

Ernst Pernicka, Sinan Ünlüsöy,
Stephan W. E. Blum (eds.)

Early Bronze Age Troy

Chronology,
Cultural Development,
and Interregional Contacts



EBERHARD KARLS
UNIVERSITÄT
TÜBINGEN



UNIVERSITY OF
CINCINNATI

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Early Bronze Age Troy: Chronology, Cultural Development and Interregional Contacts

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In memoriam
Hans Günter Jansen
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Preface

Ernst Pernicka

Troy has been of outstanding importance for EBA archaeology ever since the discovery and excavation of the site by Heinrich Schliemann. Partly due to the paucity of archaeological research on EBA Anatolia, Troy has long been considered as the only key site for Western Anatolia and the Northern Aegean. However, as a result of recent excavations at other contemporary sites (e. g., Liman Tepe, Yenibademli, Küllüoba), it has become clear that Troy was not the only significant EBA settlement in this region and that its position as a key site is due for a re-examination. To explore the similarities and diversities of Early Bronze Age cultures across the Northern-Aegean and Western Anatolia, an international conference entitled »Early Bronze Age Troy: Chronology, Cultural Development and Interregional Contacts« was held in early May 2009 at the University of Tübingen. Besides the general aspects of chronology and stratigraphy, it addressed themes such as the emergence of stratified societies, concepts of EBA economy and trade, production and distribution of raw materials and craft specialization with special reference to Troy itself.

After the untimely death of Manfred Korfmann who directed the new series of excavations until 2005 I was asked by the university to resume the responsibility for the research at Troy. This was not an easy task although I was associated with the project from the beginning in 1988, but rather from the outside and more as an adviser than a true member of the team. I gratefully acknowledge the help of many colleagues to get a grip of this enormous task but Hans Günter Jansen in particular formed a solid rock for me whose advice was always welcome and important on which I could rely on in every aspect. Hans Günter served as director of the Troy Foundation at the University of Tübingen and accompanied our research with deep knowledge and sympathy and, last not least, with outstanding generosity. It is for this reason the editors as members of the excavation team dedicated this volume to his memory.

After a successful career as physicist in an international computer company Hans Günter Jansen began a new one in the field of applied physics in archaeology. He took this very serious and indeed began formal studies of prehistoric archaeology at the University of Tübingen in 1984 where he also met Manfred Korfmann. When the new excavation project as one of the major goals of the research was the Lower City of Troy, whose existence was suspected since Heinrich Schliemann but was never really confirmed in the field. It was Jansen who suggested a large-scale geophysical prospection of the area south of the citadel of Troy and immediately began himself with this enormous task in view of the instrumentation then available. In the years between 1988 and 2001 an area of around 50 hectares was surveyed by Jansen himself and other specialist in physical prospection. As a result it was possible to outline the »city plan« with an orthogonal street system with *insulae* of the Hellenistic and Roman periods (Troy VIII and IX) together with the western Hellenistic city wall over a length of 400 m. But the most important discovery was the outline of the Late Bronze Age (Troy VI and VIIa) Lower City, which is represented not by a wall as originally assumed but by a ditch of 4 m width that extends over a length of more than one kilometer as has later been shown by excavations.

Besides his scientific achievements in archaeology, not only in Troy, Hans Günter Jansen was an indispensable member of the Troy team in a time when computers began to be applied at a regular and large scale also in archaeology. Here he could combine the knowledge of his two professional careers by creating a homepage of the project for the internet and improving its public visibility in every respect.

Finally, as managing director of the Troy Foundation he used his wide-ranging contacts to find supporters and donors and actually made considerably donations himself. He continued to participate in the excavation campaigns every summer and

was highly respected as archaeologist and geophysicist. He was awarded the honors medal of the University of Tübingen and in 2002 also the Bundesverdienstkreuz, an order of the Federal Republic of Germany. He remained interested in the progress of research at Troy until the last field campaign in 2012. He died on 25 February, 2013. We will remember

him as a warm-hearted friend and knowledgeable colleague.

Finally, we want to express our gratitude to the Deutsche Forschungsgemeinschaft (DFG) for long-term support of the Troy project and the Institute for Aegean Prehistory (INSTAP) for financial support for the publication of this volume.

Tübingen, March 2016



Early Bronze Age Troy and the Emergence of Complex Societies in the Aegean

John Bintliff

Abstract

This paper will seek to compare the rise of Troy as a proto-urban central-place in the Troad with contemporary developments in the Southern Aegean: Crete, the Cyclades and the Greek Mainland. Issues of population density, land use, urbanism and sociopolitical and economic developments will be reviewed, especially in the light of recent rethinking of the nature of the ›High Cultures‹ of the Early Minoan, Early Cycladic and Early Helladic societies.

Early Bronze Age (EBA) Troy has been described by Manfred Korfmann (2001) as a central-place, even a small state and with important manufacturing and trade connections. If we accept the maximum size he proposed for Troy II, around 9ha, (although we have already heard at this Conference from Dr. Peter Jablonka that this may be a serious overestimate), rough population guesstimates allow us to speculate how large an area would be needed to sustain such a small centre of at the most 1–2000 people. For the Korfmann Festschrift, Mauerschau, I revised my earlier (1991) calculations and came to the conclusion (Bintliff 2002), based on the following generalized chart (Fig. 1), that the Plain of Troy and its surrounding hills would be adequate for sustaining this size of population in food supplies, an area of just 400 sq km.

I cannot predict what our Troy Project colleagues will be telling us at the *next* Conference on their revised estimates for Troy VI, so for the time being I shall stay with the published suggestions that it was in total some 30 ha for the Middle-Late Bronze Age. Again using our guesstimates of population density and then the necessary landscape area to feed such a settlement, the calculations fit neatly into a territory expansion which adds the much larger Middle Menderes interior basin, a total area of 1700 sq km. If Troy VI is the capital of the state of Wilusa (I find the Troy Project's arguments convincing on this point), such a state size is appropriate, and the core town and its territory are very comparable in scale,

for example, to Minoan and Mycenaean centres and their suspected territories (Bintliff 1991, 2002).

Early Bronze Age Troy is rich in metal skills and metal objects, whilst the plan of the citadel seems to indicate a controlling elite using or even residing in monumental public structures. This elite we must presume relied on the support of farmers, herders, craftsmen and traders, who either lived in the all but vanished Lower Town, or in the equally almost invisible, dispersed rural settlements in the Plain district. Militarism seems also a major element in EBA Troy from its citadel walls, but Jablonka's hypothesis (*this conference*) of communal ritual functions for the Lower Town might introduce the concept of a ceremonial centre as well.

I would now like to compare these major elements at EBA Troy: a small fortified centre with mansions or monumental public buildings, a small-scale food sustaining area, a likely elite associated with prestigious artefacts, trade, craft specialists, warfare and perhaps district ceremonial gatherings, with recent thinking about the development of society in the EBA of the Southern Aegean.

In his 1972 classic book *The Emergence of Civilisation*, Colin Renfrew presented the Aegean EBA as the critical intermediate stage between the Neolithic village cultures of Southern Greece and the palatial states of the subsequent Middle and Late Bronze Ages. He saw EBA ›High Cultures‹, focussing on either walled towns or monumental building complexes (central places for small dis-

TOWN AREA- hectares	Population range	Bronze Age food needs	Iron Age food needs	Sustaining radius B-age	Sustaining radius I-age	5km radius + 1/3 beyond
4 to 5 hectares	480–1500	846–2700 ha	346–1080 ha	2,4–4,2 km	1,5–2,6 km	Bage: Within 5 km**
						Iage: Within 5 km**
12–14 hectares	1440–4200	2592–7560 ha	1037–3024 ha	4,1–6,9 km	2,6–4,4 km	Bage: 6,6 km radius*
						Iage: Within 5 km**
20 hectares	2400–6000	4320–10800 ha	1728–4320 ha	5,2–8,3 km	3,3–5,2 km	Bage: 9,7 km radius*
						Iage: Within 5 km**
30 hectares	3600–9000	6480–16200 ha	2592–6480 ha	6,4–10,2 km	4,1–6,4 km	Bage: 12,4 km radius*
						Iage: 6,1 km radius*
80 hectares	9600–24000	17280–43200 ha	6912–17280 ha	10,5–16,6 km	6,6–10,5 km	Bage: 23 km radius
						Iage: 14 km radius*
150 hectares	18000–45000	32400–81000 ha	12960–32400 ha	14,4–22,7 km	9,1–14,4 km	Bage: 32 km radius
						Iage: 20 km radius
Figure 1	KEY:	**=Core access zone	*=Market return zone			

Fig. 1: Hypothetical calculations of the sustaining areas required of settlements of varying sizes in the Bronze and Iron Age Mediterranean, allowing for dependent rural settlements to provide for themselves before sending surpluses to regional centres. Cultivation by inhabitants of these centres is also expected. (From Bintliff 2002).

tricts), as symptoms of the rise of a Chieftain society. These phenomena had arisen, he argued, from the cumulative interaction of several key factors: the spread of olive and vine cultivation, metallurgy and its control as part of a wider exchange of raw materials and prestige goods, and competitive elites linked with weapons and fortifications.

By the 1990's however, most of these features had come under sustained criticism. Olive and wine culture were suggested to be limited in scale of production and use throughout the Bronze Age (Hansen 1988, Runnels and Hansen 1986; Hamilakis 1996); elite mansions on the Greek Mainland might rather be temples or the settlements of traders; on Crete other elite mansions were reinterpreted as villages. Vance Watrous in his 1994 synthesis of earlier Bronze Age Crete was led to deny any evidence for social stratification.

However, more recent data and discussions bring us to a contrasting view of the South Aegean EBA once more. The accumulating evidence regarding

olive and vine cultivation from botanical remains (e. g. Asouti 2003), ceramic studies and presses actually seem to support better Renfrew's original model, that these crops were extensively exploited even at small village level from the EBA on, contributing to economic growth and demographic rise.

Perhaps even more important has become the role of Andrew Sherratt's (1981) emphasis on the spread of ox-plough cultivation and the development of the secondary products of herd animals for dairy goods and textile manufacture. Although the latest lipid-residue analyses show early dairy production, notably in the Marmara region and parts of the Middle East back into the Middle Neolithic (Evershed *et al.* 2008), the general picture agrees with Sherratt's proposal for the overall adoption of these economic innovations in Europe and Greece in the Final Neolithic and EBA (cf. Pullen 1992, Isaakidou 2006). The Importance of these agropastoral changes is reflected throughout the Aegean EBA in a population explosion across the landscape,

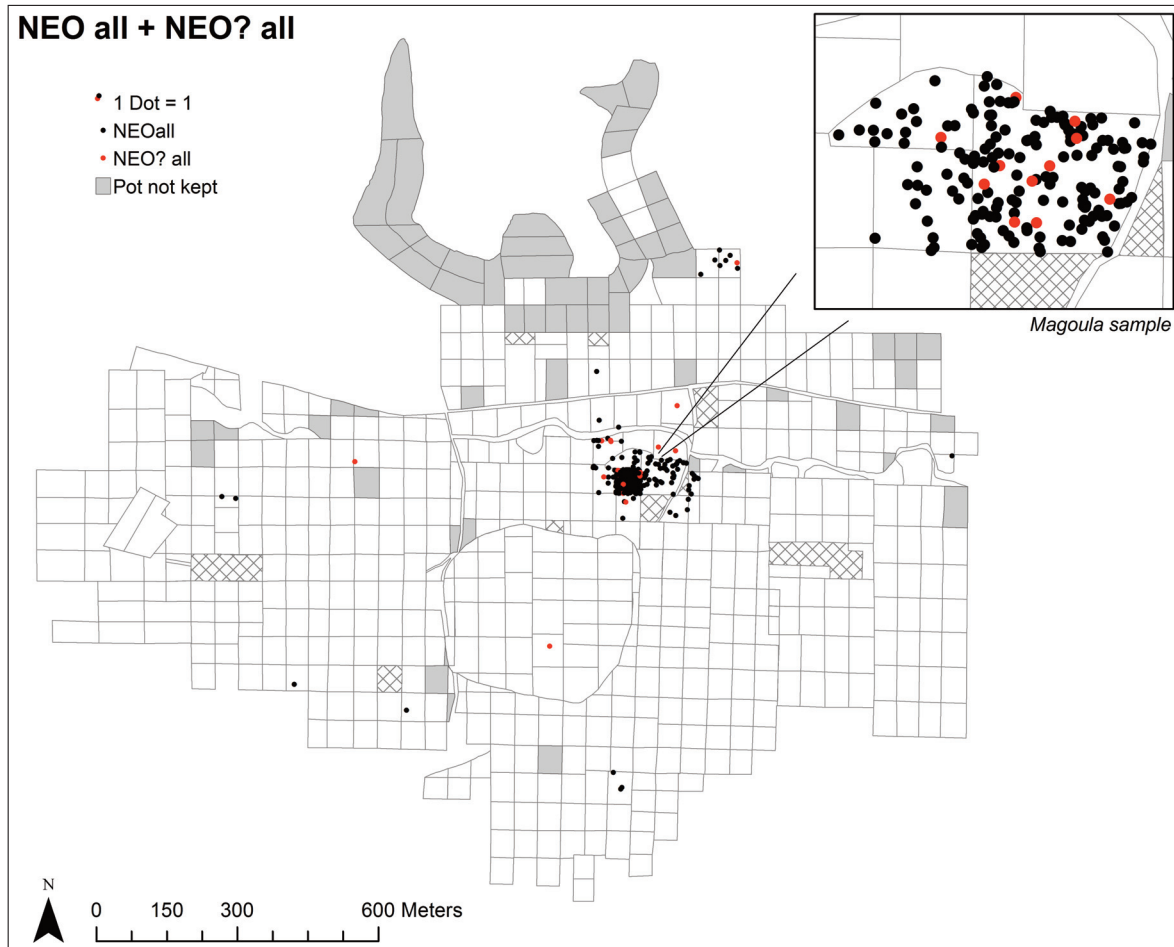


Fig. 2: Neolithic settlement patterns in the area of the later Classical city of Thespieae, Central Greece, showing almost complete nucleation at the Magoula locality over a period of several thousand years. (Source author. GIS by Emeri Farinetti).

seen in Figs. 2 and 3 in a microcosm from my own survey across the landscape later occupied by the ancient city of Thespieae, Central Greece, contrasting the Neolithic with the EBA.

The rise of metallurgy and the importance of the trade in metals and prestige artefacts is even stronger evidenced now than in 1972 (Marangou 1991, Nakou 1995), as is the likely association of precious metal with social elites. The frequency of weapons amongst metal finds is striking, fitting the widespread appearance of fortified villages or other central places, already now seen from the FN/Chalcolithic period in most areas of Southern Greece (Lohmann *et al.* 2002).

Regional surveys have identified settlement hierarchies for EBA Mainland Greece (Cosmopoulos

1998), though usually the higher-status communities remain at large village scale. Clearer suggestions of elite control continue to be linked to such supposed district central places where they possess suspected public architecture like the Corridor Houses and related monumental buildings. Shaw's review of Corridor Houses in 2007 suggests that there might have been public meeting areas outside these structures, a large groundfloor room within them also for large group meetings, but then an upper floor reserved for minority use, in his view for a controlling elite, maybe even for its residence.

In contrast to these central places, which are often small, though some are also defended, is a second class of EBA site, where settlement growth by the EBA arguably creates more townlike communi-

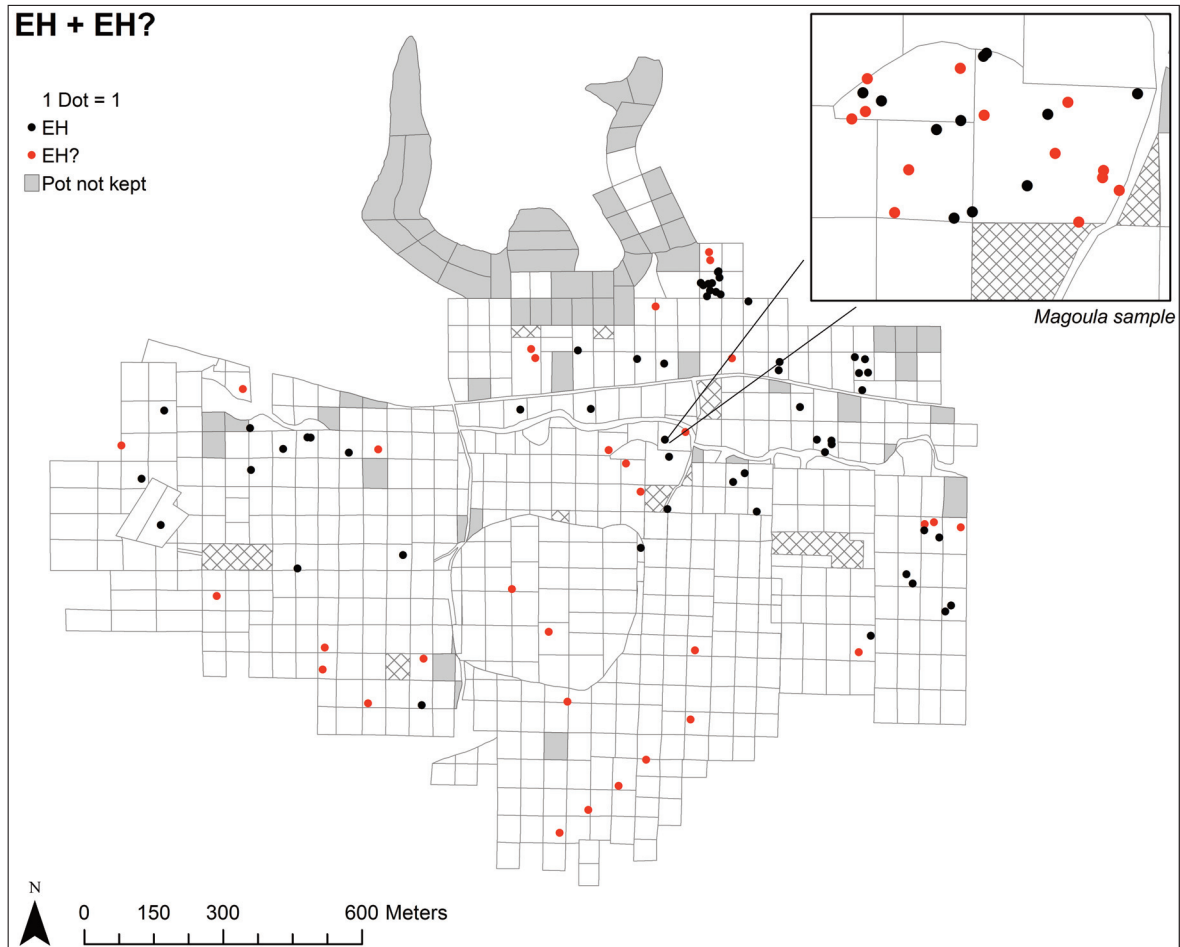


Fig. 3: Early Bronze Age settlement patterns at Thespieae, showing a remarkable explosion of settlement activity across the landscape. (Source author. GIS by Emeri Farinetti).

ties. At Knossos and Phaistos on Crete by the end of the Neolithic, communities of 5–9 hectares have been reconstructed, and these can be matched by Mainland, or near Mainland island, settlements such as Thebes, Eutresis and Manika.

From these two classes of site two different social and economic forces might be identified. For many of the Corridor Houses and other small centres, a maritime emphasis is clear, hinting that local organisation is linked to trade and the exchange of prestigious objects, such networking linking up these small foci. On the other hand at Lerna and other settlements in the Cyclades and on Crete, the occurrence of sealings may indicate that the accumulation of local products is also significant. Broodbank (2000), Maran (2007) and Kilian-Dirlmeier (2005)

have however argued that such maritime social and economic networks would have had to be step-by-step chains of contact, given the small size and limited efficiency of the EBA Aegean boats, without sails and driven by oars till the end of the period.

A second social transformation is reflected in the other kind of postulated central place settlement, at Knossos and elsewhere, where larger communities have developed by the EBA. If most Aegean settlements are small villages with wide circles of inter-marriage to each other to ensure healthy population reproduction and reduce internal social conflict, ›face to face‹ societies in other words, these large communities of 5–600 or more inhabitants are believed to mark the rise of what I would term ›proto city state‹ settlements with pronounced tendencies

to internal political transformation (Bintliff 1999, Bintliff 2000). Just as we earlier discussed in the context of the sustaining-area for Troy II and Troy VI, guesstimates of the necessary supporting area to sustain these rare Southern Aegean proto urban centres, emphasizes their necessary control over the food surpluses of small surrounding districts (Bintliff 2002).

Further evidence for Southern Aegean social stratification in the EBA has been sought in status burials. Kilian Dirlmeier's (2005) analysis of the R tumulus cemetery on Levkas in Western Greece has made a powerful case for their representing a local set of elite families, with several ranks of prestige identified, necessarily supported by a larger peasant population believed to be buried more simply elsewhere. She argues that these families controlled regional food surpluses and maritime trade. On contemporary Early Minoan (EM) Crete, the Mesara tholos tombs are village or clan-based communal graves, yet study of their finds suggests status differences based on weapons and seals (various papers in Branigan 1998). More clearly in the house tombs of Eastern Crete, notably at Mochlos, believed by Soles to be a 'gateway community' with important exchange connections, burials of an upper social class are set apart from other community graves by prominent placing, more elaborate architecture and greater wealth (Soles 1992). On the Cyclades, Renfrew's (1972) older identification of a small number of elite burials is now confirmed by Hekman's (2003) monograph on the burials from the Early Cycladic (EC) Chalandriani cemeteries on Syros. He recognizes a community leader over several generations with exceptional grave gifts, perhaps of chieftain status.

We have now seen a nexus of links in the islands and the Mainland, with similarities to Troy and North-West Anatolia, between economic growth from agropastoralism, craft specialisation and trade, elite emergence, status burials or status objects, sealings marking control over production and consumption, and fortification and weapons, with a territorial scale of small districts. This however diverges significantly from the most important development in a recent rethinking of Early Minoan developments on Crete.

It is so far actually only in Crete, that we can now trace the close ties between changes operating

at the small village level, and those observed in focal larger settlement, such as the proto city-states of Knossos, Phaistos and arguably elsewhere. Villages like Myrtos seem to show groups of related families cooperating in economic activities, and involved in probable surplus export of wine, oil and textiles (Warren 1972, Tenwolde 1992). In return a large part of the ceramics here are obtained by regional trade. At the similar and contemporary village of Vasiliki, a formal small court or plaza for social activities, probably including ritual performances, provides a smallscale parallel to the ceremonies argued to take place in the later West and Central Courts of the Minoan palaces during the Middle Bronze Age (Branigan 1998a). Comparable paved areas beside some communal tholos tombs provide wider links in the context of group rites for the ancestors. Many years ago I likewise suggested from intensive survey in Southern Crete, that family farms and villages were linked to each other by ritual acts at small local peak sanctuaries, and joint worship at regional peak sanctuaries and sacred caves, then with the emergence of the palaces in public ceremonies in and around palatial courts (Bintliff 1977, 1977a).

A new dimension has been added to these socially-integrative communal activities within Early Minoan settlements and their cemeteries and at rural sacred sites, by identifying deposits of feasting debris and plentiful sets of cups and serving vessels, both at such smaller settlements but also at the larger focal towns. Feasting as an integrative activity at all settlement levels is being emphasized from EBA times onwards and even perhaps from later Neolithic times (Wilson and Day 2000, Tomkins 2004).

An even more dramatic addition to this growing complexity of our picture of island-wide social, economic and ritual interaction comes from the Belgian team of Driessen, Schoep and their colleagues (Driessen 2003, Driessen 2007, Schoep and Knappe 2004, Schoep 2007). Building on the recognition at the palace of Malia by Pelon, that beneath the Middle Bronze Age Older Palace lies a smaller, less complex monumental ensemble beginning in Early Minoan II, these researchers have re-examined the contemporary levels at Knossos, Phaistos and many other major Minoan settlements. They reconstruct from later Early Minoan times the building at sev-

eral points across Crete of open ›Courtyard Complexes‹, with a large open plaza – later to become the palace Central Court, bounded loosely by isolated blocks of buildings. The easy access to these open squares and the importance of the debris for feasting activity, as well as of storage areas geared to communal feasting, leads them to reinterpret the earliest Minoan palaces as district ceremonial centres for surrounding urban and rural populations. Only in the late New Palace period of the early Late Bronze Age, would these be converted to the closed palaces acting as the residential power centres of regional state governments, familiar from traditional interpretations.

Although there is much evidence from Early Minoan archaeology to see the parallel rise of elite families throughout Crete, who would then be responsible for running these ceremonial centres, we can point to unusual aspects of the resultant political and regional organisation: the general lack of fortifications, the virtual absence of military equipment on the palatial Linear A archives, the scaling up rituals

from farm and village to minor centre, then major centre, forming an integrative religious network (cf. Bintliff 1977, 1977a). All this may go a long way to account for the long-survival of the Minoan palatial civilisation from mid-Early Minoan till into the Late Bronze Age, ca 2500–1550 BC, some 1000 years.

The divergence of Crete from the rest of the Aegean may rest on the long prior development of such forms of communal life, going back into the long-term evolution of large settlements at key later palatial centres across the Neolithic. However, now that discussions of Mainland Early Helladic Corridor Houses have shown a growing interest in ritual feasting and communal ceremonies, whilst at this conference the possibility has been aired that the outer enclosure at Troy II may be less a walled settlement than a centre for district gatherings, we might still be led to suggest that Minoan developments may in the end find wider connections around the Aegean Sea.

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Troy has been of outstanding importance for Early Bronze Age archaeology ever since the discovery and excavation of the site by Heinrich Schliemann. Partly due to the paucity of archaeological research on EBA Anatolia, Troy has long been considered as the only key site for Western Anatolia and the Northern Aegean. However, as a result of recent excavations at other contemporary sites, it has become clear that Troy was not the only significant EBA settlement in this region and that its position as a key site is due for a re-examination. To explore the similarities and diversities of EBA cultures across the Northern-Aegean and Western Anatolia, an international conference entitled »Early Bronze Age Troy: Chronology, Cultural Development and Interregional Contacts« was held in early May 2009 at the University of Tübingen. Besides the general aspects of chronology and stratigraphy, it addressed themes such as the emergence of stratified societies, concepts of EBA economy and trade, production and distribution of raw materials and craft specialization with special reference to Troy itself.



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