Contents lists available at ScienceDirect



## Journal of Anthropological Archaeology

journal homepage: www.elsevier.com/locate/jaa

## Empire as network: Spheres of material interaction in Late Bronze Age Anatolia

### Claudia Glatz \*

AHRC Centre for the Evolution of Cultural Diversity, Institute of Archaeology, University College London, 31-34 Gordon Square, London WC1H 0PY, UK

#### ARTICLE INFO

Article history: Received 5 June 2008 Revision received 13 October 2008 Available online 16 December 2008

Keywords: Empire Power Inter-regional interaction Hittite Anatolia Late Bronze Age Pottery Settlement patterns Administrative technology Landscape monuments

#### Introduction

The evolution and manifestations of early empires have long fascinated historians and archaeologists (e.g. Larsen, 1979; Alcock et al., 2001). Political structure and particularly indirect or hegemonic rule, however, unlike for instance economic interaction, are perceived as hard to detect in the archaeological record due to the difficulty of distinguishing between external and local causes of culture change (Postgate, 1994, pp. 1-3; Smith and Montiel, 2001 for a general discussion). This, in addition to an abundant textual-historical record, may partly explain the reluctance of archaeologists working in Anatolia (Gorny, 1995, 2002) and the Near East (Adams, 1979; Postgate, 1992, 1994; Matthews, 2003, pp. 127–128 for an exception see Parker, 2003) to engage with this subject. The problem, however, is not the nature or inadequacy of the archaeological record, but the top-down manner in which indirect political dependency, but also states and empires in general (Smith, 2003), and their material manifestations are traditionally conceptualized. One way of approaching empire from an archaeological perspective is to conceptualize it in terms of what Michael Mann described as 'multiple overlapping and intersecting sociospatial networks' (1986: 1). Empire is both a relationship and a process that underlie recurring episodes of individual and collective interaction on a multitude of socio-political and cultural levels. Material culture-from pottery to monumental architecture-is

E-mail address: claudia.glatz@ucl.ac.uk

#### ABSTRACT

Hegemonic dominance relationships and the limited intentional material expressions of imperial power they usually encompass pose an interesting and well-known problem for the archaeology of early empires. One way of approaching domination in the archaeological record is through the synthetic analysis of different modes of imperial-local interaction at overlapping socio-political levels and spheres of culture. In this paper, four material culture categories are considered with the aim of characterizing Hittite imperial relationships in Late Bronze Age Anatolia and northern Syria. They include pottery traditions and their degree of susceptibility for central influence, diachronic settlement developments, the distribution of imperial administrative technology, and an ideological discourse carried out through landscape monuments. From the spatial and chronological signatures of these overlapping networks of interaction, a more nuanced understanding of the process of empire is beginning to emerge.

© 2008 Elsevier Inc. All rights reserved.

Anthropologica Archaeology

formed by, expresses and mediates these relationships and articulates the spectrum of possible modes of engagement. An archaeology of imperial relationships is, thus, the investigation of overlapping spatial and temporal patterns of material categories that are diagnostic of inter-regional interaction. Through the superimposition of the geographical and chronological patterns of change and continuity in these aspects of the archaeological record we can begin to gain an understanding of the different cultural, political, economic and ideological relationships that existed between a political and militarily central region and its surrounding societies. This approach provides a more nuanced and bottom-up perspective on the continuum of territorial and hegemonic domination that has come to structure research into early empires. It also allows us to compare the type and intensity of inter-regional interaction specified in the textual sources with those represented, or absent, in the archaeological record. In this paper, I explore inter-regional relationships in the Hittite empire through the comparative analysis of regional ceramic traditions, settlement organization, the spatial and chronological distribution of northcentral Anatolian administrative technologies, and landscape monuments.

#### An archaeology of empire

An explicit archaeology of empire of this kind is still a relatively recent and underexplored concept in early Anatolia (Steadman and Gorny, 1995; Gorny, 1995). The Hittite empire in particular, is known to us primarily through its textual sources (Fig. 1). Hittite

<sup>\*</sup> Fax: +44 0 20 7383 2572.

<sup>0278-4165/\$ -</sup> see front matter  $\odot$  2008 Elsevier Inc. All rights reserved. doi:10.1016/j.jaa.2008.10.003

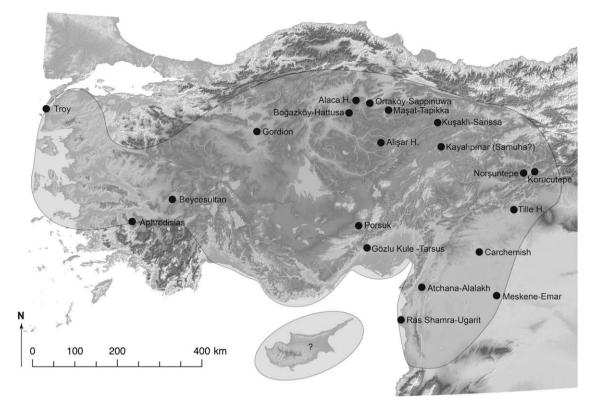


Fig. 1. Map of the Hittite empire at its maximum extent as suggested by the textual sources (14th and 13th century BC).

state formation and subsequent episodes of expansion and retraction from the central Anatolian plateau commencing around 1650 BC were the defining socio-political processes in Anatolia during the Late Bronze Age (LBA). From this highland region, early kings mounted military excursions into the south and west of Turkey, Syria and upper Mesopotamia. Efforts to integrate more effectively regions at some distance to the central Anatolian heartland are most evident in the 14th and 13th centuries BC. While expansion relied on military strength and its persuasive threat, measures of integration, as far as the textual record is concerned, concentrated on indirect strategies in the form of vassal treaties and their associated tribute demands, as well as on directly controlled strategic nodes.

Two issues are important with regard to the Hittite and other relevant LBA documentary sources. The first concerns the limitations of the Hittite records themselves in terms of the range of represented subject matters and their suitability for the analysis of imperial-local relationships. The majority of Hittite texts stem from archival contexts closely related to the state apparatus and fall within a limited set of categories consisting of political texts and diplomatic/administrative correspondence, historiographic works, documents relating to cult activities of various kinds and a legal code. Exceedingly rare are texts dealing explicitly with economic matters such as trade, the ownership, distribution and transfer of property, or with administrative hierarchies and procedures (e.g. van den Hout, 2006). As a consequence, the economic structure and processes of administration are understood in outlines only in the central region itself. The second concerns the geographical restriction of substantial LBA text-finds to the central Anatolian plateau (Boğazköy-Hattusa, Maşat-Tapikka, Ortaköy-Sapinuwa, and Kuşaklı-Sarissa). Additional LBA textual evidence comes from Syrian sites such as Ras Shamra-Ugarit, Atchana-Alalakh, and Meskene-Emar, and from outside the Hittite sphere of effective control. Whether through accidents of preservation or real absences, large parts of potentially Hittite controlled Anatolia have no textual voice of their own.

In this way, the selective perspective provided by the textual record of Hittite strategies of control and degrees of integration, although vital for an understanding of the overall structuring of domination in specific areas, cannot *a priori* be taken as representative of the totality of inter-polity relationships within and beyond the Hittite empire. Moreover, the high political and, at the same time, basic military level of interaction suggested in the most prominent documentary sources, forcibly leaves open a whole array of key questions concerning the practical intricacies and range of variation in imperial policies, their local mechanisms of implementation as well as their implications for the socio-economic organization and the cultural identities of surrounding societies. In short, we lack detailed information about the configuration of imperial relationships and their development over time.

Imperial relationships, by-and-large, are characterized by the degree and kind of domination the centre polity chose or was able to exert over surrounding regions. But imperialism, like all powerrelationships, is a dialectical process. Subordinate societies have access to various means of resistance (Miller and Tilley, 1984, p. 7; Kohl, 1987, pp. 21-22; Glatz, 2009); imperial cores are neither entirely omnipotent, nor does the relationship have to be exclusively parasitic, as some have suggested (Ekholm and Friedman, 1979); and subordinate groups-or factions within themare often willing at least to some degree (Weber, 1978, p. 212; Galtung, 1980, p. 437). As a collection of bi- and multi-lateral relationships (Doyle, 1986, p. 46) empire is always in the making, and therefore subject to continuous modification. Conventional, anachronistic views of empire-using maximum spatial extent, chronological apex of political power and the entirety of material remnants of the central polity in peripheral regions as evidence for imperial might-mask crucial processes of re-establishment, re-negotiation and re-definition of dominance relationships (Schreiber, 2005). The temporal component of imperial development is important in that relationships of control may at times be more strongly dominated by the central polity and at others leave open possibilities for resistance or negotiation. A diachronic perspective that considers pre- and different stages of post-conquest regional situations is therefore crucial, if we want to understand the time-depth and processes necessary for the establishment of different networks of interaction and their subsequent maintenance and transformation.

In order to define inter-regional modes of engagement in the Hittite realm we require firstly archaeological evidence indicative of interaction between the Hittite cultural and political heartland and surrounding regions. Secondly, transformations in local socio-political, cultural or economic strategies and organization have to be identified that can be associated, at one level or another, with imperial interference or local responses to it. In practice, the choice of material culture categories for the exploration of early empires depends to a large degree on the types of data that can be consistently gathered across large geographical areas (Sinopoli, 1994). Ideally they should represent networks of interaction and developmental processes at different socio-political and cultural levels.

Four archaeological data categories fulfill these criteria in the case of LBA Anatolia. First, at the most basic socio-economic level, regional pottery traditions can be studied for the degree of northcentral Anatolian cultural influence. Second, a comparative approach to regional settlement systems allows us to detect changes in socio-political organization, which, in association with other strands of evidence, may be related to strategies of external control or their absence. Third, a distribution analysis of north-central Anatolian administrative technology and practice highlights regions that were in direct administrative contact with the imperial elite. Fourth, the spatial distribution and political origins of LBA landscape monuments allow us to draw an outline of projected territorial hegemony by imperial as well as non-imperial agents. Through the superposition of the geographical and chronological patterns of continuity and change along these dimensions, we can begin to gain some understanding of the different networks of interaction that developed in those parts of Anatolia and northern Syria affected by the Hittite imperial venture.

#### The politics of pottery

The development of locally manufactured, monochrome northcentral Anatolian-style pottery in different parts of Asia Minor has received considerable attention in recent years (Jean et al., 2001; Fischer et al., 2003; Mielke et al., 2006). The appearance of north-central Anatolian ceramic elements in surrounding regions is conventionally thought to reflect, at one level or another, the political circumstances of the time as indicated by the textual sources (Garstang, 1953, pp. 141-142; Goldman, 1956, p. 350; Burney, 1980, p. 165; Korbel, 1985; Macqueen, 1986, p. 105; Gunter, 1991: p. 105, 2006: pp. 360-361; Henrickson, 1993, 1994, 2002, p. 123; Gates, 2001, p. 141; Gates, 2006, p. 308; Symington, 2001; Müller-Karpe, 2002, p. 257; Müller, 2005; Postgate, 2005, 2007; Jean, 2006, pp. 328-330). Despite a general lack of thorough comparative analyses (Glatz, 2007; Gunter, 2006 for an overview of western Anatolia), LBA regional pottery traditions have come to be referred to as 'Hittite'. Traditionally, Hittite campaign reports and vassal treaties are drawn upon for generalized political explanations of cultural influence (Garstang, 1953, pp. 141-142; Goldman, 1956, p. 350; Jean, 2006, pp. 322-323). More recently, economic and administrative interpretations have been put forward to explain this phenomenon. Economic/administrative approaches focus on the standardized appearance and inferred mass-production of LBA pottery, while sparse Hittite legal and economic texts are taken as evidence for deliberate homogenizing strategies in the Hittite state and a strongly state-dependent economy. This hypothetical Einheitsstaat is thought to have been responsible for the uniformization of regional ceramic traditions and the standardization of the north-central Anatolian repertoire (Müller-Karpe, 2002, p. 257; also Gates, 2001, p.141). Gates (2001), for instance, has argued that pre-firing potmarks and other practices of marking property, hinted at in the textual sources, are an expression of this centralized or centrally supervised mode of production. Alternatively, (Korbel, 1985, pp. 117-120) draws on textually attested imperial settlement policies and the transfer of deportee populations for an explanation of increasing stylistic similarities between the south-east Anatolian Norsuntepe material and ceramic types from the north-central Anatolian plateau. Müller (2005, p. 112) and Postgate (2005, 2007) favor scenarios that involve Hittite administrative personnel at sites in incorporated territories as the proponents of regional ceramic standardization and the alignment of local ceramic traditions with the central Anatolian cultural sphere.

In order to approach this subject from a more data driven perspective, several layers of past interpretations have to be peeled back. At the most basic level, the conventional treatment of pottery from culturally diverse regions and geographical situations on the respective fringes of Anatolia as a coherent sample that allows collective explanation clearly warrants re-examination. At the same time, a priori assumptions about imperial economies derived, or inferred, from scant textual sources and comparative analogy have to be disentangled from technological requirements and social mechanisms for product standardization. This involves a more rigorous engagement with the range of possible relationships between craft specialists and elite social strata, both local and imperial. Why might the imperial venture benefit from the standardization of utilitarian pottery, and how could this be effected? Alternatively, we ought to ask whether instead we might be dealing with a set of local processes of appropriation of imperial styles and practices, and how these might manifest themselves in the archaeological record

Clarity in terminology is crucial in this respect. In the light of the linguistic and ethnic connotations more than a century of research history have imposed on it, 'Hittite' is an altogether unsuitable label for material culture (Mellink, 1956, pp. 51–57). This is particularly true for cultural traditions and settlements in areas outside the central Anatolian plateau, where the term acquires, explicitly or implicitly, the notion of a conquering and, in one way or another, 'civilizing' process. More recent research into phenomena such as Romanization or Egyptianization, however, has demonstrated the vital role of local agency, perception and choice in the process of cultural adoption (Woolf, 1998; Higginbotham, 2000). In this manner, 'north-central Anatolian' (NCA) is a more appropriate label for the material culture tradition of the geographical and cultural heartland of the Hittite polity. The northern half of the central Anatolian plateau may be described as the heartland of the Hittite empire on the basis of cultural continuity from the preceding MBA and strong cultural cohesion during the LBA from pottery to architecture and building techniques. The capital city and a series of major administrative and cult centers are located in this region and Hittite identity as defined by the written sources was also strongly focused on this geographical area. The first Hittite king attested through his own documents, Hattusili I, originally carried the title 'man of Kussara', but after making Boğazköy-Hattusa his new capital adopted the name Hattusili, which means 'man of Hattusa' (Bryce, 1998, p. 73). Anatolian sources refer to Hittite kings as LUGAL.GAL LUGAL KUR URUHatti-Great King, King of the Land of the City of Hattusa' (e.g. Otten, 1981, pp. 4–5; Güterbock, 1956, p. 59), while an ordinary citizen is referred to as LÚ URUHatti-'Man of the City of Hattusa'--in the Hittite law code (Hoffner, 1997, p. 30, Section 19b). Ample external recognition of this terminology comes from the Amarna and other international correspondence (Moran, 1992: EA 17 and EA 35; Beckman, 1996, pp. 121–123).

Artefacts produced in areas beyond the central Anatolian plateau, which are either reminiscent of, or identical to, those found in this central region are referred to as 'north-central Anatolianstyle' (NCA-style). This avoids *a priori* ethnic, linguistic or cultural labeling of either the producers or the consumers of products described in this way. Neither is Hittite sovereignty over an area producing such material culture automatically assumed.

Returning to the pottery analysis, the primary research questions have to start with: first, just how homogenous LBA regional ceramic assemblages actually were; second, the timeframe of NCA stylistic introductions; and, third their proportion in local assemblages. These questions are here considered with respect to formal and technical similarities in the published ceramic assemblages from eight settlement sites that include Porsuk (Dupré, 1983), Gordion (Gunter, 1991), Beycesultan (Mellaart and Murray, 1995), Aphrodisias (Joukowsky, 1986), Tarsus (Goldman, 1956), Korucutepe (Griffin, 1980), Norşuntepe (Korbel, 1985) and Tille Höyük (Summers, 1993) in comparison to the repertoire of the Hittite capital city, Boğazköy-Hattusa (Fischer, 1963; Müller-Karpe, 1988; Parzinger and Sanz, 1992) (Fig. 1).

In order to establish a general measure of similarity between the eight regional assemblages and Boğazköy-Hattusa, the comparative analysis includes the entire formal spectrum from each site. The question of imperial influence, however, requires cultural traits that both originate on the NCA plateau and are chronologically restricted to the LBA, preferably its second half. Cultural continuity from the Middle Bronze Age (MBA) to the LBA, and simple vessel forms with parallels in other contemporary pottery traditions severely restrict the range of diagnostic shapes.

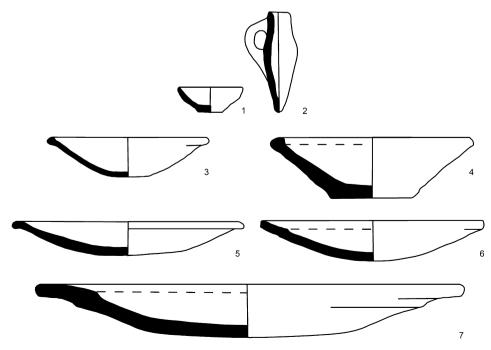
The most prominent vessel type fulfilling these criteria is the so-called plate with stepped rim profile (Fig. 2), which is an NCA invention of the LBA (Fischer, 1963, p. 103; Schoop, 2006, p. 231). Coarse, heat-resistant fabric composition, hand-manufacture and frequent traces of secondary burning point towards a primary function in food preparation, while some of the later variants are of

the standard medium fabric (Müller-Karpe, 2002, p. 263; Schoop, in press).

Multi-purpose shallow bowls with inverted (*Schwapprandschalen*) and everted rims are known also from neighboring ceramic traditions in Anatolia, Northern Syria and Upper Mesopotamia, and are therefore not ideally suited to identify NCA cultural influence. These bowl types, however, are restricted to the LBA on the north-central Anatolian plateau, and provide at least a chronological framework for comparison. The same applies to coarsely produced miniature bowls and juglets with string-cut bases, whose functions have been related to cult activities, and communal drinking.

It has been remarked upon in the past that sites outside the NCA culture sphere display a 'truncated repertoire' of NCA vessel types (Goldman, 1956, pp. 203–205; Gates, 2001, p. 138; Henrickson, 2002, p. 129; Gunter, 2006, p. 353, 359). A comprehensive typological comparison confirms that LBA ceramic assemblages across Anatolia do not feature the full formal spectrum known from the Hittite capital. The truncated repertoires at these sites, however, neither overlap completely, so as to form an imperial service, nor are all the shapes that have counterparts at Boğazköy-Hattusa introductions of the LBA. In sum, the distribution pattern and chronology of NCA influence is more complex than what might be expected of a straightforward imposition of an empire-wide standard of pottery production, whether intended for resident administrative personnel or as an ideological strategy directed at the local population.

Plates with stepped rim profiles, for instance, appear in varying quantities at six of the eight sites. They seem to be relatively common in LBA levels at Porsuk (11 examples listed in the pottery report) and Korucutepe (107), while more moderate numbers are known from Gordion (5), Norşuntepe (5), Beycesultan (3) and Tarsus (2). No plates were found at Aphrodisias and Tille Höyük. Equally, the timing of their appearance at the six sites is not identical, nor are their patterns of continuity and discontinuity during the second part of the LBA. The earliest occurrence of plates with stepped rim profiles is reported from Korucutepe in the LBA I (ca. 1600–1400 BC), for which they constitute a type fossil. At Gordion



**Fig. 2.** Typical Late Bronze Age north-central Anatolian pottery types: miniature bowl (1), miniature juglet (2), bowl with inverted rim (3 and 4), bowl with everted rim (5), plate with stepped rim (6 and 7).

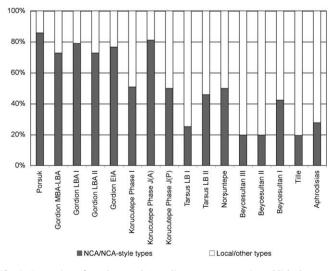
and Tarsus, plates were found for the first time in the LBA II (ca. 1400–1200 BC). This seems also to be the case at Norşuntepe, while Beycesultan I is likely to date to the Early Iron Age (EIA) (Mellaart and Murray, 1995, p. 96).

Bowls with inverting rims are present at seven of the eight sites. None are published for LBA Aphrodisias. The shape is known from contemporary traditions in Syria (Dornemann, 1981, Fig. 13.23, 31; Monchambert, 1983, Fig. 4.26) and northern Mesopotamia (Pfälzner, 1995, Mitannian: Tafel 2.b–e, 3.a–d,f; Middle Assyrian: Tafel 67.c–d, 100.b,c and 101.d,e), and we find numerous variations on the NCA theme at each of the seven sites. Small numbers of predecessors are known from MBA Gordion and Korucutepe, while inverted rim bowls are most prominent in the second part of the LBA at Tarsus and at LBA-EIA Beycesultan.

Bowls with everted rims are proportionally dominant in the final phases of the LBA at Boğazköy-Hattusa (Müller-Karpe, 1988; Parzinger and Sanz, 1992). They are absent at Porsuk, Aphrodisias and Tille Höyük, while five unprovenanced examples are known from Tarsus. At Gordion, Beycesultan and Korucutepe, everted rim bowls have come from all LBA levels, as well as EIA contexts. They concentrate in the LBA I at Korucutepe and in the LBA II at Gordion.

Miniature bowls are found at six of the eight sites, with Aphrodisias and Porsuk forming again the exceptions. Single occurrences of such bowls are reported from Gordion, Beycesultan and Tille Höyük. A total of 17 are known from Tarsus. Around 20 examples are published from Korucutepe and two from Norşuntepe. Except for Korucutepe, where they appear in the LBA I, they concentrate in the LBA II at all other sites. More distinctive are miniature juglets, of which one example was found at Korucutepe (Phase J) and Norşuntepe, respectively, while altogether 13 are published from Tarsus.

Instead of a singular empire-wide imposition of NCA pottery standards, there seem to be at least four different processes of cultural interaction and influence active (Fig. 3). (1) If we take account of the overall as well as more diagnostic typological similarities with the Boğazköy-Hattusa repertoire, it appears that Porsuk and Gordion were part of an extended NCA cultural sphere during the LBA. At both sites we find large numbers of NCA-style vessel types making up the majority of their assemblages, although Porsuk lacks a number of key shapes. (2) Another site whose overall assemblage seemingly matches those of Porsuk and Gordion in



**Fig. 3.** Proportion of north-central Anatolian pottery types in published assemblages. Note that sample sizes differ for each site: Porsuk (203), Gordion (299), Beycesultan (604), Aphrodisias (206), Tarsus (278), Korucutepe (3564), Norşuntepe (1273), Tille Höyük (263).

its close connections to the NCA tradition is Korucutepe in Phase J. The scope of these similarities, however, is restricted to simple shallow bowls at the latter site. From the point of view of chronology, Korucutepe appears to present a special case in south-east Anatolia in that cultural influence from the plateau is already strong in the first half of the LBA, which predates the historically attested establishment of Hittite control over this region in the 14th century BC. (3) In contrast, the repertoires of Tarsus and Norsuntepe show a number of similarities with the central plateau while displaying equally strong local characteristics. The range of NCA shapes and their timeframes of introduction, however, differ at the two sites. (4) Finally, fewer connections still can be detected in the repertoires of Beycesultan and Tille Höyük, which lie at the western and south-eastern geographical fringes of NCA ceramic influence. Despite an apparent increase in plain wares at the end of the LBA and the EIA and a handful of plates and bowls with inverted and everted rims, the pottery from Bevcesultan is one of high labor-investment in the form of colored and metallic slips and other types of decoration as well as continuity from the previous period. The diversity of special purpose vessels is also unparalleled on the NCA plateau and hints at a rather different social investment in ceramic production and consumption. The case of Tille Höyük is different in that a clear cultural shift seems to have taken place during the LBA. Some of the most characteristic features of the NCA repertoire, however, are lacking from Tille Höyük, in particular stepped plates and signature bowl types. The LBA settlement at Aphrodisias lies clearly beyond the limits of NCA ceramic influence. The pottery from Aphrodisias shares similarities with the NCA tradition in terms of simple rim shapes, but has virtually no diagnostic connections with the central plateau.

Overall, we find that the core region of NCA-style ceramic production extended to the north-west and south-east fringes of the central Anatolian plateau, while regions to the south and east began at different points in time to select formal elements to incorporate into local traditions. Western Anatolia, in contrast, was largely untouched by this phenomenon, a picture which we shall find perpetuated in most of the following data categories.

#### Settlement trends and political organization

The location, organization and distribution of settlements depend on physical and environmental conditions, but they are equally conditioned by historical and socio-political circumstances (e.g. Roberts, 1996, p. 29). Diachronic developments in settlement systems can be seen as expressions of regional socio-political and economic organization and as sensitive indicators of continuity and change within these domains, including processes related to political integration (de Montmollin, 1989; Alcock, 1993, pp. 3-6). Investigations into LBA Anatolian settlement trajectories, urbanism and the conceptual interplay between town and hinterland have been relatively few to date (Beckman, 1999; Archi, 1976-77, 1980; Thalmann, 1990; Aktüre, 1994; Bartl, 1997; Schachner, 2006; Mielke, in press). Macro-level settlement studies in particular, besides brief mentions of the sizes of some excavated sites (Archi, 1976–77, p. 101), draw their conclusions principally on the basis of textual-historical and linguistic evidence and lack the fundamental connection of their findings with the archaeological record.

Archaeological field survey has seen a dramatic surge in Turkey and neighboring regions over the last decades. A growing, but essentially disarticulate, corpus of regional settlement data is available in various stages of publication and, as in other parts of the Near East and the Mediterranean (Alcock and Cherry, 2004), it calls for inter-regional syntheses. Comparative regional approaches are particularly fruitful in the investigation of spatially extensive phenomena such as urbanization, state-formation and imperial incorporation (Adams, 1981; Alcock, 1993; Wilkinson, 2000; Cherry and Davies, 2001; Wilkinson et al., 2005). Summary accounts of survey results from across Anatolia (e.g. Yakar, 2000) have so far failed to engage with these questions, nor have the problems inherent in the primary data been taken into sufficient considerations.

In addition to the standard biases affecting surface survey results (Schiffer, 1987; Ammerman, 1981; Banning, 2002, pp. 39– 65; Wilkinson, 2003, pp. 32–43), problems specific to comparative approaches include the divergent quantity and quality of data among surveys and the compatibility of chronological classifications (Alcock, 1993, pp. 49–53). As regards regional surveys in Turkey, characteristic features of many projects are the apparent lack of specific research designs and of objectives beyond the recording of previously unknown sites, highly variable data quality and scarcity of final publications (see also Erciyas, 2006, pp. 53–60). Despite these limitations, a process of model building, testing and revision can only fully begin once a first, detailed but synthetic analytical step has been taken and a clearer picture of the overall settlement situation prior to and during the LBA is established.

The following interpretations of LBA settlement trajectories are based on the comparative analysis of around 60 Anatolian and north Syrian survey projects. They include observations of diachronic fluctuations in settlement numbers, rates of continuity/ discontinuity in settlement location, and changes in regional hierarchical organization and site-size distributions. In order to bridge the gap between survey data and socio-political organization, LBA textual evidence on Hittite administrative and economic organization has been combined with archaeological information from excavated NCA sites such as Maşat-Tapikka and Kuşaklı-Sarissa. With their identities and functions relatively securely established, the physical characteristics of these sites serve as 'blue-prints' for the identification of similar administrative centers in the survey record (Table 1).

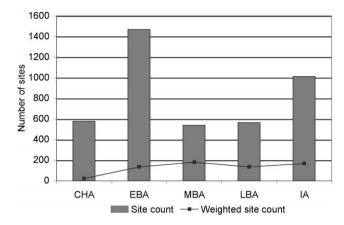
Beginning with long-term trends we find in Anatolia a cross-regional drop in site numbers after the Early Bronze Age (EBA) (1552 sites) to less than half in the MBA (612) and a slight increase in identified LBA sites (647). In the Iron Age (IA) (1055), site numbers rise again to almost double that of the LBA (Fig. 4). Although this pattern has to be viewed in the context of the length of each chronological period and the lack of differentiation within them by many surveys, the overall trend is readily comparable to that found in other parts of the Near Easter: a marked increase in settlement locations in the Early Bronze Age, a phase of declining site numbers during the 2nd millennium BC, followed by another peak during the Iron Age, albeit with a shift from larger mounds to small flat settlements (Wilkinson, 2003). It would thus appear that a less densely settled landscape was the demographic background against which second millennium BC state formations and imperial expansions occurred.

Survey evidence is available in sufficient detail in some regions to allow a more fine-grained characterization, even if tentatively and in a preliminarily manner, of settlement trends indicative of the nature of local-imperial interrelations. These include a process of territorial integration in key central regions, an intensive model

#### Table 1

Administrative and spatial scope of excavated Hittite centers.

Admin. scope	Official role	Hittite name	Modern name	Size (ha)
State/empire Region (Sub-)region (?) ~District	Imperial capital Capital 'Upper Land' Cult centre Seat of provincial officials (AGRIG and BEL MADGALTI)	Hattusa Samuha Sarissa Tapikka	Boğazköy Kayalıpınar Kuşaklı Maşat Höyük	180 20 18.2 ~8



**Fig. 4.** Long-term settlement trends in Anatolia (site counts per period and site numbers weighted by the length of each chronological period).

of hegemonic control as a possibility in southern and eastern Anatolia, and processes of active and passive frontier formation to the north and north-east of the of central region (Fig. 5).

#### A process of territorial integration

Cross-regional survey evidence indicates that the central Anatolian plateau witnessed the decline or abandonment of major MBA centers during the LBA. Powerful MBA settlements such as Karahöyük-Konya (39 ha) and Acemhöyük (44 ha) on the southern plateau, and Alişar Höyük (14 ha) further north, were replaced at the top of regional settlement hierarchies by old secondary centers or newly established sites of lower spatial extent. LBA sites that appear to be taking over regional control tend to range between 10 and 20 ha in size, which compares well with the dimensions of excavated LBA sites such as the cult centre of Kuşaklı-Sarissa (18.2 ha—intramural) and the district centre of Maşat-Tapikka (ca. 8 ha).

The newly established LBA sites of Gubat Sehri (15.7 ha) (Omura, 2003) and Hövük-Altılar (18 ha) (Omura, 2005) on the south-central plateau are potential candidates for regional centers with a political and administrative scope similar to that of Kuşaklı-Sarissa (Fig. 6). The sites of Yorğunhisar (9 ha) (Omura, 1992), Büyükkale (7.5 ha) (Omura, 2002), both of which are occupied in the preceding period, as well as the newly established Büyükkaletepe (6.2 ha) (Omura, 1993) are candidates for district centers on a scale comparable to Maşat-Tapikka. In the region around the Salt Lake, Azak Kalesi (11.3 ha) (Omura, 2001) falls somewhere between the two categories, while Çopuroğlanın Çukur (10 ha) (Omura, 2004), Höyük Tepe (7.7 ha) (Omura, 2001), Yalnız Ağıl (7 ha) (Omura, 2004) and Acemi Höyüğü (6.9 ha) (Omura, 1994) would also fall well into the range of LBA district centers. With the exception of Acemi Höyüğü, all of these sites appear to be new foundations of the LBA.

Settlements above 20 ha seem to represent highest-order regional centers in the LBA. One of these, Kayalıpınar (Ökse, 2001) in Sivas province may be Samuha, the capital of the Upper Land (Müller-Karpe, 2000, p. 364), the largest administrative unit in the Hittite core region. In addition to Boğazköy-Hattusa and a debatable Troy, only five LBA settlements seemingly transgressed the 20 ha threshold. By comparison, the habitation areas at Boğazköy-Hattusa, despite recent efforts to unearth further living quarters (Seeher, 2003), cover only about 30 ha (Mora, 1977, p. 236), the equivalent of a large LBA regional centre. What remains at Hattusa are ca. 150 ha of monumentalized space whose purposes was solely that of imperial administration and representation; although regional centers too had parts of their intramural areas dedicated to monumental edifices and open spaces.

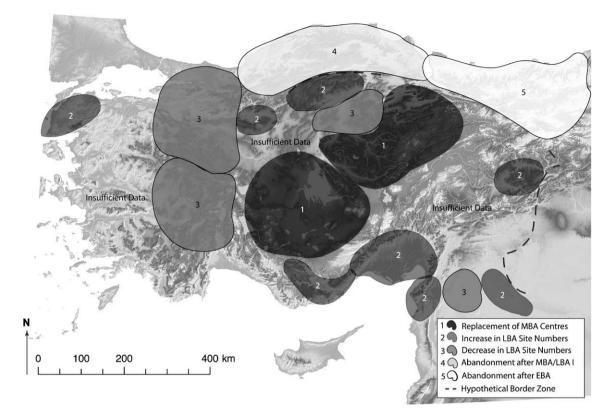


Fig. 5. Overview of regional settlement trends during the Late Bronze Age.

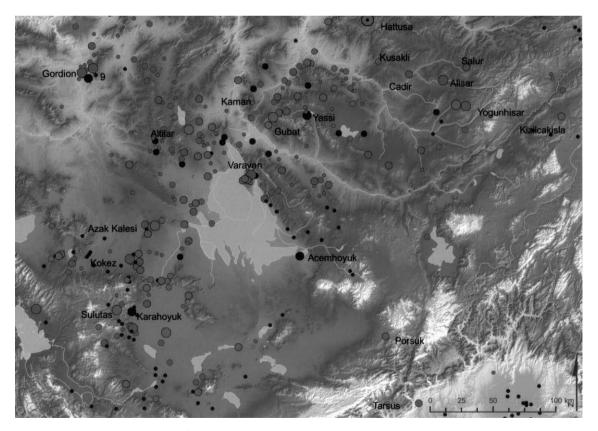


Fig. 6. Map of south-central Anatolia with Middle and Late Bronze Age settlements.

The practice of replacing larger established power bases with new and smaller settlements must have served not only the practical aspects of the exertion of intensive control, but also emits a strong symbolic message of the shift of power from a local to a spatially more extensive polity (see Branting, 1996 for the Alişar region). From the data currently available, it appears that this transformation had a different pace on the eastern and the southern plateau. A lot more research is needed to confirm, or contradict, this hypothesis, but perhaps we are looking at two temporally overlapping but not entirely congruent sequences in what appears to be the expansion of intensive territorial control. This particular spatial signature seems to be restricted to the central Anatolian plateau, with patterns observed in other regions pointing to rather different settlement dynamics.

#### 'Intensive hegemony'?

Settlement analysis, in theory, is well suited to the identification of social and cultural transformations, which may be related to indirect or hegemonic rule, although more than one thread of evidence is necessary to construct a convincing argument of this kind. Hypothetical elements of the spatial signatures of hegemonic control include the continuation of traditional power-bases. Variations may be expected in the vulnerability or capabilities for selfdefense of these central settlements (Gorny, 1995; van De Mieroop, 1997, p. 73; Smith, 2003, p. 210). From a regional perspective, increases in site numbers in the lower echelons of settlement hierarchies may be expected as responses to economic pressures as well as improved security situations.

In the case of LBA Anatolia, we find a rise in LBA sites in the Altınova (eastern Anatolia) against a background of relative settlement stability (Whallon, 1979). In this region, almost all MBA sites continued to be occupied in the LBA. New settlements were established primarily in the lower levels of the settlement hierarchy, the number of small sites increasing by ca. 37% and that of medium sized-sites by ca. 60%. Some of the central settlements such as Korucutepe appear to have been without the protection of a city wall (van Loon, 1980; contra Ertem, 1974; Burney, 1980, p. 166). A similar trend of continuity of central places and a general increase in site numbers seems to have occurred in parts of Rough Cilicia and Cilicia, although the evidence is not as reliable (Seton-Williams, 1954; French, 1965). Written correspondence and administrative links to the Hittite state are known from several sites in southern Anatolia, which appear to have entertained increasingly close cultural links with the Hittite core region. In concert with other types of evidence, it would seem that the settlement trends in southern and south-eastern Anatolia represent the spatial aspects of an intermediate form of external control, which may be called 'intensive hegemony'.

#### The limits of empire

Archaeological survey and excavations along the northern fringe of the central plateau have yielded evidence for drastic changes in settlement strategies during the second half of the second millennium BC, which are indicative of the formation of a contested frontier zone. This observation is not new (Yakar, 1980; Yakar, 1992, p. 510; Yakar and Dinçol, 1974, p. 91; Dönmez, 2002, pp. 274–276; Matthews, 2000, pp. 1017–1018; Glatz and Matthews, 2005) but it is conventionally restricted to the data from individual survey projects and thus lacks the broad geographical overview of comparative analysis.

Two large-scale settlement processes affected the regions in question in the course of the second millennium BC. The first trend is characterized by a dramatic decline and, in some areas, an apparent cessation of LBA settlement in the central Black Sea area. The second development appears to have been, at least in part, a reaction to the first. It includes the strengthening of the fringes of LBA settlement in the form of fortified lines of defense and increasing settlement activities in their hinterland. In contrast to relatively widespread MBA settlement in Sinop, Samsun and Kastamonu provinces, permanent occupation, at least in their familiar LBA material culture representation, appears to have ceased in these regions. One of the southern limits for this settlement retreat was the Devrez Çay south of the Ilgaz mountains (Matthews, 2000; Matthews and Glatz, 2009). With the exception of an outpost to the north-west, four fortified settlements with LBA ceramic evidence at distances between ca. 15 and 25 km guard the passages to a more densely populated southern region. Comparable trends, however, less systematically explored and not entirely agreed upon (e.g. Dönmez, 2002; contra Yakar and Dinçol, 1974), can be observed in inner Samsun and the northern part of Amasya. Basic similarities exist along the northern fringe of LBA settlement in terms of settlement structure and site-size rages, with the largest sites matching the dimensions of Maşat-Tapikka. The latter site was the seat of a BEL MADGALTI, or chief of the border guard, and functioned as an administrative centre and military stronghold (Alp, 1991).

The comparative analysis of the Anatolian survey data has vielded a number of regionally distinct spatial trends within the geographical sphere of the Hittite empire, which are indicative of different imperial-local relationships. These include the territorial integration of key regions on the central Anatolian plateau in what appears to be an intensive, direct form of domination. Although chronological resolution is coarse, this development seems to start on the north-eastern plateau and continues during the later empire period to the south of the Kızılırmak river. Hegemonic control, which is hypothesized to leave existing power-bases in place against a background of increasing numbers of smaller sites as signs of economic prosperity and/or improved security, were identified in parts of southern and south-eastern Anatolia and northern Syria. In addition, the survey evidence has highlighted at least two processes of active and passive frontier formation at the northern and south-eastern limits of Hittite power.

The results of the ceramic and settlement analyses and the insights they provide about the intensity of cultural interaction, and the spatial transformations in different regions form the background for the investigation of two further networks of interaction. NCA administrative implements and practices, and landscape monuments are elements of an imperial-local dialogue at the highest socio-political levels of interaction.

#### North-central Anatolian glyptic in peripheral regions

At the basis of the investigation of NCA administrative implements and practices in the context of imperial-local relationships lies the observation that, although the use of seals was not restricted to the socio-political elite in the Hittite core region, archaeological find-locations in palatial, temple and other stately contexts, as well as indications of titles and professions in Luwian hieroglyphs, suggest a principle association of this type of administrative technology with the Hittite elite in charge of state administration.

NCA administrative implements and evidence for their use can be representative of a number of events and practices, ranging from the exchange of correspondence or the management of a peripheral polity by imperial officials to the local adoption of imperial administrative routines and cultural styles. Seal impressions of Hittite royalty or officials in local contexts, especially in the case of isolated finds, do not on their own present convincing evidence of effective Hittite control. What they are indicative of is interaction between representatives of the imperial authority and those of a local, possibly subordinate, polity. The quantities of texts and glyptic finds as well as the professions represented provide us with clues about the social level and intensity of this interaction and about the nature of the political relationship. Seal finds could be taken to imply the presence of the seal owner at a particular site, and, thus, in the case of Hittite officials, a physical as opposed to solely symbolic representation of imperial power. Seal and owner, however, are alienable, as are official allegiance and personal/factional interest, the nuances of which can only be kept in mind as they are difficult to identify in the available material. More common in excavation contexts are seal impressions on bullae, sealings and cuneiform tablets, which may present the use of NCA sealing practices in local contexts or, alternatively, the receipt of documents or goods from sources linked to the central administration. Changes in local administrative and sealing practices to accommodate elements of the NCA tradition may be suggestive of increasing political as well as cultural ties.

The distribution of contextually documented NCA and NCAstyle administrative technology outside the central Anatolian plateau, which is excluded from this analysis, displays a clear geographical focus (Fig. 7). Only a very limited number of NCA-style seals and seal impressions have been found to the west and south-west of the Hittite core region and to its north. The most prominent west Anatolian finds are the sealed bulla from Sarhöyük-Dorylaion near Eskişehir (Darga and Starke, 2003) and the biconvex hieroglyphic seal from Troy VIIb (Hawkins and Easton, 1996). The vast majority of 14th and 13th century BC glyptic and tablet finds concentrate in areas to the south and south-east of the Hittite core region. The nature of these discoveries within Anatolia, in particular the pit contexts at Tarsus (Goldman, 1956, pit 36.69; Gelb, 1956) and Korucutepe (Güterbock, 1973, p. 135), poses the question of whether we are dealing with chance finds that have not yet been made at western sites. If the present distri-

7 Kusaklı-Sarissa

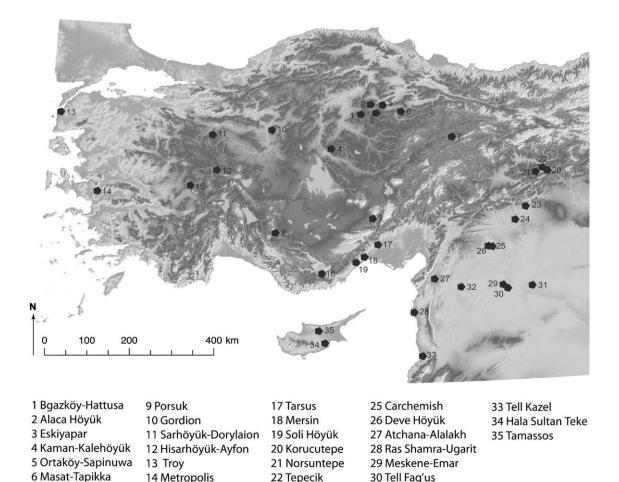
8 Oktakaraviran

15 Bevcesultan

16 Kilise Tepe

bution patterns are, as they nevertheless seem, remnants of real differences in regional interaction, possible reasons for this discrepancy are the absence of effective, administrative control altogether from western and northern areas, but also prevailing local conditions. Areas to the south and south-east, and particularly vassal states in northern Syria, fulfilled requirements of literacy and familiarity with complex administrative procedures necessary to appreciate and, thus, render effective, in practical and ideological terms, the use of imperial administrative technology and, in some instances, that of procedural practices.

The observed distribution patterns of imperial glyptic and text finds at the four major find-spots of Tarsus, Korucutepe, Ras-Shamra-Ugarit (Nougayrol, 1956; Schaeffer, 1956; Mora, 1987, 1990) and Meskene-Emar (Beyer, 2001), suggest the operation of at least three different modes of inter-regional administrative interaction involving geographically as well as hierarchically distinct segments of the imperial authority. The first includes the two Anatolian settlements of Tarsus and Korucutepe. At both sites contact with the Hittite core region is attested by the local use of NCA-style administrative technology during the second half of the LBA, but also stretching back into the pervious period in the case of Tarsus. At both sites parallels can be found between persons represented on local seal impressions and at the imperial capital. Some of these carried central or local royal titles or fulfilled official functions. The majority of glyptic finds at these two sites are sealed bullae, administrative devices attached to writing tablets or containers,



24 Lidar Hövük Fig. 7. Distribution of north-central Anatolian(-style) seals, seal-impressions and administrative practices.

23 Tille Höyük

31 Tell Fray

32 Tell Mardikh-Ebla

which are documented in large quantities at Boğazköy-Hattusa and suggest similarities in administrative practices.

In contrast, the two major Syrian find-locations have yielded very little evidence for the use of clay bullae in administrative procedures. In all other respects, however, the administrative connections and, as a consequence, the political and cultural relationships between the two Syrian cities and the Hittite realm share very little in common. Two scribal schools apparently mastered the practicalities of administration at Meskene-Emar (Beyer, 2001). One adhered to traditional Syrian tablet formats and glyptic styles, while the second presents an amalgamation of Anatolian and Syrian traditions. The Hittite viceroy at Carchemish and his officials are represented in the Meskene-Emar texts as involved in local legal decisions and as witnesses to contracts, and a Hittite administrator, 'the overseer of the land' was in charge of the entire land of Astata (Beckman, 1995, p. 28). The main dynastic line of Hattusa, with the exception of Mursili II, however, is not found in the glyptic or the written records of Meskene-Emar.

Conversely, Ugarit's leadership communicated directly with the imperial court at Boğazköy-Hattusa. Large numbers of treaties, edicts and letters attest to the rather more frequent interference of the Hittite great-king in local affairs. Yet, while numerous tablets carry the seals of Hittite royalty and officials, which relate to political and legal matters, local scribal tradition and administration did not adopt NCA glyptic styles or hybrid versions of it (Neu, 1995, pp. 124–125; Genz, 2006). Thus, while Ugarit was under highest-level political control and was interfered with in exceptional circumstances, Emar appears to have been more directly administrated by the Hittite authorities at Carchemish.

#### Landscape monuments as projections of hegemonic control

Rock reliefs and related monuments in the landscape provide a complementary perspective on high-level imperial-local relationships to those represented by, and enforced through, administrative technology. A survey of their spatial and chronological distribution allows us to glimpse an ideological struggle in the appropriation of territory and marking of boundaries by imperial and local agents, which spatially resonates but does not entirely overlap with the patterns of cultural influence and changes in spatial organization already discussed. The category of landscape monuments includes figurative and inscriptive rock and stone reliefs as well as dam and pool constructions in extra-urban contexts. Although morphologically and functionally diverse, LBA Anatolian landscape monuments share in common iconographic themes, stylistic conventions and, in many case, Luwian hieroglyphic inscriptions.

In the past, LBA landscape monuments have tended to be treated as a diverse, yet coherent, category of mainly art historical and philological interest. A consensus of strong stylistic homogeneity has emerged in the literature as well as the explicit or implicit connection of these monuments with the Hittite imperial venture (Akurgal, 1964, p. 103; Bittel, 1976, p. 191; Börker-Klähn, 1982; Kohlmeyer, 1983, p. 103; Emre, 2002, p. 233; Ehringhaus, 2005). Such an identification is arguably correct in a number of cases which, by virtue of accompanying Luwian hieroglyphic inscriptions, can be attributed to Hittite great kings (Sirkeli 1, Firaktin, Yazılıkaya, Yalburt and Karakuyu) or related officials (Tasci A). The extension of the term Hittite, in both its cultural and political connotations, to less easily identifiable monuments on the basis of stylistic similarities, however, masks a crucial diversity of authorship and, associated with it, of multiple ideological and political intentions in the power-political playing field of LBA Anatolia.

It has to be pointed out that with the exception of a short overview by Emre (2002) and Ehringhaus' (2005) comprehensive summary *Götter*, *Herrscher*, *Inschriften*: *Die Felsreliefs der hethitischen*  Großreichszeit in der Türkei, all other comparative treatments of the subject were published prior to several recent discoveries, which have emphasised the significance of LBA landscape monuments as alienable political tools. These include the discovery of the rock relief and inscription of Kurunta, (great-)king of Tarhuntassa, at Hatip (Dincol, 1998), the conclusive reading of the Karabel A inscription as that of Tarkasnawa, Hittite vassal king of Mira (Hawkins, 1998), the discovery of a second relief at Sirkeli in Cilicia (Ehringhaus, 1995, 2005, pp. 100–101) as well as hieroglyphic incisions of several local princes in the Latmos mountains in southwest Anatolia (Peschlow-Bindokat, 2001; Herbordt, 2001). Taking these new discoveries into account, the majority of known LBA landscape monuments can be attributed to either local kings (Karabel, Hatip), princes (İmamkulu, Hanyeri, Hamite, Akpınar, Suratkaya and possibly Malkaya) or persons of official rank (Taşçı A). Links to the Hittite imperial administration can be established for the authors of some of these monuments through textual or glyptic syncretisms (Herbordt, 2005; Hawkins, 2005). These, sometimes contingent, connections with the Hittite centre, however, are not straightforward confirmations of the assertion of imperial power on peripheral territories, as is seen to be the case in past treatments of the subject (Kohlmeyer, 1983, p. 103; Peschlow-Bindokat, 2001, p. 366; Ehringhaus, 2005, pp. 119-120).

The rock reliefs of Kurunta and Tudhaliya IV (1250–1220 BC) most vividly attest the use of landscape monuments in the negotiation of dynastic and territorial supremacy. The problematic relationship between Kurunta, king of Tarhuntassa in Rough Cilicia, and his cousin, the Hittite great king, is detailed in cuneiform sources as well as the hieroglyphic Luwian inscriptions at Yalburt (Hawkins, 1995). Among all Hittite great kings, Tudhaliya IV in particular appears to have invested in representational monuments at Boğazköy-Hattusa, the nearby Yazılıkaya and on the fringes of the central Anatolian plateau. As Ehringhaus (2005, p. 119) pinpointed, Tudhaliya IV seems to have been under pressure to underwrite the legitimacy of his rule in this way. By the same token, it can be argued that all monumental representations in peripheral regions are born out of similar pressures of, or aspirations to, legitimization. In other words, LBA rock reliefs and inscriptions can be interpreted as projections of centralized power and claims over territories via their boundaries and access routes rather than as manifestations of achieved centralized control. Similarly, examining monumentality in Vijayanagara India, Morrison and Lycett (1994) have convincingly argued that monumental statements of power served the assertion of centralized authority rather than the commemoration of its achievement. In view of both the large number of monuments apparently commissioned by princes and local kings as well as textual references to incessant upheavals and subsequent military campaigns across Anatolia, I propose that despite potentially close familial and/or contractual ties with the Hittite core, representations or inscriptions of princes and local rulers should be seen as evidence for power-political discourses among local factions as well as with central forces.

This argument is underscored by the striking geographical distribution of LBA landscape monuments (Fig. 8). Works of Hittite great kings outside the capital and its immediate surroundings are located on the western and eastern edges of the central plateau either directly on important communication routes or in locations generally associated with passages to other parts of Anatolia. With the exception of the Muwatalli (1306–1282 BC) depiction at Sirkeli in what was the heartland of Kizzuwatna, Hattusili III (1275–1250 BC) and Puduhepa's relief at Fıraktın and Tudhaliya IV's inscription at Karakuyu seemingly guard the south-eastern fringes of the core area. Yalburt and possibly also Eflâtun Pınar may have fulfilled a similar function along the natural, cultural and likely also political border to the west. A temporal component, indicative of changing interests and concerns in the projection of imperial power may

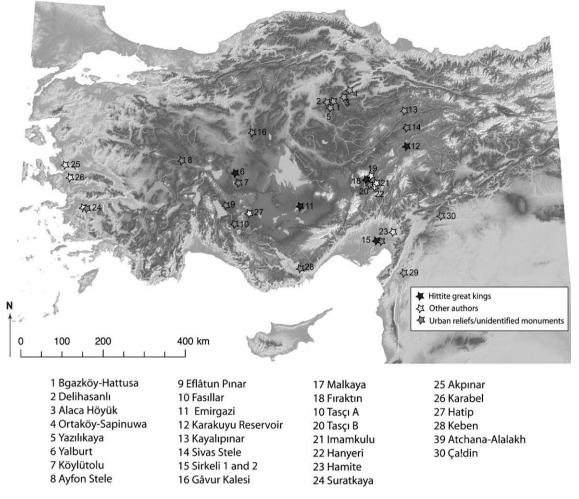


Fig. 8. Distribution of Late Bronze Age landscape monuments.

also be tentatively proposed. It seems that earlier generations of great kings concentrated ideological strategies, at least in the form of landscape monuments, in the south-east and along routes that allowed Hittite access to the natural and mercantile resources of south-east Anatolia and northern Syria. In the reign of Tudhaliya IV, although the Karakuyu inscription attests his concern also with this eastern area, identifiable imperial stone carvings, for the first time, appear on the south-west edges of the plateau.

Clearly, all of the landscape monuments in question conveyed multiple meanings and served a multitude of functions besides the more general projection of hegemony. However, from a macro scale perspective, rock reliefs and constructions in direct association with Hittite rulership were concerned with the framing or guarding of an interior rather than the subjugation of an exterior (also Seeher, 2005, p. 42). The interior perhaps corresponds with the area seen in the survey record to undergo major re-organization during the LBA, in what can be interpreted as the spatial implementation of territorial control, as well as with the core region of the NCA cearmic tradition. The concentration of imperial monuments in the last phase of the LBA contributes to the picture of these monuments as a defensive rather than offensive measure in the light of the textual sources and the pattern of reliefs commissioned by ambitious princes and the kings of powerful vassal and appendage kingdoms. Future discoveries of additional rock monuments are probable in the light of recent findings and they may require the revision of these hypotheses. A less centrally driven interpretation of inter-polity relations as conducted through the media of landscape monuments, however, appears more at ease with the immediate data and with other aspects of LBA material culture patterns.

# Discussion: overlapping networks of interaction in Late Bronze Age Anatolia

The evidence for the selective adoption of north-central Anatolian ceramic traditions in neighboring regions, changes and continuity in local settlement systems, the direction and intensity of Hittite administrative efforts and the dialogue of territorial hegemony carried out via landscape monuments show that empire, rather than a monolithic entity, is best conceptualized as a complex web of interactions. The above investigation has also shown, that imperial-local relationships were less clear-cut and in favor of all encompassing central control than inferences made from Hittite documents generally give the impression of. Instead, we gain the impression of an ongoing process or negotiation of empire that is carried out on a range of different cultural, political and social levels.

The focal point of all four elements of interaction is the central Anatolian plateau (Fig. 9). This may not be surprising, but a closer inspection of the developments in the extended core region of the Hittite empire emphasizes that we are dealing with a process of imperialism that is neither complete nor uncontested in its closest periphery and throughout its existence. Although textual sources indirectly concede the instability of Hittite control through their concern with rebellions and military campaigns, we are told com-

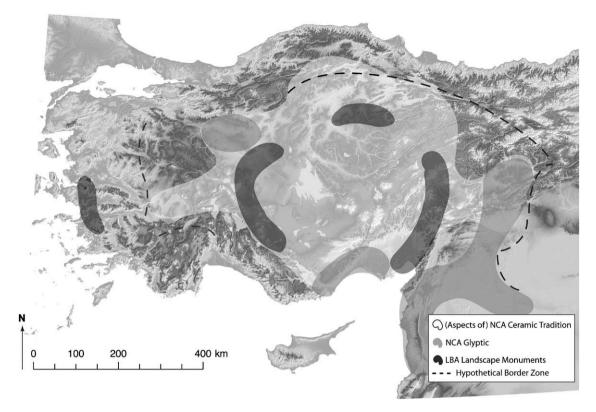


Fig. 9. Reconstruction of the spatial extent of four overlapping networks of inter-regional interaction in LBA Anatolia and north Syria.

paratively little about the substance of strategies of control and integration and the length of time it took to implement them. The survey data from the central Anatolian plateau, despite its very obvious limitations, when analyzed through a comparative and diachronic perspective, indicates a process of spatial transformation that affected first the eastern and then the southern plateau and that is suggestive of strategies of integration and the imposition of a truly territorial mode of government. This spatial signature of territorial control, however, was not found outside the central plateau. To the north, linear arrangements of fortified settlements and the scarcity of LBA materials beyond these mark out the limits of Hittite effective control. The western and eastern fringes of the central plateau and its access routes were guarded by imperial landscape monuments and challenged by local agents using the same symbolic canon to project their own territorial hegemony over the physically, politically and ideologically liminal.

The sphere of NCA cultural influence, here examined through the distribution of ceramic traits, stretches beyond the area affected by the spatial transformation of directly controlled regions inside the brackets of imperial landscape monuments. The near exclusive use of NCA-style pottery extended to Gordion in westcentral Anatolia and southwards to the Cilician Gates. The sphere of less intensive NCA ceramic influence displays a clear south and eastward focus. Yet, ceramic similarities in these regions differ in terms of their chronology of introduction and intensity, suggesting a series of local processes of adoption rather than the deliberate imposition of imperial cultural elements on surrounding territories. The distribution of NCA administrative technology seemingly matches that of ceramic influences, but reaches beyond it into northern Syria, where, with the exception of written documents, it constitutes the only tangible evidence for high-level inter-regional interaction and imperial control. The evidence from Anatolian find-spots, particularly from Tarsus and Korucutepe, hints at relatively close and intensive relationships with the Hittite core region. Western Anatolia, by contrast, was not involved in administrative interaction just as it was not touched by the NCA ceramic phenomenon. Local elites, however, developed a taste for large-scale landscape monuments.

In terms of the overall character of regional dominance relationships, the cumulative archaeological pattern can be tentatively interpreted as follows (Fig. 10). First, we observe a sphere of increasingly materially manifested direct imperial control on the central Anatolian plateau. Second, close relationships, on multiple cultural and political levels, with southern and south-eastern Anatolia and along the Syrian Euphrates point towards a level of control somewhere between territorial and hegemonic rule, which may be called 'intensive hegemony'. Third, a more hands off 'ideal' type of hegemonic control may be postulated for the case of Ugarit, whose cultural taste as well as administrative practices retain a fiercely independent character. Fourth, a veneer of political control can be inferred from the textual sources for western Anatolia. As regards the archaeological record, however, western Anatolia displays little or no tangible material signs of Hittite government and, with the exception of monumental display, of cultural interaction. Finally, we can constitute the apparent absence of effective Hittite control in the archaeological record of northern and north-eastern Anatolia.

#### Conclusions

In this paper, I have outlined an archaeology of empire that is based on a synthetic approach to inter-regional interaction. The example of LBA Anatolia has shown that the investigation of overlapping spatial and temporal patterns of material categories that are diagnostic of interaction between a political core and its surrounding regions on a range of cultural, political and ideological levels, can yield a more nuanced understanding of the relationships that underlie early empires. This approach provides an avenue to

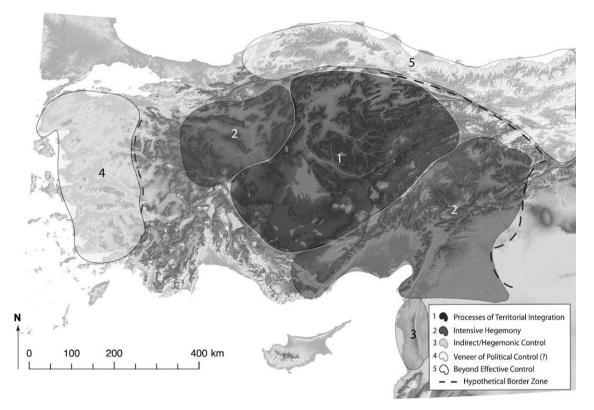


Fig. 10. Reconstruction of dominance relationships in the Hittite empire.

move beyond traditional, core-centric and top-down classifications based on the hegemonic-territorial dichotomy. It also shows that the question of whether culture change is due to external control or local initiative can be addressed through in-depth diachronic and comparative analyses of local and supra-regional processes.

#### Acknowledgments

I am very grateful to Roger Matthews for his advise and support throughout my Ph.D. research, and for his comments on earlier versions of this paper. I would also like to thank Bleda Düring and Aimée Plourde as well as two anonymous referees for their constructive criticism and suggestions.

#### References

- Adams, R. 1979. Common concerns but different standpoints: a commentary. In: Larsen, M.T. (Ed.), Power and Propaganda. A Symposium on Ancient Empires. Mesopotamia 7. Akademisk Forlag. Copenhagen, pp. 393–404.
- Adams, R., 1981. Heartlands of Cities: Surveys of Ancient Settlement and Land Use on the Central Floodplain of the Euphrates. Chicago University Press, Chicago.
- Aktüre, S., 1994. Anadolu'da Bronz Çağı Kentleri. Tarih Vakfı Yurt Yayınları, İstanbul. Akurgal, E., 1964. Die Kunst der Hethiter. In: Walser, G. (Ed.), Neuere Hethiterforschung. Historia, Zeitschrift für Alte Geschichte, Einzelschriften,
- vol. 7. Steiner, Wiesbaden. Alcock, S.E., 1993. Graecia Capta. The Landscapes of Roman Greece. Cambridge
- University Press, Cambridge. Alcock, S.E., Cherry, J.F. (Eds.), 2004. Side-by-Side Survey. Comparative Regional
- Studies in the Mediterranean World. Oxbow, Oxford.
- Alcock, S.E., D'Altroy, T.N., Morrison, K.D., Sinopoli, C.M. (Eds.), 2001. Empires. Perspectives from Archaeology and History. Cambridge University Press, Cambridge.
- Alp, S., 1991. Hethitische Briefe aus Maşat Höyük. Türk Tarih Kurumu Basımevi, Ankara.
- Ammerman, A.J., 1981. Surveys and archaeological research. Annual Review of Anthropology 10, 63–88.
- Archi, A., 1976–77. Città et territorio in Siria e in Anatolia–Mari-Ugarit-Hattusa. Dialoghi di Archeologia 9–10, 75–107.
- Archi, A., 1980. Continuità degli insediamenti Anatolici durante l'età Ittita. Studi Micenei ed Egeo-Anatolici 22, 7–17.

Banning, E.B., 2002. Archaeological Survey. Kluwer Academic/Plenum Publishers, London.

- Bartl, K., 1997. Zentralanatolische Stadtanlagen von der Spätbronzezeit bis zur mittleren Eisenzeit. Kontinuität – Wandel – Bruch? In: Wilhelm G. (Ed.), Die orientalische Stadt: Kontinuität, Wandel, Bruch. 1. Internationales Colloquium der Deutschen Orient-Gesellschaft, 9–10. Mai 1996 in Halle/Saale. Colloquien der Deutschen Orient-Gesellschaft 1. Saarbrücker Druckerei und Verlag, Saarbrücken, pp. 267–288.
- Beckman, G., 1995. Hittite provincial administration in Anatolia and Syria: The view from Maşat and Emar. In: Carruba, O., Giorgieri, M., Mora, C. (Eds.), Atti del II Congresso Internazionale di Hittitologia. Studia Mediterranea, vol. 9. luculano, Pavia, pp. 19–37.
- Beckman, G., 1996. Hittite Diplomatic Texts. Scholars Press, Atlanta.
- Beckman, G., 1999. The city and country in Hatti. In: Klengel, H., Renger, J. (Eds.), Landwirtschaft im alten Orient: ausgewählte Vorträge der XLI. Rencontre Assyriologique Internationale, Berlin, 4.–8.7.1994. Berliner Beiträge zum Vorderen Orient 18. Dietrich Reimer, Berlin, pp. 161–169.
- Beyer, D., 2001. Emar IV: les sceaux: mission archéologique de Meskéné-Emar, recherches au pays d'Aštata. Editions Universitaires Fribourg, Fribourg.
- Bittel, K., 1976. Die Hethiter. Die Kunst Anatoliens vom Ende des 3. bis zum Anfang des 1. Jahrtausends vor Christus. Beck, München.
- Börker-Klähn, J., 1982. Altvorderasiatische Bildstelen und vergleichbare Felsreliefs. Band III. Baghdader Forschungen 4. Philip von Zabern, Mainz.
- Branting, S.A., 1996. The Alişar regional survey 1993–1994: a preliminary report. Anatolica 12, 146–155.
- Bryce, T., 1998. Kingdom of the Hittites. Oxford, Claredon.
- Burney, C., 1980. Aspects of the excavations in the Altınova. Elâzığ Anatolian Studies 30, 157–167.
- Cherry, J.F., Davies, J.L., 2001. 'Under the sceptre of Agamemnon': the view from the hinterlands of Mycenae. In: Branigan, K. (Ed.), Urbanism in the Aegean Bronze Age. Sheffield Studies in Aegean Archaeology 4. Centre for Aegean Archaeology University of Sheffield, Sheffield, pp. 141–159.
- Darga, M., Starke, F., 2003. Eine Tonbulle mit hieroglyphen-luwischem Siegelabdruck aus Şarhöyük-Dorylaion. Studia Troica 13, 161–164.
- De Montmollin, O., 1989. The Archaeology of Political Structure. Settlement Analysis in a Classical Maya Polity. Cambridge University Press, Cambridge.
- Dinçol, A.M., 1998. Die Entdeckung des Felsmonuments in Hatip und ihre Auswirkungen über [sic.] die historischen und geographischen Fragen des Hethiterreichs. TÜBA-AR 1, 27–35.
- Dönmez, Ş., 2002. The 2nd millennium B.C. settlements in Samsun and Amasya Provinces, central Black Sea region, Turkey. Ancient East and West 1 (2), 243– 293.
- Dornemann, R.H., 1981. The Late Bronze Age pottery tradition at Tell Hadidi, Syria. Bulletin of the American Schools of Oriental Research 241 (29-47). 59.
- Doyle, M.D., 1986. Empires. Cornell University Press, Ithaka.

Dupré, S., 1983. Porsuk I: La céramique de l'Age du Bronze et du l'Age de Fer. Éditions Recherche sur les Civilisations, Paris.

Ehringhaus, H., 1995. Hethitische Felsreliefs der Großreichszeit entdeckt. Antike Welt 1, 66.

Ehringhaus, H., 2005. Götter Herrscher Inschriften: Die Felsreliefs der hethitischen Grossreichszeit in der Türkei. Von Zabern, Mainz.

Ekholm, K., Friedman, J., 1979. 'Capital' imperialism and exploitation in ancient world systems. In: Larsen, M.T. (Ed.), Power and Propaganda: A Symposium on Ancient Empires. Mesopotamia 7. Akademisk Forlag, Copenhagen, pp. 41– 58.

Emre, K., 2002. Felsreliefs, Stelen, Orthostraden. Großplastiken als monumentale Form staatlicher und religiöser Repräsentation. In: Kunst- und Ausstellungshalle der Bundesrepublik Deutschland GmbH (Ed.), Die Hethiter und ihr Reich. Das Volk der 1000 Götter. Theiss, Stuttgart, pp. 218–233.

Erciyas, D.B., 2006. Wealth, Aristocracy and Royal Propaganda under the Hellenistic Kingdom of the Mithradatids in the Central Black Sea Region of Turkey. Colloquia Pontica 12. Brill, Leiden.

Ertem, H., 1974. Korucutepe, 1973. Anatolian Studies 24, 38-40.

Fischer, B., Genz, H., Jean, É. and Köroğlu, K. (Eds.), 2003. Identifying changes: the transition from the Bronze to the Iron Ages in Anatolia and its neighbouring regions. In: Proceedings of the International Workshop, Istanbul, November 8– 9, 2002. Türk Eskiçağ Bilimleri Enstitüsü, Istanbul.

Fischer, F., 1963. Die hethitische Keramik von Boğazköy. Gebr. Mann, Berlin.

French, D.H., 1965. Prehistoric sites in the Göksu valley. Anatolian Studies 15, 177– 201.

Galtung, J., 1980. A structural theory of imperialism. In: Galtung, J. (Ed.), Peace and World Structure Essays in Peace Research, vol. IV. Ejlers, Copenhagen, pp. 436– 481.

Garstang, J., 1953. Prehistoric Mersin, Yümük Tepe in southern Turkey. Clarendon Press, Oxford.

- Gates, M.-H., 2001. Potmarks at Kinet Höyük and the Hittite ceramic industry. In: Jean, É., Dinçol, A.M., Durugönül, S. (Eds.), La Cilicie: espaces et pouvoirs locaux (2e millénaire av. J.-C. - 4e siècle ap. J.-C.). Actes de la table ronde internationale d'Istanbul, 2–5 Novembre 1999, De Boccard, Paris, pp. 137–157.
- Gates, M.-H., 2006. Dating the Hittite levels at Kinet Höyük: a revised chronology. In: Mielke, D.P., Schoop U.-D., Seeher J. (Eds.), Strukturierung und Datierung der hethitischen Archäologie: Voraussetzungen – Probleme – Neue Ansätze. Internationaler Workshop Istanbul, 26–27 November 2004, BYZAS 4, Ege Yayınları, İstanbul, pp. 293–309.
- Gelb, I.J., 1956. Hittite hieroglyphic seals and seal impressions. In: Goldman, H. (Ed.), Excavations at Gözlü Kule Tarsus II From the Neolithic through the Bronze Age. Princeton University Press, Princeton, pp. 242–254.
- Genz, H., 2006. Hethitische Präsenz im spätbronzezeitlichen Syrien: die archäologische Evidenz. Baghdader Mitteilungen 37, 499–509.
- Glatz, C., 2007. Contact, Interaction, Control—The Archaeology of Inter-Regional Relations in Late Bronze Age Anatolia, Unpublished Ph.D. thesis, University College London, London.

Glatz, C., 2009. Negotiating empire—A comparative investigation into the responses to Hittite imperialism by the vassal state of Ugarit and the Kaska peoples of the Pontic region. In: Areshian, G. (Ed.), Empires and Complexity: On the Crossroads of Archaeology, History and Anthropology. Cotsen Institute of Archaeology, Los Angeles, in press.

Glatz, C., Matthews, R., 2005. Anthropology of a frontier zone: Hittite-Kaska relations in Late Bronze Age north-central Anatolia. Bulletin of the American Schools of Oriental Research 339, 47–65.

Goldman, H., 1956. Excavations at Gözlü Kule, Tarsus II. From the Neolithic through the Bronze Age. University Press Princeton, Princeton.

Gorny, R.L., 1995. Hittite imperialism and anti-imperial resistance as viewed from Alişar Höyük. Bulletin of the American Schools of Oriental Research (299/300), 65–89.

Gorny, R.L., 2002. Anatolian archaeology: An overview. In: Hopkins, D.C. (Ed.), Across the Anatolian Plateau: Readings in the Archaeology of Ancient Turkey. The Annual of the American Schools of Oriental Research, vol. 57. American Schools of Oriental Research, Boston, pp. 1–4.

Griffin, E., 1980. The Middle and Late Bronze Age Pottery. In: Van Loon, M.N. (Ed.), Korucutepe 3. Final Report on the Excavations of the Universities of Chicago, California (Los Angeles) and Amsterdam in the Keban Reservoir, Eastern Anatolia 1968–1970. North Holland, Amsterdam, pp. 3–109 (Chapter 1).

Gunter, A., 1991. The Bronze Age. Gordion Excavations Final Reports III. University Museum, Philadelphia.

Gunter, A., 2006. Issues in Hittite ceramic production: a view from the western frontier. In: Mielke, D.P., Schoop, U.-D., Seeher, J. (Eds.), Strukturierung und Datierung der hethitischen Archäologie: Voraussetzungen—Probleme—Neue Ansätze. Internationaler Workshop Istanbul, 26–27 November 2004, BYZAS 4. Ege Yayınları, Istanbul, pp. 349–363.

Güterbock, H.G., 1956. The deeds of Suppiluliuma as told by his son, Mursili II. Journal of Cuneiform Studies 10, 41–68. 75–98, 101–130.

Güterbock, H.G., 1973. Hittite hieroglyphic seal impressions from Korucutepe. Journal of Near Eastern Studies 32, 135–147.

Hawkins, J.D., 1995. The Hieroglyphic Inscription of the Sacred Pool Complex at Hattusa (SÜDBURG). Studien zu den Boğazköy-Texten Beiheft 3. Harrassowitz, Wiesbaden.

Hawkins, J.D., 1998. Tarkasnawa King of Mira, Tarkondemos, Boğazköy Sealings and Karabel. Anatolian Studies 48, 1–31.

Hawkins, J.D., 2005. Commentaries on the Readings. In: Herbordt S., Die Prinzenund Beamtensiegel der hethitischen Grossreichszeit auf Tonbullen aus dem Nişantepe Archiv von Hattusa. Boğazköy-Hattuša XIX. Von Zabern, Mainz, pp. 248–313.

- Hawkins, J.D., Easton, D.F., 1996. A hieroglyphic seal from Troia. Studia Troica 6, 111–118.
- Henrickson, R.C., 1993. Politics, economics and ceramic continuity at Gordion in the late second and first millennia B.C. In: Social and Cultural Contexts of New Ceramic Technologies. American Ceramic Society, Wetsville, pp. 89–176.
- Henrickson, R.C., 1994. Continuity and discontinuity in the ceramic tradition at Gordion during the Iron Age. In: French D.H., Cilingiroğlu A. (Eds.), Iron Ages 3, Proceedings of the Third International Anatolian Iron Age Symposium in Van, Turkey, 6–11 August 1990. Monograph 16. British Institute of Archaeology at Ankara, London, pp. 95–129.
- Henrickson, R.C., 2002. Hittite pottery and potters: the view from Late Bronze Age Gordion. In: Hopkins, D. (Ed.), Across the Anatolian Plateau. Readings in the archaeology of Ancient Turkey. Annual of the American Schools of Oriental Research 57 (2000), Boston, pp. 123–131.
- Herbordt, S., 2001. Lesung der Inschrift eines hethitischen Großprinzen aus dem Latmos. Archäologischer Anzeiger 2001, 367–378.
- Herbordt, S., 2005. Die Prinzen- und Beamtensiegel der hethitischen Grossreichszeit auf Tonbullen aus dem Nişantepe Archiv von Hattuša. Boğazköy-Hattuša XIX. Von Zabern, Mainz.

Higginbotham, C., 2000. Egyptianization and Elite Emulation in Ramesside Canaan. Governance and Accommodation on the Imperial Periphery. Culture and History of the Ancient Near East 2. Brill, Boston.

Hoffner, H., 1997. The Laws of the Hittites. A Critical Edition. Brill, Leiden.

- Jean, É., 2006. The Hittites at Mersin-Yumuktepe: old problems and new directions. In: Mielke, D.P., Schoop, U.-D., Seeher, J. (Eds.), Strukturierung und Datierung der hethitischen Archäologie: Voraussetzungen–Probleme–Neue Ansätze. Internationaler Workshop Istanbul, 26–27 November 2004. BYZAS 4. Ege Yayınları, Istanbul, pp. 311–332.
- Jean, É., Dinçol, A.M., Durugönül S. (Eds.), 2001. La Cilicie: espaces et pouvoirs locaux (2e millénaire av. J.-C. - 4e siècle ap. J.-C.). Actes de la table ronde internationale d'Istanbul, 2–5 Novembre 1999, De Boccard, Paris, pp. 137– 157.
- Joukowsky, M., 1986. Prehistoric Aphrodisias. An Account of the Excavations and Artifact Studies, vols. I and II. Oleffe, Court-St-Étienne.
- Kohl, P., 1987. The use and abuse of world systems theory: the case of the pristine West Asian state. In: Schiffer, M. (Ed.), Advances in Archaeological Method and Theory, vol. 11. Academic Press, San Diego, pp. 1–36.

Kohlmeyer, K., 1983. Felsbilder der hethitischen Großreichszeit. Acta Praehistorica et Archaeologica 15, 7–135.

Korbel, G., 1985. Die spätbronzezeitliche Keramik von Norşuntepe. Institut für Bauen und Planen in Entwicklungsländern, Hannover.

Larsen, M.T. (Ed.), 1979. Power and propaganda. A Symposium on Ancien Empires. Mesopotamia Akademisk Vorlag, Copenhagen.

Macqueen, J.G., 1986. The Hittites and Their Contemporaries in Asia Minor. Thames and Hudson, London.

Mann, M., 1986. The Sources of Social Power. A History of Power from the Beginning to A.D. 1760, vol. 1. Cambridge University Press, Cambridge.

- Matthews, R., 2000. Time with the past in Paphlagonia. In: Matthiae, P., Enea, A., Peyronel, L., Pinnock, F. (Eds.), Proceedings of the First International Congress of the Archaeology of the Ancient Near East, Rome, May 18th–23rd 1998. La Sapienza, Roma, pp. 1013–1024.
- Matthews, R., 2003. The Archaeology of Mesopotamia. Theories and Approaches. Routledge, London.

Matthews, R., Glatz, C. (Eds.), 2009. At Empires' Edge: Project Paphlagonia Regional Survey in North-Central Turkey. British Institute at Ankara, London, in press.

Mellaart, J., Murray, A., 1995. Beycesultan III, Part II: Late Bronze Age and Phrygian Pottery and Middle and Late Bronze Age Small Objects. British Institute of Archaeology at Ankara, London.

Mellink, M.J., 1956. A Hittite Cemetery at Gordion. University Museum, University of Pennsylvania, Philadelphia.

Mielke, D.P., in press. Hittite Cities—Looking for a concept, In: Genz, H., Mielke, D.P. (Eds.), Insights into Hittite History and Archaeology. Ancient East and West Special Edition.

- Mielke, D.P., Schoop U.-D., Seeher J. (Eds.), 2006. Strukturierung und Datierung der hethitischen Archäologie: Voraussetzungen—Probleme—Neue Ansätze. Internationaler Workshop Istanbul, 26–27. November 2004. BYZAS 4. Ege Yayınları, Istanbul.
- Miller, D., Tilley, C., 1984. Ideology, power and prehistory: an introduction. In: Miller, D., Tilley, C. (Eds.), Ideology, Power and Prehistory. Cambridge University Press, Cambridge.

Monchambert, J.-Y., 1983. La céramique de fabrication locale à Ugarit à la fin du Bronze Récent: quelques examples. Syria 60, 25–45.

Mora, C., 1977. Saggio per uno studio sulla populazione urbana nell'Anatolica antica. Studi Micenei ed Egeo-Anatolici 18, 227–241.

Mora, C., 1987. La Glittica Anatolica Del II Millennio A.C.: Classificazione Tipologica. I. I Sigilli a Inscrizione Geroglifica. Studia Mediterranea, 6. Gianni Iuculano Editore, Pavia.

Mora, C., 1990. Primo Supplemento: La Glittica Anatolica Del II Millennio A.C.: Classificazione Tipologica. I. I Sigilli a Inscrizione Geroglifica. Studia Mediterranea 6, Supplemento. Gianni luculano Editore, Pavia.

Moran, W., 1992. Tell el-Amarna Tablets: The Amarna Letters. Johns Hopkins University Press, Baltimore.

Morrison, K.D., Lycett, M., 1994. Central power, centralised authority? Ideological claims and archaeological patterns. Asian Perspectives 33, 327–350.

- Müller, U., 2005. Norşun Tepe and Lidar Höyük. Two examples for cultural change during the Early Iron Age. In: Çilingiroğlu A., Darbyshire G., (Eds.). Anatolian Iron Ages 5. Proceedings of the Fifth Anatolian Iron Ages Colloquium held at Van, 6–10 August 2001. British Institute of Archaeology at Ankara Monograph 31. British Institute of Archaeology at Ankara, London, pp. 107–114.
- Müller-Karpe, A., 1988. Hethitische Töpferei der Oberstadt von Hattuša. Ein Beitrag zur Kenntnis spätgroßreichszeitlicher Keramik und Töpferbetriebe unter Zugrundelegung der Grabungsergebnisse von 1978–82 in Boğazköy. Hitzeroth, Marburg.
- Müller-Karpe, A., 2000. Kayalıpınar in Ostkappadokien: Ein neuer hethitischer Tontafelfundplatz. Mitteilungen der Deutschen Orient-Gesellschaft 132, 355– 365.
- Müller-Karpe, A. 2002. Die Keramik des mittleren und jüngeren hethitischen Reiches. Die Entwicklung der anatolischen Keramik - ihre Formen und Funktionen. In: Kunst- und Ausstellungshalle der Bundesrepublik Deutschland GmbH (Ed.), Die Hethiter und ihr Reich: Das Volk der 1000 Götter. Theiss, Stuttgart, pp. 256–263.
- Neu, E., 1995. Hethiter und Hethitisch in Ugarit. In: Dietrich, M., Loretz, O. (Eds.), Ugarit: ein ostmediterranes Kulturzentrum im Alten Orient. Ergebnisse und Perspektiven der Forschung. Band I. Ugarit und seine altorientalische Umwelt. Ugarit-Verlag, Münster. 115-29.
- Nougayrol, J., 1956. Le Palais Royal d'Ugarit IV. Imprimerie Nationale, Paris.
- Ökse, A.T., 2001. Hethitisches Territorium am oberen Maraššantia. Ein Rekonstruktionsversuch. In: Wilhelm, G. (Ed.), Akten des IV. Internationalen Kongresses für Hethitologie. Würzburg 4.–8. Oktober 1999. Studien zu den Boğazköy Texten 45. Harrassowitz, Wiesbaden, pp. 499–510.
- Omura, S., 1992. 1990 yılı orta Anadolu'da yürütülen yüzey araştırmaları. Araştırma Sonuçları Toplantısı 9, 541–560.
- Omura, S., 1993. 1991 yılı iç Anadolu'da yürütülen yüzey araştırmaları. Araştırma Sonuçları Toplantısı 10, 365–386.
- Omura, S., 1994. 1992 yılında iç Anadolu'da yürütülen yüzey araştırmaları. Araştırma Sonuçları Toplantısı 11, 311–336.
- Omura, S., 2001. Preliminary report of the general survey in central Anatolia (2000). Anatolian Archaeological Studies 10, 37–49.
- Omura, S., 2002. Preliminary report of the general survey in central Anatolia. Anatolian Archaeological Studies 11, 45-112.
- Omura, S., 2003. Preliminary report of the general survey in central Anatolia (2002). Anatolian Archaeological Studies 12, 37–88.
- Omura, S., 2004. Preliminary report of the general survey in central Anatolia (2003). Anatolian Archaeological Studies 13, 37–86.
- Omura, S., 2005. Preliminary report of the 2004 general survey in central Anatolia. Anatolian Archaeological Studies 14, 55–84.
- Otten, H., 1981. Die Apologie Hattusilis III. Studien zu den Boğazköy-Texten 24. Harrassowitz, Wiesbaden.
- Parker, B., 2003. Archaeological manifestations of empire: assyria's imprint on southeastern Anatolia. American Journal of Archaeology 107, 525–557.
- Parzinger, H., Sanz, R., 1992. Die Oberstadt Keramik von Hattuša. Hethitische Keramik aus dem zentralen Tempelviertel. Gebr. Mann, Berlin.
- Peschlow-Bindokat, A., 2001. Eine hethitische Grossprinzeninschrift aus dem Latmos. Vorläufiger Bericht. Archäologischer Anzeiger 2001, 363–367.
- Pfälzner, P., 1995. Mittanische und mittelassyrische Keramik. Eine chronologische, funktionelle und produktionsökonomische Analyse. BATSH 3. Reimer, Berlin.
- Postgate, J.N., 1992. The land of Assur and the yoke of Assur. World Archaeology 23 (3), 247-263.
- Postgate, J.N., 1994. In search of the first empires. Bulletin of the American Schools of Oriental Research 293, 1–13.
- Postgate, J.N., 2005. Identifying the end of the Hittite empire. Problems of reuniting history and archaeology at Kilise Tepe'. Bilkent University, The Department of Archaeology and History of Art Newsletter 4, pp. 26–30.
- Postgate, J.N., 2007. The ceramics of centralisation and dissolution: a case study from Rough Cilicia. Anatolian Studies 57, 141–150.
- Roberts, B.K., 1996. Landscapes of Settlement: Prehistory to the Present. Routledge, London.
- Schachner, A., 2006. Auf welchen Fundamenten? Überlegungen zum Stand der Erforschung der hethitischen Architektur. In: Mielke, D.P., Schoop, U.-D. and Seeher, J. (Eds.), Strukturierung und Datierung der hethitischen Archäologie: Voraussetzungen—Probleme—Neue Ansätze. Internationaler Workshop Istanbul, 26–27. November 2004. BYZAS 4. Ege Yayınları, Istanbul, pp. 149– 165.
- Schaeffer, C., 1956. Ugaritica III. Geuthner, Paris.
- Schiffer, M., 1987. Site Formation Processes in the Archaeological Record. University of New Mexico Press, Albuquerque.

- Schoop, U.-D., 2006. Dating the Hittites with statistics. Ten pottery assemblages from Boğazköy-Hattuša. In Mielke, D.P., Schoop, U.-D. and Seeher, J. (Eds.), Strukturierung und Datierung der hethitischen Archäologie: Voraussetzungen – Probleme – Neue Ansätze. Internationaler Workshop Istanbul, 26-27. November 2004. BYZAS 4. Ege Yayınları, Istanbul, pp. 215-239.
- Schoop, U.-D., in press. Hittite pottery—A summary. In: Genz, H., Mielke, D.P. (Eds.), Insights into Hittite History and Archaeology. Ancient East and West Special Edition.
- Schreiber, K., 2005. Imperial agendas and local agency: Wari colonial strategies. In: Stein, G.J. (Ed.), The Archaeology of Colonial Encounters: Comparative Perspectives. Currey, Oxford, pp. 237–262.
- Seeher, J., 2003. Die Ausgrabungen in Boğazköy-Hattuša 2002. Archäologischer Anzeiger (2003/1), 1–14.
- Seeher, J., 2005. Überlegungen zur Beziehung zwischen dem hethitischen Kernreich und der Westküste Anatoliens im 2. Jahrtausend v. Chr. In: Horejs, B., Jung, R., Kaiser, E., Terzan, B. (Eds.), Interpretationsraum Bronzezeit, Bernhard Hänsel von seinen Schülern gewidmet. Habelt, Bonn, pp. 33–44.
- Seton-Williams, M.V., 1954. Cilician Survey. Anatolian Studies 4, 121-174.
- Sinopoli, C.M., 1994. The archaeology of empires. Annual Review of Anthropology 23, 159–180.
- Smith, A.T., 2003. The Political Landscape. Constellations of Authority in Early Complex Polities. University of California Press, Berkeley.
- Smith, M., Montiel, L., 2001. The archaeological study of empires and imperialism in Pre-Hispanic Central Mexico. Journal of Anthropological Archaeology 20, 245– 284.
- Steadman, S., Gorny, R.L., 1995. Introduction: The archaeology of empire in ancient Anatolia. Bulletin of the American Schools of Oriental Research 1, 299–300.
- Summers, G.D., 1993. Tille Höyük 4. The Late Bronze and Iron Age Transition. Monograph Series Nr. 15. British Institute of Archaeology at Ankara, London.
- Symington, D. 2001. Hittites at Kilisetepe. In: Jean, É., Dinçol, A.M., and Durugönül, S. (Eds.), La Cilicie: espaces et pouvoirs locaux (2e millénaire av. J.-C. - 4e siècle ap. J.-C.). Actes de la table ronde internationale d'Istanbul, 2–5 novembre 1999. De Boccard, Paris, pp. 167–184.
- Thalmann, J.-P., 1990. L'urbanisme Hittite. In: Van den Hout, J-L., Thalmann, J.-P., Valbelle, D. (Eds.), Naissance des cités. Nathan, Paris, pp. 153–166.
- Van de Mieroop, M., 1997. The Ancient Mesopotamian City. Oxford University Press, Oxford.
- Van den Hout, T. 2006. Administration in the reign of Tuthaliya IV and the later years of the Hittite empire. In: van den Hout T. (Ed.), The Life and Times of Hattusili III and Tuthaliya IV. Proceedings of a Symposium held in Honour of J. De Roos, 12–13 December 2003, Leiden. Nederlands Instituut Voor Het Nabije Oosten, Leiden, pp. 77–106.
- Van Loon, M.N., 1980. Conclusion. In: Van Loon, M.N. (Ed.), Korucutepe 3. Final Report on the Excavations of the Universities of Chicago, California (Los Angels) and Amsterdam in the Keban Reservoir, Eastern Anatolia 1968–1970. Amsterdam, North Holland, pp. 271–277.
- Weber, M., 1978. Economy and Society. An Outline of Interpretive Sociology. University of California Press, Berkeley.
- Whallon, R., 1979. An Archaeological Survey of the Keban Reservoir Area of East-Central Turkey. Memoirs of the Museum of Anthropology University of Michigan Number 11. University of Michigan, Ann Arbor.
- Wilkinson, T.J., 2000. Regional approaches to Mesopotamian archaeology: the contribution of archaeological surveys. Journal of Archaeological Research 8, 219–267.
- Wilkinson, T.J., 2003. Archaeological Landscapes in the Near East. University of Arizona Press, Tucson.
- Wilkinson, T.J., Barbanes Wilkinson, E., Ur, J., Altaweel, M., 2005. Landscape and settlement in the Neo-Assyrian empire. Bulletin of the American Schools of Oriental Research 340, 23–56.
- Woolf, G., 1998. Becoming Roman, The Origins of Provincial Civilisation in Gaul. Cambridge University Press, Cambridge.
- Yakar, J., 1980. Recent contributions to the historical geography of the Hittite empire. Mitteilungen der Deutschen Orient-Gesellschaft 112, 75–93.
- Yakar, J., 1992. Beyond the eastern borders of the Hittite empire: an archaeological assessment. In: Akurgal, E., Ertem, H., Otten, H., Süel, A. (Eds.), Hittite and other Anatolian and Near Eastern Studies in Honour of Sedat Alp. Türk Tarih Kurumu Basimevi, Ankara, pp. 507–520.
- Yakar, J., 2000. Ethnoarchaeology of Anatolia: Rural Socio-Economy in the Bronze and Iron Ages. Monograph Series 17. Tel Aviv University, Institute of Archaeology, Tel Aviv.
- Yakar, J., Dinçol, A., 1974. Remarks on the historical geography of north-central Anatolia during the pre-Hititte and Hittite periods. Tel Aviv 1, pp. 85–99.