Karum* Ia), although house-plans are similar.²⁹ Whereas Kültepe *Karum* Ia appears to have been deserted, Alishar 10 Tb seems to have been destroyed,³⁰ but an element of doubt is expressed by the excavators, whether it was not 10 Ta which was destroyed; the latest phase of all, that of miserable squatters living in the ruins of a once wealthy town, would then not be that of 10 Ta but of a later (unnumbered) level still. In any case the last phase of Alishar was that of an unfortified site,³¹ with people living in squalor. Unfortunately, this

²⁴ *OIP.* XXIX, p. 2 f.

²⁵ *ibid.*, p. ii.

²⁶ *ibid.*, p. 15; *Observations*, p. 41; *Ausgrabungen in Kültepe*, 1949, pp. 127 ff.

²⁷ *OIP.* XXIX, p. 15.

²⁸ *ibid.*, p. 24. *Bellefen* no. 65, p. 109.

²⁹ *Ausgrabungen in Kültepe*, 1949, pp. 215-16, note 407.

³⁰ *ibid.*, pp. 215-16, note 407.

³¹ *OIP.* XXIX, p. 24.

question cannot be decided as the excavators failed to keep the pottery from the six or seven levels of Alishar II separate in their publication, so that there is no way of checking.³² Both alternatives are shown in the table above.

OTHER CENTRAL ANATOLIAN SITES

The evidence from other sites in Central Anatolia is still too fragmentary and inarticulate to be of much chronological importance.

KÜLTEPE AND TARSUS

A series of new links enable one to establish the date of the end of the Early Bronze Age in Cilicia.

- (a) Syrian bottles, such as occur in the Amarna graves, near Carchemish, are imported into Tarsus at the end of the E.B. III period, as well as into the early (and perhaps also the middle) Cappadocian level on the mound at Kültepe.³³
- (b) Amuq J caliciform ware is imported with them in both places.³⁴
- (c) Wheel-made bowls and plates of plain ware, characteristic of Cilician E.B. III, occur in large quantities in the early Cappadocian level at Kültepe.³⁵
- (d) Late Cappadocian one-handled bowls with painted designs arranged in the form of a cross on interior, exterior or both, are characteristic of the third and last Cappadocian level on the Kültepe mound and of the transitional phase, or first phase, of the M.B.A. at Tarsus.³⁶
- (e) Typical painted pottery vessels of the early phase of the Cilician M.B.A. are imported into *Karum* IV and II at Kültepe.³⁷ Monochrome wheel-made wares with fine burnished slip occurring with Cappadocian ware in *Karum* IV and in the last Cappadocian level on the mound demonstrate their contemporaneity.

In tabular form, one obtains the following equations (contemporary Alishar levels added) :

CILICIA.	KÜLTEPE.	ALISHAR.
M.B.A.	<i>Karum</i> II, c. 2000-1900 B.C. <i>Karum</i> III	ii Tb ii Tc
Transitional phase.	<i>Karum</i> IV and late Cap. level on mound. c. 2100 B.C.	5M
Latest E.B. III.	Middle Cappadocian level. Early Cappadocian level, c. 2200 B.C.	6M
Earlier E.B. III.	Latest Alishar Ib level Earlier " " "	7M 8-iiM

³² *ibid.*, p. 110.

³³ *AS.* VI, 1956, p. 25 f. H. Goldman, *Excavations at Gözlü Kule, Tarsus* II (Princeton, 1956), fig. 268, nos. 614-17 (abbreviated here as *Tarsus*).

³⁴ *Tarsus*, fig. 268, e.g. nos. 514, 523, 524.

³⁵ *Tarsus*, fig. 265, nos. 412, 413, 4-8.

³⁶ *Tarsus*, fig. 289, no. 813 ; fig. 290 nos. 811, 812 ; fig. 291, nos. 820-1.

³⁷ *Ausgrabungen in Kültepe, 1948*, pp. 198-9, figs. 328 and 616 (level II) and figs. 617 and 317, 331 and 595 (level IV) ; add : fig. 341.

Karums III and IV and the two earlier Cappadocian levels on the mound do not appear to have been of very long duration and T. Özgüç would assign about two centuries to these four building levels. The beginning of the Cilician M.B.A. would then fall *c.* 2100 B.C., which is exactly where H. Goldman puts it.³⁸ The beginning of the Cappadocian period in Central Anatolia and the last phase of Cilician E.B. III would then begin around 2200 B.C.³⁹

THE EARLY BRONZE AGE IN CENTRAL ANATOLIA (ALISHAR IB PERIOD, COPPER AGE)

In the last Alishar Ib levels of both Kültepe and Alishar two-handled cups with red-cross decoration appear for the first time⁴⁰ and similar shapes continue into the early Cappadocian phase at both sites. At Alaca Hüyük the same type occurs,⁴¹ but in grey ware and without decoration. These Central Anatolian two-handled cups are much more closely related to similar cups from E.B. III Tarsus⁴² than to the N.W. Anatolian *depas* and their sudden appearance at the end of the Alishar Ib period may be due to the first contact with Cilicia. Red-cross decoration on these cups is so far peculiar to Kültepe and Alishar, but occurs on lids in the last (fifth) E.B.A. level at Alaca,⁴³ at Tarsus on bowls with volute feet,⁴⁴ at Troy in IVc on the interior of cups⁴⁵ and in Polatli II in Troy IV contexts as the well-known red-cross bowls.⁴⁶ In Western Anatolia these are a criterion of the Troy V period, but it should be noted that occasional specimens may go back to the previous period.⁴⁷ It now seems as if this type of decoration spread from east to west.

At Kültepe, the beginning of this period has not yet been reached, but at Alishar four earlier levels were found (8-11M). A date around 2500 for the beginning of the Central Anatolian E.B.A., suggested by K. Bittel, has found general acceptance.

THE ROYAL GRAVES AT ALACA

The famous royal graves at Alaca Hüyük belong to an open cemetery on the edge of the city. As such they are not really intramural graves and their regular arrangement suggests that they were provided with markers like the Yortan cemeteries. One E.B.A. level was found below these graves, showing that E.B.A. habitation had taken place there before the cemetery

³⁸ *Tarsus*, p. 62, and information kindly supplied by Professor T. Özgüç.

³⁹ i.e. about a century later than earlier estimates.

⁴⁰ *OIP.* XXVIII, p. 158, fig. 164, 1-2 : pl. IV, 7. *OIP.* XIX, pl. I.b 139 : pl. VII, below. *AS.* IV, 1954, p. 20. S. S. Weinberg's parallel with bowls from E. H. I. Eutresis is far-fetched and inadmissible (*Relative Chronologies in Old-world Archaeology*, p. 90).

⁴¹ H. Z. Koşay, *Les fouilles d'Alaca Höyük*, pl. CVI, 3a.

⁴² *AJA.* LI (1947), pl. XCII, 1, and CXIII, 1.

⁴³ H. Z. Koşay, *Ausgrabungen von Alaca Höyük*, pl. LXXI, 168 (level 5).

⁴⁴ *AJA.* LI (1947), p. 384.

⁴⁵ C. W. Blegen *et al.*, *Troy* II, p. 138.

⁴⁶ *AS.* I (1951), p. 46 (period II).

⁴⁷ *BiOr.* X, p. 59.

was established, and one level of squatters over the graves show that the cemetery went out of use before the end of the period. D. B. Stronach, working on the metal types, has succeeded in establishing a very convincing chronological sequence of the Royal Graves and it would appear that they belong to the period between 2400 and 2200 B.C. The desertion of the royal cemetery at Alaca is probably related to the fall of the ruling dynasty and it is not unlikely that this was caused by the arrival of the people introducing the Cappadocian pottery into the Kırşehir-Boğazlıyan basin. The destruction of the squatters' settlement (level 5) may have taken place as much as a century later. Some sherds of Cappadocian ware were found in the fourth level mixed with pottery of Kültepe Ib type.⁴⁸ It appears that the old royal city of Alaca was only intermittently inhabited between c. 2200 and c. 1850 B.C. The Cappadocian people do not appear to have settled in this region and the curious pottery found by K. Bittel at Büyükkaya⁴⁹ may indicate the existence of a still largely unknown culture, different from Alishar Ib ware and contemporary with the Cappadocian culture further south and south-east.

So little is known (or published) about other C. Anatolian sites, such as Has Hüyük, Maşat, Dündartepe, Karaoğlan, Bitik and Ahlatlibel, to mention only a few of these minor sites, that a few words about their chronological position will be sufficient. Comparing Ahlatlibel with near-by Karaoğlan we find that the latter site has a later phase, missing at Ahlatlibel, during which West Anatolian contacts are strong, as in contemporary Polatlı II. Ahlatlibel seems to have come to an end before Polatlı II, the beginning of which we are inclined to date to c. 2200 B.C. Its beginning, like that of Polatlı I, does not antedate the beginning of the C. Anatolian E.B.A., c. 2500 B.C.⁵⁰

THE CILICIAN M.B.A. AND ALALAKH

After a series of earthquakes, which laid the last E.B. III city low, Tarsus was conquered by newcomers, who introduced a new type of painted pottery, well known from the Amuq plain (Amuq K, L, M, periods) and in particular from Tell Atchana (Alalakh), where it is found from levels XVI–VIII.⁵¹ Although not quite identical, the Cilician M.B.A. pottery can only be derived from that of the Amuq plain, where there can be no doubt that it occurs considerably earlier at Tell Atchana. There it appears to take the place of caliciform wares in use at the neighbouring site of Tell Judeideh (Amuq, late I and J periods).⁵² Chalices of Carchemish E.B.A. and Til Barsib type, contemporary with late Amuq I, occur in Alalakh XVI and XV, the earliest levels in which the painted pottery is found.⁵³ In

⁴⁸ H. Z. Koşay, *Les Fouilles d'Alaca Höyük*, pl. XCV–XCVI.

⁴⁹ *MDOG*. 86 (1953), pp. 54–5, and note 1 on p. 55.

⁵⁰ *AS*. I (1951), p. 53.

⁵¹ *Tarsus*, p. 348. *OIP*. XLVIII, p. 6, under Judeideh VIII. Sir Leonard Woolley, *Alalakh* (London, 1955), pp. 308 ff., esp. pp. 340 ff.; pl. LXXXIV, LXXXV, XC–XCVII.

⁵² *Relative Chronologies*, p. 38.

⁵³ *Alalakh*, p. 329, type 113b. *Carchemish* III, pl. 59, p. 224.

level XIIb some rare painted bowls (of types 10 and 34) were found, presumably imports, which like similar examples in the earliest M.B.A. level of Tarsus look most like Late Cappadocian bowls from Kültepe.⁵⁴

The lower end of the long period in which painted pottery of the type in question was in use at Alalakh can be fixed precisely to the Kültepe Ib period.⁵⁵ In tabular form :

1800	Alalakh VII	Palace of Yarim-Lim.			
1850	VIII			Kültepe	Karum Ib
	IX	Amuq			
	X	M			
	XI	L			
	XIIa	K			
2100	XIIb	Tarsus beginning M.B.		Kültepe	Late Cappadocian.
	XIIc	Amuq			
	XIII	J	Tarsus E.B. III (Late)	Kültepe	Early Cappadocian.
2200				Amarna	(Bottles)
	XIV				
	XV	} Chalices			
2300	XVI			Amuq I (Late)	
	XVII				
c. 2400	water level			Amuq I (Early)	
	Tabara al Akrad I			Amuq H (Khirbet Kerak ware)	

Although we are unable to accept Sir L. Woolley's dates,⁵⁶ there can be no doubt that the painted pottery, introduced into Cilicia at the beginning of the M.B.A., c. 2100 B.C., had been in use at Alalakh for a full two centuries before. The peculiar absence at that site of the caliciform wares suggests that we are dealing with a more attractive substitute, peculiar to Alalakh. The conquest of Cilicia by newcomers from the Alalakh region followed a marked increase of contact with the Amuq region in the later part of the E.B. III period, when caliciform wares were imported and a late E.B. III two-handled cup was exported to Tell Tainat.⁵⁷

No texts tell us who these newcomers were, but the most likely guess is that they were Hurrians.⁵⁸

DIVISIONS OF THE CILICIAN M.B.A. (c. 2100–1700 B.C.)

H. Goldman divides the M.B.A. period at Tarsus into three phases.⁵⁹ The earliest phase is of a transitional nature in which the new painted

⁵⁴ *Alalakh*, pl. XCI, ATP/47/119, and ATP/47/152, p. 309. *Tarsus*, fig. 298, no. 813; fig. 290, no. 818, and fig. 291, no. 820.

⁵⁵ *JCS*, VIII (1954), pp. 51 ff.

⁵⁶ *Alalakh*, pp. 382 ff.

⁵⁷ *Relative Chronologies*, pp. 38, 40, and fig. I.

⁵⁸ *ibid.*, p. 75.

⁵⁹ *Tarsus*, pp. 39, 43, 62, and 64 (chronological table).

pottery appears side by side with Early Bronze Age survivals, which incidentally shows that the newcomers did not oust the old population. Building remains are scanty and it appears that there is a gap in the occupation after this phase, dated to the 21st century B.C., and the floruit of the M.B.A., about 1900 B.C. During this interval only some intramural burials were found on the mound, a feature of interest in itself, as intramural burial is unheard of before in the E.B.A., and again during the rest of the Bronze Age.

The floruit of the M.B.A. she places in the two centuries between 1900 and 1700 B.C., and in that period two building levels could be distinguished, *a* and *b*, the second of which ends with considerable destruction.⁶⁰

A final phase, *c.* 1700–1650 B.C., classified by the excavator with the Late Bronze Age I period, marks the transition from the M.B.A. to the L.B.A. and is characterised by late M.B. pottery, but without the “Eye-jug” and the pedestalled bowl, now often decorated with wavy lines and bichrome paint. With it occurs a new slipped and burnished monochrome ware of Central Anatolian (or perhaps, more precisely, Konya plain) affinities.⁶¹ It is tempting to associate the destruction of the M.B.A. *b* level with the south-eastward expansion of the later kings of the Hittite Old Kingdom, which opened the way to influences from the Anatolian plateau. Of the M.B.A. pottery in general, one can say that the neater decoration, with hour-glass motives filled with dots, etc., is early, whereas the later ware is more carelessly decorated in a style reminiscent of Khabur ware, which first appears contemporary with Shamshi-Adad and Kültepe Ib, *c.* 1850 B.C., but remains in use in Northern Mesopotamia for several centuries.⁶²

MERSIN

The stratification of the neighbouring site of Mersin is less clear, but it appears that levels XI *z*, *b* and *a*, with their neatly decorated pottery and typical shapes belong to the earlier phase of the M.B.A., whereas levels X–IX belong to the later phase.⁶³ Levels VIII and VII, the latter with the so-called Hittite fortress, show the same mixture of late M.B.A. types with bichrome decoration and lack of the old shapes with the new slipped and burnished wares as the transitional phase at Tarsus, *c.* 1700–1650 B.C.⁶⁴ The fortress should therefore be dated in that period, but it appears to have stood for a long time, for the pottery found in its later levels VI and V is of Tarsus L.B. IIa type, *c.* 1450–1190 B.C.⁶⁵

There is no particular reason for suggesting that it was built by a Hittite rather than a local, i.e. Kizzuwadnan king, for it is gradually becoming evident that fortress walls built in casemate technique go back to

⁶⁰ *Tarsus*, p. 43, and *Relative Chronologies*, p. 76.

⁶¹ *Tarsus*, pp. 62–3, and *Relative Chronologies*, p. 76.

⁶² *Relative Chronologies*, p. 76.

⁶³ J. Garstang, *Prehistoric Mersin*, pp. 210 ff.

⁶⁴ *ibid.*, pp. 237, 242, figs. 154–5.

⁶⁵ *ibid.*, p. 242, figs. 156, 3, and 157.

the very beginning of the second millennium, e.g. Alishar 11 T (20th century B.C.), in non-Hittite country.

Like Kültepe, Tarsus (and perhaps Mersin) show two building levels in the L.B. I period, between c. 1650 and c. 1450 B.C. In the later one at Tarsus (L.B. I b) a seal impression of Ispuṭahsus, great king of Kizzuwadna, was found, who is known to have concluded a treaty with the Hittite king Telepinus about the middle of the 16th century B.C.⁶⁶

CILICIAN E.B.A. LINKS WITH WESTERN ANATOLIA

The third and last phase of the E.B.A. at Tarsus shows such close links with north-western Anatolia in the Troy II–IV period that we can be sure that it was people from that region who captured and burnt the previous E.B. II city and introduced their own culture.⁶⁷ These newcomers must have arrived by sea, for contemporary sites on the south-west Anatolian plateau, such as Beycesultan and Kusura, show no trace of such a movement by land, at least not before the Troy III period, which is too late.

The change from E.B. II to III is a significant one, leaving its mark not only in the pottery, now completely West Anatolian, but also in house-plans.⁶⁸ The old house-plan, consisting of a large front room with square hearth and a small room at the back, is replaced by hall and portico houses, reminiscent of West Anatolian “*megaron*” types. Linguistically also the newcomers probably differed from the earlier population and it is likely that it was they who introduced Luvian, an Indo-European language known to have preceded Hurrian in Kizzuwadna, the ancient name of Cilicia.

The beginning of the E.B. III period may be dated to some time after the beginning of Troy II, for the connecting links, such as the wheel-made plates and bowls, do not appear at Troy until the IIb or c phase,⁶⁹ Troy IIa being a development of the Troy I culture without any innovations.⁷⁰

The presence of wheel-made pottery in these levels at Troy is almost certainly the result of contact with Cilicia, where the potters’ wheel had been in use since the very beginning of E.B. II, long before it was introduced anywhere else in Anatolia.⁷¹ A very characteristic West Anatolian, and, in particular, North-West Anatolian shape, the so-called *depas*, does not apparently occur at Tarsus until the E.B. IIIb phase and at Troy itself until IIc, but earlier bell-shaped cups occur as early as E.B. IIIa.⁷² From these the typical Cilician two-handled cup, which as we have seen may have influenced similar Central Anatolian ones, could have been developed.

As close contact seems to have been maintained with Western Anatolia throughout the period, the beginning of E.B. III should perhaps be dated in Trojan terms to II b–c, c. 2400 B.C. H. Goldman prefers a slightly later

⁶⁶ *MDOG.* 73, p. 33, n. 4, and 75, p. 62. A. Goetze, *Kizzuwatna and the problem of Hittite geography* (New Haven, 1940), p. 75.

⁶⁷ *Tarsus*, pp. 61 and 347.

⁶⁸ *Tarsus*, pp. 131, 133 f. (pottery), and 347 (house plans).

⁶⁹ *Troy I*, pp. 205–6.

⁷⁰ *Troy I*, p. 205.

⁷¹ *Tarsus*, p. 105.

⁷² *Tarsus*, p. 142, nos. 487, 488–490.

date, on account of the lined ash-pits (often known in archaeological jargon under the pompous term of *bothroi*) occurring at Tarsus at the beginning of E.B. III, but not before the Troy IId phase at Troy itself.⁷³ They occur, however, as early as the Troy I period at Thermi⁷⁴ and it is doubtful whether such a simple thing is of any chronological value.

An imported class of pottery found in the E.B. III layers of Tarsus is classified as "Copper Age wares of Central Anatolian and related type".⁷⁵ The choice of this term is an unhappy one, for there is no valid reason for the assumption that any of this ware really came from as far as Central Anatolia. All of it can be closely paralleled in two other West Anatolian culture-provinces: the South-West Anatolian one, centred on Beycesultan, and its eastern neighbour, the Kusura province, stretching from Dinar and Afyon in the west to the hills bordering the Konya plain in the east. Many of the pieces assigned to the C. Anatolian "Copper Age" could not possibly have come from there, as they have features altogether unknown in that area. A good example is pot no. 722, a grey fluted *depas* of West Anatolian type, for which there is a perfect (and complete) parallel from Maltepe, near Eğret, now in the Afyon museum.⁷⁶

The character of the previous culture, that of E.B. II, is much less West Anatolian and appears to be a local development from its predecessor, E.B.I., the origin of which, we maintain, is to be found in the eastern half of the Konya plain. H. Goldman wavers in her final report between an Anatolian and North Syrian origin for this culture, mainly because one of the most typical wares (red gritty ware) is also found there.⁷⁷ However, the variant found in the Konya plain is far superior in quality to the Cilician or Syrian ones and its most typical shape is a beak-spouted jug, a shape foreign to Syria (and to Cilicia before the E.B. I period) but characteristically West Anatolian. A North Syrian origin for this culture therefore appears to be most unlikely.

Typical of E.B. II are wide, deep bowls, profusely decorated with white-filled incisions in black burnished ware,⁷⁸ which may perhaps be compared to contemporary examples from the early Troy I period in Chios (Emporio)⁷⁹ and Samos (Tigani),⁸⁰ which are, however, only provided with knobs and less lavishly decorated. An even closer parallel comes from Sizma,⁸¹ north-west of Konya. Whereas the Tarsus specimens have handles, the Sizma one has lugs, but its decoration is as rich as at Tarsus. There they appear to belong to the beginning of the period, phases E.B. II a and b,

⁷³ *Tarsus*, p. 61, and *Troy I*, p. 206.

⁷⁴ W. Lamb, *Thermi*, p. 61 (*Thermi III and IV*).

⁷⁵ *Tarsus*, pp. 134-5, figs. 283-5. Lack of space forbids an exhaustive enumeration of parallels here.

⁷⁶ Unpublished.

⁷⁷ *Tarsus*, p. 97 and note 9.

⁷⁸ *Tarsus*, figs. 257-9 and 351.

⁷⁹ *Archaeology in Greece*, 1954, p. 20, fig. I (*JHS.*, 1955, supplement).

⁸⁰ *Ath. Mitt.* 60/61, 1935/36, shape F.61.

⁸¹ In the Classical Museum at Konya. For a bad photograph see *AJA.* XXXI (1927), p. 43, no. 21, fig. 25 d.

just as they are confined to the early Troy I phase. These Tarsus bowls may be the ancestors of the bell-shaped two-handled cups of E.B. III.

An E.B. II jug of early, i.e. II a-b type, was found in a tomb at Giza, dated by G. Reisner "after the 15th year of Cheops, c. 2640 B.C." (or c. 2600 on the lower chronology).⁸² The beginning of the E.B. II period, dated by H. Goldman to c. 2750/2700 B.C.,⁸³ seems to have roughly coincided with that of Troy I, which we are inclined to put at c. 2750 B.C.

The end of the E.B. III period came in c. 2100 B.C. and in its late phase many of the typical shapes of Troy V are already present,⁸⁴ which originally suggested an overlap to the excavator.⁸⁵ In the final Tarsus report, however, she has shown that the end of E.B. III coincides with the end of Troy IV⁸⁶ and red-cross bowls make their appearance in the first M.B.A. level at Mersin, showing an overlap between Cilician M.B.A. and Troy V.⁸⁷ Moreover, the monochrome red and buff polished and slipped wares, which make their first appearance in *Karum* IV and the late Cappadocian level on the Kültepe mound, do not appear to have developed from the Alishar Ib ware but have their closest parallels in Western Anatolia, where they appear in levels dating from the Troy V period.⁸⁸ Western imports continue at Kültepe in *Karum* II and these are of types which do not occur at Troy at a date later than the fifth city.⁸⁹

The combined evidence of Kültepe, Tarsus, Mersin and Troy shows that Troy V is contemporary with the beginning of the M.B.A. in Cilicia and Troy IV with the final E.B. III phase and the Cappadocian wares in C. Anatolia.

Troy V = Cilician M.B.A. = Kültepe *karum* IV-II = c. 2100-1900 B.C.

Troy IV = Cilician final E.B. III = Cappadocian = c. 2200-2100 B.C.
(early and middle)

TROY II AND ITS PREDECESSORS

The beginning of the Troy II period appears to be roughly contemporary with the beginning of the Central Anatolian Bronze Age. A date of c. 2500 for its beginning is confirmed by a Carbon 14 date from the Alishar late chalcolithic, the period immediately preceding the E.B.A. there. Although the level from which the sample was taken is not mentioned, the date obtained—c. 2570 B.C.⁹⁰—shows the approximate correctness of the date usually given for the end of the chalcolithic in C. Anatolia.

Allowing about a century for the Troy III period, c. 2300-2200 B.C., Troy II would have lasted two centuries. Professor C. W. Blegen has now

⁸² *Relative Chronologies*, p. 73.

⁸³ *Tarsus*, p. 64.

⁸⁴ *Relative Chronologies*, p. 74.

⁸⁵ *Relative Chronologies*, p. 74.

⁸⁶ *Tarsus*, p. 61.

⁸⁷ *Prehistoric Mersin*, pp. 211, 213, figs. 120, 121.

⁸⁸ Mentioned by courtesy of Professor T. Özgüç, cf. pottery from Beycesultan VII-VI, contemporary with Troy V. See *AS. VI* (1956), p. 136 and fig. 2, nos. 15, 25, 26.

⁸⁹ *Belleten* XIX, no. 73 (1955), figs. 7-8, p. 67 (1b). *Ausgrabungen in Kültepe*, 1949, p. 159. *Troy*, II, fig. 162 a-b.

⁹⁰ *Antiquity* no. 101 (1952), p. 39 (4519 = before present).

divided this period into seven building levels, which may correspond to six or seven generations. The first three building levels, Troy II a–c, each with massive fortifications and complete rebuildings, must have occupied at least half the length of Troy II and probably more. The last phases, II d–g, show rather squalid occupation and unimpressive hovels encroaching on the former royal precinct.⁹¹ In Troy IIg the famous “treasures”, probably the property of the royal family, were hidden before the disaster, which soon overwhelmed the citadel. This does not mean that they were *made* in Troy IIg. The quality of the workmanship of weapons, vessels and jewellery alike cannot possibly be squared with the miserable later phases of the citadel. Most of the “treasures” may well date back to the Troy IIc phase, if not even earlier. For chronological purposes we may date this phase to about 2400 B.C. Foreign, i.e. probably Cilician, influences start in IIb, let us say at c. 2450 B.C., and this is probably the date *after* which Cilician E.B. III begins.

It may be noted that the first West Anatolian influence on Cyprus, ushering in the Cypriote E.B.A. with the Philia phase, is dated by P. Dikaios to c. 2400 B.C.⁹² West Anatolian contacts with Cilicia and Cyprus are no doubt part of the same movement.

The length of the Troy I period with its three major subdivisions and ten building levels is matched by Thermi with three subperiods and six levels and Poliochni with three great periods, the first of which is said to have been of long duration.⁹³ Contemporary Cilician E.B. II was also of a long duration, with its two successive city walls and nine building levels at Tarsus. Two and a half centuries seems a moderate estimate for the length of this period, when one remembers that all these sites lay in earthquake zones, which would make frequent rebuildings more often necessary than elsewhere.

Kumtepe, in the Troad, takes us back one stage further. Kumtepe Ic, the top level, is contemporary with early Troy I, and its predecessor, Ib, shows so many links with early Troy I that one can safely say that the Troy I culture developed out of it. The earliest level of all, Kumtepe Ia, serves as a link between Kumtepe Ib, a kind of proto-Troy I, and an even earlier culture, that of Besikatepe, in the Troad, and earliest Tigani, in Samos.⁹⁴ This latter culture is characterised by pattern-burnished wares and it is most unfortunate that the stratigraphical position of some of these sherds found at Tarsus remains unknown. All one can say about them is that they are probably earlier than E.B.I. Some painted cups, jars and a double beak-spout were found in Kumtepe Ib and are certainly not of local origin.⁹⁵ The ware and technique of painting reminds one most of the E.B. I wares of the Konya plain and Cilicia, from which they may have been imported. These are not the only vessels in Kumtepe Ib which show foreign contact,

⁹¹ *Troy I*, figs. 457–462.

⁹² P. Dikaios, *Khirokitia* (Oxford, 1953), p. 329.

⁹³ *A.J.A.* LVIII (1954), p. 240.

⁹⁴ *P.Z.*, 1932, fig. 13. *Ath. Mitt.* 60/61 (1935/6), pl. 57, 1–2, 61, 62.

⁹⁵ In the Citadel Museum, Ankara.

for among the material found there there appear some stems of fruit-stands of Alishar chalcolithic type.⁹⁶ Some of these are of the slender type, associated with the late chalcolithic of Alishar (levels 14-12), but one or two are more bulbous and reminiscent of the earlier type in Alishar's early chalcolithic (levels 19-15).

It seems then that the transition from early to late chalcolithic at Alishar took place during Kumtepe Ib, perhaps around 2800 B.C. The beginning of Kumtepe Ia we may perhaps place at *c.* 2900 and Besikatepe earlier still, probably reaching back with its beginnings into the fourth millennium B.C. H. Goldman dates the beginning of Tarsus E.B. I to *c.* 3000, which is reasonable in view of its eight-metre deposit, and the same date or a slightly higher one must be given to its variant in the Konya plain, from which it descended. Mersin XII, with its two contemporary wares, the one a late chalcolithic Cilician one of "Ubaid" type, the other a black burnished "Anatolian" ware, decorated with fine curvilinear or rectilinear designs in white paint and very distinctive shapes⁹⁷ is really chalcolithic in type, and though an overlap with the beginning of Tarsus E.B. I could be argued, I am inclined to support H. Goldman's view that it preceded E.B. I.⁹⁸ This would mean that Mersin XII would represent the final chalcolithic phase in W. Cilicia, let us say the last two centuries of the fourth millennium B.C.

Summarising, one obtains the following chronological scheme :

B.C.			
1900	Troy VI		
2100	„ V	Cilician M.B.A.	
2200	„ IV	„ Late E.B. III	Cappadocian ware (Alishar III)
2300	„ III	„ E.B. III	
2400	„ IIc		C. Anatolian E.B.A. (Alishar Ib) "Copper Age"
2450	„ IIb		
2500	„ IIa	„ E.B. II	
2750	„ I		Alishar Late Chalcolithic
2800	Kumtepe Ib		
2900	„ Ia	„ E.B. I	
	Besikatepe		Alishar Early Chalcolithic
3000			
—			
3200?		Mersin XII (latest Chalcolithic)	
		Mersin XIII, etc.	

⁹⁶ *OIP.* XXVIII, p. 67.

⁹⁷ *Prehistoric Mersin*, p. 167 and figs. 107, 115, pp. 183 ff., fig. 118. Although separated in the publication, these two classes of pottery were found together in one and the same building-level.

⁹⁸ *Relative Chronologies*, p. 70.

TROY AND BEYCESULTAN

In her review of C. W. Blegen's first two Troy volumes, Miss M. Mellink advocates a slightly lower dating for the Troy periods, mainly based on a reconsideration of the American excavator's estimates for the length of Trojan levels.⁹⁹ She would date the beginning of Troy II to *c.* 2400 B.C. Since then, British excavations at Beycesultan Hüyük, in the upper Maeander valley in S.W. Anatolia, have produced another E.B.A. sequence, comparable to that of Troy II–V. Provisionally, we can make the following equations :

<i>Troy.</i>	<i>Beycesultan.</i>	<i>Approximate date.</i>	<i>Remarks.</i>
IV	V	1900 B.C.	Beginning of M.B.A.
V d	VI a		
V a–c	VII and VI b	2100 „	Red-cross bowls.
IV	VIII		
a–c	IX		
	X	2200 „	
III	XI		
a–c	XII a–c	2300 „	
II	XIII		Complete break in culture at Beycesultan
d–g	XIV		between XIII and XII, but not at
II c?	XV	2400 „	Troy.
II b			
II a	not yet reached		

The long series of rebuildings at Beycesultan during the Troy II–V period show that the length of that period should not be underestimated for, unlike the remodellings, partial reconstructions and additions, which form the bulk of the Trojan sub-levels, they represent, with the exception of XII b–c and VI b, complete rebuildings.

WESTERN ANATOLIAN CONTACTS WITH THE EARLY HELLADIC AND CYCLADIC CULTURES

During the later phases of the West Anatolian E.B.A., the Troy IV and V periods, there is a fair amount of evidence for contact between the Greek mainland, the Cyclades and the West Anatolian coast and parallels are particularly abundant in the Troy IV period, the 22nd century B.C.

Troy V Period

In the latest E.H. III levels at Korakou, Zygouries, Asine, Eutresis, Malthi and Krisa red-cross bowls of shapes rather like the Trojan A 16 one appear.¹⁰⁰ A similar red cross on the base of a cup from Tiryns can be matched by one from Beycesultan VI.¹⁰¹ Red-cross bowls in western

⁹⁹ *BiOr.* X, 1953, pp. 57–8.

¹⁰⁰ *Troy* II, p. 227.

¹⁰¹ *ibid.* II, p. 227, and *AS.* VI (1956), p. 136, fig. 2, no. 23.

Anatolia are particularly common in the Troy V period, only one fragment having been found in the last Troy IV level.¹⁰² The distribution of this type in Anatolia suggests that they crossed the Aegean from Western Anatolia. It is, however, surprising that none have been found in the Cyclades or Crete, the more so as Phylakopi I and the Paros settlement are supposed to date from the last few centuries of the E.B.A. Several other resemblances have been noted by C. W. Blegen among the material from Zygouries.¹⁰³ There is a feeding bottle, rather like the Trojan Bg shape (Troy V), which has variants at Yortan¹⁰⁴ and Beycesultan VI¹⁰⁵; a jug resembling the long-lived Trojan B. 18 shape, and the plastic handle on a bowl from the same site can be matched in the C5 jars at Troy as well as on bowls from Beycesultan VII–VI and Tavşanlı.¹⁰⁶ All parallels are with the Troy V period.

An *askos* of Cycladic type may represent an import into Troy V, and a bowl with Cycladic looking handles and a smeary brown wash, unusual for Beycesultan, was found in level VII, the earliest Troy V level there.¹⁰⁷ The end of the Troy V and E.H. III periods is probably contemporary and is to be dated to *c.* 1900 B.C., but the end of Early Cycladic III may be a little later, as late E.C. pyxides are found both in late E.H. III and early M.H. contexts at Eutresis.¹⁰⁸

Vessels supported on three volute feet are typical of the Troy V period in Western Anatolia, though they occur earlier both at Troy and Tarsus. These vessels are not native to Crete and their occurrence among the M.M. Ib pottery of Mallia¹⁰⁹ would suggest that M.M. Ib began before the end of the Troy V period, i.e. before 1900 B.C. In M.B.A. Anatolia they are no longer found. In the same levels at Mallia was found a “kantharos”¹¹⁰ fragment and others are known from Gournia (in silver),¹¹¹ Pseira,¹¹² an island off Mallia,¹¹³ the *kouloura* houses at Knossos,¹¹⁴ and in M.M. I graves on Monasteriako Kephali.¹¹⁵ These vases are of an Anatolian shape, first appearing at Kültepe in *Karum* Ib,¹¹⁶ i.e. *c.* 1850–1800 B.C., at Alishar and Alaca Hüyük, in the same period or a little later,¹¹⁷ and at Boghazköy (not closely datable, but presumably of about the same date).¹¹⁸

¹⁰² *Troy* II, p. 138.

¹⁰³ *ibid.*, p. 227.

¹⁰⁴ British Museum, *Catalogue of vases* I; A 61, pl. II, but without spout.

¹⁰⁵ Unpublished, but spouted.

¹⁰⁶ *AS.* VI (1956), p. 136, fig. 2, nos. 24, 26 (level VI). In the 1956 campaign others were found in level VII. Tavşanlı material, collected in November, 1955, still unpublished.

¹⁰⁷ Still unpublished.

¹⁰⁸ And in M.M. I a; *PM.* IV, 1, fig. 57.

¹⁰⁹ *Mallia: Maisons* I, pl. LI, b. *Mallia: Necropoles*, pl. XIII, g; XX, h.

¹¹⁰ *Mallia: Maisons* I, pl. LI, c. *Mallia: Necropoles*, pl. VII a.

¹¹¹ From a grave near Gournia. *PM.* I, p. 139 a, and in pottery, *ibid.*, b and c.

¹¹² *ibid.*, fig. 139, d.

¹¹³ *BCH.*, 1925, p. 473, fig. 10.

¹¹⁴ *PM.* IV, 1, figs. 53–4.

¹¹⁵ Unpublished.

¹¹⁶ *Ausgrabungen in Kültepe*, 1949, p. 171, figs. 196–8.

¹¹⁷ *OIP.* XIX, pl. II, IX (found in graves).

¹¹⁸ K. Bittel, *Boghazköy-Hattusas*, fig. 28, 2.

Unstratified specimens or fragments have been found at Tyana,¹¹⁹ Kesilmiş Hüyük, on Lake Beyşehir, Ortakaraviran Hüyük II, on Lake Suğla, and on the castle hill of Silifke, on the Anatolian south coast.¹²⁰ From the latter place they may have reached Crete.

Troy IV Period

Many more parallels can be quoted in the Troy IV phase of the E.B.A., not only with the Greek mainland but also with the Cyclades.

A painted E.H. III sherd, belonging to a pyxis and a sherd of yellow mottled or eggshell ware, typical of Peloponnesian E.H. III, were found in Troy IV, together with Cycladic *askoi*, the so-called "duck-vases" of earlier excavators.¹²¹ The latter also occur in Troy IV contexts at other West Anatolian sites, such as Heraion, on Samos,¹²² and Beycesultan VIII.¹²³ In the same level at Beycesultan was found a large sherd with red-painted decoration on a buff ground, in the form of lozenges, filled with hatching, which may be of Cycladic origin.¹²⁴

In the first city of Phylakopi, on Melos, was found a black, burnished jug with cutaway spout and white-painted decoration.¹²⁵ This is an obvious West Anatolian import and its closest parallels are found on the sites of the Yortan culture of N.W. Anatolia.¹²⁶ This culture is often dated to the Troy I-II period only, but abundant new evidence suggests that it was contemporary with Troy I-V.¹²⁷

Fragments of quadruple dishes from Phylakopi can be matched with others found on a mound south of Susuz Han, the famous Seljuk building on the road between Burdur and Antalya.¹²⁸ In the same S.W. Anatolian region there are parallels for jugs with round mouths and white-painted decoration, such as were found at Phylakopi and Amorgos.¹²⁹ These shapes are an indication of contact between the Cyclades and S.W. Anatolia.

West Anatolian jugs of Troy IV type occur with one-handled cups of the same date in Cycladic (?) tombs near Cape Manika, in Euboea.¹³⁰ Although both types are already found in Troy III, they are much more typical of the next phase, and other jugs from the same tombs are confined

¹¹⁹ A. Goetze, *Kleinasien*, pl. 5, top right.

¹²⁰ See my forthcoming article in *Belleten* nos. 81 or 82 : "Second millennium pottery from the Konya plain."

¹²¹ *Troy II*, p. 214, fig. 170, 10. Also H. Schmidt, *Schliemann Sammlung (SS.)* nos. 3407, 3483. *Troy II*, fig. 185. *EH.* 704, p. 109, fig. 154 b D.29 add SS 2066.

¹²² V. Milojević, *Chronologie*, pl. 15, ii.

¹²³ Unpublished ; plain undecorated specimen.

¹²⁴ cf. the askos from Paros : *Ath. Mitt.* XXXXII (1917), fig. 57.

¹²⁵ *Excavations at Phylakopi in Melos*, pl. XXIV, ii.

¹²⁶ British Museum, *Catalogue of vases I*, pl. I, A.21 and A.23.

¹²⁷ Metal types from several cemeteries in the Balıkesir plain (especially that of Bayındırköy), systematically robbed, have parallels ranging from the Troy II to the Troy V period. See D. B. Stronach's article in this same number of *AS.*

¹²⁸ *Phylakopi*, figs. 135-6.

¹²⁹ *Phylakopi*, fig. 134. *Ath. Mitt.* XI, pl. 2, fig. 10. cf. rims *AS. IV* (1954), figs. 451-5.

¹³⁰ *Troy II*, pp. 9 and 110. *PEAT.*, p. 8, pl. IX, 6, examples cf. *JHS.*, 1915, p. 205 f. cf. *Troy II*, fig. 72, 33.179 of the last Troy III phase and *PEAT.*, pl. IX, lower row, 3.3.

to Troy IV.¹³¹ Another Troy IV jug was found on Aegina¹³² and cups like those mentioned above occur in E.H. III graves at Hagios Kosmas¹³³ and in others, not closely datable, on the islands of Siphnos, Syros and Naxos.¹³⁴

A Trojan jar with plastic wing-handles was found at Lerna in the later levels of the E.H. period (i.e. in E.H. III) and in the earliest building level of this period was found a small *depas*, decorated in dark-glaze paint in the local tradition.¹³⁵ In shape it resembles a ribbed *depas* found at near-by Tiryns, which has close analogies to ribbed *depata* from Beycesultan IX, belonging to the Troy IV period.¹³⁶ The Lerna, Tiryns and Beycesultan *depata* all have a low pedestal foot. The *depata* from Syros and Orchomenos are, on the other hand, of N.W. Anatolian type, the former an import, the latter a local imitation.¹³⁷

Here, then, there is good evidence for lively trade in the Aegean in the Troy IV period, which continued on a smaller scale into the next phase. From these imports we may conclude that Troy IV and V are contemporary with the E.H. III period on the Greek mainland.¹³⁸ E.H. III and E.M. III are usually equated and the beginning of the latter cannot have been much earlier than that of the First Intermediate period in Egypt c. 2200 B.C.¹³⁹ This date agrees remarkably well with that of Troy IV, calculated from other evidence, and it would seem that we have a strong chronological link here. The reappearance of painted pottery in E.H. III, c. 2200 B.C., which at Lerna appears to have marked the decisive break in the Early to Middle Bronze Age sequence, a break which elsewhere in mainland Greece came at the end of the E.H. period, three hundred years later, is closely paralleled by the appearance of the Cappadocian wares in C. Anatolia and the beginning of painted pottery in late E.B. III at Tarsus, c. 2200 B.C. To suggest that these movements are somehow related is tempting, as there is now enough evidence to show connections between Central Anatolia and Cilicia, on the one hand, and between Cilicia and Western Anatolia and between the latter and the Cyclades and Greek mainland on the other. How strong these influences were, remains to be seen and it would be worth carefully excavating a settlement site of this period in the southern Cyclades.

¹³¹ Type B.23 occurs in Troy IV and V, but not in III. Cups of the A 39 type range from Troy II-V, but are especially common in Troy IV. Jugs; cf. SS.636 and from Yortan; British Museum, *Catalogue of vases* I, A 38.

¹³² G. Welter, *Aigina*, p. 15, fig. 16.

¹³³ *AJA.* XXX, 1934, p. 272, fig. 17. *Eph. Arkh.*, 1952, p. 129, fig. 3 (A 33 and 37 cups of Troy IV type).

¹³⁴ Aberg, *Chronologie, IV (Griechenland)*, figs. 172-3, p. 86 (A 39 type).

¹³⁵ *Archaeology* 7 (1954), p. 29, fig. 17. *Archaeology* 8 (1955), p. 119, fig. 6. *Hesperia* XXIV, no. 1 (1955), pl. 21, i (and whorl pl. 22, i).

¹³⁶ *Tiryns* IV, pl. 32, 5. *AS.* VI (1956), p. 135 and fig. 1, i. Another *depas* from Korakou, C. W. Blegen, *Korakou*, fig. 17, resembles one from Beycesultan VIII, *AS.* VI (1956), p. 136 and fig. 1, 8.

¹³⁷ *Orchomenos* III, p. 56, no. 45, pl. XXIII, i. *Eph. Arkh.*, 1899, p. 108, 122.

¹³⁸ The Anatolian vessels were found at Lerna in the earliest E.H. III level. In the level immediately below, no patterned ware or Anatolian imports have yet been found and it would appear that this level was the last E.H. II one.

¹³⁹ *Antiquity* no. 111 (1954), pp. 157 ff. *Relative Chronologies*, p. 90.

EARLIER CONTACT

In sharp contrast to the many connections traceable in the Troy IV period, earlier contacts are much more tenuous. No certain Anatolian imports have so far been found in any E.H. I or II context, nor any definitely E.H. ones in Western Anatolia.¹⁴⁰ Contacts there must have been, though, for in E.H. II beak-spouted jugs of Anatolian derivation occur.¹⁴¹ In contrast to the many W. Anatolian imports into E.H. III Lerna, the E.H. II building levels, to which the "House of the tiles" belongs, show no such contact. In this house and in an earlier level still many seal impressions were found, showing spiraliform patterns, which are probably derived from the Cycladic Syros culture,¹⁴² rather than from the later E.M. III culture of Crete. A sherd with one such impression was found in Troy IIb (c. 2450 B.C.)¹⁴³ and it could have come from the same source, but there is no reason to link it with Lerna or E.M. III Crete. The Syros culture, the main decorative element of which is the spiral, appears to be fully developed at the beginning of the E.H. I period,¹⁴⁴ as is shown by its occurrence on E.H. I sites side by side with the earliest E.H. pottery. As "frying pans" are said to have been found even in E.H. III contexts,¹⁴⁵ this culture appears to have been a very long-lived one. The occurrence of two copper pins with a head in the form of a bird in a grave in Syros has been used to prove its great antiquity, for pins of this type occur in Thermi I, c. 2750 B.C.¹⁴⁶ Such arguments are specious and quite unreliable. The Thermi pin proves that the type was in use in Western Anatolia in the 28th century B.C., but

¹⁴⁰ In "Aegean chronology", *AJA*. LI (1947), S. S. Weinberg makes use of a series of spurious parallels:—

Pl. XXIX, b, is part of a beak-spouted jug, not an askos. The photograph in *Schliemann Sammlung* is misleading (p. 6), the text clear.

P. 167: bothroi are not a reliable chronological criterion, for they occur in Thermi III and IV a, i.e. middle Troy I. At Troy they are found in Troy II d, but also in Troy I a, c and d. In Cilicia they are found from the beginning of E.B. III, which we equate with Troy II c, and at Beycesultan they occur in level XIV, i.e. late Troy II, later than c. How such evidence can be used to fix the date of the E.H. II "bothros-level" at Orchomenos is difficult to see. To use such a simple feature as a lined pit, which is all that the pompous term "bothros" means, as a chronological criterion, seems unwise.

P. 168: clay "anchors" occur at Mikhalits in typologically early Troy I contexts, at Kritsana in advanced Troy I contexts, at Eutresis in E.H. I-II and at Lerna in E.H. III (*Hesperia* XXV, no. 2 (1956), pl. 47.1-p). As chronological evidence they are therefore unreliable, as might be expected from such simple household objects.

P. 170 and fig. 4: the lids from Dimini resemble the Trojan D 12 type (Troy III-V only!) more than the D 11 type (Troy I), with which Professor Weinberg compares them.

¹⁴¹ As in E.M. II Crete: H. W. and J. D. S. Pendlebury and M. B. Money-Coutts, *Excavations in the plain of Lasithi*, p. 70. *Hesperia* XXIV, no. 1 (1955), pl. 21, d (Lerna).

¹⁴² *Hesperia*, *ibid.*, pl. 22, a-i.

¹⁴³ *Troy* I, p. 408.

¹⁴⁴ S. S. Weinberg in *Relative Chronologies*, p. 94.

¹⁴⁵ *Asine*, fig. 171, and Cycladic spiral decoration in E.M. III (*P.M.* I, figs. 76, 80 and 86).

¹⁴⁶ *AJA*. LI (1947), p. 178.

as it is the only specimen there, it can hardly be used to date the Syros culture. Another one was found in a M.B.A. grave at Alishar ¹⁴⁷!

A fine slotted spearhead of Anatolian type was found in a grave on Amorgos, together with silver cups, which have shapes known in pottery at Beycesultan in level XV, c. 2400 B.C.¹⁴⁸ The spearhead should be dated in Anatolian terms to the 24th century B.C.¹⁴⁹

A pair of silver tweezers from Troy IId ¹⁵⁰ and spool-shaped pestles in grey or yellowish marble from Troy IIg and Thermi IV ¹⁵¹ have E.H. or E.C. connections. Arguments based on fragments of stone bowls, made of marble or mica-schist,¹⁵² or on obsidian tools and flakes, are especially unreliable,¹⁵³ for these materials are not confined to the Cyclades and can be found much nearer to Troy (and Thermi) : marble on Marmora island and obsidian in great deposits near Düvertepe, half-way between Balıkesir and Kütahya. The possibility must be left open that most of the raw material came from these places and not *necessarily* from the Cyclades. The same applies to the marble bowls from Thermi I–III,¹⁵⁴ Poliochni ¹⁵⁵ and Tepecik, near Tavşanlı.¹⁵⁶

The many flat marble figurines of E.B.A. date, found in the Afyon-Denizli district (Kusura, Karaca Ahmet, Şuhut, Beycesultan, Karaca Hüyük, Yassi Hüyük),¹⁵⁷ are all made of local marble. There is no reason to assume Cycladic influence here and the only stratified ones, found at Beycesultan, all belong to Beyce XV–XIII, long before the period in which Cycladic influence is notable,¹⁵⁸ i.e. level VIII.

EARLY AEGEAN WARES AT TROY

In this short review of the chronological links between Anatolia and the Aegean, we have intentionally omitted the foreign wares found at Troy by the American excavators. These wares, found from the beginning of the middle phase of Troy I onwards, are classified as Early Aegean by C. W. Blegen.¹⁵⁹ As such they have been used to correlate the Trojan strata with

¹⁴⁷ *OIP.* XXIX, fig. 134, d, 2418.

¹⁴⁸ Montelius, *La Grèce préclassique*, pl. 29. Aberg, *Chronologie* IV, fig. 129. Beycesultan specimens unpublished, but see *AS.* IV (1954), p. 211 and figs. 342–3.

¹⁴⁹ *Eph. Arkh.*, 1898, p. 154. Montelius, *op. cit.*, pls. 7, 15.

¹⁵⁰ *Troy* I, p. 210.

¹⁵¹ *Troy* I, p. 211. *Thermi*, p. 195 (Thermi IV).

¹⁵² *Troy* I, p. 46.

¹⁵³ *Troy* I, p. 211. For a cautious view see *Thermi*, pp. 195–6.

¹⁵⁴ *Thermi*, p. 177.

¹⁵⁵ *AA.* XLVIII, p. 247.

¹⁵⁶ Unpublished.

¹⁵⁷ The Kusura figurines are illustrated in *Archaeologia* 86 (1936), fig. 11, 5–7; 87 (1937), pl. LXXXIV, 11, and fig. 17, 1–5. *AS.* IV (1954), figs. 459–461 (Kusura, Karaca and Yassi Hüyük II). The Karaca Ahmet figurines in the Afyon museum are unpublished. A fine plastic local marble figurine was found at Şuhut, see *AS.* IV (1954), fig. 462.

¹⁵⁸ Local marble was used for making large figurines as early as the chalcolithic period in S.W. Anatolia. *AS.* VI (1956), pl. XII, b, where it is erroneously described as of limestone.

¹⁵⁹ *Troy* I, p. 53.

the successive phases of Early Helladic (and Cycladic) culture in the following way :

Early Troy I	no imports. (Earliest E.H. slipped and polished ware.)
Middle Troy I —	“ glazed wares not of the earliest E.H. type,” i.e. E.H. II. (<i>Troy</i> I, p. 40.)
Late Troy I	
Troy II —	“ long before the end of the E.C. and E.H. periods.” (<i>Troy</i> I, p. 213.)
Troy III —	“ somewhere near the turn from E.H. II to III.” (<i>Troy</i> II, p. 9.)
Troy IV —	“ a penultimate phase of E.H. III.” (<i>Troy</i> II, p. 109.)
Troy V —	“ last phases of E.H. and E.C.” (<i>Troy</i> II, p. 229.)

Professor C. W. Blegen would date the beginning of middle Troy I to c. 2800 B.C. and the import of E.H. and E.C. wares would then have been continuous for about 900 years, as the end of Troy V is to be dated c. 1900 B.C. The beginning of Troy I he would date one or two centuries earlier, i.e. c. 3000/2900 B.C.,¹⁶⁰ and E.H. I would be roughly contemporary with early Troy I. This would mean that the E.H. period lasted about one thousand years. A possible objection to this is that in the corresponding period in Western Anatolia, the number of building levels and the total depth of deposit¹⁶¹ appears to be much larger than in Early Helladic Greece. Even with our own estimate for the beginning of Troy I, c. 2750 B.C., the same objection still stands. How such a discrepancy could arise, when the same building materials are used and the same physical conditions (including earthquakes) obtain on either side of the Aegean, defies explanation.

Another strange feature is that, of all the N.W. Anatolian sites excavated, only Troy shows Early Aegean imports. Thermi, Poliochni, Emporio, Tigani and Heraion were all excavated by archaeologists familiar with Early Helladic or Cycladic material, but none of these sites appears to have produced any definite E.H. or E.C.¹⁶² wares. When one considers the coastal distribution of these sites, this certainly causes astonishment.

Other difficulties are raised by correlating Professor Blegen's chronology of the E.H. and E.C. periods with that of Early Minoan, based on comparisons with and imports from Egypt.¹⁶³ Unless a high Egyptian chronology is accepted, the facts cannot be made to fit and to destroy the well established synchronism (end of Egyptian predynastic equals end of

¹⁶⁰ *Troy* I, p. 41.

¹⁶¹ Thirty building levels at Troy. Even with deduction of the minor alterations in Troy III-V, at least twenty complete rebuildings remain. The most complete record in Greece, that on the site of Lerna, has about ten (or at most a dozen) Early Helladic levels, two to four in E.H. III, *Hesperia* XXV (1956), p. 161, and five to six earlier ones, preceding the House of the Tiles, *ibid.*, p. 167.

¹⁶² Except E.C. askoi in Troy IV period levels at Heraion, see note 122. The other sites were all uninhabited after Troy I, at least during the E.B.A. To the list of Troy I sites without later occupation we may add Bayrakli, Hüyükcek, near Larisa, and Hüyükcek, near Ağa Ali Çiftlik, as well as several other minor sites. At none of these was any E.H. ware found.

¹⁶³ F. Matz, *Handbuch der Archaeologie*, II (Der Aegaeis), 1950, and *Historia* I (1950), pp. 173 ff. See *Antiquity* no. 111 (1954), p. 157.

Jemdet Nasr, in absolute terms, *c.* 2900 B.C.) on the basis of some Early Aegean imports into Troy is indefensible. In view of all these difficulties, it is desirable to subject the Early Aegean wares at Troy to a closer scrutiny than has yet been done.

Early Aegean wares can be divided into two categories ; *scored ware*, which first occurs in middle Troy I, increases in late Troy I and disappears during the first phases of Troy II and *glazed ware*, which occurs from the middle of Troy I to the end of Troy V.¹⁶⁴ Local imitation of glazed ware begins in Troy II and continues until the end of the E.B.A.¹⁶⁵ Moreover, an indeterminate class of wares is distinguished in Troy III and IV, with recognisable *Anatolian* shapes.¹⁶⁶

All this material is exceedingly fragmentary and rims are so rare that in most cases hardly anything can be said of the shapes.¹⁶⁷ The excavator admits that in most cases the identification of sherds as Early Aegean depends solely on the distinctive brush-applied glaze or slip, which is often crackled.¹⁶⁸

Although these sherds are always carefully described in the text, the photographs do not do justice to the technique and a few colour plates might have been added, in view of their importance. Also, where rims are present, they are never illustrated in profile drawings, which is regrettable,¹⁶⁹ as it would have been interesting to see how different their profiles were from the contemporary Anatolian material. In most cases one has to take the excavator's word for it, that the sherd in question belongs to a typical E.H. vessel. A good example are the two rim fragments from Troy I, assigned to sauceboats in the text.¹⁷⁰ The photograph¹⁷¹ shows some rims, not of the most unmistakable part of a sauceboat, the spout, but of the body. An unprejudiced reader would ask whether such sherds could not have belonged to another shape, such as a bowl. Unfortunately there is no way to check the statement.

The question is not purely academic, but of great importance, since there is now some evidence that a peculiar form of sauceboat, rather different from the E.H. and E.C. ones, was made in N.W. Anatolia. At Emporio and Thermi V fragments of such a vessel were found in early and late Troy I levels respectively and the magnificent gold specimen from

¹⁶⁴ *Troy* I, pp. 53-4 ; p. 222. *Troy* II, pp. 20, 120, 136. None occurs in Troy Vd.

¹⁶⁵ *Troy* I, p. 222. *Troy* II, pp. 20, 120, 136.

¹⁶⁶ *Troy* II, p. 20 (imported *b*), fig. 73 : 34.411 (incised) and 34.400 are shape B 22, a descendant of a Troy II shape. p. 43 and fig. 73 : 33.256 is paralleled in Beyce XII and IX (Troy III and IV period) and 33.257 and 258 are again normal Anatolian shapes, easily matched in shape, fabric and ware in the Afyon district (Yazılıkaya, Karaca Ahmet, etc., unpublished pottery in the Afyon museum). All of these belong to the last phase of Troy III.

¹⁶⁷ See footnote 164.

¹⁶⁸ *Troy* I, p. 54. *Troy* II, pp. 20 and 236.

¹⁶⁹ e.g. in case of *Troy* II, fig. 82, 4-6, 16, and fig. 83, 9-11, 12.

¹⁷⁰ *Troy* I, pp. 106, 193.

¹⁷¹ *Troy* I, fig. 252, 5 and 12.

Troy II may be its descendant.¹⁷² It is interesting that Dr. W. Lamb did not claim an E.H. or E.C. origin for her sauceboat. If the sherds from Troy I did belong to sauceboats at all, they might just as well have belonged to this rare N.W. Anatolian type. With the exception of these two alleged sauceboat fragments, no sherds attributable to this very characteristic E.H. shape were found among the hundreds from Troy II to V.

It is one of the unsolved problems, how from all this imported glazed ware not a single *characteristic and unmistakably Early Helladic or Cycladic* shape could even be partially restored. No single sauceboat, tankard, *askos* of typical E.H. or E.C. form was found before the Troy IV period.

Even at that comparatively late period there is only one (or if we add the specimen found by H. Schliemann¹⁷³) two Cycladic *askoi* and one E.H. III patterned pyxis fragment.¹⁷⁴

A painted handle from middle—and two painted sherds from late—Troy I are considered as rare examples of painted Early Aegean ware.¹⁷⁵ C. W. Blegen admits that they present a problem, for patterned ware in Greece is characteristic only of the E.H. III phase and these sherds are therefore too early in date. He therefore assumes that they are probably Early Cycladic, where painted decoration is supposed to have started earlier.¹⁷⁶ Two others, one from Troy II, the other from Troy III, are decorated in white paint on coarse red and brown-grey wares.¹⁷⁷ White-painted pottery is so characteristic of the Yortan culture, at home in the region immediately east and south-east of the Troad, that one wonders why an Aegean origin should have been favoured, the more so as this type of decoration again appears to have been more common there at the *end* of the E.B.A.¹⁷⁸

Recent discoveries in Anatolia have contributed greatly to establishing the origin of the *scored ware* imported into middle and late Troy I and diminishing in Troy IIa and b. These vessels must have been imported for their contents, for the only recognisable shapes are storage jars. At Tarsus this ware was found as early as the E.B. I period, but it is characteristic of the next phase. It is a variant of the Cilician red gritty ware, in use there throughout the E.B.A. The origin of both these wares and of the glazed or slipped red polish ware, which invariably accompanies it, can now be shown to lie in the Konya plain, where they occur on nearly every E.B.A. site.¹⁷⁹

¹⁷² Emporio ; *Archaeology in Greece*, 1954 (*JHS.*, 1955, supplement), p. 44, "bird-shaped vase" ; *Thermi*, town V, fig. 32, no. 521, and p. 91. SS. 5863. These Anatolian types appear to have influenced the Southern Balkan cultures of Vinča and Bubanj, for which see V. Milojević, *Chronologie*, pl. 35, 7, and 37, 8.

¹⁷³ SS. 2066.

¹⁷⁴ See footnote 121.

¹⁷⁵ *Troy I*, p. 154, fig. 251, 14, and pp. 184–5, fig. 262, 17–18.

¹⁷⁶ *Troy I*, pp. 54–5.

¹⁷⁷ *Troy I*, p. 273, fig. 412, 38 (Troy II c) ; *Troy II*, p. 96, fig. 60, F 16.

¹⁷⁸ In the E.C. settlements of Paros and Phylakopi, *op. cit.*, and in E.M. III. White-painted pottery continued into the M.B.A. in both Cyclades and Crete, but not in Anatolia.

¹⁷⁹ *Relative Chronologies*, p. 71 (scored ware) ; *Tarsus*, p. 97 (late E.B. I), p. 121 (E.B. II). *AS. IV* (1954), pp. 190 f., 196, and figs. 95–147 (thin painted metallic) and 159 (scored ware).

Their distribution extends westward as far as the Lake of Beyşehir and the Calycadnus valley.¹⁸⁰ Further west it was not found during extensive surveys in S.W. Anatolia, but recently large quantities of the ware have been discovered at Hüyük, a Troy I site 50 km. north of Izmir,¹⁸¹ nor would it be surprising if it occurred at Heraion, in Samos, for some similar sherds have been picked up by the writer near Kuşadası, opposite Samos.¹⁸²

All this points to contact by sea between the west coast and Cilicia and both Miss H. Goldman and the writer consider this pottery to be the same as or closely related to the *scored ware* of Troy. The shapes of the vessels of this ware in Cilicia are not yet known, but those recovered from mounds in the Konya plain all belong to various-sized storage jars.¹⁸³

The import of *scored ware* comes to an end after Troy IIb,¹⁸⁴ which is exactly at the moment that N.W. Anatolian elements introduce the E.B. III culture into Cilicia. Gradually increasing trade with Cilicia during the later stages of the Troy I period may have led to this development.

Now that an Aegean origin for *scored ware* can be ruled out and trade between Troy I and Cilician E.B. II has been established, one might propose an alternative origin for the two painted sherds from late Troy I. The patterns on these shapeless fragments and the technique of a brown paint on a buff slip is remarkably like the painted "apricot" ware from Tarsus E.B. I and II and the painted metallic ware from the Konya plain, decorated with very similar paint and patterns.¹⁸⁵ A handle from Troy Ik,¹⁸⁶ classified as Early Aegean, with its vertical incision near the top, is unmistakably related to this same class of pottery in the Konya plain and Cilicia, where such incised handles are characteristic of E.B. II,¹⁸⁷ the period which, as we have seen above, is contemporary with Troy I. Handles treated in this way are unparalleled elsewhere in Anatolia.

Moreover, brush-applied slip or glaze, often worn and crackled, regarded at Troy as Early Aegean *glazed ware*, is not confined to the Greek mainland and the Cyclades but has a much wider distribution in Anatolia and is even found in Cyprus.¹⁸⁸

As early as 1939 Professor K. Bittel made the following observation in his report on the excavations at Demirci Hüyük, near Eskişehir, the nearest site to Troy, excavated on the Anatolian plateau :

"Bei den Funden vom Aharköy-Hüyük bestätigte sich eine schon am Demirci-Hüyük gemachte Beobachtung, dass zahlreiche Stücke nämlich, die, wenn sie nicht in Anatolien gefunden wären, unbedingt mit solchen der 'Urfirnis'-Ware der

¹⁸⁰ *AS. IV* (1954), p. 191.

¹⁸¹ An almost coastal site.

¹⁸² At Yılanlı Burun and Kadikalesı, between Kuşadası and Cape Mykale.

¹⁸³ See footnote 179, and unpublished new material from the Calycadnus valley.

¹⁸⁴ *Troy I*, p. 54.

¹⁸⁵ *AS. IV* (1954), figs. 95, 115, 122, 145-7. *Prehistoric Mersin*, fig. 122.

¹⁸⁶ *Troy I*, p. 17, fig. 250, 7. cf. *AS. IV* (1954), figs. 96, 99, 117, 124, 143.

¹⁸⁷ *Tarsus*, fig. 253 ; 250-1.

¹⁸⁸ At Kafkala, near Myrtou, the writer collected pottery decorated in this way, which is indistinguishable, but for the shape, from that on the opposite coast at Silifke. Technique and fabric are identical. Miss Joan Duplat-Taylor informed me that the Kafkala ware is typical of the first phase of the Cypriote E.B.A.

Aegaeis vergleichbar wären, nur einen stark verwitterten polierten Überzug besitzen. So konnten die verschiedensten Stufen vom braunglänzend polierten Überzug bis hin zur 'Urfirnis'-Ware lückenlos aufgestellt werden" (*Demirci Hüyük*, p. 32).

The same observation was made by him when shown a lot of E.B.A. pottery, collected by the writer on mounds in the Tavşanlı district, west of Kütahya.

The distribution of wares with brush-applied slip or glaze in Anatolia extends from Tavşanlı and the lake of Iznik to the Konya plain, Cilicia and northern Cyprus. In each case it occurs side by side with properly slipped and burnished wares, but the crackly glaze or slip is particularly common in the more southern districts. The colours of the slip or glaze are identical with those in Greece (even the metallic greyish-black is found in the Konya plain and in Cilicia).

As fabric and brush technique, not shape, are the criteria for the identification of Early Aegean wares at Troy, I venture to suggest that the *glazed* ware, which occurs with the *scored* ware, is derived from the same region and not from the Aegean. Such a view does not only remove the difficulty raised by the painted sherds, but is also consistent with the statement of the excavators of Thermi, Poliochni, etc., that no Aegean wares were found at these sites.

The increase in glazed ware sherds in Troy II and III and the rise of a local imitation of this ware is in keeping with the strong cultural ties which now bind Cilicia to N.W. Anatolia. Other glazed wares occur in Troy III, of indeterminate origin. Some almost complete shapes show Anatolian, not E.H. or E.C., affinity.¹⁸⁹ Red wash wares increase all over W. Anatolia and various slips and glazes occur at this period at Beycesultan XII, XI.¹⁹⁰ Most of the rims of Troy III Early Aegean wares have their counterparts at Beycesultan,¹⁹¹ as well as in the rest of Anatolia. Not a single vessel *need* have come to Troy III from the Early Helladic-Cycladic regions.

In the Troy IV period, on the other hand, genuine E.H. and E.C. imports start, but without rims and shapes it is impossible to say which fragments of *glazed ware* are of Anatolian and which of Aegean origin. It is interesting to note that in the Troy V period, when Cilicia is no longer part of the West Anatolian culture province, the number of *glazed ware* sherds at Troy sharply declines. C. W. Blegen admits that "in the entire collection (of 39 rimless sherds from Troy V) there is not a single piece that can unhesitatingly be attributed to a specific Aegean or Helladic place of manufacture" (*Troy II*, p. 227).

All this seems to indicate that with the beginning of the Cilician M.B.A., at the beginning of Troy V, c. 2100 B.C., trade with that region

¹⁸⁹ See footnote 166.

¹⁹⁰ Starting from level XII onwards. There is a profound break in the culture between levels XIII and XII, which can only be explained by the arrival of a new people (Luvians?).

¹⁹¹ As far as recognisable on the photographs in *Troy II*, fig. 83, 4-6, 16 and 19. Shapes like these are commonplace in western Anatolia at this period.

gradually declined. It is interesting that not a single sherd of smeared ware, the final Early Helladic product, was found at Troy, although a big bowl in this (or similar) ware was found in Beycesultan VII, contemporary with the beginning of Troy V.

All the evidence produced in the course of our argument suggests that, with the exception of some sherds in Troy IV, the *glazed wares* imported into Troy from the beginning of middle Troy I to the beginning of Troy V, i.e. during the period from about 2650–2100 B.C., were of an Anatolian, and more specifically Cilician, not an Aegean origin.

CHRONOLOGICAL IMPLICATIONS

The only definite synchronism between E.H. Greece and Troy appears then to be the beginning of E.H. III and Troy IV, *c.* 2200 B.C. This would allow a duration of three centuries for E.H. III. Of the two preceding periods, the first, E.H. I, appears to have been short and transitional,¹⁹² perhaps lasting not more than a century. Allowing two hundred years for E.H. II, the whole E.H. period would have had a duration of six hundred years in the more advanced parts of the country and a century less in Western Greece. A tentative date of *c.* 2500 for E.H. I, *c.* 2400 for E.H. II and *c.* 2200 B.C. for E.H. III would agree with the Early Minoan correlations, independently dated by Egyptian evidence (low chronology Dyn. I at *c.* 2900 B.C.), as well as with the thickness of the respective E.H. strata.

Developed Cycladic pottery of Syros type accompanies the earliest E.H. I wares, clearly showing that the newcomers arrived by way of the Cyclades and were perhaps accompanied by Early Cycladic elements. The beginning of the Syros culture therefore clearly antedates the beginning of E.H. I, and the Pelos culture, which lacks the spiraliform decoration so characteristic of the Syros culture, is probably earlier still. Pelos ware has been found in Euboea in a grave, associated with gold and silver vessels which are probably of Anatolian origin.¹⁹³ The late neolithic (or rather chalcolithic) Larisa culture shows the same shapes in pottery.¹⁹⁴ In its earliest phase, represented by Arapi, this culture has pattern-burnished wares,¹⁹⁵ but the later and classical Larisa culture, represented by Otzaki, prefers ribbing, fluting, beading and white-painted decoration.¹⁹⁶ Imported vessels of Pelos type have also been found at Tigani, in Samos, where pattern-burnished pottery of Besikatepe type represents the earliest occupation,¹⁹⁷ but no certain chronological conclusions can be drawn from this material, as it was found unstratified.

When one places side by side the West Anatolian and Aegean sequences, the one indirectly dated by Egyptian, the other by Mesopotamian

¹⁹² At Eutresis, the earlier half of the E.H. I level was still mixed with late neolithic and the pure E.H. I level only one metre thick.

¹⁹³ F. Schachermeyr, *Die ältesten Kulturen Griechenlands* (Stuttgart, 1955), pl. VIII.

¹⁹⁴ V. Milošević, *Chronologie*, pls. 9, 1, and 10, 5, and p. 42.

¹⁹⁵ *AA.*, 1955, p. 188, fig. 2, 9–12.

¹⁹⁶ *AA.*, 1955, p. 163, fig. 6, 1–3, 5.

¹⁹⁷ *AJA.* LI (1947), pl. XXXII, b.

evidence, some interesting facts emerge. E.H. II becomes contemporary with Troy II c-g and III, the short period of E.H. I equals the Troy II a and b phases, which like it are a transitional period. Troy I becomes the Anatolian equivalent of the late neolithic or rather chalcolithic cultures of Greece, Crete and the Pelos culture in the Cyclades.

A more satisfactory explanation can now be given for the use of white-painted pottery in the Larisa culture, which on earlier chronologies presented one with the problem, why this typical Anatolian technique should have appeared first in Thessaly and only afterwards in Western Anatolia. As the Larisa culture now becomes contemporary with the period of its maximum use in Western Anatolia, i.e. Troy I,¹⁹⁸ there can be little doubt that it was indeed derived from N.W. Anatolia, probably via Troy or Thermi, from the Yortan region. It is interesting to note that when in E.H. III contact was firmly established between the Greek mainland, the Cyclades and N.W. Anatolia, this white-painted decoration is readopted in C. Greece, in the so-called Hagia Marina ware,¹⁹⁹ as well as in E.C. III²⁰⁰ and E.M. III.²⁰¹

Historically the destruction of Troy I and the desertion of a large number of Troy I coastal settlements²⁰² in the years around 2500 B.C. can be linked with the arrival of the bearers of the Early Helladic civilisation, which put an end to the late neolithic of Greece. Only in the areas not immediately affected by this movement did the late neolithic culture last until the beginning of E.H. II.

The dates for the beginning of the Macedonian and Thracian E.B.A. are not affected by this lowering of the Early Helladic dates. The type sites, Kritsana, in the Chalcidice,²⁰³ and Mikhalits, in eastern Thrace,²⁰⁴ show

¹⁹⁸ White-painted pottery occurs earlier than Troy I in Kumtepe Ia, Mersin XII and in the Söğle group in the Elmalı plain of Central Lycia.

¹⁹⁹ *Orchomenos* III, *passim*.

²⁰⁰ Paros; *Ath. Mitt.*, 1917, p. 45 f., figs. 49-55; Phylakopi, *op. cit.*, pp. 93, 152, fig. 134 and pl. X below, and *BSA*. XVII, pl. IV, right.

²⁰¹ J. D. S. Pendlebury, *The Archaeology of Crete*, p. 80 f.

²⁰² Troy I was burnt (*Troy* I, p. 39), Thermi fortified and then deserted, Emporio burnt, Bayrakli, Ayio Gala, Hüyük, Tigani, etc., deserted.

²⁰³ *Prehistoric Macedonia*, fig. 36 a-c. Horned lugs on a middle and late Troy I A16 shape. The absence of typical early Troy I shapes is noteworthy and in sharp contrast with the pottery from Mikhalits. It does not look as if Kritsana I, to which these types belong, should be dated too early in the period and it is quite possible that the site was not founded by Anatolians until the earlier phases of Troy II, as Troy IIa is virtually indistinguishable from late Troy I. The barbarous vessel, fig. 39, 1, is not a *depas* (not even a degenerate one) as S. S. Weinberg maintains in *AJ.A.* LI (1947), p. 407, and on which he bases his argument for a low date for the beginning of the Macedonian E.B.A. An unpublished *depas* from a mound near Langada is in the Salonika museum.

²⁰⁴ *Fouilles et Recherches* I (Sofia, 1948), pp. i ff., and *AS.* VI (1956), pls. I-II, p. 45 f. Mikhalits shows typical early Troy I shapes, though more heavily decorated than at the type-site (figs. 7-8). Other vessels with proper handles, bowl shapes of A16 type suggest that Mikhalits spanned the whole of Troy I (figs. 4-5). Coarse ware from this site resembles that of Karaağaçtepe, in the Thracian Chersonese, where it occurs in its second level, which is likewise of Troy I date (R. Demangel, *Le tumulus dit de Protesilas*, fig. 43). With the pre-Sesklo barbotine ware of Greece, Starčevo, etc., with which S. S. Weinberg connects it in the article referred to in the previous footnote, it has no connection whatsoever.

a culture of advanced and early Troy I type respectively. In the case of Mikhalits I am inclined to think of a northern extension of the Troy I culture, but in the case of Macedonia one must consider the possibility that the events around 2500 may well have sent refugees from the deserted Troy I sites into Macedonia. Such an explanation does not clash with the historical events outlined above, but would also account for the relative shallowness of the Macedonian E.B.A. strata.²⁰⁵ To assume the same for eastern Thrace would ignore the obvious geographical links between the Troad and the region immediately north of it.

Date, B.C.	Egypt	Crete	Greece	Cyclades	Anatolian dates, B.C.	Thrace/ Macedonia	Troad
2900	Dyn. I-II	Late Neolithic (Chalcolithic)			2900		Kumtepe Ia
							Kumtepe Ib
2675	III	cultures		← Pelos group	2750	Mikhalits	Troy I (early)
					2650		Troy I (middle)
2620	IV V	E.M. I		← Syros group			Troy I (late)
			E.H. I		2500	Kritsana 1	Troy II a-b
		E.M. II	E.H. II		2400		Troy II c-g
2360	VI				2300		Troy III
2200	1st Intermediate M.K.	E.M. III	E.H. III	E.C. III	2200	Kritsana 6	Troy IV
		M.M. 1 A			2100		Troy V
2000		M.M. 1 B	M.H.	1850? M.C. I	1900	M.B.A.	Troy VI (early)

POSTSCRIPT

In a recent article in *Orientalia*, 26, 1957, p. 12 ff., J. Lewy attempts to show (a) that the Cappadocian tablets from Alishar and Boghazköy (Hattuš) do not belong to the *Karum Ib* period, to which K. Balkan assigns them, but to the earlier *Karum II* period (p. 18), (b) that the interval between these two periods was about eighty years (p. 27, n. 2 and pp. 32-34). This invites the following comments:

J. Lewy's argument runs as follows: A merchant Da'a, residing in *Hattuš* corresponds with Nabi-Enlil, a merchant in Alishar (Al. no. 15), who is therefore a contemporary. In letter Bo. 289/h Da'a is mentioned with a certain Ziki. On another tablet (EL. 232) a Ziki occurs with a certain Nur-Ištar. Both names are uncommon. In ICK. 162, a Nur-Ištar carries bales of cloth to *Hattum* and in a letter (L 29-560) written to Pušu-ken, the well-known merchant in Kanesh, who was a contemporary of Sargon king of Assyria, Nur-Ištar and the city of *Hattum* are again mentioned. Linking Da'a of *Hattuš* through Ziki to a Nur-Ištar and

²⁰⁵ Six building levels for the whole of the E.B.A. at Kritsana, with a total depth of deposit of six metres, *Prehistoric Macedonia*, fig. 17; Hagios Mamas has the same depth of E.B.A. deposits and its finds are very similar, *ibid.*, fig. 8.

assuming that the latter is identical with a Nur-Ištar, associated with the city of Hattum in the days of Pušu-ken of Kanesh, i.e. in the *Karum* II period, J. Lewy arrives at the conclusion that Da'a and Nabi-Enlil and therefore the tablets from Boghazköy and Alishar belong to the same period.

The argument rests on two assumptions, neither of which have been conclusively proved: (a) that there is only one merchant with the name Nur-Ištar, (b) that Hattuš and Hattum are identical, a theory advocated by J. Lewy but denied by I. J. Gelb (*Inscriptions from Alishar and vicinity*, p. 10) and E. Bilgiç (*AfO* XV, 1951, p. 33 and notes 218–220).

Moreover, in the thousands of tablets from *Karum* II, a *karum* Hattuš is not mentioned; the one exception, an unpublished tablet now in the Kayseri Museum, was found unstratified (K. Balkan, *Observations*, note 30). Nor is Da'a, the head of a merchant house, or any of the *limu* names from Boghazköy, known from the *Karum* II tablets at Kültepe (*Observations*, p. 47). This is most surprising and one wonders why, had there been a *karum* at Hattuš in the Kültepe *Karum* II period (which was after all the chief Assyrian *karum* in Anatolia), it should not have been mentioned on at least some of the ten thousand tablets of this period from Kültepe.

Much more decisive is the archaeological context in which the Alishar tablets were found. On the basis of the new material from Kültepe, T. Özgüç has shown that lead figurines, seals, burial customs and especially the pottery associated with the Alishar tablets strongly support K. Balkan's dating (T. and N. Özgüç, *Ausgrabungen in Kültepe 1949*, pp. 215–16, n. 407).

Any doubt which one might perhaps still have felt about the date of the tablets from Alishar, in view of its somewhat confused publication, has now been dispelled by the 1956 excavations at Boghazköy, where we have the excavator's testimony for the exclusively *Karum* Ib context in which the Cappadocian tablets (including Da'a's) were found.²⁰⁶ This new evidence when published will enable one to confute J. Lewy's thesis.

As for his second point, the caravan mentioned in the Mari text (p. 32) would still fall within the lifetime of the *Karum* Ib at Kanesh and its neighbour at Hattuš in our chronology, though very much towards its end. It serves as a reminder not to underrate the length of the later *karum* period, to which T. Özgüç and K. Bittel would give about fifty years. The presence of imported Khabur ware at Kültepe is not incompatible with K. Balkan's dating, as J. Lewy suggests, for objects found in a burnt settlement belong inevitably to the period immediately before its destruction, and not to its beginning. J. Lewy misquotes M. E. L. Mallowan as saying that the first examples of Khabur ware date to the time of Shamshi-Adad's younger son, Iasmah-Adad (p. 34), whereas he says that they cannot be later than Iasmah-Adad and that the tablets of his reign date the beginning of the extensive use of Khabur ware in the district (*Iraq*, IX, 1947, p. 82—italics mine). The origin of this ware remains unknown, and J. Lewy's argument is therefore inconclusive.

²⁰⁶ [See above, p. 22.—ED.]