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### **Southern and Southeastern Anatolia in the Late Bronze Age**

Marie-Henriette Gates

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### **Abstract and Keywords**

This article presents data on the Late Bronze Age of southern and southeastern Anatolia. Southern and southeastern Anatolia present three contrasting zones, differentiated by topography, elevation, climate, soils, and connectivity to neighboring regions. In the Late Bronze Age, as at other times, they offered varied options for human exploitation and settlement, and reflected different cultural and political inclinations. The Late Bronze Age cities, towns, and forts in southern and southeastern Anatolia endured various fortunes in the twelfth century BCE, but all experienced the eventual termination of this cultural, political, and economic phase. Most were destroyed and lay deserted for centuries, or their ruins were reoccupied by squatters and migrants, then abandoned.

Keywords: settlements, towns, forts

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The Late Bronze cultures of southern and southeastern Anatolia remain ill-defined because of factors both stemming from past research directives and innate to their material cultures. For southern Anatolia, these constraints are being redressed by intensive fieldwork and tighter typological control. An immediate result has been the realization that most archaeological criteria in use since the major excavations of the 1930s, such as Tarsus, were misguided, and that the region's second millennium B.C.E. sequence must be reworked from its very foundations. Efforts have begun on several fronts, but corrections will emerge slowly. This chapter will thus need adjustments, not least to assimilate the changes reshaping Late Bronze archaeology in central Anatolia. Research on southeastern Anatolia has been led by other issues, also prejudicial. The two regions form an awkward partnership, both in this summary, and during the Late Bronze Age.

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### History of Research



Figure 17.1 . Map of sites discussed in the text.

Southern Anatolia's Late Bronze profile was created, in the 1930s-1940s, by excavations at large mounds: in Cilicia at Mersin-Yumuktepe (Garstang 1953) and Tarsus (Goldman 1956), in the Amuq at Tell Atchana (Woolley 1955), and at Judeideh and Çatal Höyük

for the Oriental Institute of Chicago's survey project (Haines 1971; McEwan 1937) (see figure 17.1). Among that era's other regional surveys, Seton-Williams's work in Cilicia and the Bay of İskenderun gave a comprehensive overview (Seton-Williams 1954). Their aims and findings produced a synthesis charting historical events, migrations, invasions, and trade as primary cultural agents (e.g., Hanfmann 1948). This consensus remained fixed until the 1990s, when new fieldwork started at previously untested sites (Kilise Tepe, Kinet Höyük, Sirkeli, Soloi Höyük [recently also referred to as Soli Höyük], Tatarlı Höyük), and older sites were reopened. To these were added excavations on the peripheries (Porsuk, Tilmen), and new surveys in the Amuq (Yener 2005) and eastern Cilicia (Killebrew, Lehmann, and Gates 2009; Salmeri and D'Agata 2009). These have stimulated a review of the region's Late Bronze components, among other issues.

In contrast, most fieldwork in the southeast has been carried out by salvage projects, in anticipation of hydroelectric dams on the Euphrates, the Tigris, and tributary rivers, from the 1960s until the present. Their pressured agendas maximize returns by focusing on accessible and instructive periods. Late Bronze occupation is sparsely documented, mainly at fortified sites, whose circuit walls are encountered in step-soundings down high mounds (e.g., İmikuşağı, Korucutepe). Late Bronze pottery also proved difficult to recognize on survey (Dodd 2007; Wilkinson 1990:110-13). Progress in both regions can be gauged from summaries in Yildirim and Gates (2007).

### Cultural Parameters

#### Chronology

Since the early twentieth century's first systematic research, Late Bronze southern Anatolia was conceived as a historical framework into which archaeological findings were inserted. Typologies and changes in material culture were described and explained according to a political schema drawn from textual evidence. This restrictive format survived without challenge until recently, in part because the fifty-year hiatus in regional fieldwork offered little incentive to reexamine these premises, and especially because

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sequences to which they could compare, in Anatolia and northern Syria, followed similar principles.

Late Bronze levels at Tarsus provided the primary reference for the immediate region and beyond. The excavation's prompt and assertive report proposed a complete record of archaeological expectations for the second half of the second millennium B.C.E. (Goldman 1956), in contrast to the insufficient data, or site-specific narratives, of the other major projects: Mersin-Yumuktepe (Levels VII-V: Garstang 1953; Jean 2006), the original Amuq survey (Phase M: Haines 1971; Swift 1958), and Tell Atchana (Levels VI/V-I: Woolley 1955). Late Bronze Tarsus was seen to comprise two historical periods, supported by epigraphic finds: the first under the local dynasty of Kizzuwatna, in fluctuating alliance with the Mittanni kingdom, followed by annexation into the Hittite Empire under Šuppiluliuma I, or thereabouts (Goldman 1956:62-63). Occupational levels at Tarsus were then grouped into two main phases: Late Bronze (LB) I and LB II. They corresponded to the two historical periods and coincided with dating conventions in Palestine. LB II was further divided into LB IIa, an impressive architectural level in Hittite style, later destroyed by fire, and LB IIb, a squatters' occupation whose Aegeanizing pottery (LH IIIC "Granary Style") was linked to Sea Peoples' raids in the eastern Mediterranean, and to the historical end of the Late Bronze Age (Goldman 1956:44-59). Reanalysis of the second millennium B.C.E. stratigraphic and ceramic sequence at Tarsus modified some aspects but preserved the overall rationale (Slane 1987). Finally, absolute dates were calculated from these historical criteria, and confirmed by ceramic cross-dating: LB I = ca. 1650-1450 B.C.E., LB IIa = ca. 1450-1225 B.C.E., and LB IIb = ca. 1225-1100 B.C.E. (Goldman 1956). Current views would lower the beginning of LB I by one century, and of LB IIa by four decades, to the mid-sixteenth and late fifteenth centuries B.C.E., respectively (Bietak and Höflmayer 2007).

The Tarsus chronology's strength lies in conforming to an eastern Mediterranean template that supercedes regional boundaries and facilitates comparative assessments, whereas the longer, better articulated sequence at Tell Atchana was formulated to track the site's internal historical trajectory (Woolley 1955) and cannot be widely applied. However, Tarsus's excavated Late Bronze occupation is incomplete, as newly confirmed by results from Kilise Tepe and Kinet Höyük, to (p. 396) its west and east. Pottery from Tarsus's latest stratum assigned to LB I, "The Pottery Storage Room Unit" (Goldman 1956 :46-48, the 5.00 M. Phase in Section A; Slane 1987:467-68, Level A.VI) is precisely matched by the Middle Bronze II/III assemblage at Kinet (Gates 2000; for earlier doubts, see Fischer 1963; Mellink 1965; Symington 1987). Thus Late Bronze Tarsus is, at present, limited to a single coherent architectural level: the "Hittite Temple" in Section A and housing in Section B (Goldman 1956:49-50; Slane 1987:12, Levels A.IX-B.IX). The Late Bronze stratigraphy at Kilise Tepe (Phases III-IIa-c/d) and Kinet (Phase IV, Periods 15-13.2) can now substitute for Tarsus to represent the entire period. Like LB IIb Tarsus (A.X-B.X), these two sites also document the decline of their Late Bronze culture, and its eventual Iron Age replacement (Gates 2006; Postgate and Thomas 2007:111-58).

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In southeastern Anatolia, the Late Bronze's stratigraphic definition is meager and treated as a single horizon encompassing two historical phases: the Mittanni kingdom (ca. 1500–1350 B.C.E.), followed by the Middle Assyrian one, contemporary with and outlasting the Hittite Empire (ca. 1350–1050 B.C.E.; see Matney, chapter 19, and Radner, chapter 33 in this volume, for additional discussion of Assyrian topics). With some exceptions, site levels refer to these periods rather than to Late Bronze phases (e.g., Schachner 2003). This system is also favored for Late Bronze Syria (Akkermans and Schwartz 2003:327–33) and northern Mesopotamia, southeastern Anatolia's closest archaeological references. In the Upper Euphrates, a cultural and political frontier zone in this period as in others, excavations have applied labels that are either culture-historical, or archaeological: for example, İmikuşağı's Habur (= MB II) and Hittite Old Kingdom phases (= late MB II/LB I) (Konyar 2006), in contrast to Korucutepe's LB I Phase I (= Hittite Old Kingdom) and LB II Phase J (= Hittite Empire) (van Loon 1978:28–34). In the absence of an agreed-upon chronology, and because few key sites are published, the Upper Euphrates and southeastern Anatolia assume a marginal place in Late Bronze archaeological discussions. In fact, this discretion accurately reflects a time when permanent settlement became sporadic and dispersed.

### Diagnostic Material Culture

The Late Bronze ceramic assemblage in both regions was professionally manufactured in plain, light-colored fabrics and featured a narrow range of tablewares: plates, shallow bowls, craters, and flasks or pitchers. Their banality matched, even in shape and appearance, the uniform output of potmakers throughout Syria and northern Mesopotamia during the second millennium B.C.E. (Akkermans and Schwartz 2003:331; Mazzoni 2002; Pfälzner 1997; Postgate 2007). Local traditions were superseded by a common set of kitchen and dining utensils, pointing to a broad trend in the substance and serving of meals.

In the south, the source for the local ceramic industry was central Anatolia under Hittite administration (not Syria). Indicators are white- or yellow-slipped bottles with tall necks and pointed bases; three-handled pilgrim flasks; coarseware (p. 397) baking platters, plain or with a red-burnished band at the rim; red- or brown-burnished zoomorphic vessels such as bulls and birds of prey, or with zoomorphic protomes; miniature saucers; and potmarks incised before firing (e.g., Gates 2001, 2006). Excluding potmarks, these types, together with plates, bowls, and containers making up the majority of the assemblage, appeared on the Anatolian plateau with the Middle Bronze "*kārum* period," and evolved there over the following centuries (Mielke 2006; Mielke in Müller-Karpe 1998:123–29; Schoop 2006; and see Michel, chapter 13, and Kulakoğlu, chapter 47 in this volume, for the *kārum* period). But their introduction to Cilicia was abrupt, replacing the Middle Bronze serving set (the Cilician Painted trefoil-mouthed pitcher and cup) and cooking pot (a deep casserole with loop handles and a short spout) (Gates 2000). Whether the process behind this new pottery's implantation was a regulatory economic system (Gates 2001) or

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on-site administrative presence (Postgate 2007), it heralded close Hittite involvement (Postgate 2007).

Less evident is when this change occurred. The narrow and repetitive repertoire, called “Drab Ware” at Tarsus, was attributed there and at Mersin to the Hittite Empire, when Šuppiluliuma I annexed Kizzuwatna (Garstang 1953:237–38; Goldman 1956:203–5). Hittite mass-produced ceramics were thus made to characterize LB II (LB IIA at Tarsus), and assigned to the fourteenth and thirteenth centuries B.C.E., in accordance with Boğazköy. The revision of Boğazköy’s ceramic sequence to span the entire Hittite period, from the sixteenth century B.C.E. onward (Schoop 2003, 2006), makes these chronological assumptions invalid. Nor can they be redressed by applying Glatz’s criterion of a “north-central Anatolian (NCA) style” based on seven diagnostic types (Glatz 2009, and see Glatz, chapter 40 in this volume), because it is their subtle modulations that calibrate the four-century evolution (Schoop 2003, 2006). Kilise Tepe (Level IIIa–e) and Kinet Höyük (Phase IV:2, Period 15C–A) show the Hittite assemblage in place in LB I, by the sixteenth or early fifteenth century B.C.E. (Gates 2006; Postgate 2007). In the Amuq, it probably arrived later (Atchana Level III), to be clarified by the new excavations. Both Amuq surveys found this period ceramically indistinct and elusive (Casana 2009; Casana and Wilkinson 2005; Swift 1958:23–30).

For the Euphrates frontier, texts relating a Hittite military presence in Išuwa are supported by archaeological findings and a central Anatolian ceramic assemblage. It was introduced to the northern Elazığ-Malatya region, at İmikuşağı, Korucutepe, and elsewhere, including Arslantepe, at the start of the Old Kingdom; painted and burnished decorations, relief impressions, and flaring-necked storage jars precede the onset of mass production (Konyar 2006). These distinctive types, close to their “*kārum* period” forebears, soon yielded to the faster, efficient production already discussed, including the potmarks (Murray 1987; Umurtak 1996). It is best documented at Norşuntepe and Korucutepe Phases I and J (the latter a mixed sample, however: Griffin 1980; Murray 1987). Further south, the pertinent phases from Tille have been redated from the Late Bronze to its transition into the Early Iron Age (Griggs and Manning 2009; Summers 2010; compare Summers 1993); and other Late Bronze sites in the region remain unpublished (Lidar, Samsat) or inadequately sampled (Carchemish).

**(p. 398)** In the face of this conservative assemblage, high-visibility imports play the noble role for dating, especially Cypriot Bichrome (MB II/III–early LB I, ca. 1560–1460 B.C.E.), and White Slip and Base-Ring wares (LB I–II), despite internal chronological disputes (Bietak and Höflmayer 2007; Crewe 2007:14–15; Merrillees 1992; e.g., Kozal 2005). Their replacement by Aegeanizing, Late Helladic/Late Cypriot IIIC pottery announces the close of the Late Bronze Age in the twelfth century (Cadogan 1998). True Mycenaean ceramics are rare, restricted to the late fourteenth and thirteenth centuries B.C.E. (LH IIIA/B = LB II), and from fills, except at Kilise and Atchana (E. French 2007; Mühlenbruch 2009:25–32). The few pieces that made their way east (e.g., to Tille, Summers 1993:45) are chronologically insignificant.

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For southeast Anatolia, the fine, light-on-dark Nuzi Ware has served a fundamental purpose, singling out as diagnostic a class of “coarse chaff-tempered jars and bowls” that otherwise defied identification, for example, on the high mound at Titriş, and at Giricano (Algaze, Mısır, and Wilkinson 1992:43; Schachner 2002). Üçtepe’s Phase 10, from a small sounding, produced comparable bowls and plates, for which parallels were proposed from central Anatolia and the Upper Euphrates, to northern Syria, but only the few associated Nuzi Ware sherds assured this pottery’s Late Bronze attribution (Özfiat 2005:34–35). Because reliance on the presence or absence of imports and fine wares to recognize Late Bronze assemblages is problematic on many levels (e.g., Casana 2009:12), the ceramic typology here remains uncertain.

Epigraphic finds have thus proven valuable, overriding problematic contexts. Hittite writing, in Hieroglyphic Luwian (HL; see Yakubovich, chapter 23, and Melchert, chapter 31 in this volume), is widely distributed in an instructive pattern, from provincial centers to smaller sites. Tarsus produced the largest number (about sixty), and longest span: seal-impressed clay tags (conical bullae) for documents written on perished materials, one HL seal-impressed cuneiform tablet, one seal-impressed jar handle, and biconvex seals with personal names. They recorded transactions by, among others, the early Kizzuwatnan king Išputaḫšu (fifteenth century B.C.E.), Ḫattušili III’s queen Puduḫepa (early thirteenth century B.C.E.), and resident royal Hittite administrators (Gelb 1956). Other Hittite princes were based in Atchana/Alalakh III-II/I (LB II), according to tablets, seals, and an exceptional orthostat depicting “Tudḫaliya, the king’s son” (Fink 2007; Wiseman 1953: 117–18; Woolley 1955:266–67). Biconvex seals from Mersin-Yumuktepe and Kilise Tepe, bullae from Tatarlı and Soloi Höyük, and two stamped jar handles from Kinet tied into the same bureaucratic system of the Hittite Empire (Gates 2008; Sevin and Köroğlu 2004; Symington 2007b; Ünal and Girginer 2010; Yağcı 2003). So also did bullae and biconvex seals in the Euphrates Valley, from Korucutepe (Güterbock 1973, 1980) to Tille (Collon 1993) and Lidar, where two bullae of Kuzi-Tešub, king of Carchemish in the early twelfth century B.C.E., connect that capital’s Late Bronze and Iron Age dynasties (Hauptmann 1987; Hawkins 1988; Sürenhagen 1986).

The nonroyal biconvex seals, hieroglyphic script, and Luwian language became popular in the thirteenth century B.C.E. in semi-official and private sectors, which maintained them after the demise of the Hittite state and its cuneiform archival tradition (Yakubovich 2008, and see Yakubovich, chapter 23 in this volume). For the (p. 399) regions discussed here, the only examples from secure contexts were the four in Kilise Tepe’s Level IIb/c Stele Building, an administrative complex destroyed ca. 1180 B.C.E. (Postgate and Thomas 2007:137; Symington 2007b); other “stratified” finds were typically found in pits dug into final LB II levels (Tarsus, Korucutepe) and in transitional LB/EIA destruction debris (Tille, Lidar). As a group, these HL finds reflect the state’s close oversight of provincial centers (Tarsus, Alalakh, Lidar) during the late Empire (Yakar 2000:259–69), its practice in secondary townships (Kilise Tepe), and a degree of regional literacy pervasive enough to survive the collapse of a centralized system.

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Akkadian cuneiform archives from Tell Atchana's Niqmepa Palace and Level IV report the historical, economic, and social life of this LB I (fifteenth century B.C.E.) Hurrian kingdom before its Hittite annexation (von Dassow 2005). In the lightly populated Upper Tigris, a single tablet provides an LB I (fifteenth/fourteenth century B.C.E.) date to a fortress at Türbe Höyük (Yildirim and Gates 2007: 300), and a cache of fifteen tablets identifies at Giricano an enclave that housed Middle Assyrian tax collectors over several generations (twelfth–mid-eleventh century B.C.E.) (Schachner 2002).

Other types of portable material culture and technologies, such as metalwork, cylinder and scarab seals, and the minor plastic arts, adhered to an eastern Mediterranean Late Bronze standard. They are best illustrated in the Uluburun shipwreck (e.g., Pulak 1998) and the civic, religious, and funerary contexts at Atchana (Woolley 1955). A limestone statue of Idrimi, ruling at Alalakh for his Mittanni overlord Barattarna (LB I, fifteenth century B.C.E.), is remarkable for its style and autobiographical text; it was discovered in the site's late LB II temple precinct in a secondary setting, like the Hittite orthostat of Tudḫaliya (see Fink 2007, with references). Finds at the other sites come from habitation deposits, with incomplete, damaged, and recycled inventories.

## Geography, Environment, and the Human Landscape

Southern and southeastern Anatolia present three contrasting zones, differentiated by topography, elevation, climate, soils, and connectivity to neighboring regions. In the Late Bronze Age as at other times, they offered varied options for human exploitation and settlement and reflected different cultural and political inclinations. Historical geography provides little assistance, since few of their archaeological sites can be associated with ancient toponyms.

### Cilicia

The Çukurova plain—Cilicia Campestris of classical antiquity—is a low-lying alluvial fan of exceptional size (approximately 140 km wide). It was formed by three (p. 400) rivers and their many tributaries, flowing from the steep Taurus Mountains that enclose the plain on three sides, down into the Mediterranean. Rich and perennially renewed soil, high rainfall, and a temperate climate ensured predictable agricultural yields. These provided, close at hand, the food to support large populations in closely spaced nucleated settlements over the long term, an essential requirement for stable urban life (Jongman 1988). The multiperiod mounds that extend, at twenty- to thirty-kilometer intervals, in an arc from the plain's western to eastern borders, are located beside or within the plain's modern towns and cities. Together they attest to conditions favorable for continuous settlement from Neolithic times onward, on scales appropriate to respective periods. Beyond them, to the north, a second looser tier of large centers, such as Tatarlı, extended into the interior valleys, although this piedmont stayed populated only through Early

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Byzantine times (Seton-Williams 1954). Cilicia's urban sites on mounds were all occupied during the Late Bronze Age.

South of this arc, formed by a gravelly alluvial fan underlying the earliest occupation at Tarsus (Öner, Hocaoglu, and Uncu 2005), stretched the delta's marshlands and lagoons. The modern coastline was in place by Roman times and maintained a string of seaside harbors (Seton-Williams 1954). But preclassical ports were situated inside estuaries and were vulnerable to silting and abandonment, on terrain unsuitable for sustained habitation (Yakar 2000:345, citing Strabo). Harbors and fishing villages can be hypothesized from the many small sites with discontinuous or short occupations that were identified by surveys in the delta proper, along its southern banks (Taffet 2001). Long-lived exceptions are Bronze Age ports on Cilicia's western and eastern borders, where the mountains draw near the sea: at Soloi, Mersin-Yumuktepe, Kinet, and on the coastal strip around İskenderun Bay. Cilicia's maritime connections, invariably emphasized by classical historians because of its visible Roman ports (Hellenkemper and Hild 1986; Rosenbaum, Huber, and Onurkan 1967), developed early in the second millennium B.C.E., when an autonomous eastern Mediterranean economy based on seafaring first emerged. Cilicia also fostered ancillary maritime industries like shipbuilding, its forested mountains providing ready timber (Yakar 2000:352, citing Strabo). Cargoes from the LB II wrecks at Uluburun and Cape Gelidonya document the commerce in metals, raw materials, and finished goods that such boats transported (Bass 1967; Pulak 1998).

In contrast, the few land routes into this plain were difficult and seasonal, in precipitous valleys cutting through the mountain barriers. The shortest route from the Anatolian interior crossed, above Tarsus, an elevated pass known since classical times as the Cilician Gates, near modern Pozanti. A second route to the northeast, the highland road from Gaziantep eastward, followed the narrow gorge of the upper Ceyhan through the Hasanbeyli Pass above modern Bahçe, before taking a long descent into the plain. Tributary valleys also gave access from the north (from Kayseri and, eventually, Sivas), through rough terrain marked by Late Bronze and Iron Age rock reliefs and inscriptions (Darga 1992:174-82; Ehringhaus 2005; Seeher 2009). Entry into Late Bronze Cilicia was protected by fortresses at Porsuk/Zeyve Höyük and Domuztepe (Alkım 1952; Beyer et al. 2008).

**(p. 401)** A third, strenuous passage from the central plateau bisects the wide mountainous buffer, known as Rough Cilicia or Cilicia Tracheia, that protects the delta's western flank. This isolated route, down the deeply encased Göksu Valley from the Konya plain to a coastal outlet at Silifke, was sparsely settled, since the region is more suited to a rural economy and transhumant lifestyle (D. French 1965; Yakar 2000:353-55). The site at Kilise Tepe was an exception, situated to oversee the last descent to the coast (Postgate and Thomas 2007:11-13, 18). The valley acted as a channel for Mediterranean products into central Anatolia in the Late Bronze Age (Symington 2001). It perhaps found favor by skirting intermediaries in the urbanized delta, and its nomadic population offered predictable transport for goods during cyclical migrations (Klengel 1977; Yakar 2000).

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Second millennium B.C.E. ports would be expected at frequent intervals along Rough Cilicia's rocky coastline west of Silifke, but no predecessors for its many Hellenistic and Roman ones are attested archaeologically (Dinçol et al. 2001; Symington 2007a). Further west, on the Pamphylian and Lycian shores, LB II coastal habitation has been probed by recent soundings only at Perge, preclassical Parğa, and Patara, preclassical Patar (Yildirim and Gates 2007:308).

Despite the topographical contrast between the eastern plain and western mountains, the two formed a single cultural zone recognized since antiquity by classical geographers and confirmed by archaeological research since the early twentieth century (D. French 1965; Postgate and Thomas 2007:5-7; Symington 2007a). They represented two Late Bronze historical entities: Kizzuwatna in the plain and Tarḫuntašša in the mountains, although the latter's territorial domain was realized by a diplomatic maneuver of the late Hittite Empire (Jasink 2001). Together, they stood geographically apart from inland neighbors, whose incursions could be monitored closely, and instead turned to the eastern Mediterranean, which in the Late Bronze Age offered direct entry to an international market. Cilicia's economic advantages led Hittite rulers to draft treaties with generations of Kizzuwatnan kings, from ca. 1500 B.C.E. onward, more than with any other dynastic region (Trémouille 2001; and see Beal, chapter 26 in this volume, for a history of such treaties), although military interest in the route to western Syria is often cited for these diplomatic efforts (Symington 2007a; Trémouille 2001). The appeal and benefits of a Mediterranean outlet underlie textual references to the port of Ura, whose location in western Cilicia remains contested (Symington 2007a); recent excavations at Soloi make it an attractive candidate (Yağcı 2003).

At best, the only accepted Late Bronze (Hittite) toponyms for archaeological sites in Cilicia are Tarsus (Tarša) at Gözülü Kule, and Adana (Adaniya) at Tepebağ Höyüğü, thanks to the persistence of their place names. Periodic efforts to label others (e.g., Forlanini 2001; Trémouille 2001) have yet to be confirmed by epigraphic proof from the sites themselves.

### **The Amuq Plain**

The Amuq Plain was also low-lying, and fed by three rivers, but it constituted a self-contained inland entity. Like Cilicia, climate and alluvial soil provided reliable agricultural resources, supplied by villages to one second millennium B.C.E. urban center, at Tell Atchana (Casana 2007, 2009; Casana and Wilkinson 2005). Farming contended with poor drainage and swamps, but the plain's small size (30 × 40 km) is more likely to have been the factor that limited settlement density to a single large site (Casana 2009). It connected with the Mediterranean, about thirty-five kilometers distant, via the narrow valley of the Orontes, whose estuary sheltered at least one Late Bronze port, that of Sabuniye (Pamir and Nishiyama 2002). The Amuq especially looked inland; straightforward roads led east into Syria and northward up the İslahiye valley, guarded by Bronze Age Tilmen Höyük. From there they turned east into the highlands of Gaziantep and on to the Upper Euphrates and the Tigris. The Amuq's only neighbor with difficult

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access was Cilicia, screened off by the Amanus Range, and reached through the steep pass at Belen, overlooking İskenderun's coastline. The route was watched by a second millennium B.C.E. site identified through survey at Dağlıbaz, in the western foothills below Belen (Killebrew, Lehmann, and Gates 2009).

This topographic barrier gave different affiliations to the two regions. Unlike Cilicia, the Amuq's cultural and socioeconomic dynamics stemmed from overland ties; proximity to the Mediterranean merely provided a conduit for commerce and income. The dominant Late Bronze populations also spoke different languages: Luwian in Cilicia, Hurrian and West Semitic in the Amuq (Melchert 2003:12; von Dassow 2008; and see Yakubovich, chapter 23 in this volume). When geographers placed the *Pylae Syriae* (the gateway from Asia Minor and Cilicia into Syria) at İskenderun, they evoked a cultural separation already imprinted in the Bronze Age.

The historical and demographic framework of the Late Bronze Amuq is also in sharper focus. Tell Atchana's tablets identify it as ancient Alalakh, seat of the minor but well-connected second millennium B.C.E. kingdom of Mukiš, more tightly integrated than Tarsus into the Mittanni kingdom (Alalakh VI/V-IV, LB I). Detailed entries from its Level IV archives about towns, villages, and households present an exceptional and newly tapped source for reconstructing one Late Bronze society in depth (von Dassow 2008). Like Tarsus, Alalakh was governed by Hittite administrators during the fourteenth and thirteenth centuries B.C.E. (Alalakh III-II, LB II).

The archival inventories of LB I Alalakh's dependent settlements and their sizes coincide poorly with survey data, which record fewer Late Bronze sites than the texts imply. The kingdom's human and landed properties evidently included holdings outside its territorial limits, making efforts to reconcile toponyms with local sites a futile exercise (Casana 2009). The archaeological pattern, in contrast, reflects a reasonable balance between urban center and village network, the agricultural hinterland that underpinned the city's other economic activities.

### **The Southeast**

Southeastern Turkey's highlands are discussed elsewhere in this volume (see Sagona, chapter 30, Marro, chapter 12, and Laneri and Schwartz, chapter 14). The Late Bronze landscape differed from its configuration in the mid-third to mid-second millennium B.C.E., however. Various factors conspired to precipitate this change: irregular rainfall and increased aridity (Freydank 2009; Konyar 2006; Riehl 2009), the creation of the Hittite state's eastern border at the Euphrates, and the dissolution of large-scale commerce between the Anatolian plateau and northern Mesopotamia. These factors resulted in the abandonment of most Middle Bronze centers, intermittent occupation at the few that endured, and the founding of fortified outposts to administer Hittite, Mittanni, and Middle Assyrian bureaucracy and control the circulation of people and goods.

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Southeast Anatolia subsisted on ovicaprid husbandry and on rainfed agriculture under less favored conditions than in the west, because of poorer soil, higher rates of erosion, and a climate with seasonal extremes. To sustain a population on an urban or ostentatious scale required extensive farmlands and extraterritorial enterprise. Most settlements were therefore rural, and the few hubs they supplied were widely dispersed (Archi, Pecorella, and Salvini 1971:9–15; Wilkinson 1990:11–60). Prosperity and survival depended on a delicate balance of natural and external advantages that was apparently disrupted throughout the Late Bronze Age. A review of recent excavations underlines the extent of this post-MB II hiatus. In the Tigris/İlisu Valley, Hirbemerdon and Kenan Tepe were abandoned, and Late Bronze occupation is found only on Ziyaret Tepe's high mound and the fortress at Türbe Höyük. A similar break occurred in the Urfa and Gaziantep areas at Zeytinli Bahçe and Tilbeshar, whose countryside was also depleted (Kepinski-Lecomte et al. 1996; Matney et al. 2002; Yildirim and Gates 2007:300–3). Survey in the vicinity of Arslantepe confirmed a gap in settlements of any size after MB II; so did previous evidence to the south from Titriş Höyük, Kurban Höyük, and Harran, where habitation was thin, if at all present, throughout the second millennium B.C.E. (Prag 1970; Wilkinson 1990:129–33). Unstable and discontinuous occupation is also indicated at the few attested Late Bronze sites. Architectural remains are slight at Giricano (Schachner 2002, 2003), interspaced with erosional phases even at Hittite outposts like İmikuşağı and Korucutepe (Konyar 2006; van Loon 1978:28–39), or temporary, with pits and fireplaces but little else, as is the case at Tille (Summers 1993).

Official installations were located in strategic passes and at river crossings: the Hittite ones on the Sakçagözü-Maraş passage from Cilicia toward the Euphrates and Carchemish (Dodd 2007), and in the Euphrates Valley from Elaziğ to Carchemish and Emar; to their east, the Mittanni-Middle Assyrian ones were similarly situated. The countryside they invested was populated by subsistence farmers and transient pastoralists whose archaeological existence is invisible. It is also largely anonymous, apart from equating Malatya with Maldiya/Malitija and Djerablus with Carchemish (Jasink 1994); the lack of provenience for Ḫattušili I's letter to a vassal in Tikunani, with references to Ḫaḫḫum (Lidar?) and other towns, is indeed regrettable (Salvini 1994, 1998). When the Hittite state reoriented central Anatolia's supply network to the south's maritime markets (Seeher 2005), the southeast lost its lucrative overland connections and reverted to a rural economy and precarious village life.

### (p. 404) Settlement Layout and Architecture

Late Bronze settlement layout in these regions is gauged from mounds of formal, "urban" type and from specialized sites such as forts, one provincial town (Kilise), and one port (Kinet). Village life must be inferred from the declining stages of LB II. Largely missing are cemeteries, represented only in the Carchemish area (Woolley 1914), by incidental tombs on the mound at Tell Atchana (Woolley 1955) and perhaps by a funerary monument

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above Muwatalli II's rock relief at Sirkeli (Ahrens et al. 2008; Ehringhaus 1999). Extramural cemeteries, for inhumation and cremation, are assumed from this evidence.

In keeping with Bronze Age practice, civic buildings and residences were situated on high mounds, perhaps in isolation there. In the southeast, lower towns disappeared with the Late Bronze Age, when inhabitants chose the security of an elevated site. Such may have been the case too in Cilicia and the Amuq, but this is unexplored except at Kinet, where buildings on the shoreline, admittedly essential to the harbor's business, were overseen by those on its mound (Gates 2006). Official structures are attested by the broad exposures at Tell Atchana and Tarsus, and, to some extent, reflect historical affiliations. The Level IV ("Niqmepa") palace at Tell Atchana (LB I), with entrance portico, two-chambered audience suites, and orthostats lining the formal rooms, was built in western Syrian style (Woolley 1955:110-31), as was the small, contemporary temple, whose porch, anteroom, and cella are aligned and of equal width. Temple rebuildings during the LB II preserved its Syrian features, although the incomplete Level III version is obscure (for a reworked temple sequence, see Fink 2007). In contrast, the monumental temple at Tarsus, dominating the mound's highest point and east side, was unquestionably Hittite in plan and construction, circumstances dating it, perhaps wrongly, to LB IIa (see foregoing discussion; Goldman 1956:49-50). A second Hittite temple, recognized by its cyclopean masonry and compartmented foundations, is under excavation at Tatarlı, where it likewise occupied the site's eastern lookout (Girginer 2008). Hittite builders were claimed for the massive casemate platform ("citadel") at Atchana III-II (LB II) (Woolley 1955:166-70); in the absence of any superstructure, however, neither its plan nor its type can be evaluated (Fink 2007). The large-scale structures at Kinet, overlooking its harbors, are also difficult to assess from their incomplete plans (Period 15, LB I; Period 14, early LB II: Gates 2006, compare with 2009). Finally, Kilise Tepe's unpretentious "Stele Building," combining administrative and cultic functions, suited official life in a provincial town; three wings, for storage and other activities, enclosed a room with an altar-like feature and a painted slab (the stele) (Phase II a-c, late LB II: Postgate and Thomas 2007). No public structures are published for the southeastern sites but could be expected at Lidar. Private housing on these mounds ranged from sturdy, multiroomed residences with internal courts at Tarsus and Atchana, to rural accommodations by the close of LB II (Gates 2006; Goldman 1956:50-59; Summers 1993).

Military architecture followed standards common to the Late Bronze eastern Mediterranean, including Hittite central Anatolia. With the (possible) exception of (p. 405) Mersin, the known sites were all castles for a military and official presence, not residential places protected by a walled enclosure. Mudbrick fortification walls, for example, at Mersin VII-V, were set on stone casemates with rectangular projecting towers, fronted by a screen wall (Garstang 1953:237-41; Jean 2006). They are exceptionally illustrated by the burnt fortress at Zeyve Höyük/Porsuk (Phase V: LB II); its casemates stored grain and other supplies, and its western gate was guarded by two inner towers with internal staircases, whose brick and timber superstructures stand two stories high (four meters) (Beyer et al. 2008). The Euphrates examples show that few buildings were inside: warehouses and a square tower-like structure at İmikuşağı (LB I);

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small, sporadic domestic structures at Korucutepe and Tepecik (Konyar 2006; van Loon 1978); and at Lidar (LB II), a central open area with a brick-lined cistern (Hauptmann 1987). The LB I stronghold at Tilmen, at the crossroads south into the Amuq and west into Cilicia, consisted of a reused tower (Fortress H, like the one at İmikuşağı) beside an official residency (Building C), situated at the highest point of the destroyed MB II city (Colantoni 2010; Marocchi et al. 2010). East of Hittite territory, the fortress at Türbe Höyük was designed on a similar scale (70 × 30 m) to monitor the confluence of the Tigris and Botan Rivers (Yildirim and Gates 2007:300).

## End of the Late Bronze Age

The Late Bronze cities, towns, and forts in southern and southeastern Anatolia endured various fortunes in the twelfth century B.C.E., but all experienced the eventual termination of this cultural, political, and economic phase (Gates 2010). Most were destroyed, and lay deserted for centuries (e.g., Lidar), or their ruins were reoccupied by squatters and migrants, then abandoned (Porsuk, Tarsus). Some deteriorated into villages, attracted new settlers, then ceased altogether (Kilise Tepe, Kinet). Others were abandoned outright (Atchana) and replaced by a new settlement nearby (Tayinat). Prosperity did not revive them fully until the Middle Iron Age, ca. 1000 B.C.E., at the earliest.

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### **Marie-Henriette Gates**

Marie-Henriette Gates is Associate Professor of Archaeology at Bilkent University.

