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INTERWEAVING WORLDS

Systemic Interactions in Eurasia, 7th to 1st Millennia BC

*Papers from a conference
in memory of Professor Andrew Sherratt*

What *Would* a Bronze Age World System Look Like?
World systems approaches to Europe and western Asia 4th to 1st millennia BC

Editors

Toby C. Wilkinson, Susan Sherratt and John Bennet

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Norman Yoffee

CONTRIBUTORS

Nils Anfinset

University of Bergen

Alexander A. Bauer

City University of New York

Christoph Bachhuber

British Institute at Ankara

Philippe Beaujard

CNRS

John Bennet

University of Sheffield

Cyprian Broodbank

University College London

Avraham Faust

Bar-Ilan University

Roxanna Flammini

Pontifical Catholic University of Argentina
CONICET

Dorian Q Fuller

University College London

Irene Good

Harvard University

Raphael Greenberg

Tel Aviv University

Paul Halstead

University of Sheffield

Valasia Isaakidou

University of Sheffield

Philip L. Kohl

Wellesley College

Kristian Kristiansen

University of Gothenburg

Borja Legarra Herrero

University of Leicester

Joseph Maran

University of Heidelberg

Christopher M. Monroe

Cornell University

Lorenz Rahmstorf

University of Mainz

Michael Rowlands

University College London

Jane Schneider

City University of New York

Susan Sherratt

University of Sheffield

David A. Warburton

University of Lyon

Ehud Weiss

Bar-Ilan University

David Wengrow

University College London

Toby C. Wilkinson

University of Sheffield

Norman Yoffee

University of Nevada



Archaeologist, Teacher, Friend.
Professor Andrew G. Sherratt, 1946–2006.

13.

Negotiating Metal and the Metal Form in the Royal Tombs of Alacahöyük in North-Central Anatolia

Christoph Bachhuber

The extravagant metal assemblages of the EBA royal tombs of Alacahöyük have long been studied within a framework of distant exchange with Syro-Mesopotamia. The sum of objects has been consistently interpreted as representing wealth that was generated through trade. In this reinterpretation of the royal tombs, I suggest that the depositions should be studied as a measure of value rather than a measure of wealth. In particular, metal and metal objects acquired unprecedented salience in their deposition in these burials. The paper assesses the creation of sacrificial value in the highlands of Anatolia by reconstructing motivations that included, but were not confined to, aggrandizing elite display. The potency of metal and metal objects in the royal tombs may have additionally derived from interaction between foreign (urban Syro-Mesopotamian) regimes of value and indigenous (highland Anatolian) ones. Ideological tensions created by the introduction of urban and commercial value systems may have been partially resolved in the extravagant consumption of metal in these burials.

The production and exchange of metal and metal objects has been a dominant concern in the archaeology of the Early Bronze Age in Anatolia for two interrelated reasons. An increasing volume and quality of metal objects identified in contexts like the royal tombs of Alacahöyük and the treasure deposits of Troy suggests the increasing wealth and sophistication of the societies in Early Bronze Age Anatolia that were manufacturing and using them. This in turn may be related to the increasing flow of metal between the minerals rich landscapes of Anatolia and the metals deficient landscapes of Syro-Mesopotamia (Fig. 13.1), particularly during the ED III and Akkadian periods. Metal has thus provided a medium with which to reconstruct both a cause and effect of exchange with Syro-Mesopotamia.

By the 1950s the spectacular EBA metallurgical assemblages discovered across Anatolia had provided a large enough corpus for archaeologists to begin exploring the relationship between Anatolian metallurgy and social change. This corpus suggested that a metallurgical *koine* emerged

between Anatolia and Syro-Mesopotamia in the latter half of the third millennium, a fact which has been consistently recognized as evidence for communications between the two regions. The *koine* was marked by an unprecedented degree of elaboration and a gaudiness of precious metal display and deposition.

These developments have ensured that metallurgy has attracted considerable interest in the archaeology of EBA Anatolia. Jewellery and weaponry have naturally been at the fore and it would be redundant here to review and discuss comparanda shared between the two regions, their find contexts, or implications for chronology (for catalogues and discussions of jewellery and weaponry forms see Stronach 1957; Bass 1966; Maxwell-Hyslop 1971, 38–63; Yakar 1985a; Musche 1992, 101–28; Nakou 1997). The earliest observations on these comparanda (e.g. from Troy, Alacahöyük, and Kültepe) generally cited objects from the ED III Royal Cemetery of Ur as the Mesopotamian prototypes for forms identified in Anatolia (see for example Bass 1966).



Figure 13.1. Sites and places mentioned in the text.

The perceived relationship between exchange, metallurgy and social change was most succinctly outlined by Henri Frankfort, who observed:

“Everywhere (in Anatolia) the products of the smiths and jewellers betray a greater or lesser dependence on the brilliant achievements of the Third Early Dynastic Period in Sumer... Their ores or ingots may occasionally have been obtained in exchange for finished products from the Mesopotamian workshops. However this may be, the influence of southern prototypes is noticeable in all the sites which we have named, although they were not slavishly copied” (Frankfort 1954, 113)

Frankfort’s analysis situated metallurgy within the dominant diffusionist paradigm of his time, when the agency of social change in EBA Anatolia was sought in one of two dynamics: (1) exchange with Syro-Mesopotamia, and (2) large-scale population movements (*i.e.* Luwian speakers or other Indo-Europeans).

The circulation of metal between EBA Anatolia and Syro-Mesopotamia continues to feature fundamentally in current interpretations of social change; though the relationships are not as straightforward as they once were. Jewellery,

weapons and other objects from the metallurgical *koine* are being identified more frequently in subsequent excavations across Anatolia with fewer new finds from Syro-Mesopotamia (Özgüç and Temizer 1993, 623), eroding the assumption that advances in (metallurgical) technology must radiate from Mesopotamia. The current general consensus is that the majority of the metallurgical innovations of the period emerged with the smiths in metals rich landscapes (*i.e.* highland Anatolia and the Zagros Mountains in Iran) and proceeded to influence the metallurgy and tastes of a metal-deficient Syro-Mesopotamia (Kohl 1978, 475; Moorey 1982, 36; Yakar 1985a, 37; Özgüç and Temizer 1993, 623; Stein 1999, 34; Yener 2000, 6; Özbal *et al.* 2002, 39–41).

Whilst the new consensus has fostered greater sensitivity towards regions adjacent to Mesopotamia, they continue a diffusionist research tradition whose fundamental interest in metal objects is to outline the transmission of technologies within regional networks of exchange. This perception of metal objects in the archaeology of EBA Anatolia has been shaped in part by a catalogue-like approach to assemblages like the treasure deposits of Troy or the royal tombs of Alacahöyük. Both have been studied as little more than corpora of information that can be assessed to outline various trends in material culture, including advances in metallurgy

and the emergence of a shared, pan-regional metallurgical *koine* (as above), or rates of exchange and a related prosperity in Anatolia measured in the metallurgical wealth of these assemblages. In other words, the study of metal deposits in EBA Anatolia has been fundamentally more concerned with their content than their context (*cf.* Bradley 1998, 13). The positivism entrenched in the methodology of cataloguing the deposits and measuring trends with them has largely distorted the significance of metal assemblages in EBA Anatolia.

It is from this background that the present study both eagerly and cautiously engages aspects of World-Systems theory that were modified for Bronze Age social economies by Andrew and Susan Sherratt. In recent years long distance trade networks, which form an essential part of world-systems approach, have been the focus of considerable archaeological scrutiny in EBA Anatolia and adjacent regions (see for example Gülçür 2002; Şahoğlu 2005; Rahmstorf 2006; Efe 2007; Bobokhyan 2008). The relationship between intensified long distance trade and social change is underscored implicitly in these studies. In other words, the potential for intensified trade to invigorate a local economy and to communicate new (foreign) concepts seems so obvious, that few archaeologists are asking why or how societies in Anatolia were transformed by these new communications. This current archaeology of long distance trade in EBA Anatolia thus risks perpetuating a *deus ex machina* diffusionism.

That some manner of long distance communication occurred between the regions of Syro-Mesopotamia and Anatolia is not in doubt; though for something like a world-system to have existed in prehistoric Anatolia, archaeologists must be able to reconstruct substantial social change that was a direct consequence of communication with urban centres in Syro-Mesopotamia. Herein emerges the real challenge, for the most successful archaeological adaptations of world-systems theory rely on observing ideological imbalances more than economic ones [*e.g.* based on Jane Schneider's (1991) study of the role of preciousities]. Imbalances would result in both an aggressive transmission and local reception and manipulation of urban (or core) ideologies, which should be observable in the archaeological record. To what extent though can archaeologists confidently reconstruct direct associations with the manufacturers of imported objects and materials? The appeal and potency of exotic objects and materials almost certainly derived from what Mary Helms (1988, 15) has called a "symbolically charged geographical distance". We are nevertheless at risk of imposing archaeological knowledge of the origins of exotic objects and materials onto the knowledge of the ancient consumers of exotic objects and materials (see Andrew Bevan's [2004] study for a similar concern with the EM II–MMI Cretan consumption of Egyptian stone vases; see also Legarra Herrero, this volume).

If there is any conceptual value in reconstructing a world-

system between Anatolia and Syro-Mesopotamia in the Early Bronze Age, the effort should begin with a powerful construct introduced by Andrew and Susan Sherratt (1991) – namely the motivations of local consumption within networks of production and long distance exchange. Consideration of consumption necessarily grants a social context to Anatolian societies that were engaged in these communications. The versatile concept of consumption can also begin to illuminate divergent regimes of value across the greater region, which will ultimately guide the interpretation of metal objects in the royal tombs of Alacahöyük.

A brief introduction to the royal tombs of Alacahöyük

The royal tombs of Alacahöyük loom large in our perception and reconstruction of Early Bronze Age societies in Anatolia. The burials were discovered in 1935 by the archaeologists Hamit Koşay and Remzi Arık in a cemetery located beneath a Hittite town and ceremonial precinct on the mound of Alacahöyük, 20 miles north of the Hittite capital of Hattusa. The burials have been perceived collectively as 'royal' on account of their ostentatious gold, silver, electrum, tin-bronze, arsenic-copper, lead, iron, and semi-precious stone funerary offerings (Fig. 13.2), and probably also on account of their association with the much later Hittite town and cult place.

Limited soundings in Level 7–8 of the EBA settlement uncovered evidence for a destruction, and very soon after (probably in Level 7) the first three of the royal tombs of Alacahöyük were interred (Fig. 13.3). The 14 shaft graves¹ of the royal tomb cemetery are of rectilinear construction and range in dimensions from 8.0 x 3.4m (Tomb H) to *ca.* 2.8 x 1.7m (Tomb R). The depth of the shafts is between 0.5–1m. The boundary of each shaft is defined by a perimeter of boulders. A few of the shaft graves abut the walls of abandoned buildings from earlier or contemporary levels (Tomb M) thus incorporating the walls of abandoned structures into the walls of the shallow shafts. The abandoned buildings and cemetery demarcate a boundary on the edge of the living settlement of Alacahöyük.

The floors of the shaft graves are generally of stamped clay, with one exception of a floor paved in stone (Tomb F). The deceased and select burial offerings, including animal sacrifices, were generally placed on top of platforms constructed of mudbrick, pisé or slabs of stone. The tomb space was roofed by two large timber beams running the length of the shaft, and numerous smaller beams running the width (Fig. 13.4). The beams were filled and secured with plaster creating a solid roof.

The predominant mode of interment in the royal tombs of Alacahöyük is a single adult individual in a flexed position

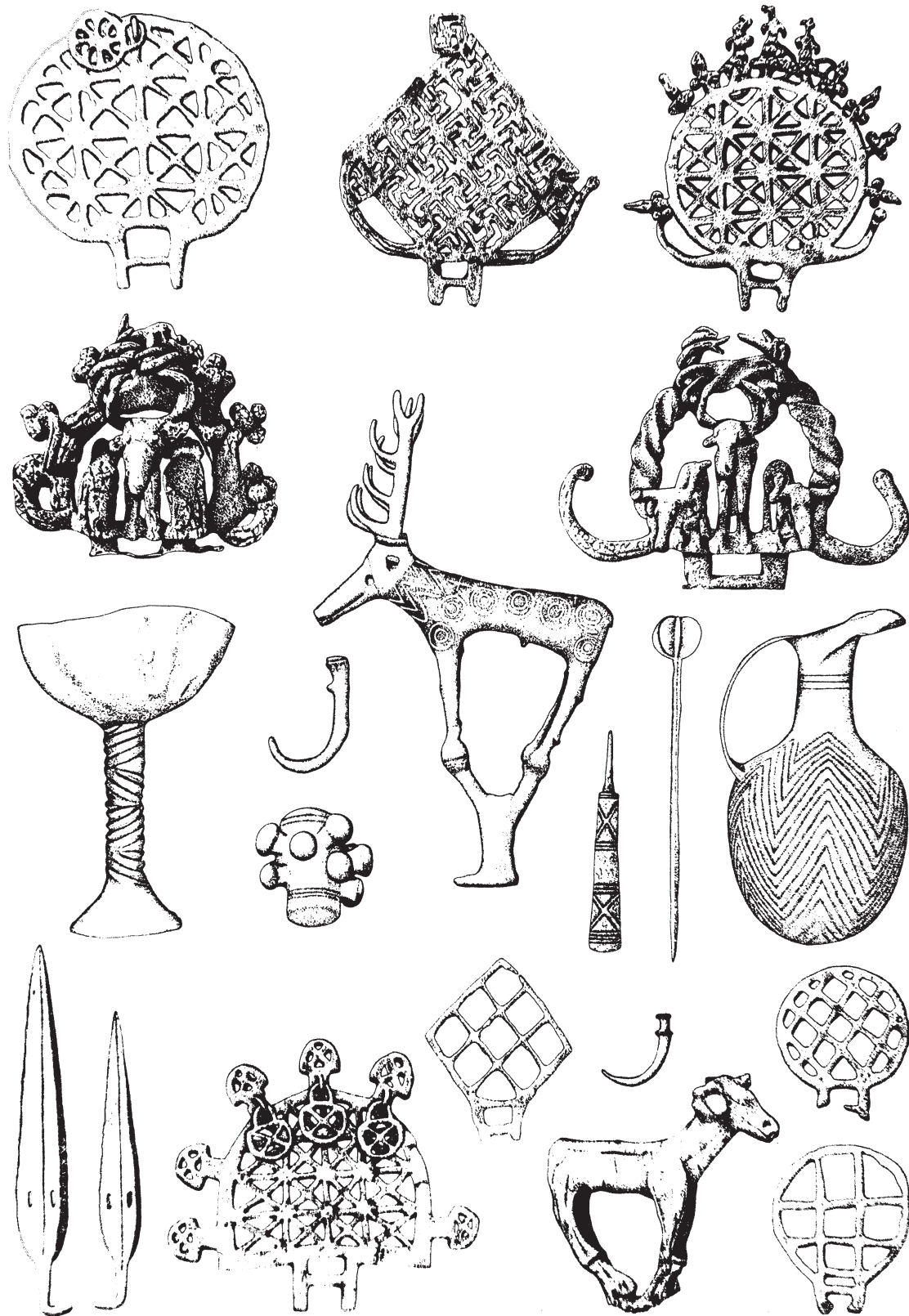


Figure 13.2. The variety of metal forms deposited in the royal tombs of Alacahöyük (after Gülçur 2002, fig. 15).

Year	Periodization of the royal tombs of Alacahöyük	Troy	Demirci-höyük	Poliochni	Mesop.	Ebla/Tell Mardikh	Amuq
2000		V					
2100	Transitional	IV			Ur III		J
		III			Guti	IIB2	
2200	Level 4	Ilg		Yellow			
		IIf	abandoned		Akkad		
2300	Royal tomb cemetery is abandoned	IId		Red			I
		IIf				Palace G	
2400	Tomb H	IIf	P-Q				
	Levels 5-6	IIf	O			IIB1	
	Tombs S,D,R,B	IIf			ED III		
	Tombs E, C, A, A1,T,T1	Ij-k	N				
2500	Tombs F,K,L	Ii		Green			
		Ih	M			IIA	
		Ig					H
2600	Level 7	IIf	L		Early Dynastic		
	Level 8		K				
2700		Id-e	J				
	Level 9	Ic		Blue			
2800		Ib	H-I				

Figure 13.3. Chronological chart showing periodization of the Royal Tombs of Alacahöyük (chronological relationships based largely on analysis in Bachhuber 2008, 20–61. Level associations of royal tombs based largely on Gürsan-Salzmänn 1992, 41–8, and Gerber 2006, though note Özyar 1999 for critique of these traditional designations of discrete building phases).

with his or her head oriented to the west. Most of the intact flexed interments were placed in the NW corner of the shaft. There is nevertheless some variation in the treatment of the human remains. Some burials were clearly secondary interments, with only skull and long bones (one set from the later interment from tomb complex T/T1, three sets from Tomb R, and three sets in Tomb C). In Tomb E, an intact western oriented skeleton was interred with an additional skull, and in Tomb D the remains of an adult female were scattered about the tomb. These practices signify, at the very least, that mortuary rituals were not singularly bound to the event of an individual's death.

The secondary interments suggest that burials were revisited, and the human remains from them exhumed, manipulated and reinterred. In Christoph Gerber's (2006) recent reassessment of the stratigraphy of the royal tomb cemetery, disturbances to the architectural integrity of

some of the tombs in the middle phases of deposition may indicate that the builders of the more extravagantly furnished later tombs (B and H) plundered earlier tombs that show considerably less material wealth (Gerber 2006, 383–383). We may question whether or not the earlier tombs were plundered for the sole purpose of increasing the ostentation of the later tombs, or also whether a truly stratigraphic and chronological relationship exists at all between discrete tomb construction phases (see Özyar 1999 for critique). At the very least, the scenarios of secondary interment and re-entry into tombs strongly suggest that more occasions were created for the performance of mortuary rituals, which almost certainly included the ostentatious display, consumption and transfer of wealth.

Animals were an integral part of the rituals observed in the royal tombs. The most striking is the treatment of cattle. The remains of cattle are associated with seven tombs.

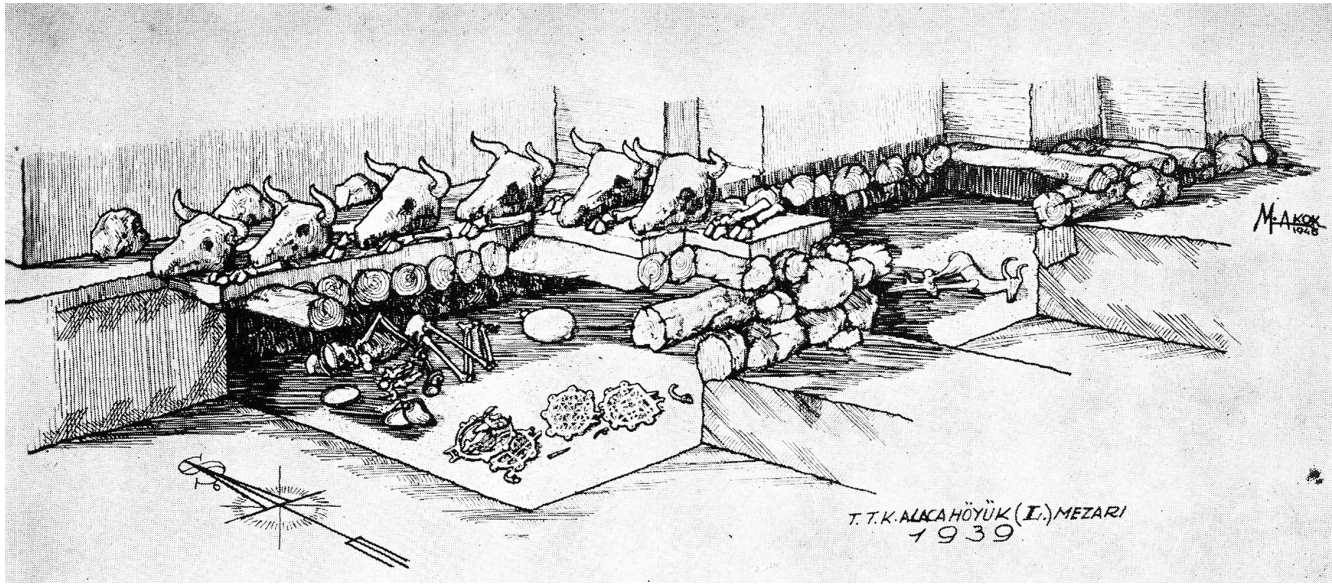


Figure 13.4. Isometric reconstruction of tombs L (foreground) and K (after Koşay 1951, pl. 191).

None of the cattle interments are intact; rather only the head and the hoofs had been deposited in a careful manner (the remainder are not archaeologically visible and may well have been consumed in feasts associated with the mortuary event). The heads of the cattle are all facing/oriented west (the same orientation as the deceased). Pairings of hooves were regularly (though not universally) placed at the back of the cattle skulls, the pairings numbering from 1 to 5. Hooves were placed otherwise in Tombs L, F and A. The majority of the animals were paired, so that a train of cattle in two rows was achieved (Fig. 13.4; a linear train was not observed in the cattle pairings of Tomb L). The cattle were placed either on the roof of the shaft grave (as in Tombs A, E, L, F) or on the floor (Tombs R, B, L, H), sometimes elevated on a pedestal. Cattle were not the only animals interred. The intact remains of goats, dogs as well as pigs, boars and an ass were interred in the shaft graves as sacrificed animals; disarticulated faunal remains were also identified, intimating perhaps the deposition of food stuffs.

The objects deposited in the royal tombs of Alacahöyük have received ample discussion (see recently Gürsan-Salzman 1992; Özyar 2000; Mansfeld 2001; Gülçur 2002; Zimmermann 2006b), and here I wish to provide a very general overview of the types of objects offered, their materials of manufacture and the manner of their interment. The materials used to manufacture the metal objects include tin-bronze,² arsenic-copper,³ silver, gold, electrum, iron and lead. Some of the object types are made exclusively of one material. For example, all of the diadems worn by the majority of the interred were manufactured from gold. The

large stag figurines were all cast in tin-bronze or arsenic-copper, with occasional silver inlay (Fig. 13.2). The majority of the intricately shaped standards were cast in tin-bronze or arsenic-copper (Figs. 13.2 and 13.7: 34 examples), but five were cast in silver. The majority of the tools, including axes, adzes, hammers, and borers were manufactured from tin-bronze or arsenic-copper. Weapons (ceremonial or otherwise) include daggers, swords, and ceremonial knobbed maceheads. Most of the blades of weapons were cast in tin-bronze or arsenic-copper (sometimes with precious metal elaboration; Fig. 13.2). Exceptions include a macehead of gold and an iron bladed dagger. The majority of the drinking and serving vessels were metal (gold, silver, electrum, tin-bronze, and arsenic-copper; Fig. 13.2), but ceramic vessels were also deposited. Figurines (mostly human idols and a few animals) could be manufactured from metal (tin-bronze, silver, gold), bone, or ceramic. Large hooks were manufactured from tin-bronze, arsenic-copper and silver (Fig. 13.2). Lastly, numerous personal ornaments were identified in all of the tombs, and could have been worn as jewellery or sewn onto fabric. Ornamental objects were manufactured mostly from gold, silver, arsenic-copper, and semi-precious stones (carnelian, hematite, lapis), and included bracelets, anklets, pins, elaborated gold sheet plaques, necklaces, diadems, and earplugs.

A few very general patterns may be observed in the deposition of objects. Items like weapons, tools, and jewellery were placed close to the body of the deceased; objects that were less like personal effects, such as the standards and figurines, were placed further away (Gürsan-Salzman 1992,

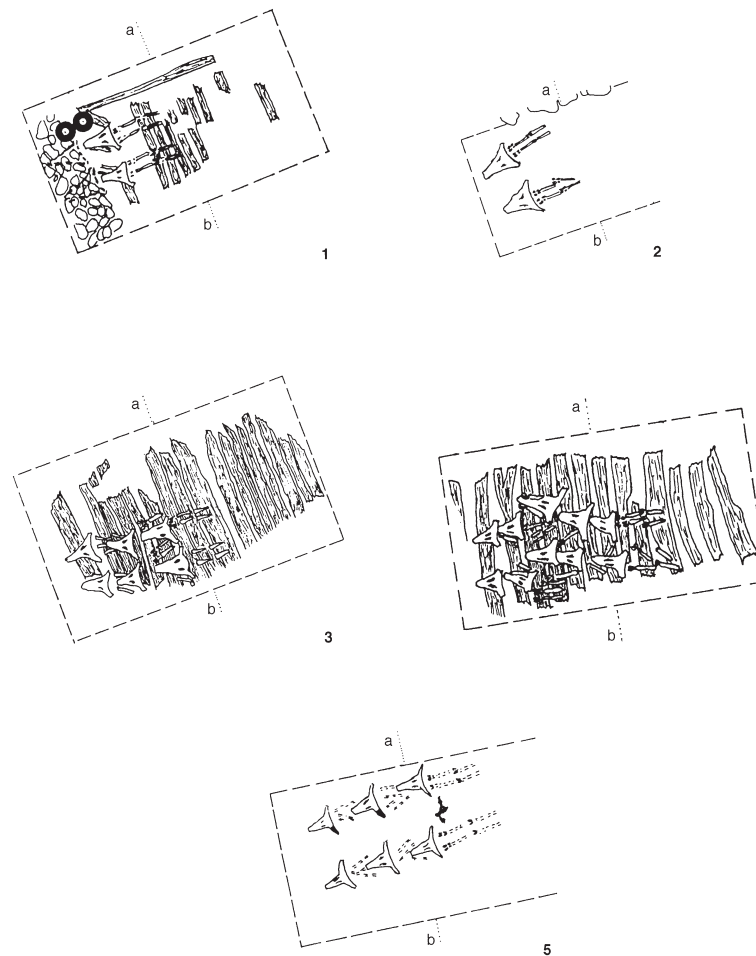


Figure 13.5. Arrangement of cattle offering in the royal tombs of Alacahöyük (after Mansfeld 2001, fig. 5).

68–9). The standards and hooks were regularly deposited in very close association (Gürsan-Salzmänn 1992, 132; Mansfeld 2001, 25). There is some degree of gender differentiation, as earplugs and swords (though not daggers and maceheads) were associated exclusively with male burials, and cymbals with female (Gürsan-Salzmänn 1992, 134; for cymbals see Koşay 1951, pl. CXXVI).

Where values begin to diverge

The extravagance observed in the royal tomb cemetery of Period III Alacahöyük has long been studied in the context of intensified exchange between Central Anatolia and Syro-Mesopotamia (for an early and highly influential treatment see Mellink [1956]; and more recently Mansfeld [2001, 42–3]). Two features of the burials are generally implicated in long distance communications: first, intimations of wagon burials at Alacahöyük that suggest direct influences from ED III

Mesopotamia (e.g. the wagon burials in the royal cemetery of Ur and Cemetery A at Kish) or the Caucasus (Orthmann 1967; Mansfeld 2001); and second, increased wealth in the royal tombs of Alacahöyük that suggest intensified exchange with Syro-Mesopotamia.

Both observations warrant more careful consideration. Wagons have not been conclusively demonstrated in the royal tombs of Alacahöyük (Zimmermann 2006–7, 512–514; Bachhuber 2008, 190–96), though the determination to reconstruct wagons betrays a diffusionist research tradition in Early Bronze Age Anatolia, in particular the emphasis on southern Mesopotamian prototypes. The reconstruction of wagons has resonated with other outlines of ideological diffusion at Alacahöyük, most dramatically the local reception of the Sumerian goddess Innana (Korfmann 1986), observed in intimations of sky cults and female forms in the standards, figurines and idols deposited in the Alacahöyük tombs (see Zimmermann 2006–7 for discussion and critique). More to the point of this paper, a linear relationship does not exist between

intensified production/exchange and increased depositional wealth. Whilst the royal tombs of Alacahöyük should be studied within the broader context of communications with Syro-Mesopotamia, not enough consideration has been given to the relationship between increasing activities of long distance exchange and the evident dramatic social change at Alacahöyük.

There is little question that the emergence of large urban centres like Ebla and Mari in northern Syro-Mesopotamia affected developments in Anatolia beginning near the middle of the third millennium. The Ebla Palace G archives reveal a robust and enterprising economy based on agriculture, viticulture, animal husbandry, and textile and metallurgical industries. Gold and silver were circulating through Ebla in impressive quantities. One entry reads “1740 *minas* of gold present” (ca. 870 kg; Pettinato 1981, 166); another records an annual outlay of silver of 3796 *minas* 10 *shekels* (ca. 2000 kg; Pettinato 1981, 167). The Eblaites were both manufacturing precious metal objects, and using silver and gold as media for priced exchange. We can reasonably infer that this dynamic urban centre pursued economic interests that linked it, if not directly, to societies on the Anatolian Peninsula.

As noted above, the archaeological signature of exchange between the two regions has been the focus of considerable recent research. Many have turned to the well-documented Assyrian trading colonies of the early second millennium for clues to the nature of these earlier exchange relationships. As is well known, the two paramount interests of the Assyrian merchants were Anatolian silver and gold. Assyrian standards of valuation were measured in weights of gold and particularly silver (in *shekel* and *mina*). The Assyrians sought only bullion from their Anatolian partners, as expressed in the callous acquisition of manufactured objects in Aššur, which were being “turned back into silver (and gold) for purchases in the city” (Veenhof 1995, 863). Precious metal was perceived and used similarly in the Palace G archives at Ebla in the Early Bronze Age (see below and Pettinato 1981, 166–72).

To many archaeologists the well documented existence of the Assyrian trading colonies suggests that an extensive if not comparable exchange network was already in place in the Early Bronze Age, into which the Assyrian network naturally coursed (see, for example, Muhly 1973, 305; Yener 1980; Mellaart 1982; Yakar 1997, 369; Efe 2002, 59; 2007, 60; Şahoğlu 2005). Tahsin Özgüç has suggested that the EBA settlement of Kültepe had already begun to assume an important role in interregional trade, for which it became famous in the Assyrian Trading Colony period (Özgüç 1963, 2; 1964, 48).

So far the parallels are explicit between the two networks of exchange in the Early and Middle Bronze Ages; though what of the incentives, investment, or organizational mechanisms?

The Assyrian Trading Colonies are often implicated in frameworks of commercial exchange, where private initiative and capital in the guise of family firms fuelled the Assyrian end of the enterprise more so than any palatial interest, as did the pursuit of profit (see Larsen 1976, 92–105). The Assyrian Trading Colonies thus support an essentially modernist (or formalist) model, which outlines vigorous and consistent systems of exchange that were regulated by forces of supply and demand, not too dissimilar from the modern capitalist economy.

It is clear what the Assyrians sought to gain from these exchange relationships; but what of the Anatolians? As is well known, donkey caravans in the Assyrian trading colony network made the 6 week return trip from Aššur laden with high quality textiles and tin for consumers in Anatolia. The benefits of exchange for the Anatolians nevertheless diverged from their Assyrian counterparts. The Assyrians appear to have been only interested in silver and gold bullion, or liquid and easily convertible commodities. The Anatolians were similarly interested in the convertible commodity of imported tin, but also in the Syro-Mesopotamian manufactured product of textiles. The distinction here is that the Assyrians desired a liquid commodity and appear to have been indifferent to Anatolian craft. On the other hand the Anatolians were interested in products directly associated with the craft of the societies of Syro-Mesopotamia – namely their textiles. It is a distinction between supply side economics on the Assyrian side that emphasizes commodity production (and adheres more favourably to formalist frameworks) and considerations of patterns of demand (or consumption) on the Anatolian side, which do not adhere as closely to formalist models.

The most applicable model for exchange on the Anatolian end of the Assyrian Trading Colony network was formulated by Andrew and Susan Sherratt (1991). I suggest the model is also appropriate for the Early Bronze Age in Anatolia. The Sherratts have sought to bridge the long standing modernist/formalist vs. substantivist/primitivist divide with a seminal study of Bronze Age social economies. Their model embraces the substantivist position that the exchange of objects and resources has salient social and political implications for ruling elites, though does not diminish the importance of the supply side of productive output within these exchange activities. The Sherratts’ model explores the ‘incentive to trade’ and finds a fundamental impetus in the desire to own or consume exotic objects or resources, which contain within them an intrinsic value beyond their presumed relative scarcity.

In the Anatolian example, the consumption of imported Syro-Mesopotamian textiles in the Assyrian Trading Colony period associated the consumer with distant and socially sophisticated realms. In the Early Bronze Age, urban manufactured commodities from Syro-Mesopotamia might

have also been desired by Anatolian elites. Machteld Mellink (1989, 323) has suggested that the Syrian flasks distributed across the length of Anatolia in this period contained perfumed oils (see Rahmstorf 2006 for distribution map); though Thomas Zimmermann's recent studies of these containers in Anatolia have supported the idea of local imitation or production (Zimmermann 2002; 2005; 2006a), raising the question whether Syrian perfumed oils travelled over great distances. It is nevertheless noteworthy that the Ebla archives do record the export of olive oil regionally, as far as Emar on the Middle Euphrates (Pettinato 1981, 162). Textiles might have also been an imported commodity in Anatolia, presuming continuity with the Assyrian Trading Colony period and noting the primacy of textile industries in the contemporary Palace G archives of Ebla (Pettinato 1991, 165–6), and the regional exchange of textiles. Carchemish on the modern border between Syria and Turkey is, for example, recorded as both a source of and a destination for textiles in the Eblaite archives (Pettinato 1976, 12; 1981, 209, VII.2–4).

In the Early Bronze Age the source of prestige granted by the potential ownership and consumption of exotic commodities (as well as imported tin, which begins to be observed in significant volumes of deposited bronze in this period, and lapis) presents more ambiguities than in the textually documented Assyrian Trading Colony period. Such objects and materials would have clearly derived from a symbolically charged geographical distance (after Helms 1988), though direct associations with the urban centres of Syro-Mesopotamia are more challenging to reconstruct. Much more consideration needs to be given to the kinds of communication that joined these societies in long distance trade in the Early Bronze Age. Reconstructions of a 'Great Caravan Route' spanning across the length of Anatolia (e.g. Efe 2007) may risk conflating our understanding of the organizational mechanisms of the Assyrian Trading Colonies with the earlier network. Direct and regular lines of communication with urban centres in Syro-Mesopotamia should not be assumed for the Early Bronze Age. Associations with distant urban elites may well have been diluted by a more complex network ostensibly resembling Colin Renfrew's well known formulation of a 'down the line' prestige chain (Renfrew 1972, 465–8).

The less certain reconstruction of organizational mechanisms need not lessen the conceptual value of the Sherratts' 'incentive to trade'. Prestige would have been granted by the ownership and consumption of exotic objects and materials regardless of the precise knowledge of their origins. This desire for exotica would have compelled the emergent Anatolian elite to invest in the intensification of production, in order to create a surplus of local commodities with which to negotiate in exchange (cf. Sherratt and Sherratt 1991, 354).

In the Assyrian Trading Colony period, and seemingly also in the Early Bronze Age, the Anatolian commodity that most interested Syro-Mesopotamian consumers was metal. Metal also injected these exchange networks with an element of liquidity, and all metal objects, be they in ingot, jewellery or weapon form, was a potential reserve of wealth that could be mobilized in exchange transactions (Sherratt and Sherratt 1991, 360). The liquidity of metal (and the expanding circulation of commodities in general) necessitated also a degree of value standardization, and this may be observed in a number of developments in the Early Bronze Age.

The most obvious place to begin is with the *shekel* and *mina* measures in the archives of Syro-Mesopotamian palaces (cf. Ebla, above). Weight metrology had become necessary in the accountancy of temple administrations during the Early Dynastic IIIa period in Mesopotamia, when silver was adopted as the primary standard of valuation for transactions (see recently Robson 2008, 76–84). The standardization of value requires instruments to measure value; these instruments are archaeologically visible in the Early Bronze Age and have been the focus of considerable recent scholarship. The most archaeologically pervasive of the implements is normally identified as a small hard, polished stone (often hematite) that can have one or more flat surfaces, and which is sometimes notched, incised or inscribed. It is still a matter of some debate when weights, or more specifically pan balance weights, had begun to be used for the purpose of measuring value (Rahmstorf 2007). Clearly by the latter half of the third millennium the geographical range and quantity of objects convincingly interpreted as weights in the archaeological record of Syro-Mesopotamia and adjacent regions suggests that this technology was widely adopted during the ED IIIa and Akkadian periods, roughly contemporary with the economic reforms noted above. Objects that have been convincingly identified as weights have been recorded in contemporary EBA contexts across Anatolia to the Aegean (ca. 2600–2200 BCE; see Rahmstorf 2006, 2007, and this volume; also Bobokhyan 2007; 2008). Both Lorenz Rahmstorf and Arsen Bobokhyan have suggested that Syro-Mesopotamian regimes of value, bearing on the weight equivalency of a *shekel*, were transmitted across Anatolia in this period.

An increasing standardization of value across western Asia may also be reconstructed in the contemporary identification of gold, silver, lead and copper/bronze ingot forms in depositional and other contexts in Anatolia,⁴ northern Mesopotamia,⁵ northern Syria,⁶ southern Mesopotamia,⁷ Iran,⁸ Oman,⁹ and the Indus Valley.¹⁰ The emergence of an interregional *koine* of jewellery forms, as mentioned above, might be interpreted in a similar light. All metal objects were potential reserves of wealth whose value could be measured in weight in a metrological system. Philological considerations

are compelling here. Marvin Powell (1978) observes that the ‘ring money’ that is frequently attested in Old Babylonian and Old Assyrian archives may have antecedents in the third millennium, in particular references to silver, gold and copper rings (or coils/spirals) that are called *ḫar* in the Ur III archives. These *ḫar* are mobilized in transactions (e.g. 90 five-*shekel* silver *ḫar* from 20 *minas*; Powell 1978, 213), and value references to *ḫar* are normally recorded in five-*shekel* units (Powell 1978, 214); *ḫar* are first attested in Old Akkadian texts (Powell 1978, 213), roughly contemporary with the developments explored in this paper.

Ring and spiral forms are prominent in the EBA metallurgical *koine* of western Asia, including Anatolia – in particular the spiral forms that are normally called ‘hair rings’ (*Lockenringe*) in the literature. Bobokhyan (2008, 63) has drawn on a range of archaeological and ethnographic literature to suggest that the several ring forms that feature in the Early and Middle Bronze Age assemblages of the Caucasus and the Anatolian Peninsula served as a kind of currency. This is worth considering, particularly as the coil-shaped hair rings evoke the coil/spiral *ḫar* currency recorded in Old Akkadian and Ur III texts (see also Lassen 2000, 242).

The above observations suggest a standardization of value emerged across EBA western Asia, with emphasis here on Anatolia. Value regimes derived ultimately from the urban centres of Syro-Mesopotamia may have been widely (if indirectly) communicated as urban demand for metal and other resources grew; the proposed origin is salient. Communications between two regions like Syro-Mesopotamia and Anatolia in the Early Bronze Age should not be perceived as an exchange between equals, rather:

“the complementarity between the areas involved in this trade was not just one of materials, but of unequal degrees of complexity, expertise, and labour time: in a word, of organisation, and investment. That is why the system was capable of expansion, and why it spread outwards to take in new areas, in a spatial multiplier effect” (Sherratt and Sherratt 1991, 355).

Strategies of consumption and the conceptual value of ‘tournaments of value’

One notable difference between societies of the Anatolian Early Bronze Age and those included in the later Assyrian trading networks is observed in their divergent uses of metal. The extravagant depositions of metal that characterize Early Bronze Age contexts like the Trojan citadel or the royal tombs of Alacahöyük do not feature in the Middle Bronze Age palace and lower town of Kültepe for example,¹¹ nor in any of the Hittite centres,¹² nor in any burial context

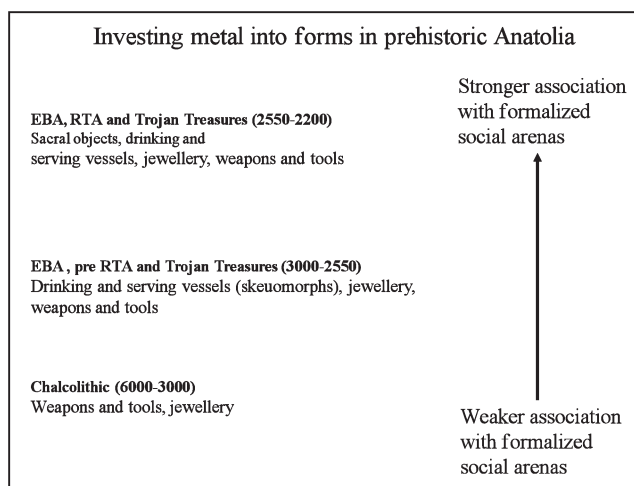


Figure 13.6. Increasing semiotic potency in metal forms from the Chalcolithic through the Early Bronze Age in Anatolia (RTA = royal tombs of Alacahöyük).

from the Middle or Late Bronze Age across Anatolia.¹³ The deposition of contested resources in Early Bronze Age societies introduces another aspect of the versatile concept of consumption, which can further inform problems of social organization and valuation in EBA Anatolia. At the very least, the extravagant deposition of resources represents a socially contingent strategy of elite investment, which contrasts with the more substantial or mature investment of resources into palatial architecture observed in Anatolia in the second millennium (cf. Easton *et al.* 2002, 103).

Clearly the elite at Alacahöyük invested heavily in a symbolic apparatus that legitimized their social power. The patterned repetition of mortuary behaviour in the royal tombs of Alacahöyük suggests strongly that the apparatus was established to seek legitimacy in the ancestral dead. The ancestral dead probably belonged to a pantheon of rulers with whom the living rulers desired to closely associate; and it was the ancestral dead who provided the arena for the extraordinary consumption of volumes of desirable objects and materials.

Legitimacy was achieved in part through the manufacture and deposition in mortuary events of semiotically potent metal objects like the stag and steer figurines and disc standards. The steer/stag figurines and standards were material expressions of a cosmology that likely existed in north-central Anatolia prior to the royal tombs of Alacahöyük. Casting technologies that emerged towards the end of the fourth millennium in Syro-Mesopotamia and Anatolia (namely bivalve mould and lost wax casting techniques, see Moorey 1999, 269–271) reached a new level of sophistication in the middle of the third millennium in north-central Anatolia (Yener 2000, 67–8; de

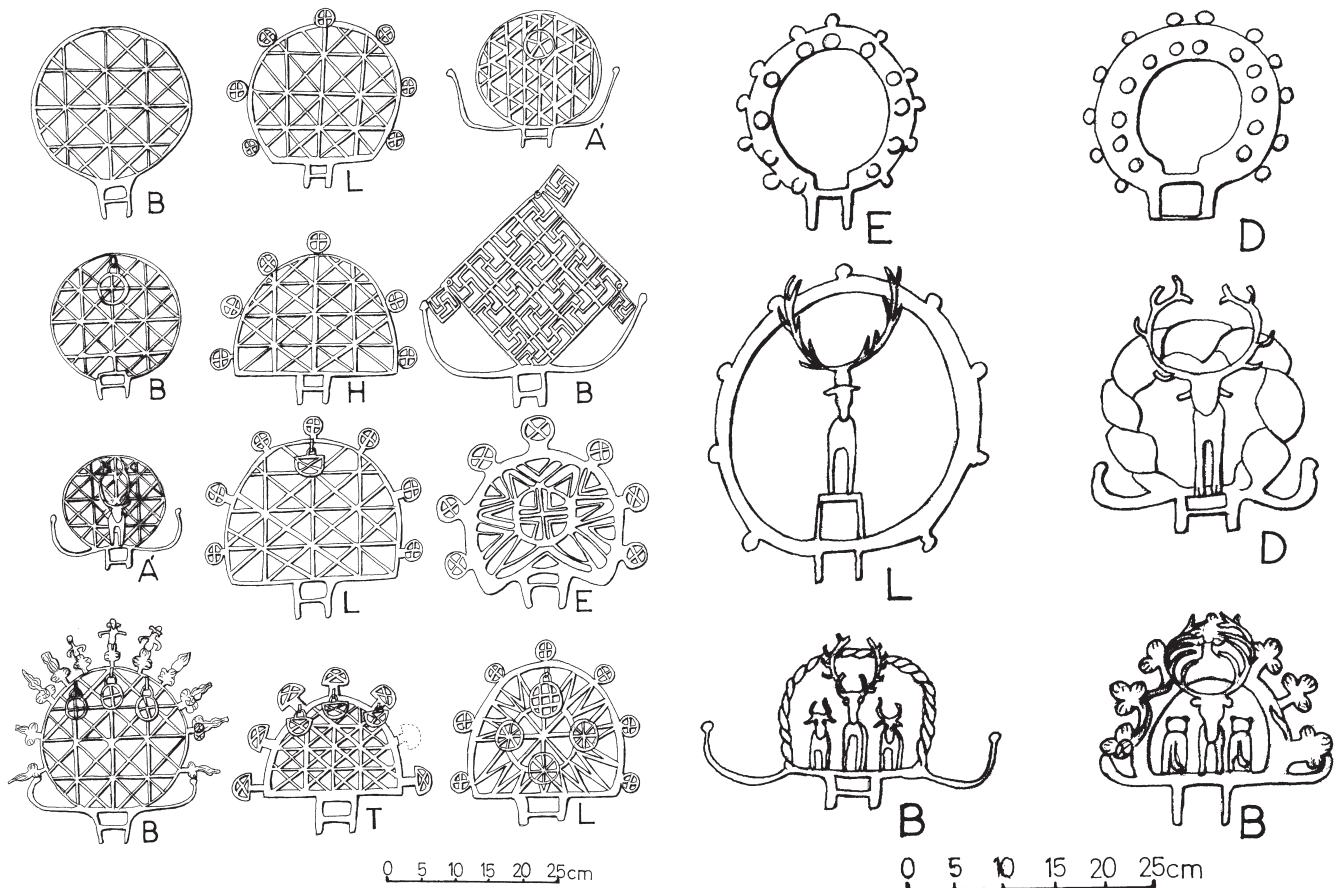


Figure 13.7. The variety of standards as 'individualized creations' deposited in the royal tombs of Alacahöyük (after Özyar 2000, figs. 3b and 4).

Jesus 1980, 43–4), enabling metal smiths to materialize this cosmology in ways that were probably inconceivable before; though of course the ability to manufacture the sophisticated metal objects does not explain the need or desire to.

Metals were sparsely and infrequently deposited in burials in central and north-central Anatolia prior to the founding of the royal tombs of Alacahöyük (Bachhuber 2008, tables 7–8). Metal has been identified in non-elaborated, generalized and easily transferable forms of jewellery and weapons.¹⁴ Thus it would seem that it was the ownership and display of the metal that held significance prior to the royal tombs of Alacahöyük, though the form itself had not yet achieved any strong meaning – cosmological or otherwise. This observation gains limited support in central and north-central Anatolia from the frequent identification of animal figurines and idols in contexts predating the royal tombs of Alacahöyük at Büyük Güllücek, Alışar and İkiztepe (Yakar 1985b, 179, 186, 198). These objects were manufactured exclusively in terracotta.

If the form of a metal object communicated less than the metal invested in it, there would have been little incentive to

preserve the object's form (through deposition or sacrificial offering); or, there would have been little reservation in releasing the object or melting it down. In this line of reasoning, metal was normally perceived as a material to be circulated. The difference then in depositional practices between the two periods may have had less to do with the relative metallurgical wealth or poverty of these societies (though clearly production and exchange had intensified), rather in differing perceptions and necessarily uses of metal.

The social expectations placed on metal objects reached a peak in the royal tombs of Alacahöyük (Fig. 13.6), commensurate with a choice to invest large volumes of precious, exotic and non-precious metals in semiotically potent and sacral forms like the stag/steer figurines and standards (Figs. 13.2 and 13.7). It was commensurate also with the choice to invest all of this metal in depositional contexts. These were not generalized types as were used and circulated in the previous period, rather they were highly embellished 'individualized creations' (cf. Davenport 1986,

106) that were probably manufactured for the single event in which they were to be displayed and deposited (Fig. 13.7; see also Özyar 2000, 111 for direct associations with individuals). This might be one reason why the standards and figurines, which represent some of the most elaborated metallurgical craftsmanship in Bronze Age western Asia, do not find comparanda in contexts outside of north-central Anatolia (see Zimmermann 2006b, fig. 1). The forms may have been created to be consumed in the burials they were found in.

The fundamental innovation at Alacahöyük is that metal forms had become imbued with sacred associations. Implications may be read in William Davenport's observations on sacral objects in the Eastern Solomon Islands:

"[T]he utilization of exceptional skills, or what we think of as aesthetic expressions, sets certain objects apart from ordinary things and commodities and designates them for use on ritual occasions alone. It decommoditizes them. Put another way, aesthetically embellished objects signal ritual contexts and ritual utilization. It is as if a nonmaterial or spiritual dimension is added to an object, committing it to a domain in which social and religious values prevail over economic ones." (Davenport 1986, 107)

The new perception of metal forms and objects facilitated more extravagant consumption (or sacrifice) of metal at Alacahöyük than was possible in previous periods. The above observations may explain how this happened, but they do not fully explain why.

The extravagant display and consumption of wealth at Alacahöyük sets in motion useful concepts introduced in Arjun Appadurai's (1986) well known study of commodities, which outlines how the value of objects can be created beyond the spheres of production, supply and demand. He suggests that activities of exchange also create value, and assesses arenas of exchange to understand how social interaction is related to the valuation of commodities. He describes one such arena as a 'tournament of value'. These events occur periodically and within sanctioned social contexts removed from daily and mundane social and economic activities. The actors involved are nevertheless brought together in a competitive arena to jostle for social and political status, partially through the negotiation of desirable materials and objects. The jostling includes 'the disposition of the central tokens of value in the society in question' (Appadurai 1986, 21). Such tournaments are hosted, ultimately, as events to create 'new paths of commodity flow' (Appadurai 1986, 57).

In this line of reasoning, the ancestral dead in the royal tombs of Alacahöyük created for their living successors an arena within which to negotiate status. This innovative

behaviour included the disposition of central tokens of value, namely desirable objects and materials invested with sacral value. Here, the metal adornment of the dead disguised a prestige elevating and public expenditure of metal, whereby "strategic skill is culturally measured by the success with which actors attempt diversions or subversions of culturally conventionalized paths for the flow of things" (Appadurai 1986, 21). The diversions and subversions in the context of this discussion included the appropriate adornment of ancestral dead in mortuary rituals.

This public act of consumption would have impressed on an audience a series of messages related to the living and dead participants of the ceremony. At the very least, the builders of the first royal tombs had provoked a 'social rupture' from previous practices and relations in north-central Anatolia, which included the conspicuous sanctioning of inequality through extravagant mortuary ritual (*cf.* Voutsaki 1997; 1998; Wolpert 2004, 130–2 for discussions of the Shaft Graves of Mycenae). Thus an explicit regional hierarchy was created in north-central Anatolia, outlined in recent excavations and analyses of contemporary and neighbouring cemeteries, and the objects and materials deposited in them (Yıldırım and Sipahi 2004; Yıldırım 2006; Zimmermann 2006b; Zimmermann and Yıldırım 2008).

Status competition (drawn largely from ethnographic analogy) has become a familiar interpretation of extravagant depositional contexts and practices in prehistoric societies. It seems a broad consensus has been reached regarding how elites were able to legitimize their station through the self-aggrandizing public display and consumption of specific kinds of objects and materials, though Aaron Wolpert (2004, 129) observes that legitimacy could not be achieved in acquiring, displaying or consuming wealth alone, "*unless* it was grounded in collective narratives and an accepted cosmology". Less well understood is why specific kinds of materials acquired the characteristics suitable to display and consume (Wolpert 2004, 130; after Lesure 1999, 23–4). How did metal achieve its overwhelming social and cosmological salience for elite communion in this cemetery at Alacahöyük? The problem might be approached through the historical contingency of an incipient world-system that included north-central Anatolia near the middle of the third millennium BCE, and consideration of subsequent interactions between Anatolian and Syro-Mesopotamian value systems.

The meeting of divergent regimes of value at Alacahöyük

The sum of objects interred in the royal tombs of Alacahöyük should be interpreted as a measure of value rather than a measure of wealth, or a measure of the exceptional value the

builders of the tombs imbued in metal and metal objects. Metal held a sacrificial value when it was displayed and deposited in these burials that contrasts sharply with the value regime observed in the archives of contemporary Ebla, where silver and gold were recorded in measured weights of *shekel* and *mina*. The administrative elite of Ebla clearly perceived metal as a liquid commodity and used it as a fixed medium of priced exchange.¹⁵ In David Wengrow's contribution to this volume, the liquidity of metal in the Eurasian and western Asian Bronze Age is an urban 'archival' value, which can be linked with a range of administrative practice that includes metrological systems and their accompanying weights, measures and the standardization of metal forms into ingots. I cited this kind of evidence above to suggest that a standardization of value emerged across western Asia that originated in the commercial enterprise of Syro-Mesopotamian urban centres, facilitating (if indirectly) the circulation of materials to Syro-Mesopotamia. It is thus worth considering the coexistence of two divergent valuations of metal in north-central Anatolia during the period of the royal tombs at Alacahöyük – namely an indigenously constructed sacrificial value, and a liquid value ultimately derived from foreign commercial enterprise (*cf.* Wengrow, this volume, on 'sacrificial' versus 'archival' economies). The latter might be glimpsed in a neighbouring and roughly contemporary hoard in north-central Anatolia at Mahmatlar that included silver ingots (Koşay and Akok 1950) and the wide profusion of ingots and ingot moulds across Anatolia in this period (see note 4), or in the identification of ring and spiral jewellery forms in the royal tombs of Alacahöyük,¹⁶ and the similarly wide and contemporary distribution of these forms across Anatolia. An aggressive or 'predatory' urban ideology (Wengrow, this volume) had entered the steppe of north-central Anatolia in the mid-third millennium (Fig 13.1). The sacrifice of wealth in the ritual entrapments of the royal tombs of Alacahöyük can thus be interpreted, in part, as an engagement with this new way of valuating the material world.

Ethnographic studies on the broadly analogous introduction of money to non-monetary social economies may be one approach to this problem. A collection of essays (in Parry and Bloch 1989) has challenged the widely held interpretation that the introduction of money necessarily corrupts the moral and cosmological order of traditionally non-monetary societies. These studies suggest that money (and its valuation) is generally subsumed into already established 'long-term orders of exchange' and 'short-term orders of exchange'. The former incorporates value regimes that uphold the moral and cosmological order (or 'long-term restorative cycles'), where the latter short-term cycle defines the regular transactions that occur in the day to day. The two spheres of valuation do not interface or compete. When money circulates through a short-cycle it is used as a standard of valuation to buy and sell in impersonal, self-interested and morally equivocal

transactions. Money acquired from these transactions is then invested in long-term orders of exchange and undergoes a symbolic and cosmological transformation, where it is spent (or morally purified) in extravagant and economically irrational ritual activities that uphold the moral order of a community (Bloch and Parry 1989, 25).

The above observations underscore how a society can absorb foreign and commercial regimes of value without destabilizing their own moral and cosmological order. Such an approach provides a conceptual framework to begin to understand the relationship between expanding networks of metal exchange, communication, and the extravagant deposition of metal at Alacahöyük. Metals were mined from ore sources that were probably woven into the cosmological fabric of this society. The metal extracted from them would have been imbued with a salience derived from its origins in the veins of sacred, mountainous landscapes. This is not to suggest that all locally procured metal was at all times perceived and used sacredly. It too likely circulated in short-term cycles as an indigenous commodity; but metal in its local use and circulation would have been invested with specific values originating in a cosmology that incorporated sacred landscapes and mysterious sources. Metal would have been exchanged with this ideological weight.

Regimes of value derived ultimately in the urban centres of Syro-Mesopotamia would have nevertheless entered into the distant negotiation and exchange of this same metal. In such a scenario, metal was symbolically and morally reduced to a fixed medium of priced exchange (probably related to equivalencies bearing on the *shekel*) in the short-term transactions that circulated the resource towards urban centres in Syro-Mesopotamia. One motivation for the depositional behaviour observed in the royal tombs of Alacahöyük may have been an attempt to resolve this potential threat to indigenous value systems. Metal was sacrificially deposited (in a long-term transactional cycle) in the burials of ancestors to uphold its ideological value. Such expenditures offer a moral imperative to the prestige elevating behaviour of extravagant metal deposition and can also begin to address the problem of how and why metal acquired the value that it did in the royal tombs of Alacahöyük.

Conclusion

Archaeologists working in EBA Anatolia have interpreted the sum of objects interred in the royal tombs of Alacahöyük as a measure of wealth derived from exchange activities between Anatolia and Syro-Mesopotamia. The relationship between wealth and the deposition of it is not so straightforward, however. The assemblages at Alacahöyük represent one of the most extravagant expenditures of metal in depositional

contexts in the whole of Bronze Age western Asia; however the builders of these tombs could not have ranked as one of its wealthiest societies.

'Wealth' as such may be conceptually misleading in assessing the significance of Alacahöyük. It is more appropriate to study the assemblages as a measure of value. I have reconstructed divergent regimes of value within an incipient world-system that emerged out of Syro-Mesopotamian enterprise beginning near the middle of the third millennium. An aggressive, commercial value regime was communicated across much of western Asia in this period. It was ultimately derived from and transmitted through an urban demand for resources, in particular metals. Supply met demand in north-central Anatolia via incentives to acquire imported metal (tin) and other materials (lapis) and perhaps also imported commodities of Syro-Mesopotamian manufacture (textiles or oils?). These exotic objects and materials would have been imbued with a significance derived from their distant and exotic origins. The exotica would have been displayed, circulated and consumed accordingly by self-aggrandizing elite groups in north-central Anatolia.

The extravagant consumption of metal in public mortuary events at Alacahöyük was a complex gesture that should also be studied as an elite-aggrandizing strategy related to the negotiation of both metal and status, though additional motivations may be accessible to the archaeologist. I have reconstructed an ideological and moral imperative drawn largely from ethnographic analogy and the historical contingency of a world-system. Metal and metal objects in the royal tombs of Alacahöyük were imbued with a sacrificial value that derived from inherent tensions created in the distant exchange of locally procured metal. Metals mined in Anatolia (gold, silver, copper) held values that were created within the cosmology of its miners and manufacturers. Aggressive, commercial, urban and foreign regimes of value would have nevertheless entered into negotiations of the distant circulation of metal. The ideological value of metal was necessarily reduced or threatened in its negotiation. The indigenous value of metal could be restored through its extravagant sacrifice in highly choreographed, cosmologically salient ceremonies in north-central Anatolia that incorporated the ancestral dead.

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Notes

- 1 Most discussions of the royal tombs of Alacahöyük cite 13 burials. This is probably because tomb complex T/T1 has been overlooked as one burial: it actually represents two architecturally discrete burials.
- 2 For relatively high percentages of tin content in Alacahöyük bronzes see Esin 1969.
- 3 See de Jesus 1980, 95 for discussion of use of tin-bronze and arsenic-bronze at Alacahöyük.
- 4 Troy III Treasures F for notched gold and electrum bar ingots (Antonova *et al.* 1996, cat. nos. 128–32); Treasure A for silver *Zungenbarren* (Schliemann 1880, nos. 787–92); see Bobokhyan 2007, 89–90 for discussion of ingots in the Trojan treasures; for silver plano-convex ingots in a roughly contemporary hoard at Mahmatlar in north-central Anatolia (Koşay and Akok 1950); for a roughly contemporary lead ingot from Phase II at Göltepe in the central Taurides north of Cilicia (Yener 1994, 34); for a roughly contemporary arsenic-copper ingot from an EBA II level at Tepecik in the Altınova region of the far upper Euphrates (Esin 1987, 72, 76). For moulds of ingots in EBA and MBA contexts across Anatolia see Müller-Karpe 1994, 141.
- 5 Akkadian period hoard at Tell Brak for silver ingots (Oates and Oates 1993, 163–4, 184–8).
- 6 Tell Chuera for bun copper/bronze ingots (Moortgat and Moortgat-Correns 1978, 66).
- 7 Bronze bun ingot possibly from mid-third millennium contexts at Tell al-Ubaid (Moorey 1999, 245); Powell (1978, 238, pl. III) references a silver ingot from a hoard in 'Agade' contexts at Tell Asmar, though I could not locate this referenced ingot.
- 8 Susa hoard including five copper bun ingots (Tallon 1987, cat. nos. 87–92); see also Moorey 1999, 244–5 for discussion of third millennium BCE copper and bronze ingots.
- 9 For several sites in Oman where bun shaped copper ingots have been identified, see Hauptmann *et al.* 1988, 41, fig. 4:6.
- 10 Copper bun ingots from Lothal, see Rao 1965.
- 11 See Öztan 1997 for a hoard of (fragmented) silver ingots and jewellery (in various ring forms with prototypes in the Early Bronze Age) at Acemhöyük in the Phase III palace (Middle Bronze Age=Assyrian Trading Colony period). I address the Trojan treasure deposits in Bachhuber 2009.
- 12 See Matthews and Glatz 2009 for an extravagant hoard of possible Kaska attribution in LBA contexts at Kınık-Kastamonu in north-central Anatolia.

- 13 For catalogue of MBA-LBA mortuary contexts in Anatolia, see Akyurt 1998.
- 14 See for Period IV Alacahöyük a copper armband and copper ring in Koşay 1944, 160; see, for Büyük Güllücek, a plain copper dagger in Koşay and Akok 1957, 48–9; see, for Alişar Level 14, copper bracelets and silver earrings in von der Osten 1937, 51.
- 15 Though cf. Jennifer Ross's study of the socio-political manipulation of metal and metal industries by Syro-Mesopotamian elites in the third millennium (Ross 1999).
- 16 See Koşay 1951, pls. 120, 134 for a range of ring forms adorning the dead at Alacahöyük, in Tomb H large ring anklets, in Tomb M spiral 'hair ring' forms (Arık 1937, CLXXVI, Al. 254–255), and in Tomb K a range of spiral forms (Koşay 1951, pls. CLXXXIV. Res. 2, CLXXXVI); see Zimmermann *et al.* 2009, fig. 4, for spiral ring forms in burials at nearby Resuloğlu.

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