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Indigenous Social Complexity at Hacınebi (Turkey) and the Organization of Uruk Colonial Contact

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> …this is an imperialism that weakens at its periphery. At the center are hands on the levers of power, but the cables have, in a sense, been badly frayed or even cut. It is a world system in which minor agents, allies, and even subjects at the periphery often guide the course of empires.
>
> —Richard White, *The Middle Ground: Indians, Empires, and Republics in the Great Lakes Region, 1650–1815*

The impact of Mesopotamian expansion during the Middle and Late Uruk periods (ca. 3700–3100 B.C.) on neighboring societies in Iran, Syria, and Anatolia has been the subject of considerable debate (Algaze 1989b, 1993a; Rothman 1993; Schwartz 1988b; Stein 1990, 1998; Wattenmaker 1990). Only recently, however, have researchers broadened their research focus away from the Uruk colonies themselves towards an examination of the indigenous societies with whom the Mesopotamians interacted (Frangipane 1993; Stein, Bernbeck et al. 1996). It is impossible to determine the degree of Uruk influence on the development of neighboring groups without establishing a baseline for comparison. We can do so by documenting indigenous social and political organization in southeast Anatolia, north Syria, and the Iraqi Jazira in the periods before intensive contact and Mesopotamian colonization began ca. 3700 B.C. At the same time, we can best understand the Uruk expansion by studying the organization of economic and political interaction between the Mesopotamians and indigenous polities in these zones of primary contact. In this chapter I examine the

Uruk expansion by looking at the evidence from Hacınebi Tepe, on the Euphrates River trade route in southeast Turkey.

This chapter has three parts. The first section presents evidence from Hacınebi indicating that the indigenous polities of this area were already complex before the Uruk expansion, so one cannot argue that contact with Mesopotamia was the primary influence on political development in the periphery. This preexisting, indigenous social complexity in areas such as southeast Anatolia structured the political economy of interaction between the Uruk colonies and their local host polities. In the second part, I present a definition of colonies and their archaeological correlates. Using these criteria, I show that a small colony of ethnically distinct Mesopotamians was present at Hacınebi for at least two centuries but did not dominate the local Anatolian population either politically or economically. Instead, the two groups seem to have engaged in symmetric exchange. Finally, I will explore the implications of this long-term, peaceful, symmetric exchange for the overall organization of the Uruk regional interaction network. In particular, I suggest that we need to recognize the existence of tremendous internal variation in power relations between the urbanized Uruk states and neighboring subregions. Consequently, Mesopotamian political and economic influence varied depending on the power of the indigenous polities and declined with distance from the southern alluvium.

THE INDIGENOUS SOCIETIES OF SYRO-ANATOLIA BEFORE THE URUK EXPANSION

In chronological terms, the late fifth and early fourth millennia B.C. indigenous cultures in north Syria and southeast Anatolia are contemporaneous with the terminal Ubaid and Early Uruk cultures of Mesopotamia. However, in cultural terms they were distinctive local entities. The social, cultural, and political organizations of these small-scale and heterogeneous northern polities are only now being clarified through excavations (or reanalyses) of sites such as Arslantepe in the Anatolian highlands (Frangipane 1993), Brak in the north Syrian plain (Oates and Oates 1997), Gawra in the Iraqi Jazira (Rothman 1988, 1994b), and Hacınebi in the piedmont zone between them (Stein, Bernbeck et al. 1996; Stein, Edens et al. 1996; Stein et al. 1997; Stein, ed. 1999). In the absence of a better term, researchers often refer to

the indigenous groups of Syro-Anatolia in the fourth millennium B.C. as the "Local Late Chalcolithic" cultures, to distinguish them from the intrusive Uruk colonies of the mid- to late fourth millennium.

Although differing from one another in terms of local ceramic and architectural styles, the Local Late Chalcolithic polities of the eastern Taurus (Arslantepe), the Taurus piedmont (Hacınebi), the Khabur headwaters in north Syria (Brak, Hamoukar), and the north Iraqi Jazira (Gawra, Hawa) seem to exhibit a number of fundamental similarities in their economic, political, and ideological systems. The highland site of Arslantepe has a crucial location close to the principal copper, lead, and silver deposits of eastern Anatolia (Frangipane and Palmieri 1987:299; Palmieri 1985:196–202; Palmieri et al. 1993). Evidence for metallurgy and ceramic mass production suggests that local highland communities had already begun to develop a fairly complex, specialized economic organization in Arslantepe period VII, before the Uruk expansion (Palmieri 1985:196). In the piedmont and steppe zones, sites such as Hacınebi, Brak, Hamoukar, and Gawra show similar evidence for social complexity in the early fourth millennium, before Uruk contact.

During the following period of strong Mesopotamian influences (VIA), Arslantepe shows signs of increasing socioeconomic complexity. Seal impression motifs reflect both local traditions and Mesopotamian iconography. Door-lock sealings reflect centralized control over storage and disbursement of commodities (Palmieri 1985:202, 1989). Overall, the evidence suggests that Arslantepe VIA had developed a highly centralized administrative system controlling metallurgy, agricultural production, and the local exchange system (Frangipane and Palmieri 1987:299). There is virtually no evidence for the physical presence of Mesopotamians at Arslantepe; it is a completely local Anatolian site under the control of the local rulers. The highland sites would thus appear to be independent complex polities that traded with the Mesopotamians (whether directly or indirectly) while remaining *outside* the zone of actual Uruk colonization. Indigenous complex polities had developed also in the piedmont and steppe zones, at sites such as Hacınebi, Brak, and Gawra (and possibly Hamoukar and Hawa, if survey-based size measurements of these latter sites are accurate).

Although these Local Late Chalcolithic societies show a high degree of variability in material culture, they appear to share several

key characteristics, among them two-level site-size hierarchies, regional centers with internal functional differentiation, monumental architecture, exotic raw materials obtained through long-distance exchange, advanced copper and silver metallurgy, mortuary evidence for hereditary elites, and complex administrative systems based on stamp seals whose broadly similar wild animal motifs suggest some kind of shared elite ideology across the Syro-Anatolian borderlands. Taken together, the limited available evidence suggests that these Local Late Chalcolithic polities had independently developed complex forms of political, social, and economic organization in the early fourth millennium B.C.

Excavations at Hacınebi afford a rare opportunity to make the broad-scale horizontal exposures necessary to clarify the organization of these polities in the period prior to the onset of intensive contact with Uruk southern Mesopotamia. At the same time, the presence of an Uruk enclave in the northeast corner of the site enables us to study Mesopotamian-Anatolian interaction at the micro level. Comparison of the earlier and later phases at Hacınebi allows us to determine the degree to which the Uruk expansion affected the indigenous political and economic systems of southeast Anatolia.

Hacınebi, Turkey: Indigenous Complexity in the Early Fourth Millennium

Hacınebi Tepe is a 3.3-hectare, roughly triangular mound on the limestone bluffs overlooking the east bank of the Euphrates River, 5 kilometers north of the modern town of Birecik in Şanlıurfa province, southeast Turkey. The site lies on the main north-south river trade route linking Anatolia with Syria and Mesopotamia. Hacınebi also commands a strategic location at the midpoint of the major east-west river crossing zone that extends from Zeugma (the location of the Hellenistic bridge) in the north down to Birecik, where the ford or bridge has been in more or less continuous use from the Roman/Byzantine periods to the present. Six seasons of excavation (1992–97) at Hacınebi have investigated the Local Late Chalcolithic (LLC) indigenous societies in southeast Anatolia and the organization of their interaction with Uruk Mesopotamia during the fourth millennium B.C. (Stein 1998; Stein and Mısır 1994, 1995, 1996; Stein,

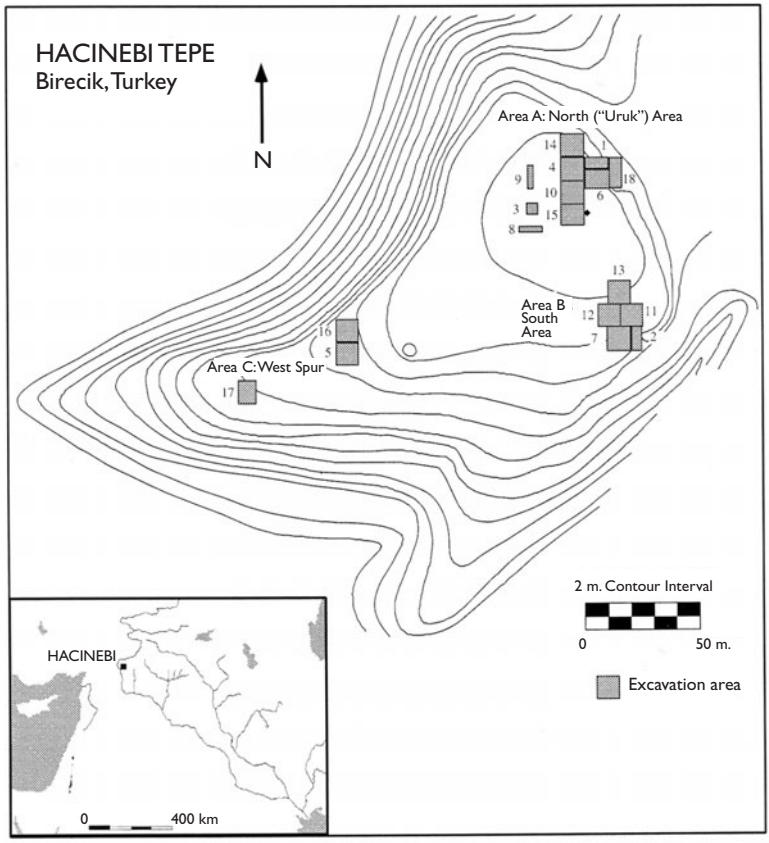

FIGURE 8.1

Site map of Hacınebi Tepe, Turkey.

Bernbeck et al. 1996; Stein, Boden et al. 1997; Stein, Edens et al. 1996, 1998). Eighteen trenches have exposed more than 1,400 square meters of Late Chalcolithic deposits in three separate excavation areas, providing a spatially representative sample of variation in architecture and activities at the site (fig. 8.1).

Three main occupations are attested at Hacınebi. Fifth- to second-century B.C. Achaemenid/Hellenistic deposits are present immediately below the plow zone and extend over the entire site. These overlie and often cut through a layer of erosional deposits that seals off two areas of Early Bronze I burials at the north and south ends of the site (Stein, Boden et al. 1997). These burials cut into a second erosion layer and

the underlying Late Chalcolithic occupation, dating approximately 4100–3300 B.C., based on calibrated radiocarbon dates (Stein, Edens et al. 1996: fig. 14). Stratigraphy and associated ceramics allow us to subdivide the Late Chalcolithic occupation into an earlier phase A (equivalent to LC 2 in the chronological system of this volume), which has early forms of local Anatolian handmade, chaff-tempered ceramics, and a later phase B. Phase B1 (LC 3: ca. 3800–3700? B.C.) has late forms of local Anatolian ceramics (with beveled-rim bowls appearing at the end of the phase), while phase B2 (LC 4: ca. 3700–3300? B.C.) has both late local Anatolian and the full range of Mesopotamian Late Middle Uruk ceramics (Stein, Edens et al. 1996:96–97). Late Chalcolithic phase A marks the earliest occupation of Hacınebi and directly overlies sterile gravels or bedrock.

The Evidence for Social Complexity in Phases A and B1 (LC 2 and LC 3)

Social complexity is difficult to identify in the archaeological record for two main reasons. First, in prehistoric or nonliterate societies, the relationship between systems of meaning such as political ideologies and their material culture correlates is problematical and subject to serious interpretive ambiguities. In addition, theoretical critiques of evolutionary typologies have emphasized that the application of terms such as "chiefdom" as a unitary "type" of society can mislead researchers into lumping fundamentally different societies within a single conceptual framework that masks rather than clarifies variation (Kristiansen 1991; Yoffee 1993). Although one must always beware the perils of uncritical trait listing, there is a general consensus among archaeologists that co-occurrence of a number of locational, mortuary, architectural, and artifactual patterns provides reasonably secure evidence for the emergence of hierarchically organized complex societies that—for heuristic purposes—we can call "chiefdoms" in the broad, flexible sense that this term is now generally taken to mean (Creamer and Haas 1985; Earle 1991; Flannery 1972, 1995; Johnson 1987a; Peebles and Kus 1977; Snarskis 1987; Spencer 1987; Stein 1994b; Steponaitis 1981; Wright 1984; Wright, Miller, and Redding 1980). These lines of evidence include multilevel site-size hierarchies, differentiation in grave goods, high-status adult and/or children's burials,

architectural differentiation both within settlements and between centers and surrounding rural communities, long-term economic differentiation, concentrations of exotic and/or precious raw materials in regional centers, high volumes of long-distance trade in prestige goods, attached craft specialization, monumental public architecture, evidence for the centralized appropriation and storage of surpluses, and complex administrative or decision-making hierarchies. On this basis, locational, architectural, mortuary, administrative, and artifactual evidence argue for a relatively high degree of sociocultural complexity at Hacınebi in the early fourth millennium phases A and B1, before the beginnings of contact with Uruk Mesopotamia.

In this period, two-tiered settlement hierarchies of small regional centers and dependent villages can be seen in a broad band across the piedmont-steppe interface in southeast Anatolia, north Syria, and northern Iraq (Lupton 1996; Whallon 1979; Wilkinson and Tucker 1995). In the Khabur headwaters subregion, survey data suggest that some early fourth millennium indigenous centers such as Brak, Hamoukar, and Hawa reached sizes of 12 to 33 hectares (for Hamoukar: estimated size 12 hectares—Jason Ur, personal communication 1999; Hawa: estimated size 33 to 50 hectares—Wilkinson and Tucker 1995:44; for Brak site size estimates, see Schwartz, this volume). In the Euphrates River valley, the phase A settlement at Hacınebi starts to show clear signs of architectural differentiation and the construction of monumental stone architecture in all three main excavation areas. At the west end of the site, a series of at least four narrow stone storerooms 7 meters long were constructed. These storerooms are associated with evidence for metallurgy and with administrative activities. At the south end of the site (area B), a monumental stone enclosure wall was constructed with 2-meter-wide niches and buttresses along its east face. This 3-meter-wide wall is preserved to a height of over 3.3 meters and extends at least 20 meters in the excavated exposures. Inside the enclosed area, a stone and mud brick platform 3 meters high, at least 7 by 5 meters in area, was constructed (fig. 8.2). During phase B1, the northeast end of the site was transformed into a special-purpose area consisting of a monumental stone platform 2.8 meters high, measuring at least 8 by 7 meters in trench exposures. A large open area was created to the east and northeast of the platform through the construction

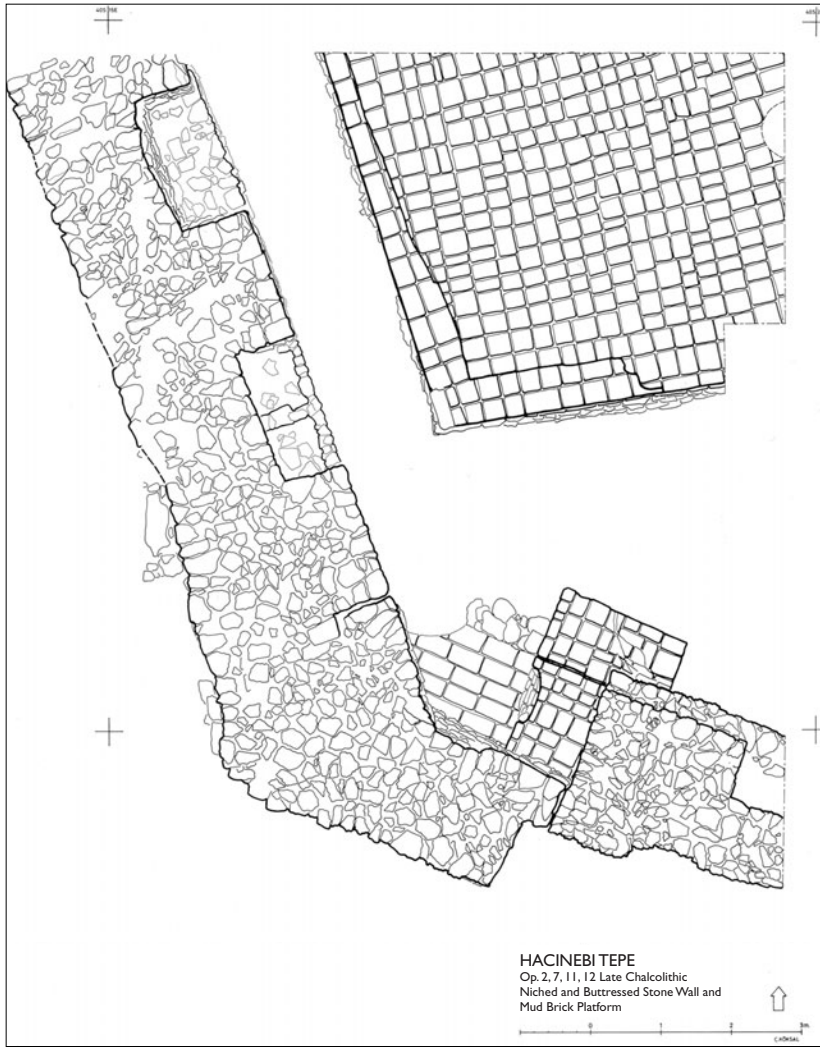

Figure 8.2

Hacınebi Area B, enclosure wall and platform (phases A–B1).

of two massive stone terraces (fig. 8.3). The platform may have been either a ritual structure or possibly an elite residence; however, its function remains uncertain because it was remodeled and rebuilt, so that nothing remains from its original mud brick superstructure.

Mortuary practices provide additional evidence for emergent social complexity in the early fourth millennium occupation at Hacınebi.

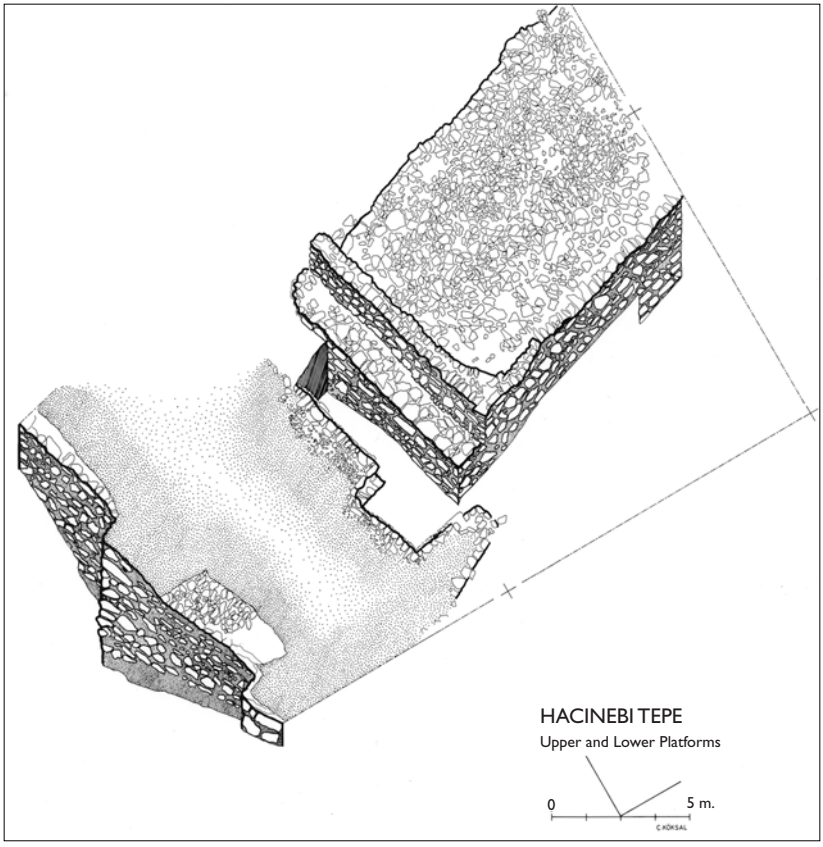

Figure 8.3

Hacınebi Area A, isometric projection of terrace and platform complex (phase B1).

The inhabitants of the phase A and B1 settlements continued the fifth millennium local southeast Anatolian tradition of jar burials of infants and small children. The burials are generally articulated, with no grave goods. An unusual phase A infant burial sealed beneath a room floor in operation 17 at the west end of the site provides important evidence for emerging social stratification and elite formation in the early fourth millennium. Inside the burial jar along with the skeleton were placed a miniature ceramic vessel, one copper ring, and two silver earrings as grave goods (Stein, Edens et al. 1996:96). This is significant for several reasons. First, the infant jar burials very rarely contain grave offerings of any sort. Second, the earrings are the earliest known silver artifacts

from the site and would certainly be among the earliest silver pieces known from Anatolia (apparently predating the silver finds at Korucutepe by three to five hundred years—Brandt 1978; van Loon 1978:7–9; see also discussion in Prag 1978:39). The combination of silver's scarcity in general and its presence in an atypical mortuary context suggests that this was a highly valued prestige good. The deposition of the three metal rings in an infant burial provides good evidence for ascribed status—specifically the emergence of inherited elite identity in the early fourth millennium at Hacınebi.

Record-keeping artifacts such as stamp seals and seal impressions provide a third line of evidence for hierarchical administrative and social systems in phases A and B1 at Hacınebi. Stamp seals with a broadly similar repertoire of animal motifs are well known from fourth millennium Local Late Chalcolithic sites in the eastern Anatolian highlands (at sites such as Arslantepe and Değirmentepe—Esin 1990; Ferioli and Fiandra 1983; Frangipane 1993, 1994a), in the steppes of the northern Iraqi Jazira at Gawra (Rothman 1994a, 1994b; Tobler 1950), and at Hacınebi in the Taurus piedmont zone. Each stamp seal was carved with a unique design to identify its individual or institutional owner. Stamp seals in the north and cylinder seals in southern Mesopotamia served as extremely important administrative technologies that allowed individuals or centralized institutions to monitor the ownership, movement, receipt, storage, and disbursement of goods as trade items, rations, taxes, or tribute with remarkable accuracy even in the absence of a developed writing system. As such, the presence and spatial distribution of seals and seal impressions can serve as evidence for the operation of decision-making hierarchies and centralized control over economic activities (Dittmann 1986a; Ferioli and Fiandra 1983; Frangipane 1994a; Frangipane and Palmieri 1989; Johnson 1973, 1987a; Pittman 1994a; Rothman 1988; Wright and Johnson 1975; Wright, Miller, and Redding 1980; Wright, Redding, and Pollock 1989; Zettler 1987).

A number of stamp seals and seal impressions have been recovered from phases A and B1 at Hacınebi (fig. 8.4). This is not in itself conclusive evidence for complex bureaucratic systems, since stamp seals occur at Near Eastern sites as markers of personal ownership from Neolithic times onward (see, e.g., Akkermans and Duistermaat 1996). However,

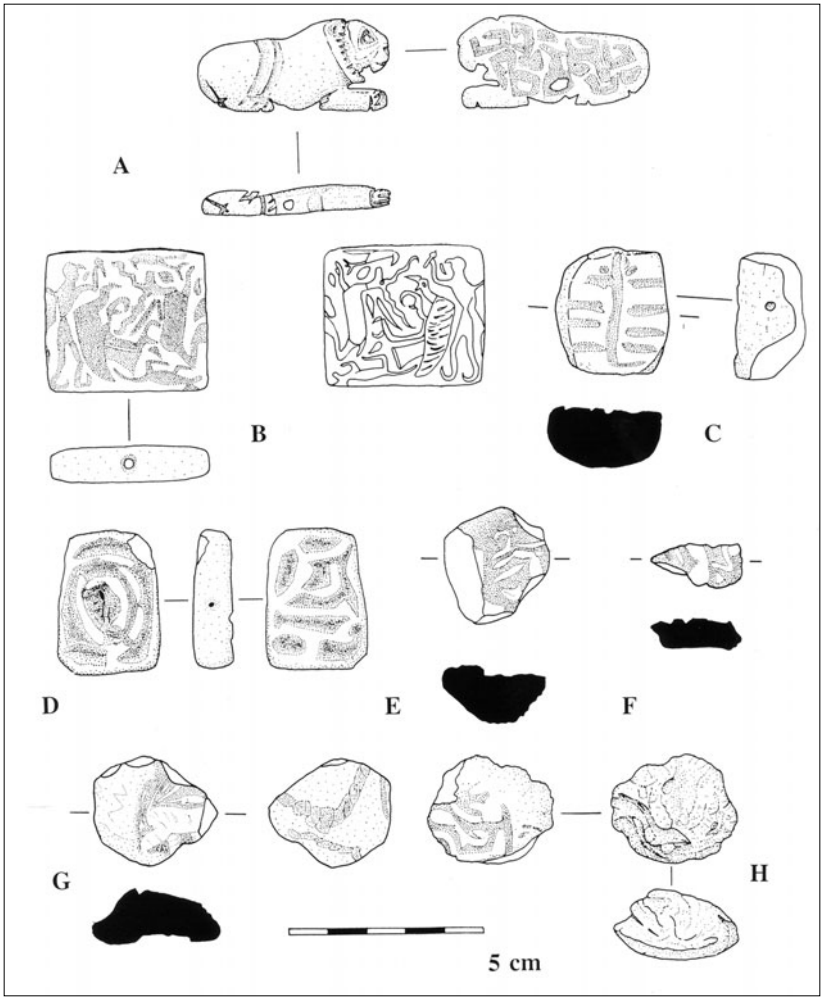

Figure 8.4

Hacınebi Local Late Chalcolithic stamp seals and seal impressions.

variation in seal design and the spatial distribution of the seals and sealings provide important evidence for administrative hierarchy. Hans Nissen has argued that in late fourth millennium Mesopotamia one can distinguish high-status individuals from lower-level temple functionaries based on the complexity and manufacturing technique of seal designs (Nissen 1977). The early fourth millennium seals from Hacınebi fall into two categories: baked clay or limestone seals with

crudely incised geometrical designs (Pittman 1996a) and one example of a rectangular seal carved from red siltstone bearing an elaborate design depicting deer, vultures, and a mace-carrying anthropomorphic figure (possibly a god or demon—Pittman 1998). The simple, crudely carved seals were found in domestic contexts, while the elaborate seal was recovered from a pit inside a niched, white-plastered mud brick building in area A at the north end of the site. Thus, the spatially patterned variation in seal quality and motifs is consistent with the other evidence suggesting a distinction between higher- and lower-status individuals at Hacınebi. The unbaked clay seal impressions support this interpretation. Although our evidence is still limited, the amount of variation in the design motifs on seal impressions from the north part of the site suggests that the individuals or institutions in this area were receiving goods from a variety of sources, a pattern consistent with the payment of tribute or taxes to a central authority of some sort. Taken together, the seals and seal impressions from the phase A and B1 settlement argue for the hierarchical ordering of the economic system and of individuals, and possibly larger-scale institutions.

Several independent lines of evidence indicate that the phase A and B1 settlement at Hacınebi was an active participant in long-distance exchange networks aimed at procuring exotic raw materials from the Mediterranean in the west, the Tigris-Euphrates headwaters to the north, and the Taurus piedmont to the east. Small amounts of exotic raw materials and finished items (possibly prestige goods) have been recovered from the early fourth millennium settlement. On the floor of a phase A room in the south end of the site, a small carved gray stone pendant was found, apparently made of chlorite, while a chlorite bowl fragment was found in the west area of the site. Since the nearest known chlorite sources are in the Diyarbakır area, almost 300 kilometers to the east (Philip Kohl, personal communication 1996), the Hacınebi pendant and bowl provide evidence for regional exchange of either exotic raw materials or finished prestige goods in the early fourth millennium B.C. (Stein, Edens et al. 1996:212). A second exotic raw material found in the early fourth millennium settlement is cowrie shell from the Mediterranean (170 km to the west), present in the form of three deliberately abraded shell beads. Obsidian was another import to Hacınebi. Instrumental Neutron Activation Analysis (INAA)

results indicate that a surprisingly wide variety of sources was used in phases A and B1, including Nemrut and Bingöl Dağ in eastern Anatolia, Göllüdağ in central Anatolia, and the Gutansar source in Armenia just north of Yerevan (M. James Blackman, personal communication 1998).

Finally, metals—notably copper and silver—were the most important exotic raw materials obtained through long-distance exchange by the phase A and B1 inhabitants of Hacınebi. Neither metal occurs naturally anywhere near the site. We have already noted above the presence of two silver earrings in a phase A infant jar burial at the site. The most likely sources for the Hacınebi silver are either the Amanus Mountain range (the "Silver Mountain" of third-millennium Mesopotamian texts) to the west of Hacınebi on the route to the Mediterranean (Prag 1978) or (most probably) the Keban area, upstream on the Euphrates (Seeliger et al. 1985).

Copper and copper-processing artifacts are far more common than silver, occurring in phase A and B1 deposits in all three main excavation areas at the site (fig. 8.5). Not only are finished products such as small chisels, earrings, and pins present, but open-faced casting molds, crucibles, slags, a tuyere (blowpipe for copper smelting), and four actual smelting pit furnaces have been found as well, indicating that copper was brought to the site in raw form and worked locally (Özbal, Earl, and Adriaens 1998). Analyses of the phase A and B1 copper objects suggest that they were smelted from ores whose composition most closely matches the Ergani source (Özbal 1996, 1997), about 200 kilometers to the north of Hacınebi. Ergani has been one of the richest and most important copper sources in the Middle East since the Neolithic. Ores were presumably transported down the Euphrates by raft to Hacınebi for processing.

The available evidence does not permit us to determine whether the exchange system was monopolized by local elites or functioned in a more open, entrepreneurial fashion. However, the scarcity and exotic origins of the raw materials, combined with their use as ornaments, are consistent with their hypothesized social role as prestige goods materializing an elite ideology (DeMarrais, Castillo, and Earle 1996; Earle 1982). The long-distance exchange of copper, silver, marine shell, and chlorite, presumably as raw materials for prestige goods, supports the locational, architectural, administrative, and mortuary evidence for the

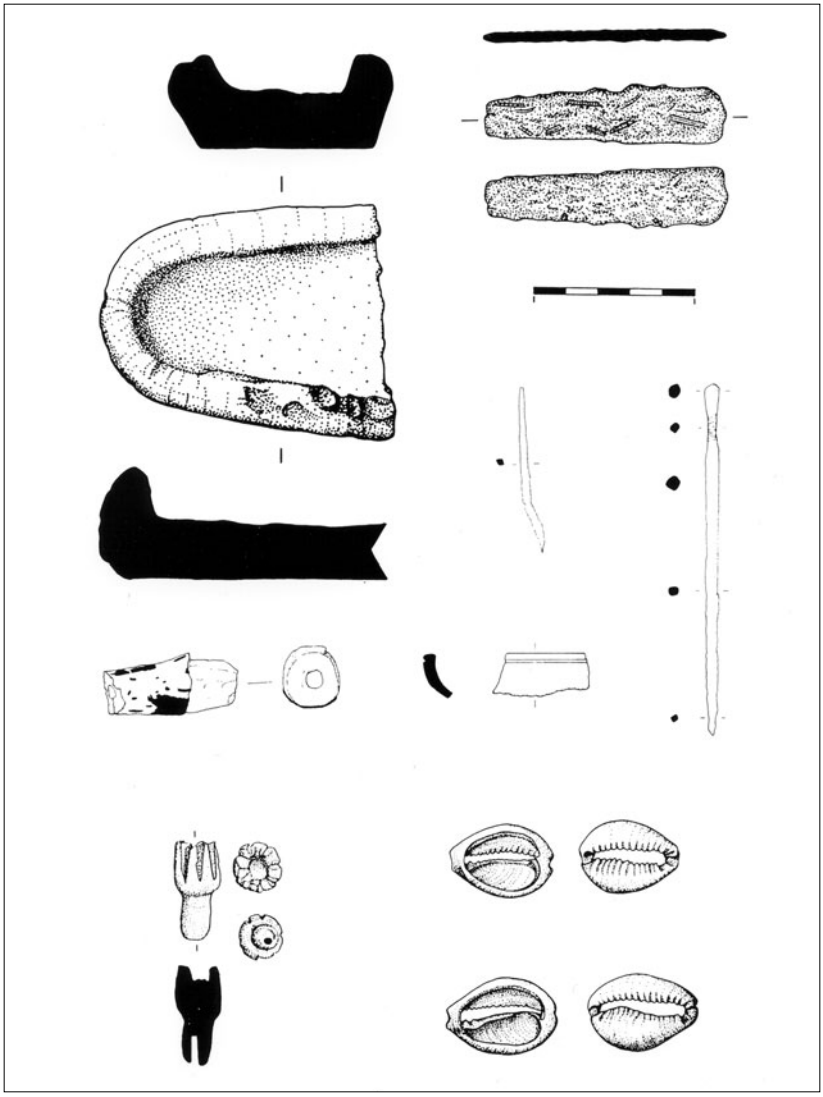

Figure 8.5

Hacınebi metallurgical artifacts and imported materials: oval mold fragment for open casting of copper ingots, copper chisel, copper pins, tuyere (blowpipe), beaded-rim chlorite bowl fragment, blossom-shaped chlorite pendant, worked cowrie shells.

emergence of a small-scale hierarchical social system with hereditary elites in southeast Anatolia during phases A and B1 at Hacınebi.

Overview of Phases A and B1 at Hacınebi

The social, cultural, and political organizations of the phase A and B1 occupations at Hacınebi can be inferred indirectly from architectural, mortuary, administrative, and economic evidence. What we see is the regional center for a small-scale, complex polity, perhaps something we could call a simple chiefdom, with hereditary elites, a complex administrative technology, advanced metallurgy, socioeconomic differentiation, long-distance exchange of raw materials and/or prestige goods, and a craft economy that combined household production with small-scale specialization by independent producers of ceramics and copper ornaments. In general, the economy seems to have been largely geared toward local consumption (see Stein 1999:130–37), although some surplus production must have been taking place to support the limited importation of exotic raw materials for use as prestige goods legitimating the existing social hierarchy. The administrative technology of seals and sealings also suggests that the elites were mobilizing surplus subsistence or craft goods, although the scale of these exactions remains to be determined. The inferred sociopolitical organization of Hacınebi in the early fourth millennium matches the evidence from the centers of other small-scale northern polities such as Arslantepe in the Anatolian highlands (Frangipane 1993), Hamoukar and Brak in the north Syrian plain (Oates and Oates 1997), and Gawra in the Iraqi Jazira (Rothman 1988, 1993, 1994a, 1994b; Rothman and Blackman 1990). The commonalities between these polities in their administrative technology of stamp seals and the broad similarity of the wild animal motifs on the seals also suggest some kind of shared elite ideology across the Syro-Anatolian borderlands. These ideological links between different local elites were probably closely connected to the economic connections among the polities in this interaction network. The exotic raw materials at Hacınebi suggest that the major trade connections at the end of the fourth millennium were to the west, north, and east, linking the site with the other piedmont/steppe chiefdoms, rather than southward toward Mesopotamia.

Hacınebi Late Chalcolithic Phase B2

Phase B2 (LC 4 in the chronology used in this volume—ca. 3700–3300? B.C.) at Hacınebi shows complete continuity in the local

material culture from the earlier phases A and B1. However, we now have the relatively sudden appearance of an Uruk Mesopotamian material culture component as a second, alien assemblage concentrated in the northeast corner of the site (although smaller amounts of Uruk material are present as well in other parts of the site). This material is both contemporaneous with and often separate from the continuing local Anatolian material culture tradition that predominates in all other excavated parts of the site. With about 1,400 square meters exposed in areas A, B, and C, phase B2 is the best-documented Late Chalcolithic occupation period at Hacınebi. Both radiocarbon dates and stylistic evidence indicate that this period of culture contact and interaction began at Hacınebi during the latter part of the Middle Uruk period (in terms of the Mesopotamian chronology; see Wright and Rupley, this volume). The Uruk material encompasses a full range of artifact categories, functions, and behavioral patterns that, taken together, provide strong evidence for the presence of a small Mesopotamian colony existing as an autonomous trade diaspora in this local Anatolian site.

COLONIES AND EMULATION AS FORMS OF INTERACTION

Colonies are a widespread cross-cultural phenomenon closely connected with the emergence of many early state societies in both the Old and New Worlds (Algaze 1993a, 1993b; Champion 1989; Dyson 1985). Archaeologically documented colonies were established by state societies such as Teotihuacan (Pool 1992; Santley, Yarborough, and Hall 1987), Oaxaca (Spence 1993, 1996), Tiwanaku (Goldstein 1993), the Inka (Pease 1982; Van Buren 1996); Uruk Mesopotamia (Sürenhagen 1986a), Egypt (W. Adams 1984), Assyria (Larsen 1976, 1987), Greece (Boardman 1980; Tsetskhladze and De Angelis 1994), the empire of Alexander the Great and his Hellenistic successors (Descoeudres 1990; Hopkins 1979; Rostovtzeff 1938), and Rome (Bartel 1989; Haselgrove 1987; Millett 1990).

A colony can be defined as an implanted settlement established by one society in either uninhabited territory or the territory of another society. The implanted settlement is established for long-term residence by all or part of the population and is both spatially and socially

distinguishable from the communities of the host society. The settlement at least starts off with a distinct formal or informal corporate identity as a community with some level of cultural, economic, military, or political ties to its homeland, but the homeland need not politically dominate the implanted settlement.

Colonies can be established for a variety of purposes, many of them overlapping:

1. as military outposts connected with direct conquest—e.g., Roman provincial colonies;
2. as refuges—e.g., the Puritan Massachusetts Bay Colony;
3. as "safety valves" to resettle population or defuse social conflict—e.g., Greek colonies or Australia;
4. as outposts for the spread of a specific ideology—e.g., the Spanish missions in California;
5. as capital investments in agriculture—e.g., the early English colonies in Virginia;
6. as trade colonies—e.g., Old Assyrian colonies, Phoenician/Carthaginian colonies, Greek colonies such as Massalia, the Venetian or Genoese commercial enclaves, and the early stages of English colonialism in India.

Exchange, usually in conjunction with other purposes, is probably the single most common reason for the establishment of colonies.

Colonies are not the only form of interregional interaction. Emulation is another important way in which people, information, or physical materials can move across social boundaries. Emulation is a process of social identity negotiation in which one group attempts to raise or reinforce its own status by adopting the behavioral, material, or ideological attributes of another group of equal or higher status. Emulation can take place within a society when lower-ranked groups adopt markers of local elite status (see, e.g., Pollock 1983). Often, however, local elites in one area emulate the elites of other, higher-status polities as a way to redefine or reinforce their status relative to competitors or lower-ranked groups in their own society (e.g., Flannery 1968; Joyce 1993; Wells 1992; Winter 1977). This second form of emulation underlies prestige-goods economies but is not limited to the

actual acquisition of foreign goods. Cross-cultural emulation can also occur through the copying in local media of foreign prestige markers (Marcus 1990a, 1990b; Winter 1977). Cross-cultural emulation often involves transformations of meaning, so the same item of material culture may have completely different meanings in its place of origin and in the emulating society (Rogers 1990; Sahlins 1990; Thomas 1991). Emulation is almost always selective, in the sense that some items or styles will be borrowed while others will not, depending on the degree to which they can be rationalized within the cultural system of the emulating group. For these reasons, it is important to emphasize that cross-cultural emulation cannot be taken as evidence for the control of one society over another, since ideological, political, economic, and military power do not necessarily coincide (Schortman and Urban 1994:402). The mere presence of Uruk material culture or Uruk stylistic "influences" cannot in and of themselves be used to prove Uruk control.

Archaeological evidence for cross-cultural emulation would consist of local imitations of the architecture, iconography, and material culture associated with foreign elites. As for portable items of material culture, one might find genuine imported prestige goods as well. These borrowings should be associated with the public buildings, residences, or burials of local elites. One would expect to see differences between local elites and commoners in the distribution of foreign or foreign-inspired material culture. Local elites would be expected to emulate foreign styles in those items of material culture associated with the highly visible "public" identity (e.g., architecture, personal ornamentation, clothing, or food serving and consumption), while continuing to use local styles of material culture in domestic contexts and activities (such as food preparation, child rearing, or subsistence). By contrast, commoners would be expected to retain the full range of local material culture for use in both "public" contexts and in more circumscribed social spheres. We would expect the evidence for emulation to appear gradually, selectively, and incrementally in the archaeological record.

In contrast with the archaeological signatures of emulation, one can identify colonies as those settlements whose architecture, site plan, and material culture assemblage are identical to those of another region but are located as spatially discrete occupations surrounded by settlements of the local culture. One would expect colonies to be

founded as completely new settlements on previously unoccupied land. Alternatively, if founded in a preexisting settlement, a colony should show sharp architectural and artifactual discontinuities with earlier occupations. The foreign material should appear suddenly, and as a complete assemblage, rather than gradually and selectively limited to elite items. One could also imagine varying forms of contact through time in which there was first local emulation and later actual colonization, in which case the abruptness of the new assemblage in the archaeological record will be less pronounced, but still present. Artifactual similarities to the homeland should reflect a broad complex of material culture used in a variety of activities and social contexts.

In an analysis of the evidence for an intrusive Teotihuacan presence at the site of Matacapan on the Mexican gulf coast, Santley and his colleagues argue that the ethnic identity of the inhabitants in a colonial enclave should be expressed in the artifactual repertoire associated with two distinct levels of social inclusiveness—the enclave as a whole, and the more restricted domestic level (Santley, Yarborough, and Hall 1987:87). At the enclave level, the identity of the foreigners will be expressed through public rituals; these are often centered on a ceremonial structure such as a church, temple, or mosque, whose architecture generally incorporates the style or symbolic elements of the homeland. Common language, styles of dress, the wearing of particular badges or emblems, and burial customs are also enclave-wide ways to express the foreigners' separate identity. These practices are especially common because they provide highly visible identification of a person's ethnicity by others both within and outside the group (Santley et al. 1987:87).

At the domestic level, the members of a foreign colonial enclave generally live together in a contiguous area, distinct from other parts of the host community. In these households, ethnicity will be expressed principally through mortuary and culinary practices. Food preferences, preparation procedures, and the material culture associated with these practices should differ from local patterns in the host community while resembling the cultural practices of the homeland. The foreigners' distinctive ethnic identity can also often be seen in the use of raw materials or styles from the homeland (Santley et al. 1987:87–88). By virtue of its explicit focus on the ways that material culture is used

differently in different social contexts, this model provides a rigorous, cross-culturally applicable set of general criteria for the identification of colonies in the archaeological record.

Uruk Colonies

In addition to the general criteria suggested by Santley and colleagues for the identification of colonies, the co-occurrence of several different forms of Uruk material culture—notably ceramics, architecture, and administrative technology—has been suggested as a way to identify Uruk colonies in specific instances, while distinguishing them from contemporaneous local settlements (Sürenhagen 1986a:9–13). Multiple criteria are necessary because ceramics alone are not a reliable indicator of ethnicity (Kramer 1977; Santley et al. 1987).

A limited range of Uruk ceramic types, notably beveled-rim bowls, occurs frequently at Late Chalcolithic sites in the central Zagros (Henrickson 1994; Weiss and Young 1975; Young 1986), north Syria (Algaze 1989b; Braidwood and Braidwood 1960; Fielden 1981; Schwartz 1988a; Wattenmaker and Stein 1989), and southeast Anatolia (Algaze 1989a; Algaze et al. 1991; Palmieri 1985; Wattenmaker and Stein 1989). At these sites, beveled-rim bowls invariably occur in association with a larger local chaff-faced ceramic assemblage, such as the characteristic "hammerhead bowls" of the Local Late Chalcolithic in southeast Anatolia and the Khabur headwaters region. By contrast, only a few sites in these areas have the *full* repertoire of Uruk ceramics such as beveled-rim bowls, bottles with droop spouts, four-handled jars, and ceramic elements such as string-cut bases, cross-hatched triangles, nose lugs, and diagonal "early" (Palmieri 1985:192) or "pseudo" (Sürenhagen 1986a:26) reserved-slip decoration. Local ceramics tend to be rare or absent from sites or parts of sites that have the full Uruk ceramic assemblage.

The sites with the full Uruk ceramic repertoire also have distinctive Uruk domestic or public/ritual architecture. The southern Mesopotamian tripartite "middle hall" house characterizes implanted Uruk settlements (Sürenhagen 1986a:10), although considerable variation exists within this overall house plan at Uruk colonies (see, e.g., Kohlmeyer 1996). Wall cone mosaic decoration is a second characteristic Uruk architectural element (Behm-Blancke 1989; Özten 1984).

Similarly, niched-façade tripartite temples are a distinctive Mesopotamian type of public building (Finet 1977; Van Driel and Van Driel-Murray 1979), although this architectural form was copied by some northern indigenous sites—e.g., at Gawra XIII and Hammam et-Turkman.

Perhaps the most important material signature of Uruk colonies is the presence of a full range of southern Mesopotamian administrative technology such as cylinder seals, hollow clay balls, bullae, tokens, and clay tablets with numerical inscriptions used to monitor the mobilization, transportation, storage, and disbursement of goods (Nissen 1985a; Schmandt-Besserat 1978, 1981; Van Driel 1982, 1983; Young 1986).

The Archaeological Evidence for an Uruk Colony at Hacınebi in Phase B2 (LC 4)

When evaluated by both the general and Uruk-specific sets of criteria for the identification of colonies, the Hacınebi data provide clear evidence for the establishment and long-term operation of a small Mesopotamian residential enclave inside the local Anatolian regional center at Hacınebi. Both Uruk and Anatolian artifacts are present in phase B2 contexts in markedly contrasting distributions. Mesopotamian artifacts are not just limited to ceramics, but rather represent the full range of Uruk material culture used in both public and domestic contexts. These different forms of Uruk material culture are found together and are spatially distinct from contemporaneous local Anatolian deposits. The south and west areas of the phase B2 settlement have predominantly Local Late Chalcolithic material culture (although Uruk materials are present in these areas as well). In contrast, the majority of the Uruk material is localized within area A. In other words, contemporaneous B2 deposits showed clear spatial differences between the distributions of local and Mesopotamian ceramics. Even when phase B2 is divided into finer stratigraphic units, distinct (and largely homogeneous) Uruk and local assemblages can be isolated as both contemporaneous and interstratified deposits.

The full range of late Middle Uruk ceramic forms and decorative techniques is present at Hacınebi (Pollock and Coursey 1996). Ceramic vessel form classes run the full gamut of functions, including food preparation (e.g., strap-handled cooking pots, ladles), serving

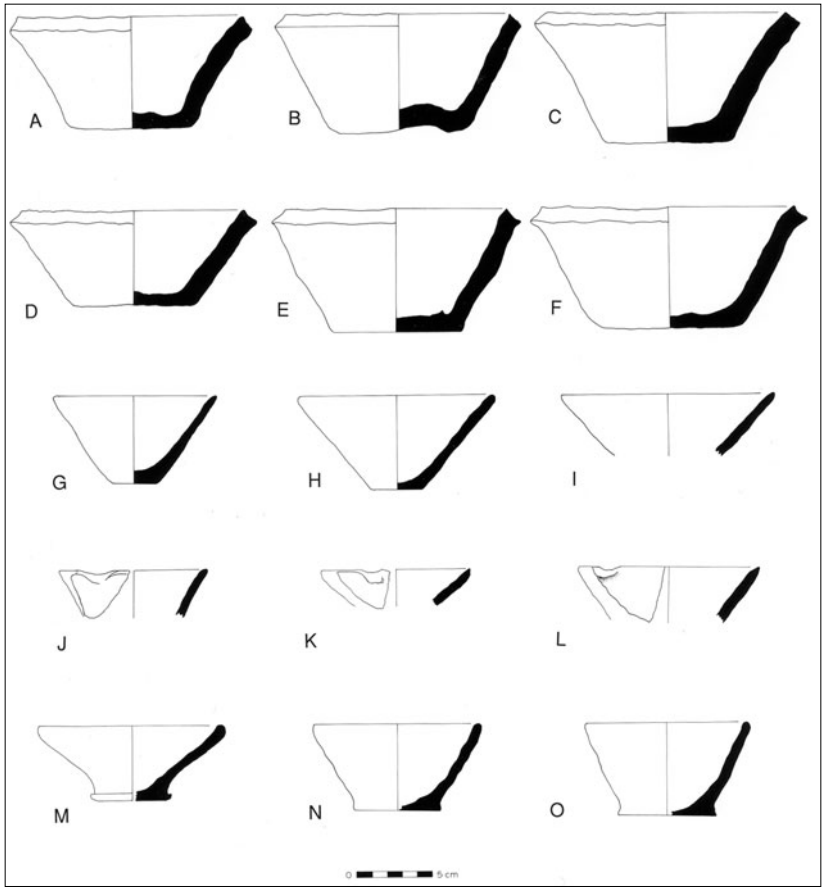

Figure 8.6

Hacınebi phase B2, Uruk ceramics: beveled-rim bowls, conical cups, crude conical cups.

(trays, conical cups, lip spouts, beveled-rim bowls, band-rim bowls), and storage (low expanded-band-rim jars, droop spouts) (figs. 8.6 and 8.7). Vessel forms closely match those of other Middle Uruk colonies such as Sheikh Hassan (e.g., Boese 1995:171–74, 200–201, 266–70) and sites in the southern Mesopotamian Uruk heartland (e.g., Sürenhagen 1986b). Ware types and manufacturing techniques such as the use of the fast wheel, throwing "from the hump," and string-cut bases are also identical to southern Mesopotamian practices. A few minor variations have been noted in the ways that stylistic motifs were combined on Uruk ceramics at Hacınebi; this would be consistent with the distance of Uruk potters

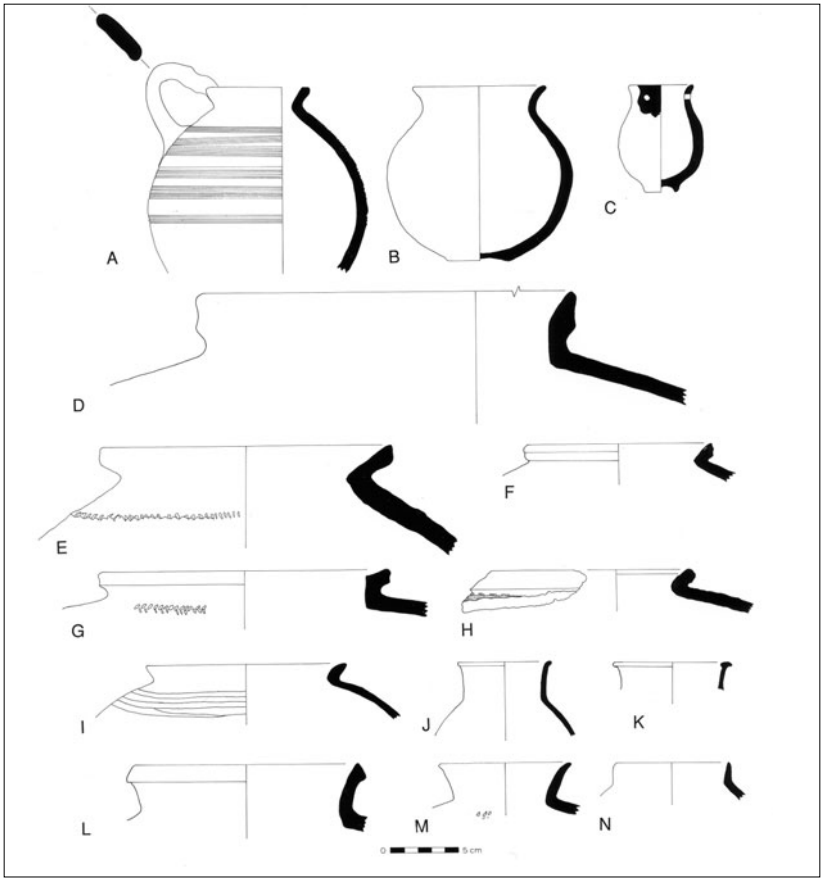

Figure 8.7

Hacınebi phase B2, Uruk ceramics: cooking pots with strap handles and comb-incised bands, storage jars.

at Hacınebi from their homeland 1,300 kilometers to the south. Finds of Uruk-style kiln wasters and the preliminary results of neutron activation analysis all indicate that the Uruk-style ceramics were manufactured on-site; the production of Uruk ceramics was contemporaneous with, but stylistically and technologically distinct from, the manufacture of the local Anatolian hand-built, chaff-tempered ceramic forms.

Other forms of Mesopotamian material culture occur as well. Uruk architecture is attested—albeit indirectly—at Hacınebi through the presence of ceramic wall cones, the uniquely Mesopotamian form

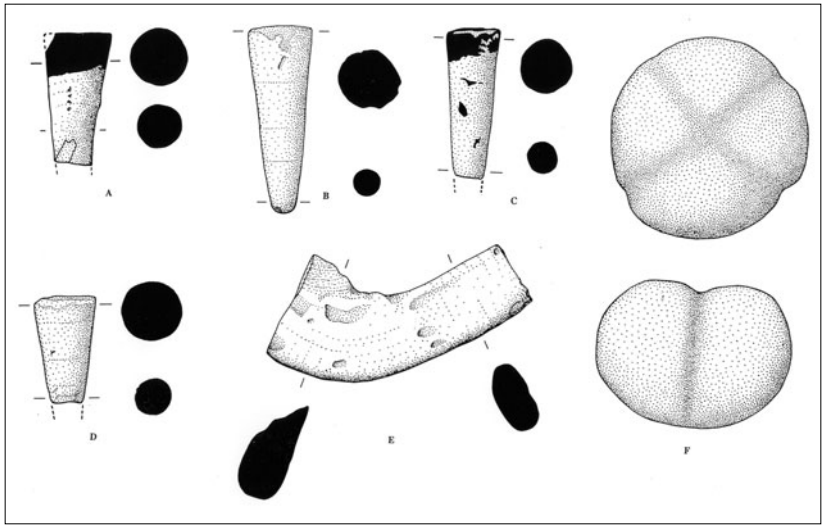

Figure 8.8

Hacınebi phase B2, selected items of Uruk material culture: A–D*, wall cones;* E*, baked clay sickle fragment;* F*, cruciform grooved stone weight.*

of building decoration, in secondary (trash) deposits at the site (Stein, Bernbeck et al. 1996:215–16) (fig. 8.8). Excavations in southern Mesopotamia at Uruk-Warka and at colonies such as Habuba Kabira, Jebel Aruda, and Hassek Höyük have shown that this architectural decoration was used on public buildings in the Uruk period (Behm-Blancke 1989).

An additional form of distinctively Mesopotamian material culture at Hacınebi is bitumen. Bitumen is a malleable, petroleum-based material that occurs as a tarlike substance in natural seeps. When temper is added (e.g., chaff or sand), bitumen can be used for a variety of purposes. Bitumen sources are common in southern Mesopotamia and southwestern Iran (Connan and Deschesne 1991, 1996), where in the Uruk period this material was ubiquitous as a construction material, sealant, and raw material for a variety of functional or decorative objects. Bitumen has also been identified at Uruk colonies in Syria (Boese 1995–96; Peltenburg et al. 1996). Although the local Anatolian population also imported and used small amounts of bitumen in phases A and B1, this material was obtained from non-Mesopotamian sources from the Batman area to the east and possibly from Samsat, on

the Euphrates 100 kilometers upstream from Hacınebi; this latter source was well known at least as early as Classical times (Forbes 1955:3; Pliny 1931:35, 179; M. Schwartz et al. 1999) and was still mined by villagers in the area as recently as the 1970s (Necmi Yaşar, personal communication 1998). However, the volume of bitumen at Hacınebi increased markedly in phase B2, where it has been found concentrated in deposits associated with Uruk ceramics (Stein, Bernbeck et al. 1996). The bitumen in Uruk contexts at Hacınebi matches the chemical composition of the bitumen sources at Hit in southern Mesopotamia and in the Deh Luran plain (M. Schwartz et al. 1999), suggesting that this material was either a trade good imported to southeast Anatolia from Mesopotamia (or southwest Iran) or else the packaging within which some other trade good was transported.

Other distinctively Mesopotamian forms of material culture found at Hacınebi include personal ornaments, artifacts associated with commercial activities, and subsistence-related technology (fig. 8.8). A conical-headed copper pin found in Uruk deposits at Hacınebi has an exact parallel in the Uruk colony at Tell Sheikh Hassan (Boese 1995:224, pl. 10d) and at southern sites such as Telloh and Susa (Tallon 1987: numbers 934, 936, 937). Cruciform grooved stone weights, known from southern Uruk sites such as Uruk-Warka and Susa and from Uruk colonies at Habuba Kabira (Rouault and Masetti-Rouault 1993: pl. 148) and Sheikh Hassan (Boese 1995:175, pl. 13b), are also present at Hacınebi. Finally, two examples of high-fired clay sickles have been found at Hacınebi. These tools are characteristic of fourth millennium southern Mesopotamia in the Ubaid, Uruk, and Jemdet Nasr periods (Benco 1992) and are unknown in Local Late Chalcolithic settlements, where the easy availability of high-quality chert made the use of clay sickles unnecessary. The clay sickles are particularly important evidence of Uruk styles in subsistence technology at Hacınebi. This is entirely consistent with the presence of an actual Uruk working population at the site; one would not expect to find a humble item of this sort in a situation of elite emulation.

Most importantly, the north area of Hacınebi has yielded evidence for both Mesopotamian and Anatolian forms of administrative (sealing) technology. Mesopotamian record-keeping technology is easily recognizable in its use of cylinder seals as opposed to the Anatolian use

of stamp seal technology. Local Anatolian-style stamp seals and seal impressions are present at Hacınebi in phases A and B1 and continue in use in phase B2. However, phase B2 deposits in the northeast area of Hacınebi have yielded an almost complete range of standard Uruk administrative artifacts, including jar sealings, jar stoppers, a hollow clay ball filled with tokens, and a fragmentary (numerical notation?) clay tablet, all bearing Uruk cylinder seal impressions and all found in association with Uruk ceramics (fig. 8.9). These record-keeping devices are common at southern Mesopotamian urban sites such as Uruk-Warka and at Uruk colonies such as Habuba Kabira, Jebel Aruda, Tell Sheikh Hassan, and Hassek Höyük (Behm-Blancke 1992b; Boese 1995; Nissen, Damerow, and Englund 1993; Sürenhagen 1986a; Van Driel 1983). Although the occasional Uruk cylinder seal impression or local imitations of Uruk cylinder seals have been found at wholly indigenous sites such as Arslantepe, the *full* assemblage of Uruk administrative technology *only* occurs in the Uruk homeland and in Uruk colonies.

Instrumental neutron activation analysis (INAA) of the sealing clays by M. James Blackman complements the glyptic studies to provide further evidence for the presence of a Mesopotamian trading enclave at Hacınebi (Blackman 1999). Blackman compared the chemical compositions of the clay artifacts bearing Anatolian stamp seal impressions with those bearing Uruk cylinder seal impressions. Two results are of particular importance. First, the Uruk-style sealings were chemically distinct from the contemporaneous Anatolian-style sealings. Second, the Uruk-style sealings could be divided into two subgroups. One consisted of sealings on local clays, indicating that the Uruk cylinder seals were being used on-site at Hacınebi. This subgroup included the cylinder seal–impressed hollow clay ball with tokens (fig. 8.9). The other subgroup consisted of Uruk-style sealings on nonlocal clays that most closely matched provenienced samples from the Susa area, one of the main urban centers in the Uruk heartland. This second subgroup included the cylinder seal–impressed tablet (fig. 8.9). These INAA results suggest the presence of two contemporaneous groups of people at the site, each using their own record-keeping system. The people using the Anatolian-style stamp seals used only local clays, presumably for local transactions (although we cannot exclude the possibility that they may also have been exporting goods from the site). The people

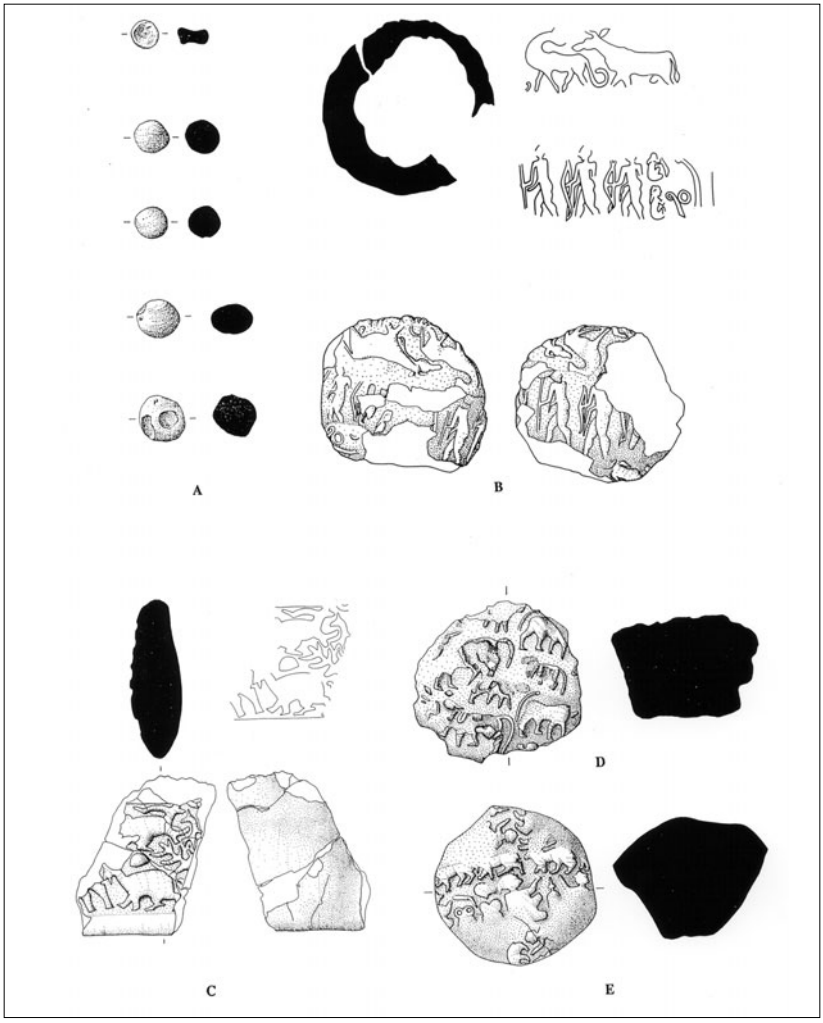

Figure 8.9

Hacınebi phase B2, Uruk administrative technology: A*, tokens;* B*, hollow clay ball bearing the impressions of two cylinder seals;* C*, fragment of cylinder seal-impressed (numerical?) tablet;* D–E*, cylinder seal-impressed jar stoppers.*

using the Uruk-style cylinder seals were both receiving sealed goods from southern Mesopotamia and also sealing containers and keeping records on local clays. This fits exactly with what one would expect for a trading colony that maintained close economic ties with its homeland.

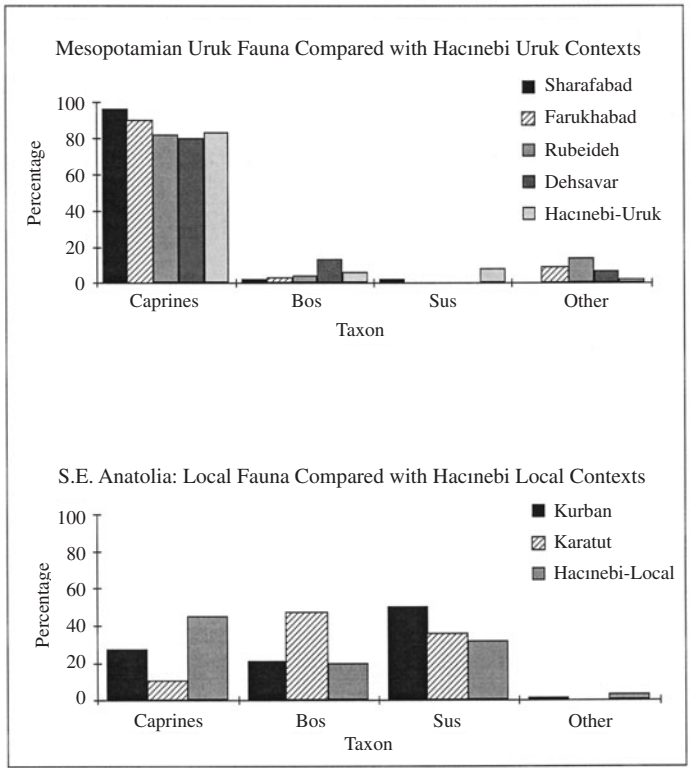

FIGURE 8.10

Hacınebi phase B2 fauna. Top: *Hacınebi Uruk contexts compared with Mesopotamian Uruk sites.* Bottom: *Hacınebi Local Late Chalcolithic contexts compared with southeast Anatolian (LLC) sites.*

Finally, behavioral patterning at Hacınebi is consistent with the artifacts in matching the expected profile of a Mesopotamian colony. Animal bone remains can provide particularly strong evidence for the presence of a Mesopotamian enclave at Hacınebi, since food preferences and food preparation procedures are often very culture-specific (Crabtree 1990; Emberling 1997). The presence of such an enclave should be reflected by clear differences in food preferences, food preparation procedures, and butchery practices. Preliminary analyses show that major differences exist in the relative frequencies of different animal species between those parts of Hacınebi with Uruk material culture and those where the local Anatolian assemblage predominates. A

pilot study of the faunal remains associated with Uruk artifacts at Hacınebi showed that the relative abundance of the main taxa (sheep, goats, cattle, and pigs) closely matches known Mesopotamian food preferences and differs markedly from the animal bones associated with Anatolian contexts (fig. 8.10) (Stein and Nicola 1996). Subsequent analyses with larger samples and a more refined stratigraphic breakdown of the site sequence reinforce this conclusion. At the same time, a preliminary study of butchery patterns shows marked differences in the widths and locations of cut marks between the Uruk and local Anatolian parts of the phase B2 settlement (Stein 1997). Analyses of the Hacınebi fauna are ongoing (e.g., Bigelow 1999).

Taken together, the distinctively Mesopotamian ceramic, architectural, administrative, and other forms of material culture used in both public and domestic contexts at Hacınebi are completely consistent with both general criteria for the identification of colonies in the archaeological record and the specific complex of material characteristic of Uruk colonies and settlements in the southern Mesopotamian homeland (tables 8.1 and 8.2). Uruk ceramics in and of themselves are *not* sufficient evidence for the existence of a Mesopotamian enclave at Hacınebi. However, when we have Uruk wall cones, clay sickles, cruciform grooved stone weights, copper pin styles, administrative technology, trade goods (bitumen), and deposits of almost exclusively Uruk pottery occurring with faunal remains that exactly match Mesopotamian food preferences, then we can be fairly certain that the midden was deposited by a group of Mesopotamians living among the local people at the site. The food preferences are particularly telling because they suggest that these are actual Mesopotamians, not simply local elites who emulated southern Uruk styles of material culture. This does not mean that there was no emulation of Mesopotamians by Anatolians. On the contrary, sites such as Arslantepe suggest that at least some Anatolian elites in the major centers were emulating Mesopotamian iconography and possibly other aspects of material culture. At Hacınebi, local elites may well have been present in another part of the site, and these as-yet-unidentified elites may well have emulated certain aspects of Uruk material culture. However, the evidence from the northeast corner of Hacınebi represents actual Mesopotamians and not Anatolian imitators.

Table 8.1

General Criteria for the Archaeological Identification of Colonies

Criterion	*Hacınebi*
1. Homeland styles in public architecture	Uruk wall cone ornaments for public architecture
2. Homeland styles of	
a. dress	?
b. ornament	Uruk-style copper pin
c. burial customs	Absence of on-site adult burials in Hacınebi and Uruk Mesopotamia
3. Contiguous residence in a spatially distinct quarter	Concentration of Uruk material in northeast corner of site
4. Culinary practices distinct from local patterns while resembling the homeland's cultural practices	Differences between Uruk and local contexts in butchery and food preparation patterns
5. Use of homeland raw materials	Mesopotamian bitumen concentrated in Uruk areas; southern Mesopotamian sealing clays present

Source: Santley et al. 1987:87–88.

Table 8.2

Specific Criteria for the Archaeological Identification of Uruk Colonies

Criterion	*Hacınebi*
1. Full functional range of Uruk ceramic types	Full functional range of Uruk ceramic types
2. Uruk administrative technology of cylinder sealings, tablets, bullae, and tokens	Uruk administrative technology of cylinder seals, sealings, tablets, bullae, tokens
3. Copper production	Copper production
4. Use of clay wall cones to decorate public buildings	Clay wall cones present
5. Tripartite house with "middle hall" plan	
6. Sculpture in the round or in relief	
7. Uruk small objects	Uruk clay sickles, cruciform grooved weights, and copper pins present

Source: Sürenhagen 1986b:9–10.

The Organization of the Mesopotamian Colony in Hacınebi B2

How was this Mesopotamian colony or trade diaspora organized as an economic, social, and political entity? What was the nature of interaction between the foreigners and their indigenous host community? The most important point to emphasize is that we have absolutely no evidence for fortifications, weapons, warfare, or violent destruction in the phase B2 settlement. All indications are that the relations between the Mesopotamian trade diaspora and its local Anatolian host community were peaceful and long-lasting, for a period of at least 200, and possibly as long as 400, years (based on calibrated radiocarbon dates). A second key feature is that the Uruk colonists were a small minority at Hacınebi; the distributions of ceramics, administrative technology, and faunal remains suggest that the foreign enclave was located in the northeast corner of the site, while the local Anatolian population seems to have predominated in the other areas.

One of the most significant aspects of culture contact at Hacınebi is the evidence that the Uruk colony did not dominate the local Anatolian community either economically or politically. We can infer this from the absence of any evidence for tribute and from the fact that the Mesopotamians and Anatolians each maintained their own parallel record-keeping systems of seals and sealings (discussed below; also see Stein 1998). Comparative analyses of ceramics, chipped stone, fauna, and record-keeping (administrative) artifacts from Uruk and local contexts at Hacınebi suggest that the Mesopotamian enclave was a socially and economically autonomous diaspora whose members raised their own food, produced their own crafts, and administered their own encapsulated exchange system. The variety of artifact classes shows that the people who generated the trash in Uruk and local contexts were engaged in similar types of activities, suggesting low levels of intracommunity exchange and a high degree of socioeconomic autonomy in the Uruk enclave. This autonomy can be seen in the encapsulated nature of craft production, subsistence, and exchange-related administrative activities.

Patterns of chipped stone tool production and use suggest that the Uruk enclave at Hacınebi had been characterized by a high degree of economic autonomy in both craft production and subsistence. Uruk deposits show clear evidence for stone tool manufacturing. The

frequency of secondary flakes with large areas of cortex reflects early stages in the manufacture of large "Canaanean blades" made from a distinctive medium-grained banded cream/tan chert. The presence of this raw material and of secondary flakes in Local Late Chalcolithic deposits as well suggests that blade tool manufacture took place concurrently in both Uruk and Anatolian parts of the site. Stone tool forms in the Uruk and Anatolian midden deposits suggest that occupants of both parts of the site were engaged in agricultural production (Wright and Bernbeck 1996; C. Edens 1996, 1997, 1998a, 1998b). Many of the Canaanean blades show traces of bitumen hafting in the typical locations for sickle blades. Similarly, silica gloss or "sickle sheen" is present on at least some blades from both areas. This is important because it suggests that the people who generated the midden on the Uruk side of the wall at Hacınebi were harvesting cereals. This stands in marked contrast to the near absence of sickle blades at the Uruk colony of Habuba Kabira in Syria; on this basis Dietrich Sürenhagen has suggested that the Uruk colonists were supplied with food by the local population (Sürenhagen 1986a:22).

The same forms of stone tools were produced by both the Mesopotamian and Anatolian communities, although Canaanean blades and simple blades from contexts with Mesopotamian material culture match the dimensions of these tool types in the Mesopotamian homeland while being significantly smaller than Canaanean and simple blades from Anatolian contexts (Edens 1996, 1997, 1998a, 1998b). These differences are consistent with ethnically specific contrasts in technological style (Lechtman 1977) between Mesopotamians and Anatolians at Hacınebi.

Overall, the lithic evidence suggests three conclusions. First, both Anatolians and Mesopotamians at Hacınebi had access to the same raw materials. Second, both the Uruk and Anatolian areas were independently manufacturing parallel tool forms although there may have been some ethnically distinctive differences in the technological styles they used to make particular blade types. Finally, both the Uruk and local areas were engaged in agricultural production and had some kind of regularized access to agricultural land.

Other craft activities were also practiced in parallel by the Uruk and Mesopotamian communities. Ceramic spindle whorls are present

in both areas, suggesting that both groups were weaving their own textiles. Spindle whorls show no stylistic differences between Uruk and local contexts (Keith 1997). Similarly, finds of Uruk-style kiln wasters indicate that the foreign enclave was manufacturing its own pottery, following southern Mesopotamian technological practices and stylistic conventions. Copper manufacturing debris such as open-faced casting molds and crucible fragments have been found in both Uruk and Anatolian parts of the site. Most remarkably, a fragment of unprocessed raw malachite (a form of copper ore) was found adhering to the wall of a typical Uruk beveled-rim bowl. One intriguing suggestion is that the bowl was being used as a measuring scoop for the malachite ore (Özbal 1997). The presence of raw materials and manufacturing debris suggests that the Mesopotamians were directly engaged in copper working, perhaps in addition to obtaining finished copper ingots or objects from local trading partners. Thus, basic craft goods such as stone tools, ceramics, metals, and textiles were all produced in parallel by the Uruk and Anatolian communities.

The Uruk administrative technology coexists with, but is separate from, the local stamp seals and sealings. Unused sealing clays are found in both Uruk and local contexts, confirming that each group monitored the movement of commodities. The two sealing systems differ in technology, iconography, function, and pathways of economic circulation. The Mesopotamian record-keeping system used cylinder seals, which were rolled over the wet clay sealing medium to produce a long, narrow, continuous band of repeating images. Mesopotamian motifs stressed animal processions or work scenes depicting laborers engaged in agricultural or craft production. Uruk cylinder seals were impressed on hollow clay balls or bullae, on tablets, on mushroom-shaped clay jar stoppers, and most frequently on clay sealings affixed to the rim or exterior of ceramic vessels.

By contrast, the Anatolian system consisted of rectangular or round stamp seals, which created a single image each time the seal was pressed into the wet clay lumps affixed to the container closures. Phase B2 Anatolian seals almost always depicted lions and caprids in chase or hunt scenes (Pittman 1996b). The two systems were used for completely different functions. Anatolian stamp seal impressions at Hacınebi are found on sealings affixed to wooden boxes, packets of

reed matting, leather bags, and cloth sacks; they never appear on ceramic vessels, tablets, jar stoppers, or bullae. Most telling of all, a comparison of the administrative artifacts with the distribution of other classes of material culture shows very low levels of interaction between the Uruk and local spheres of exchange. This is important, because if Anatolians were delivering supplies as trade goods or tribute to the Mesopotamians, then we would have expected to see the discarded local stamp sealings in Uruk Mesopotamian contexts. This is not the case. Instead, Uruk-style cylinder-sealed record-keeping artifacts occur exclusively with Uruk-style ceramics, while local-style stamp-sealed administrative artifacts are found almost always with local Anatolian ceramics. The few cases of Anatolian sealings in Uruk deposits are important because they confirm the contemporaneity of the two record-keeping systems while emphasizing that they were used to seal different goods that moved in separate economic spheres. The distribution of sealings suggests the operation of two autonomous, minimally interacting systems monitoring separate sets of economic transactions, rather than the kinds of commodity flows to be expected if the Uruk colony were exercising political or economic dominance over its Anatolian host community.

Analysis of faunal body part representation was used to determine whether the people in the Uruk enclave were being provided with meat by the local population. Generally, when a sheep or goat is butchered, elements with little meat value such as the head and foot bones are removed and discarded. By contrast, the body parts with the most meat on them, the forelimb and hind limb, are retained. If the people in the Uruk enclave were being provisioned with meat by their host community, then we would expect to see high proportions of limb bones in Uruk deposits, but few head or foot bones. However, since all of the main body parts are present, and there is no clear predominance of the meat-rich limb bones, the available evidence suggests that the people in both the Uruk and local contexts were raising and butchering their own animals.

Overview of Mesopotamian-Anatolian Interaction at Hacınebi

Excavations and artifact analyses thus indicate five important aspects of relations between the Uruk colony and its local host commu-

nity at Hacınebi. First, the colonists were a small minority. Second, interaction between the Mesopotamians and the Anatolians was peaceful. Third, the colonists did not dominate the locals either economically or politically. Fourth, the colonists and the locals seem to have been members of economically autonomous, self-sufficient, encapsulated communities. Finally, calibrated radiocarbon dates and ceramic styles suggest that the colonists were present and retained a distinct foreign social identity at Hacınebi during the Middle Uruk and the first part of the Late Uruk periods, a time span from ca. 3700 to as late as 3300 B.C.—in other words, for up to 400 years. The economic evidence suggests that the Mesopotamians were engaged in the working of copper obtained through exchange—most likely with the local inhabitants at Hacınebi, but possibly with traders from the upstream source areas. Presumably, the colony had been established in order to tap into the preexisting southeast Anatolian copper exchange network and to extend it southward to Mesopotamia. The Mesopotamian enclave was economically autonomous in the sense that it produced its own crops, pastoral products, and crafts. The Mesopotamians appear to have been able to survive as a distinct social group with its own identity, while maintaining both economic autonomy and peaceful relations with the elites of the local polity for an extended period of time. In the absence of any evidence for political, military, or economic domination, the most reasonable conclusion is that the foreigners were able to survive and flourish only at the sufferance of the local rulers, most likely by forging strategic alliances with them through marriage or exchange relations (Stein 1997).

CONCLUSION: IMPLICATIONS FOR THE OVERALL STRUCTURE OF THE URUK EXPANSION

The evidence presented here has five main implications for our understanding of the organization of the Uruk expansion and its influence on indigenous polities in southeast Anatolia, north Syria, and northern Iraq. First, the data from Hacınebi, Arslantepe, Brak, and Gawra all indicate that the local societies of these areas were already complex, hierarchically organized polities before the Uruk expansion. These polities continued to exist as discrete entities during the Uruk expansion. For that reason, it is misleading and inaccurate to subsume these indigenous cultural traditions under broader terms such as

"Northern Uruk." We need to be careful not to conflate "Uruk" as a time period with "Uruk" as a material culture assemblage.

Second, the distribution of metals and other prestige goods indicates that the indigenous early fourth millennium polities of southeast Anatolia, north Syria, and the Iraqi Jazira had their own exchange networks, linking the Mediterranean, the Ergani copper source areas, and the eastern Taurus highland/steppe interface zones. Metals were widely traded among the early fourth millennium polities of these areas and were worked locally at regional centers such as Hacınebi. It is therefore reasonable to conclude that Mesopotamians were drawn to Hacınebi in order to gain access to both raw and processed copper.

Third, the functional range and behavioral patterning of Uruk material culture at Hacınebi cannot be explained as simply the products of emulation. Instead, numerous lines of evidence indicate that an ethnically distinct Uruk colony was present in one corner of the local settlement at Hacınebi. This colony engaged in exchange (to obtain copper), copper smelting and casting, and a full range of subsistence and craft activities.

Fourth, spatial and functional analyses of ceramics, lithics, faunal remains, and administrative artifacts show that this colony did not exert economic or political control over the indigenous host polity. Instead, the Mesopotamians lived as an economically autonomous diaspora community, trading with the Anatolians on equal, symmetric terms. This essential symmetry in Uruk-local political and economic relations at Hacınebi can be explained as the result of a distance-related decay in the Mesopotamian ability to project its power into the highland resource zones (Stein 1998). As a small, outnumbered minority more than 1,000 kilometers from home, in the midst of an already hierarchical, complex, and technologically advanced polity, the Uruk colonists at Hacınebi were in no position to obtain copper through either coercion or unequal exchange. Instead, we can reasonably infer that the Uruk colony at Hacınebi gained access to the Anatolian trade routes and Anatolian resources such as copper and lumber through strategies of economic and marriage alliances with local elites (Stein 1997, 1998). Presumably, these arrangements were profitable to local elites, although we still do not know what the Mesopotamians traded in return for metal.

Fifth, the Uruk colony at Hacınebi was founded quite early—in

Middle Uruk times, ca. 3700 B.C.—and interacted peacefully with the local polity at Hacınebi for at least 300 and possibly as long as 400 years. Both calibrated radiocarbon dates and ceramics from Hacınebi, Sheikh Hassan, and Tell Brak indicate that the Uruk expansion began in the latter portion of the Middle Uruk period (LC 4) and lasted well into the Late Uruk period (LC 5). In other words, we can no longer think of this regional interaction network as a short-lived phenomenon; instead, the period of colonization and intensive exchange relations between Mesopotamia and its neighbors lasted from 3700–3100 B.C. Over the course of this long period there appear to have been several shifts in the location of the Uruk enclaves, as some (e.g., Hacınebi) were apparently abandoned, some continued in use (Sheikh Hassan), and others were founded from scratch (Habuba, Jebel Aruda, and Hassek). The number of Uruk colonies also seems to have increased dramatically from the Middle to the Late Uruk period. This temporal variation suggests that there may well have been major changes in the organization of the network over the course of six centuries. Although there is some evidence for coercion and unequal exchange at the Late Uruk site of Habuba Kabira, the enormous spatial extent of this regional interaction network, its internal variation, and its six-century duration make it highly unlikely that Uruk Mesopotamia was able to dominate its trading partners, either economically or politically, everywhere and at all times. In fact, instances of Mesopotamian dominance (e.g., at sites such as Habuba Kabira) might possibly be the exception, rather than the rule, in the Uruk expansion.

Taken together, the longevity of the Uruk expansion and the differences between colonies such as Habuba Kabira and Hacınebi (or the analogous site of Godin) mean that we have to rethink our basic ideas concerning the political organization of this regional interaction network. Power relations and terms of trade varied considerably in space (and probably over time as well). The Uruk expansion can no longer be seen as a short-lived episode of colonial domination. Instead, we must recognize that this was a network characterized by long-term stability and balanced exchange relations with unexpectedly complex local polities in the resource-rich highland zones at the outer reaches of the Greater Mesopotamian world. However, this network was by no means homogeneous.

First of all, we have no reason to believe that Uruk Mesopotamia was a single state with one integrated trading system. Even though Uruk-Warka is the largest site of this period, settlement pattern data suggest multiple urban centers in the southern alluvium and the Susiana. The locational data are completely consistent with the idea of multiple competing urbanized polities in a pattern analogous to the Early Dynastic social landscape. Second, regardless of whether Uruk Mesopotamia was one or several competing states, we have no reason to believe that exchange and colonization were monopolies under centralized control. Certainly in later periods, there is ample evidence to suggest that Mesopotamian exchange was conducted by entrepreneurial individuals or groups either in tandem with state institutions or in place of these institutions (Adams 1974a; Foster 1977). As a result, one can reasonably hypothesize a fragmented political landscape in which several urbanized states competed for access to the raw materials of highland Anatolia and Iran. Each polity would have had its own colonies, in a pattern analogous to the competition between Genoa, Venice, and other city-states of medieval/Renaissance Italy (Lane 1966). In some cases the centralized institutions of the Uruk states might have organized trading settlements, while in others, entrepreneurial individuals and groups might have been the primary colonists and traders in a pattern similar to what we see later in the Old Assyrian trading system (Larsen 1976, 1987). In short, both the Uruk homeland and its exchange network were probably multicentric in character.

This type of heterogeneous nature was apparently characteristic of power relations within the interregional interaction network formed by the Uruk expansion. Fourth millennium Mesopotamian states seem to have been able to exert political and economic control over their immediate hinterlands (see, e.g., Wright, Miller, and Redding 1980; Wright, Redding, and Pollock 1989); however, Uruk power over other parts of the interaction network appears to have declined with increasing distance from the alluvium. I have suggested elsewhere that this spatial variation in power relations can be described through a "distance-parity" model of interregional interaction (Stein 1993, 1998). The model draws on the economics of transportation to specify a gradient in power and exchange relations between the different parts of an interaction network, so that within certain very specific parameters,

one can expect to see a distance-related decay in the power of the core states, leading to increasingly equal relations with increasingly distant peripheries. Under conditions of technological/demographic superiority or ease of access between two areas of differential social complexity, areas close to the core would be characterized by asymmetric (i.e., unequal) exchange and the kind of core dominance hypothesized in world system models of world empires (Wallerstein 1974). However, when these conditions do *not* obtain, then we would expect to see increasing parity with distance in core-periphery relations at the outer reaches of such a network. In the latter case, the transportation costs involved in projecting economic or military power would offset the core's advantages and lead to symmetric or equal exchange.

Thus, for example, in fourth millennium B.C. Mesopotamia, a comparison of *(a)* the city of Uruk-Warka itself, *(b)* large colonies such as Habuba Kabira (or Sheikh Hassan), and *(c)* small, distant colonies such as Hacınebi shows a tremendous degree of variation in the social and economic organization of this earliest colonial network as one moves outward from the urban core to its periphery. In the Mesopotamian heartland, cities such as Uruk-Warka and Susa controlled their rural hinterlands, exacting taxes and sending out administrators to control the most basic activities, such as planting, harvesting, and collection of crop surpluses (Wright et al. 1980, 1989). In the "near periphery"—areas of Syria closest to southern Mesopotamia proper—Uruk colonies such as Habuba Kabira were large fortified settlements that apparently used coercion in a short-lived and ultimately unsuccessful effort to exert economic control over the surrounding local Syrian communities (Strommenger 1980; Sürenhagen 1986a). In more distant subregions, Uruk settlements such as Godin V in highland Iran (Weiss and Young 1975; Young 1986) and Hacınebi in southeast Turkey took the form of small "outposts" located inside the preexisting towns of local polities. We have no evidence to suggest that the outposts dominated local economies through asymmetric exchange or coercion. Instead, the small numbers and vulnerable position of the Mesopotamians at sites such as Hacınebi and Godin meant that they could only survive by remaining on good terms with their more powerful indigenous neighbors. The organization of these settlements and the ways they interacted with their local neighbors varied markedly, depending on the

distance from Mesopotamia, the size of the local population, and the degree of preexisting social complexity in the indigenous polities.

I have argued here that the easy archaeological identifiability of Uruk Mesopotamian material culture has biased our interpretations of interregional interaction in the fourth millennium B.C. Near East. The presence of Uruk artifacts and even Uruk colonies does not necessarily mean that Uruk Mesopotamia dominated its periphery or that it determined the trajectory of political development in north Syria, southeast Anatolia, and western Iran.

Until recently, our reconstructions of the Uruk expansion have been able to postulate Uruk dominance and influence for two reasons. First, because virtually nothing was known about the local polities of the neighboring subregions, they were assumed to be backward and easily amenable to Mesopotamian control. Second, the presence of Uruk colonies or material culture in north Syria, southeast Anatolia, and western Iran was automatically assumed to be evidence for either political or economic control by Mesopotamia. Neither of these blanket assumptions holds up under close scrutiny. By documenting the indigenous societies of southeast Anatolia both before and during the period of intensive contact with Mesopotamia, the Hacınebi data require us to rethink our models of how the Uruk interregional interaction network actually functioned.

Notes

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