Journal of Anthropological Archaeology 32 (2013) 774–790

Contents lists available at SciVerse ScienceDirect

Journal of Anthropological Archaeology

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

Sovereignty and territoriality in the city–state: A case study from the Amuq Valley, Turkey

James F. Osborne *

Johns Hopkins University, Department of Near Eastern Studies, Gilman Hall 117, 3400 North Charles Street, Baltimore, MD 21218, USA

ARTICLE INFO

Article history:
Received 29 June 2012
Revision received 15 May 2013
Available online 10 June 2013

Keywords:
Territoriality
Sovereignty
City–state
Settlement pattern
Iron Age
Syro-Anatolia
Ancient Near East

ABSTRACT

This article investigates the relationship of state authority and territory in the city–state, using the Iron Age Syro-Anatolian culture of the ancient Near East as a case-study. Although more sophisticated spatial modeling of political authority has appeared in the past decade, archaeologists are still prone to assume that territoriality in ancient city–states operated according to a "container model" principle in which, like the modern state, political power is evenly distributed across the landscape within clear boundary divisions. The present work examines both the historical record from the Iron Age on the one hand, and regional settlement pattern data on the other, to evaluate the appropriateness of this conception of territory and power in the Syro-Anatolian city–state of Patina, located in southern Turkey. Textual accounts and gravity modeling of settlement distributions point toward a pattern of territoriality in which power was present inconsistently across the geographical extent of the city–state, and in which borderlines as conventionally drawn did not apply. I refer to this flexible relationship of authority and space as malleable territoriality.

Introduction

The Syro-Anatolian city–states of the Near Eastern Iron Age (ca. 1200–700 BC) were clustered around the northeast corner of the Mediterranean Sea (Fig. 1). They arose out of the political turmoil that followed the collapse of the Late Bronze Age palace economy and the downfall of the Hittite Empire around 1200 BC (Bryce, 1998; Glatz, 2009; Ward and Joukowsky, 1992). These polities then existed as independent entities in the early first millennium until their piecemeal annexation into the imperial apparatus of the Neo-Assyrian Empire in the mid- to late-8th century BC (Hawkins, 1982; Lipiński, 2000). In a process of state formation that is still only dimly understood, former provinces of the Hittite Empire and sedentarizing nomadic pastoralists from inland Syria amalgamated in the 12th and 11th centuries BC to create the Syro-Anatolian kingdoms (Bonatz, 2000a,b; Bunnens, 1995; Gilibert, 2011; Giusfredi, 2010; Hawkins, 1982; Lipiński, 2000; Malamat, 1973; Mazzoni, 1994; Pucci, 2008; Sader, 2000; Schniedewind, 2002; Thuesen, 2002; Ussishkin, 1971).

Their roots in the Hittite Empire and subsequent interaction with the Assyrian Empire render these states "secondary" in neo-evolutionary typologies (Esse, 1989; Fried, 1967: 240–2; Joffe, 2002; Knauf, 1992; Marcus, 2004; Parkinson and Galaty, 2007; Price, 1978). However, it may be more appropriate to consider the Syro-Anatolian kingdoms as "city–states" (Thuesen, 2002), defined here as independent polities characterized by their small scale, by having a single city center that dominated the rest of the settlement pattern economically and politically, and by their participation in a regional political system that involved multiple neighboring polities of the same basic composition (Charlton and Nichols, 1997: 1; Griffeth and Thomas, 1981; cf. Hansen, 2000a,b; Nichols and Charlton, 1997; Trigger, 2003: 94–103), despite the objections of some scholars to this term (e.g., Cowgill, 2004: 527; Feinman and Marcus, 1998: 8; Marcus and Sabloff, 2008: 23).

Embedded within traditional definitions of the city–state is the assumption that this political structure necessarily derived political authority and legitimacy from a territorial strategy that involved the ownership and control of continuous stretches of land distinguished by clear boundaries and borders (e.g., Charlton and Nichols, 1997:1; Hansen, 2000b: 16; Trigger, 2003: 94). In this paper I question this assumption by assessing archaeological and historical sources for territoriality in the Syro-Anatolian city–state of Patina. By using both material and textual sources as evidence, I tack between objective and subjective frameworks, operating under the assumption that both sources of knowledge can be used to complement and supplement the other with judicious treatment.

After brief theoretical discussions regarding the combination of texts and archaeological data on the one hand, and sovereignty and territoriality on the other, this paper then evaluates historical and empirical data that shed light on the relationship of political

* Fax: +1 410 516 5218.
E-mail address: josbor24@jhu.edu

0278-4165/$ - see front matter © 2013 Elsevier Inc. All rights reserved.
http://dx.doi.org/10.1016/j.jaa.2013.05.004

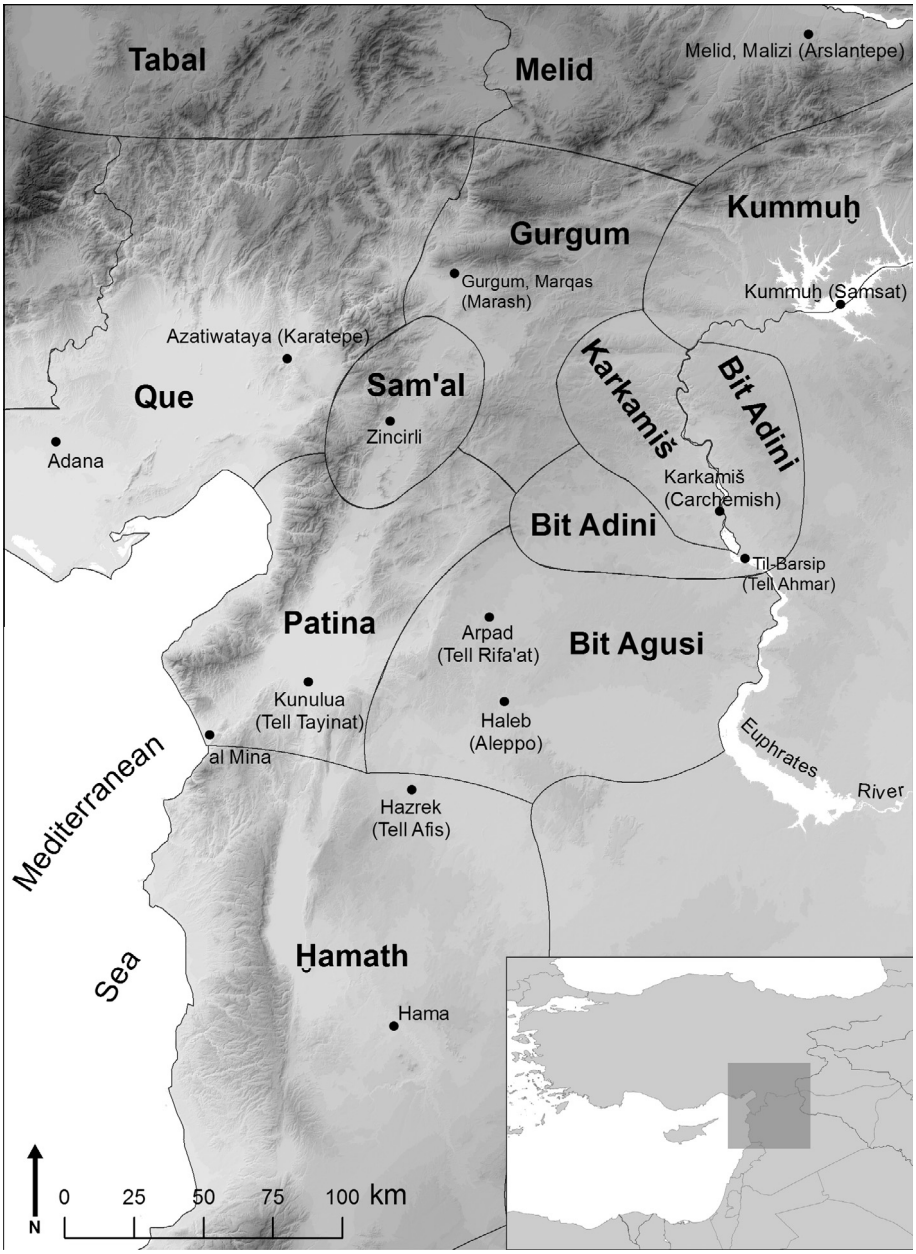

Fig. 1. Conventional map of the Syro-Anatolian city–states, with regional key in the bottom right. Adapted by the author from the Tübinger Bibelatlas, B IV 14.

authority and territory in an early complex society. In both cases the evidence shows a complicated scenario, one in which territory and sovereignty do not necessarily have the same straightforward relationship as they have had (or are assumed to have had) in contemporary history. In contrast to the generally assumed model of evenly distributed territorial authority, power was expressed and experienced as a patchy and highly variegated phenomenon across the landscape of the Syro-Anatolian city–state. This type of territorial sovereignty may have been a common feature of secondary and city–states cross-culturally, and I refer to it as malleable territoriality.

Toward a dialectical approach

The study of complex society in the ancient Near East has an idiosyncratic disciplinary heritage in anthropology. On the one hand, the ancient Near East has featured prominently in the major anthropological debates of prehistoric archaeology, especially the origins of agriculture, urbanism, and the rise of state-level society (Algaze, 2005; Rothman, 2001; Stein, 1999). On the other, the Bronze and Iron Ages of the ancient Near East from the third millennium to the mid-first millennium BC, millennia that cumulatively provide hundreds of thousands of historical documents, feature considerably less prominently in the literature of anthropological archaeology, though significant exceptions do exist (e.g., Cooper, 2011; Glatz, 2009; Parker, 2001, 2003; Stone and Zimansky, 2004; Ur, 2003). This contradictory intellectual history can be reconciled by an appeal to a dialectical approach to archaeological problems of the historical Bronze and Iron Ages – not dialectical in the Marxian, materialist sense of the term, but in the sense advocated by Alison Wylie (1989), who follows Geertz (1979) and others to propose tacking between "experience-near" and "experience-distant" operating frameworks, an approach that combines subjective/emic and objective/etic sources respectively.

This paper subjects the data pertinent to questions of political territoriality in the city–state to two primary modes of analysis.

The first is an exploration of what the texts and iconographic remains contribute to our understanding of native conceptions and perceptions of space. Because both the textual and the artistic sources are so heavily dominated by the royal figure of the king, analysis in this section focuses on how the texts and images in question activated people's imaginations by associating political authority with a specific constellation of symbols.

The second mode of analysis is more formal in nature. Clifford Geertz, the primary advocate of interpretive anthropology, recognized the methodological reality that interpretation of foreign cultures involves not just "experience-near" concepts, or those concepts by which a culture in question understands its own actions and beliefs, but also "experience-distant" concepts, those formulations made by the researcher that make a culture's symbols and patterns of thought and behavior intelligible to others (1979). Although the goal is always to understand a culture on its own terms, at times analysis will inevitably involve the application of methods and interpretations that stand outside of its view of the world (Sahlins, 2004: 4). It should be added, however, that the metaphor of near and distant proximity implies the two are mutually exclusive, when the reality is a continuum of increasing or decreasing interpretive distance from the archaeological subject. Ancient inscriptions by contemporary but foreign cultures, for example, occupy an epistemological middle ground between near and distant. Wylie (1989) refers to this oscillation between the native/emic/interpretive/qualitative mode of analysis on the one hand, and foreign/etic/formal/quantitative on the other, as a "dialectical tacking." Archaeologists of the Iron Age Near East are well-positioned to perform such tacking, exploring ways that the two approaches can be brought into harmony, and ruminating on what it means if they cannot. The result is a richer account of the spatiality of political life than would be possible if either were conducted alone (cf. Sewell, 2005: 318–72; Taylor, 2008: 13; Thurston, 1997).

In the case presented here, I examine Iron Age spatial data from the Amuq Valley of southern Turkey as obtained by the traditional means of archaeological research, especially regional survey, but also explore the perceived and conceived aspects of space in that time and region, including data that might be said to fall under the umbrella of history, such as indigenous inscriptions and artistic programs. Such a dialectical approach, though not strictly empirical, may be considered an example of what Smith (2011): 168-173, following sociologist Robert Merton (1968) (and *contra* Binford (1977) and other archaeologists [e.g., Tschauner, 1996; Varien and Ortman, 2004]), considers middle-range theory: the body of theory that exists at the intermediary level between empirical observations of data and grand, generalizing social theory.

Sovereignty and political territoriality

A recent review of sovereignty in archaeology by Adam Smith (2011) summarizes recent trends in archaeological literature concerning political domination, arguing that politics can be best described as an emergent negotiation between personal will and sovereign privilege. One aspect of sovereignty that rarely receives critical treatment, however, is the traditional assumption of sovereignty's territorial justification; most scholars still consider sovereignty to take place "within a delimited territory" (Smith, 2011: 416).

The idea of sovereignty legitimized by territorial holdings has a long tradition in Western thought. Historians of international relations typically trace the idea to the Peace of Westphalia in 1648, which ended decades-long strife in Europe. In part, peace was accomplished by means of the territorial assignments ascribed to each of the involved parties, leading to a principle of territoriality that has become known as Westphalian sovereignty: neighboring states with clearly demarcated boundaries, within which state sovereignty is held to be uniformly and evenly distributed across space. In crossing boundaries, sovereignty then transfers entirely to the neighboring state (Harding and Lim, 1999; Krasner, 1995; Ruggie, 1993). Westphalia inaugurated what has been the basic paradigm for understanding statehood and territory over the next three and a half centuries.

John Agnew (1994, 2009) refers to this geopolitical assumption – the conceptual bundling of sovereignty and territory, and with it the expectation of political power that is evenly distributed across space within bounded containers – as the "territorial trap." Agnew and other humanist geographers (e.g., Brenner, 1998; Elden, 2009, 2010; Paasi, 1996, 2002, 2003; Raffestin, 1984; Sack, 1986) have argued that this bundling is a result of the geopolitical order that has prevailed for the past 350 years since the rise of the territorial nation-state. Today's globalized political economy illustrates well that the relationship between authority and space is rarely as straightforward as borderlines suggest (see also Appadurai, 1991, 1996).

Archaeology has been slower to question territory as a necessary route to power, although there is a growing body of literature that presents different understandings of the spatiality of state authority. These alternatives include network models (Campbell, 2009; Keightley, 1983; Liverani, 1988; Parker, 2001; Smith, 2005, 2007; Tomaszewski and Smith, 2011) and other reconstructions that maintain territoriality to be an emergent phenomenon contingent to historically specific circumstances (Casana, 2009; Mantha, 2009; Parker, 2003, 2006; Smith, 2003; VanValkenburgh and Osborne, in press). This study contributes to these ongoing discussions in anthropological archaeology surrounding the relationship of political authority and space at the regional scale. The archaeologically and textually rich contexts of the ancient Near East, including the Iron Age Syro-Anatolian city–states discussed here, are particularly well suited to an exploration of how early complex societies created and experienced political territoriality, and how this was manifested in the city–state political formation specifically.[1]

With this methodological and theoretical orientation in mind, I now turn to territoriality in the Syro-Anatolian city–states, and the case-study of Patina in particular. The following analysis begins with historical indications of sovereignty and space, and then interprets the regional settlement pattern data for Patina during the Iron Age II period (ca. 900–700 BC).

Representations of territorial sovereignty in the textual and iconographic records

Patina was located in the Amuq Valley (Turkish: Amik Ovası) in south-central Turkey (Figs. 1 and 2). Patina's rough areal extent is typically derived from the numerous royal inscriptions written by Assyrian kings after they had passed through the Amuq either on military campaign or on exploitative economic raids (Grayson, 1991: 71–6; 1996; Harrison and Osborne, 2012: 125–6; Tadmor and Yamada, 2011). Although its sphere of influence may have extended east through the Afrin Valley toward Aleppo and west over the Amanus Mountains in the earliest decades of its existence, Patina was concentrated in the Amuq Valley proper during the time period that is best understood archaeologically and histori-

[1] A more comprehensive survey of the intellectual history of territoriality in geography and related disciplines, and the consequences of this history for archaeology, is provided by VanValkenburgh and Osborne (in press). Papers in the accompanying volume, *Territoriality in Archaeology* (Osborne and VanValkenburgh, in press), present a series of case studies exploring archaeological manifestations of territoriality in early complex society.

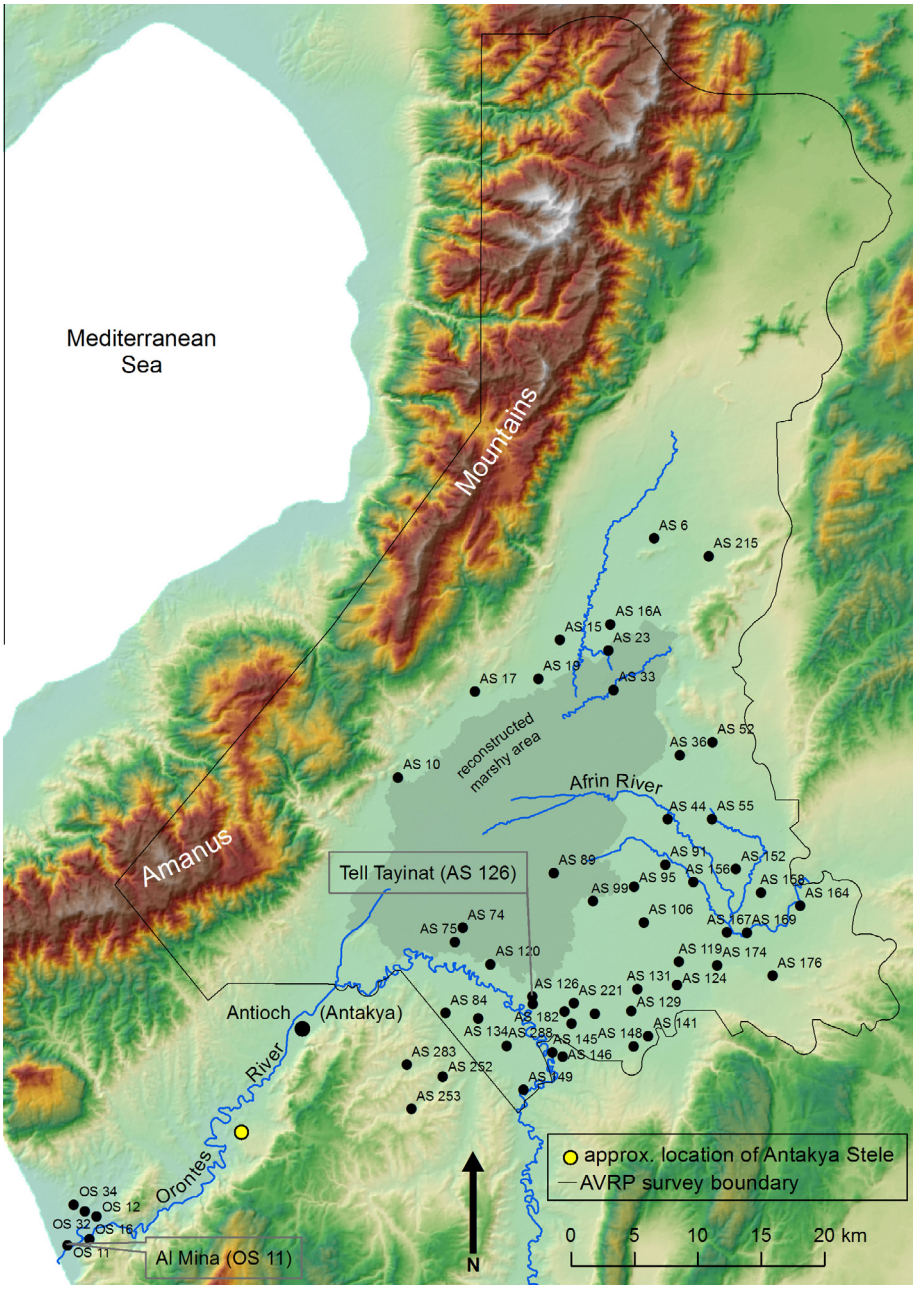

Fig. 2. The Amuq Valley, surrounding geological features, and Iron II settlements identified by the author from survey data collected by the Amuq Valley Regional Projects.

cally, specifically the 9th and 8th centuries BC (Harrison, 2001: 120).

The Assyrian records provide a contemporary, though non-native, perspective on how Syro-Anatolian political authority operated at the regional level. In the Akkadian-language annals of the Assyrian kings, three levels of settlement hierarchy within the Syro-Anatolian city–states can be identified from their accounts of settlements they encountered during their annual military campaigns (Ikeda, 1979; Liverani, 1992). The first is the "royal city" (Akkadian: *āl šarrūti*), the residence of the ruler and capital city (Ikeda, 1979: 76). Typical features of the *āl šarrūti* included a palace (*ēkallu*), often with a treasury (*makkūru*), a harem, and a set of officials (*rabûti*) including eunuchs (*ša rēši*). The second settlement category was the *ālāni dannūti*, or "fortified cities." These cities were generally named and, like the royal city, were associated explicitly with a walled fortification system. Syro-Anatolian fortified settlements are also represented in Assyrian iconography, for example the bronze panels that decorated the gates at the Assyrian site of Balawat. These gates portray cities in Patina with enceinte walls, fortified gates, and moats (King, 1915: Pls. XXV, XXVII). Finally, there were the *ālāni ša limēti*, or "cities in the neighborhood." These settlements were never named. Instead, in order to provide a general impression of the extent of inflicted destruction, they were listed in counts of the total number of villages sacked by the Assyrian ruler, ranging from a handful to as many as 150 (Liverani, 1992: 125). From his analysis of Assyria's annual military campaign accounts, Liverani concludes that there were, on average, slightly more than three fortified cities for every royal city, and approximately 20 villages for every fortified city (1992: 138).

Thus, as far as the visiting Assyrians were concerned, the Syro-Anatolian polities were characterized by a settlement system

Table 1
Amuq Survey (AS) sites with Iron II occupation.

Amuq survey number	Site size (ha)	No. of sherds	No. of Iron II sherds	Iron II occupation according to Braidwood	Iron II occupation data quality
AS 6[a]	0.81	1055	12	No	3
AS 10	1.6	28	5	Yes	2
AS 15	1.35	87	2	Yes	3
AS 16A	1	51	4	No	2
AS 17	2.55	175	7	No	3
AS 19[b]	0.18	20	1	Yes	3
AS 23	1.44	25	5	No	2
AS 33[c]	0.43	N/A	N/A	Yes	N/A
AS 36	1.8	168	3	Yes	3
AS 44[d]	1.2	30	6	No	2
AS 52	3.22	107	9	Yes	2
AS 55[e]	2.55	75	4	Yes	2
AS 74	0.38	9	3	Yes	2
AS 75	1.19	166	13	Yes	2
AS 84	5.4	304	70	Yes	2
AS 89	2.1	512	79	Yes	2
AS 91[f]	3.75	239	7	No	3
AS 95	1.44	306	27	Yes	2
AS 99	7	442	44	Yes	2
AS 106	2.1	200	20	Yes	2
AS 119[g]	2.25	104	1	No	3
AS 120	3.6	215	22	Yes	2
AS 124	2.7	319	9	Yes	3
AS 126	35	183	48	Yes	1
AS 127[h]	0.49	32	1	N/A	1
AS 129	4.5	585	49	Yes	2
AS 131	3.45	97	16	Yes	2
AS 134	0.5	49	5	Yes	2
AS 138	1.75	294	5	No	3
AS 139	5	218	10	No	4
AS 141[i]	2	N/A	N/A	Yes	N/A
AS 145[i]	1.3	N/A	N/A	Yes	N/A
AS 146[i]	1.3	N/A	N/A	Yes	N/A
AS 148[i]	1.8	N/A	N/A	Yes	N/A
AS 149[i]	2.2	N/A	N/A	Yes	N/A
AS 152	1.44	46	7	Yes	2
AS 156	6.25	71	12	No	2
AS 158	1	58	4	Yes	2
AS 164	1.44	139	8	Yes	2
AS 167	10	273	46	Yes	1
AS 169	0.375	236	11	Yes	3
AS 174	1.125	416	31	Yes	2
AS 176	3	233	22	Yes	1
AS 182	1	76	5	N/A	2
AS 215[j]	0.33	372	2	N/A	3
AS 221	0.16	63	5	N/A	2
AS 252[k]	3.14	36	3	N/A	2
AS 253[k]	4.71	105	3	N/A	3
AS 283[k]	1.72	79	3	N/A	3
AS 288	1.276	78	3	N/A	3

[a] The small proportion of Iron II sherds of the total collected might incline one to disregard this site as having had an Iron II occupation. However, the unusually common Cypriot-style pieces speak against such an interpretation (see Plate 1). Most likely the Iron II occupation of this tall mound is obscured by subsequent periods of habitation.

[b] Despite only having a single identifiable Iron II sherd in its small collection, an Iron II attribution for AS 19 is supported by Braidwood's interpretation to that effect (1937: 22).

[c] Because of significant damage to the site in recent years, the original Braidwood Iron II attribution is the only one available (1937: 23).

[d] Concerning AS 44, the AVRP Gazetteer reads "Not visited. . .The site was not located in the field" (Casana and Wilkinson, 2005a: 213). Nevertheless, a bag of pottery clearly labeled AS 44 is present in the AVRP collections, and the author has presented the findings from this site.

[e] Braidwood reports a fragment of a "Hittite" statue being found at this site and published by Messerschmidt (Braidwood, 1937: 25; Messerschmidt, 1906).

[f] All of the Iron II sherds come from the steep north slope of the tell, an area targeted by the surveyors specifically to access earlier periods. This suggests that subsequent Hellenistic and Roman occupations obscure the Iron II material available on the surface of the mound, hence that period's relatively small representation.

[g] Like AS 91, this site's Iron II level is difficult to access due to Hellenistic and Roman occupation. The single Iron II sherd, however, is unambiguous.

[h] Although not a ceramic vessel *per se*, also present in the AVRP collections for AS 127 is a baked clay spool weight, apparently a baked version of the Aegean-style spool weight common in sites with a Sea Peoples connection in the Early Iron Age (Stager,1995: 346–7). These have also been found in the renewed excavations at Tell Tayinat (Janeway, 2006–2007: 138–9) and in Iron II contexts at Çatal Höyük (Haines, 1971: Plate 16B).

[i] Because of its proximity to the border with Syria, 300 m away or less, this site was not visited in the renewed survey. For this reason no assessment of ceramics from the site could be made. Its dating thus comes solely from Braidwood's original assessment, and its measurements are derived from satellite imagery.

[j] Like other sites, we assume that the low absolute and relative total of Iron II ceramics from AS 215 is likely a result from the mound's height (29 m) and the obscuring of earlier occupations by the Islamic, Roman, Hellenistic, and Achaemenid layers.

[k] Although it was surveyed, the details of this site are not published in the AVRP report; its information was kindly made available to the author via the AVRP database. It belongs to a group of peripheral or highland sites that "will be published in a separate volume dedicated to the uplands and mountains" (Casana and Wilkinson, 2005a: 203).

Table 2
Iron Age sites identified by the Orontes Delta Survey.

Orontes Delta site number	Site size (ha)
OS 11	1.6
OS 12	1.2
OS 16[a]	1
OS 32[a]	1
OS 34[a]	1

[a] Site area approximated from satellite imagery in conjunction with the statement "All [Iron Age] sites can be described as small settlements" (Pamir, 2005: 72).

comprised of three distinct tiers: a royal city, secondary fortified centers, and small rural settlements. The consistent use of this terminology over the course of several Assyrian rulers' reigns (Ikeda, 1979: Tables 1 and 2) suggests a durable pattern that was more than simply the artifice of single foreign observers.

A similar hierarchy may be attested in an indigenous source from the Syro-Anatolian kingdom of Sam'al, Patina's neighbor to the north. A monumental statue found in this city–state possesses a royal inscription from the mid-8th century that reads in part "In my days command was given...to establish cities and establish towns; and to the inhabitants of the villages my authority extended" (Gibson, 1975: 67),[2] seemingly providing native confirmation of a three tiered settlement pattern.

Syro-Anatolian royal inscriptions, though briefer and fewer in number than the Assyrian royal annals, are replete with proclamations of royally-built cities and fortresses (Mazzoni, 1994, 1995). In a stele from the kingdom of Hamath, for example, the royal author states that after having finished defeating a coalition of city–states that aligned against him, he built "...all] these strongholds throughout my whole territory" (Gibson, 1975: 11). Likewise, the Phoenician–Luwian bilingual inscription from Karatepe records that the local king built fortresses throughout his kingdom (Röllig, 1999: 51). Passages such as these, which recur repeatedly throughout the Syro-Anatolian realm (see Hawkins, 2000: 231, 315, 402, 409), point to a local understanding of the "fortified city" similar to the settlement type identified by the Assyrians. Native inscriptions collectively indicate that rulers and elites of Syro-Anatolian kingdoms conceived their settlement systems much as described by the Assyrians.

Furthermore, the idea of ubiquitous political power was promulgated not just by the content of royal proclamations, but also by their locations. Inscriptions are found scattered throughout the landscape of these polities, often in places with no associated settlement (Denel, 2006). The inscription overlooking the ancient and modern road at Kötükale in the kingdom of Melid is an example, as is the remote rock relief at Kızıldağ (Harmanşah, 2011: 63–4, Fig. 2). In the city–state of Hamath, two Early Iron Age stelae were found at important crossings of the Orontes River (Hawkins, 2000: 415–19). In Patina itself several fragments of a monumental inscription were found reused in the village of Jisr el Hadid, (now Demir Köprü), the Amuq Valley's major crossing point of the Orontes. By strategically placing royal inscriptions at prominent river crossings, kings maximized their visibility, ensuring that these monuments served as a prominent reminder of their royal authority to citizens throughout the kingdom.

[2] Unfortunately the pertinent terms are not perfectly understood. K. Lawson Younger offers the more cautious "In my days it was commanded throughout all my land to reconstruct TYRT and to reconstruct ZRRY and to build the villages of the dominion" (Hallo and Younger, 2003: 156). However, even in this translation the context implies three different types of settlement. Other epigraphers have offered etymological and paleographic justifications for understanding TYRT and ZRRY as cities and fortresses respectively (e.g., Donner and Röllig, 1966: 38; Tropper, 1993: 68–9). I thank K. Lawson Younger for discussing this passage and its problems with me.

Indigenous textual sources from Patina and its neighboring Syro-Anatolian polities, and those of the invading Assyrians, provide a relatively detailed understanding of the expression of political authority in Patina at the regional scale. The settlement hierarchy in Patina and other city–states was apparently three-tiered as suggested by the annals of the Assyrian rulers and by the terminological distinctions made between capitals, fortresses, and villages in the Aramaean and Luwian inscriptions themselves. Syro-Anatolian rulers, including the kings of Patina, created monumental inscriptions that extolled not only their ability to build throughout the land, but also their ability to monitor and keep it secure. Kings promulgated this message by placing these inscriptions both in the capital and in conspicuous locations in the countryside.

However, this ideology of royal authority being evenly spread across the territory of the city–state was not always represented so consistently in political texts, and an inscription from Patina itself complicates this tidy conception of the relationship between sovereignty and territory. The Orontes River flows from the south into the Amuq Plain, where Patina was located, before turning west and south again to continue its course through a narrow valley until it reaches the Mediterranean Sea (Fig. 2). There are a small number of Iron Age sites in the Orontes Delta (Pamir, 2005), including the important coastal trading site of Al Mina. As elaborated below, scholars are beginning to understand Al Mina, and by extension the few small sites surrounding it, as politically integrated with Patina. This understanding of the delta would appear to suggest that the entire stretch of Orontes between the Amanus Mountains and the Jebel al-Aqra from the river's exit from the Amuq near Antakya to its discharge at the sea near Al Mina likewise belonged within Patina's zone of influence.

Yet there is a significant problem with this scenario. An early 8th century BC cuneiform inscription known as the Antakya Stele was found in the midpoint of this tributary valley halfway between the modern city of Antakya and the coast, and well within the presumed territory of Patina (Fig. 2) (Donbaz, 1990: 5). The stele represents a boundary marker (*tahūmu*) that records an Assyrian king negotiating a settlement between the Syro-Anatolian city–states of Hamath and Bit-Agusi, resulting in Hamath ceding towns to Bit-Agusi; they reportedly "divided the Orontes River between them." A boundary stele between two city–states located squarely within an area that should, by all reason, belong to neither of them (see Fig. 1), is certainly unusual. Some have resolved the problem by proposing that the stele must have been sent down the Orontes from an original location to the south and east, where a Bit-Agusi/Hamath border would be more plausible (Hawkins, 1995: 96).

The motive for the transportation is unclear, and the move is only postulated to make Syro-Anatolian borders palatable to contemporary principles of cartography. But the stele's location is only problematic if one assumes a Syro-Anatolian understanding of territoriality in which borders were discretely marked in space and were understood by inhabitants to demarcate territories of evenly distributed control by political authorities. However, what if the stretch of the Orontes River in the valley between Antakya and the coast was simply not under the authority of Patina (see Weippert, 1992: 58, n. 97)? There is no *a priori* reason to conclude that the Antakya Stele documents the accretion of territory on the part of Bit-Agusi at the expense of Patina (Harrison, 2001: 120). Rather, we must consider the possibility that this inscription may provide a glimpse into a particular feature of Syro-Anatolian land tenure. Instead of being a discretely bounded and integrated domain, the territory of Patina may have been characterized by a malleable conception of political space.

Similar inscriptions elsewhere in the Syro-Anatolian realm suggest the Patina example was not an isolated case, such as the Incirli Stele that was found in the city–state of Gurgum, but assigns

territory and settlements from Gurgum and Kummuh to Que, a kingdom on the other side of the Amanus Mountains (see Fig. 1) (Kaufman, 2007; Swartz Dodd, 2012: 225–9). Likewise, a stele with a Luwian-language inscription by the king of Carchemish, the largest city in the Syro-Anatolian realm, was found in the vicinity of Aleppo in the city–state of Bit-Agusi (Hawkins, 2000: 143–151). The inscription records the purchase of a city by the Carchemishean king for the price of six hundred mules, demonstrating that Syro-Anatolian settlements could easily change ownership (Giusfredi, 2010: 255–9). Its provenience further suggests that such exchanges could take place without consideration for proximity to the ruler's capital city.

Foreign Assyrian and indigenous Syro-Anatolian royal annals combine to present a scenario in which settlements were organized, in broad terms, according to a three-tiered hierarchy and in which political territoriality was promoted by royal decree as an absolute phenomenon. However, other, more mundane, passages suggest that in practice sovereignty may have been more complicated territorially than the kings presented. This paper now evaluates the archaeological record, and specifically the regional settlement pattern data from the kingdom of Patina, to assess the degree to which this data can inform our understanding of Syro-Anatolian sovereignty and space.

The kingdom of Patina

The north Orontes Valley

Patina was located in the Amuq Valley (Fig. 2), situated at the northern extent of the eastern Mediterranean littoral. The valley is part of the great Red Sea–East African Rift Valley system that terminates slightly further to the north at the Maraş Triple Junction, the meeting point of the African, Arabian, and Anatolian Plates (Altunel et al., 2009; Sbeinati et al., 2005; Tolun and Pamir, 1975). The Amuq is a fairly discrete geological formation that measures roughly 535 sq. km (330 sq. miles) (Yener, 2005a: 2). In shape it can be likened to an equilateral triangle with its apex at the northern corner (Braidwood, 1937: 8). On its west lies the imposing Amanus Mountain range, extending up to 2250 masl. To the southwest and southeast lie the foothills of the Jebel al-Aqra and Zawiye Dağ respectively, and to the northeast is the basalt-rich Kürt Dağ.

The plain itself lies in the range of 80–90 masl (Casana and Wilkinson, 2005b: 28). Although extraordinarily flat, the plain has not had a uniform depositional history. Geomorphological analysis has demonstrated that in some areas the surface of the plain is essentially the same today as it had been in Neolithic times, whereas in others the surface level of early periods is buried under several meters of accumulated soil. This is due to alluviation from flooding of the rivers, colluvial deposits resulting from the erosion of mountain slopes, and the influence of the Lake of Antioch, all of which affect different parts of the valley (Casana, 2008; Wilkinson, 2000: 169–178).

Among the important hydraulic features of the Amuq are three river systems. The small Kara Su flows from the north and enters the Amuq at its northern corner, while the equally small Afrin River enters the Amuq via the connected Afrin Valley to the east. The Orontes River, the only substantial river in the plain, flows north through the Ghab Valley of western Syria and enters the Amuq from the south, turning westward near the sites of Tell Atçana and Tell Tayinat, the two principal Bronze and Iron Age settlements in the plain. The river then skirts the southwestern corner of the plain before heading southwest through the city of Antakya (ancient Antioch) en route to the Orontes Delta and the Mediterranean coast. Despite the availability of river water, the Amuq Valley was not irrigated until the Roman period due to the fact that it receives an annual average of 500–700 mm of rain, well above the minimum amount necessary for dry farming (Casana and Wilkinson, 2005b: 28).

Today the landscape is heavily irrigated, primarily for corn, sunflower, and cotton, but this is only a feature of the last few decades after several attempts to drain the Lake of Antioch were finally successful (Çalışkan, 2008). As Robert Braidwood presciently deduced (1937: 8–9), the lake was a late feature. Despite seasonal flooding, a large perennial lake was not yet in existence during the lifetime of the city–state of Patina (Wilkinson, 1997: 566; 2000: 176–8), although there was possibly a sizable zone of semi-permanent marshy land created by flooding that was still substantial enough to discourage settlement in that area. Pollen cores taken from the adjacent Ghab Valley to the south show that the area was heavily wooded until roughly 8000 BC, then was substantially deforested between 8000 and 5000 BC. By the Bronze and Iron Ages (ca. 3400–600 BC), therefore, the landscape had been significantly modified to its modern agricultural state (Yasuda et al., 2000). If the Ghab Valley pollen cores are tentatively accepted as proxies for the Amuq, then the Amuq was likely already denuded of its forest long before Patina came into existence. Paleoenvironmental reconstruction thus suggests that the Amuq Plain of the Iron II period was not entirely dissimilar from the Amuq Plain of today, with the exception of varying surface elevations (Casana and Wilkinson, 2005b: 30, Table 2.2, and Fig. 2.4).

Regional settlement patterns

The Syrian–Hittite Expedition surveyed the Amuq Valley in the spring of 1936 when Robert Braidwood spent three weeks assessing all the visible tell sites in the plain. The results were published in Braidwood's ground-breaking volume *Mounds in the Plain of Antioch: An Archaeological Survey* (1937). Braidwood accomplished a lot in those three weeks: every visible mound was visited, including those up the neighboring Afrin Valley, and occupational histories were assessed through comparison with a ceramic sequence established from the expedition's excavations at Tell Judaidah. In total, Braidwood identified 178 sites, already a remarkably high number given the relatively small survey area. Though his survey methodology was pioneering in its time, there are limits to Braidwood's study. There are no pottery plates provided, making it impossible to evaluate period assignations. Site sizes were not measured formally, either in terms of areal extent or height. There was no attempt made to subdivide surface collections such that differential occupational zones of a single site through time could be estimated. Finally, only mounded settlements were targeted and there was no attempt to survey the rest of the plain, such that non-tell sites were entirely excluded. This led to a bias favoring the Bronze and Iron Ages.

In 1995, research into the settlement history of the Amuq was reinitiated by Aslıhan Yener with the Amuq Valley Regional Projects (AVRP) (Yener, 2005b; Yener et al., 2000). AVRP's survey methodology involved taking systematic collections from all the mounds in the plain, including those visited by Braidwood, and from all non-mounded sites as identified through satellite imagery and off-site transects (see Casana and Wilkinson, 2005b). In addition, the survey was extended into the surrounding highlands with the goal of providing a counterpoint to the lowland-exclusive efforts of Braidwood (Casana, 2003: 183–204). These efforts have increased the current number of known sites from 178 to 396 (Gerritsen et al., 2008; Swartz Dodd, 2011).

Iron II settlements in the Amuq Plain

It is the collections made by the AVRP survey that form the basis of the settlement pattern analyses of the early first millennium presented here. Identifying which sites in the Amuq might have belonged to the kingdom of Patina requires knowledge of the local archaeology of the Iron Age, and more specifically the Iron II (ca. 900–700 BC). Fortunately, Tell Tayinat, the ancient city of Kunulua, "royal city" of the kingdom of Patina, was excavated by the Oriental Institute of the University of Chicago from 1935 until 1939 under the auspices of the Syrian–Hittite Expedition to the Amuq Valley (Fig. 3). The expedition identified five phases of architectural remains which were termed Building Periods (Haines, 1971). The earliest of these phases, Building Period 1, was dated roughly from 875 to 825 BC and Building Period 2 from 825 until about 720 BC (Haines, 1971: 66; cf. Harrison, 2009a,b). On ceramic and historical grounds, the original dating of Building Period 2 has been largely confirmed, though modified slightly, from ca. 850 to 738 BC. The conquest of the city by the Assyrians in 738 BC marks the likely end point of Building Period 2 (Osborne, 2011).

Based on the Tayinat sequence established by the Syrian–Hittite Expedition a typology of local and imported ceramic wares was made by the author (Fig. 4) (Osborne, 2011, in press). The local pottery of the 9th and 8th centuries is characterized above all by a large number of open vessels – bowls and shallow platters together constitute 69% of the assemblage examined – and a ware type known as Red Slipped Burnished Ware that is found throughout the Levant at this time. Regionally, Tayinat's local forms have close parallels with the Levant and northwestern Syria (Cecchini and Mazzoni, 1998; Lebeau, 1983; Lehmann, 1996, 1998); the Amanus Mountain range on the west side of the Amuq seems to be a dividing line between Levantine and Anatolian ceramic traditions. Imported pottery comes from Cyprus, especially the Bichrome and White Painted components of Cypro-Geometric pottery but also Black on Red ware (Gjerstad, 1948; Schreiber, 2003). Tayinat also produced several dozen pieces of Greek Geometric pottery (Coldstream, 1968), including especially the so-called "pendent semicircle skyphos" which is often taken as a marker of cultural and economic relations between the Aegean and the Near East at this time (e.g., Kearsley, 1989).

Fig. 3. CORONA satellite image of Tell Tayinat (DS1112-2203DA039). Note the excavation scar from the 1930s Syrian–Hittite Expedition. Also note the lower town and city wall, not visible on the ground.

The morphological attributes of mounded tell sites compromise our ability to determine a settlement's occupational history from surface finds. The final period of occupation is closest to the surface, and thus provides the most common ceramic material picked up by surveyors, while sites that were occupied for a long time might not have their earliest levels represented on the surface at all. A stark example of this phenomenon is that of Tell Salihiyyah (AS 129), last occupied in the Iron Age. Despite being attested historically in the Middle and Late Bronze Ages (ca. 2000–1200 BC), these periods provided less than 2% of the AVRP ceramic collection, while the Iron Age provided 90%. This problem affects the earliest periods of tell occupation most adversely, which, in the Amuq, refers especially to the Neolithic through the Early Bronze Age. However, a transition from tell-based settlements to farmsteads and small villages began in the Seleucid period, roughly the mid-first millennium BC (Casana, 2007). One consequence of this transition is that the Iron Age level of these tells is often their last major occupational phase, and therefore their uppermost layer (Casana and Wilkinson, 2005b: 37). For those sites whose Iron Age occupation is buried under multiple subsequent occupations, a related problem is our inability to accurately determine settlement size during the Iron Age. Previous researchers have attempted to compensate for this problem by looking at other variables pertinent to Iron Age site topography such as unusual height, which is argued to correspond to Iron Age fortifications (Casana 2007, 2009). Such considerations can helpfully modify analyses like gravity modeling in instances where the results seem unlikely or counterintuitive (see below).

Equally challenging is the difficulty of placing these ceramic types into a high-resolution chronological sequence. Although new and distinct ceramic forms were introduced by the permanent presence of the Assyrians in the Iron III period following their conquest of Kunulua in 738 BC, many of the forms of the Iron II's ceramic assemblage continue well into the seventh century (Hausleiter and Reiche, 1999). Isolating the pre-Assyrian conquest phase in the AVRP collections, therefore, remains a challenging task. This means that the results presented here possibly conflate the settlement pattern of c. 850–738 BC with that of 738–c. 625 BC.

The results of an examination of the AVRP collections, based on a comparison with the Iron II ceramic assemblage from Tell Tayinat, is provided in Fig. 2 and Table 1, which lists all 50 sites found to have Iron II pottery in their collections. In addition to site size, a total count of the sherds in these collections is presented, as well as the number of definitively identified Iron II sherds. The presence or absence of an Iron II assignation by Braidwood is also listed for sites AS 1 through AS 178, the last site recorded by Braidwood. The final column evaluates the confidence level in the Iron II attribution according to a hierarchical scale adopted and modified from Casana (2009).

Confidence scaling helps provide a transparent account of the quality of the data, although all of the sites in the table are included in the analyses that follow. Dating confidence is ranked into four categories, from highest quality to lowest: (1) the site possesses an Iron II occupation identified by excavation; (2) the site has a large collection of diagnostic Iron II pottery (>5%); (3) the site has a small collection of diagnostic Iron II pottery ($\leqslant$5%) at a site with later, and therefore obscuring, occupation; and (4) the site has a small collection of diagnostic Iron II pottery ($\leqslant$5%) with no

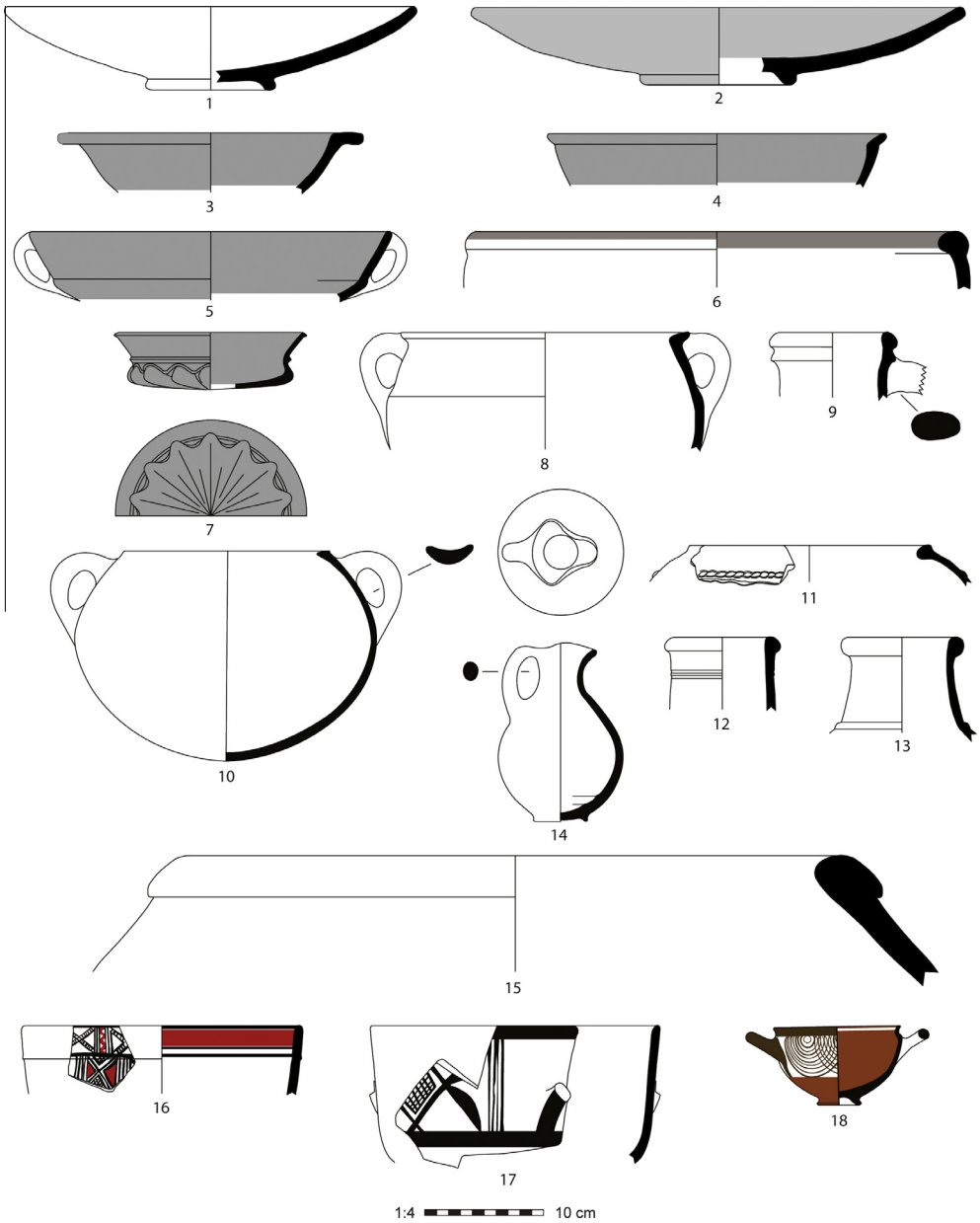

Fig. 4. Ceramic typology of the Iron II (ca. 900–700 BC) pottery at Tell Tayinat (Osborne, in press). Grey shading indicates a red slipped and burnished surface treatment. Typical local forms include platters with ring base (1, 2); bowls with everted rims (3, 4); carinated bowls (5, 7); large basins with red slip and burnish on the rim only (6); kraters (8); jugs (14); holemouth cooking pots with stone temper (10) and cooking pots with shell temper and thickened rim (11); storage jars (9, 12, 13); and pithoi (15). Imported wares are most frequently Cypro-Geometric pottery from Cyprus, including Bichrome Ware (16) and White Painted Ware (17) (Gjerstad, 1948); much less common is Greek Geometric pottery, especially the painted semi-circle skyphos (Coldstream, 1968; Kearsley, 1989).

identifiable subsequent occupation. There is only a single instance (AS 139) of this last, least reliable category, suggesting that, on the whole, the identification of Iron II sites has been accomplished with reasonable confidence. By far the most frequent Iron II ceramic forms were round-lipped and squared-lipped Red Slip and Burnished Ware platters. Cypriot pottery was collected from a number of sites (e.g., AS 6, AS 17, AS 84, AS 95, AS 120, AS 138), suggesting that these vessels were circulated widely throughout the plain. The rarer Greek Geometric imports do not have a single occurrence.

Al Mina and the Orontes Delta

In addition to the Amuq Valley proper, there is another geological zone that must be considered: the Orontes Delta, a small strip of flat, fertile land located at the mouth of the Orontes River (Fig. 2). When it departs the Amuq Valley through its southwest corner, the Orontes enters a narrow zone between the foothills of the Amanus range to the north and west and the foothills of the Jebel al-Aqra to the south and east. The entrance to this zone from the Amuq was later occupied by the next great urban center to follow Kunulua, the Roman city of Antioch. Until recently the only site along the valley of the Orontes River between the Amuq and the Mediterranean that has featured in discussions of Iron Age archaeology has been Tell Sheikh Yusuf, better known as Al Mina (Woolley, 1938a,b).

Because of its unusually high quantity of Greek Geometric pottery, Al Mina has been the single most important site on the Levantine littoral for documenting material relations between the ancient Near Eastern "East" and the classical Greek "West," especially during the seventh century's so-called Orientalizing

Revolution of the classical sphere (Burkert, 1992). The traditional view of Al Mina has long been that early Al Mina was either wholly Greek or had many Greeks living there, that the Greeks at Al Mina had settled there with the purpose of importing Near Eastern exotic goods to Euboea and the greater Greek world, and that the Greek pottery found at the site was used by these Greek traders specifically (Boardman, 1959, 1965, 1990, 1999, 2001, 2002). Renewed research, however, has made a compelling case for understanding Al Mina as a fundamentally local phenomenon on the basis of large quantities of local pottery, the Levantine character of the architectural remains, and more sophisticated notions of ethnicity than simply equating pots with people (Graham, 1986; Lehmann, 2005; Luke, 2003; Taylor, 1959; Waldbaum, 1994, 1997).

The question of who occupied the coastal trading site of Al Mina leads us to consider who controlled the site politically. Geographical passages in historical texts suggest that Al Mina was the Iron Age town of Ahta, a settlement that was a royal storehouse controlled by the kingdom of Patina (Na'aman, 2007: 44; Tadmor and Yamada, 2011: 85–6; Zadok, 1996: 104–5). Analysis of the material culture from their contemporary levels, especially the Aegean and Cypriot ceramics at Tayinat that had to have been imported from a coastal site and that are of a significantly greater quantity at Tayinat than at any other inland Levantine site, also indicates close interaction between the two sites (Luke, 2003: 12–20; Osborne, 2011).

The historical importance of Al Mina as an integral part of Patina is now also supported by settlement data. The plain of the Orontes Delta was surveyed by Hatice Pamir as a component of the larger Amuq Valley Regional Projects (Pamir, 2005: 67–98; Pamir and Nishiyama, 2002). Pamir's survey identified five sites in the Orontes Delta that had Iron Age occupation, including the already-known Al Mina (OS 11) and Sabuniye (OS 12) (Table 2). The published drawings include illustrations of several types attested in Tayinat's assemblages, including Red Slipped and Burnished Ware and Cypro-Geometric White Painted and Bichrome Wares (Pamir, 2005: Fig. 3.11 and 3.12). These sites bring the total number of settlements within the Iron II city–state of Patina to 55.

Gravity modeling

The map that results from these data shows a high concentration of sites across the valley, and a small number of sites in the delta of the Orontes River (Fig. 2). The narrow valley between the delta and the plain was not surveyed, but erosion from the surrounding mountains has covered the valley floor with several meters of colluvium (Casana, 2008). Together with the sprawl of the modern city of Antakya, this colluvium obscures ancient settlement in this area.

The Iron II sites in the Amuq Valley are not distributed evenly throughout the plain. Instead, there is a large gap visible in the plain's northwest quadrant. This gap corresponds closely with seasonal wetlands predicted by hydrological modeling of the Amuq, an area that is shaded grey in Fig. 2. The accuracy of the predicted hydrological feature is best evidenced by sites AS 10, AS 15, AS 16A, AS 17, AS 19, and AS 23, all of which are close to the wetland's west–northwest edge. These results point towards the existence of a semi-permanent wetland area during the Iron II period that was probably flooded annually, possibly explaining why the majority of Patina's settlements are located in the eastern and southern portions of the plain.

The issue of site location can be explored further by assessing the relationship between site size and distance between sites using gravity modeling. Gravity modeling is a method that has seen only limited usage in Near Eastern archaeology (Lupton, 1996; Schacht, 1987), but has long been recognized as a helpful tool to assess settlement systems in a visual and quantitative way (Hodder and Orton, 1976). This technique has its origins in the positivist movements of geography in the 1960s (e.g., Olsson, 1965), and like all quantitative methods, should not be considered in isolation. However, gravity modeling is a helpful way of converting numerical site-size data into a visual representation of potential relations between sites, and to do so in a way that is consistently applied to every site.

The gravity model depends on two significant assumptions. The first is that interaction decreases with distance between two sites, due to the rising cost in communicative efficiency that increases with distance between sites. The second is that the intensity of a site's interaction with neighboring settlements increases as that site increases in size or population; the larger or more populous the site, the more it interacts politically with its neighbors (Alden, 1979: 170). In other words, interaction between two places is considered to be directly proportional to their populations, but inversely proportional to the distance between them (Alden, 1979: 171). The precise nature of the proposed interaction – political, economic, cultural, or other – is unspecified; here I treat it as an approximation of political relationships, though it might be more appropriate to speak more vaguely of 'interaction spheres'. Of course, these assumptions will not hold in every instance. A political center that is small in relation to many of its other settlements may still be extremely powerful. Other latent assumptions in the model must also be accounted for, especially the fact that it does not take topographic variability into consideration but rather places settlement systems into an abstracted space. In fact, this latter assumption is less pernicious to our case than it might be in others: since the Amuq Valley is a flat plain with few significant topographic barriers, it is perhaps as close a case as one is likely to get to the imaginary isotropic setting that many quantitative settlement analyses assume.

Gravity modeling is computationally straightforward. First one measures the distance from every site to every other site. Then every site is assigned an index of the likely strength of its interaction with every other site based on a simple equation: $M_{ij} = A_i A_j / (d_{ij})^2$, where A_i and A_j are the areas of settlements i and j and d_{ij} is the distance between them (Schacht, 1987: 1973, n. 2). Each site thus has a different interaction index for every other site; the higher the number, the greater the proposed likelihood and strength of interaction between them. Each site's highest order of interaction corresponds to its nearest interaction neighbor, and its next highest order to its second nearest interaction neighbor. The results of these two degrees of proposed interaction are presented visually in Fig. 5.

Fig. 5 is illustrative in several respects. First and foremost, it is apparent that AS 126, Tell Tayinat, features prominently; many sites both small and large are predicted to have close political interaction with Tayinat. 18 of the 55 sites have Tayinat as their nearest interaction neighbor, and another nine list Tayinat as their second, indicating that Kunulua, the capital city of ancient Patina, was either the strongest or second strongest site of predicted political interaction with half the settlements in its hinterland. Nearest interaction neighbors of the first degree have been linked together by black lines and those of the second degree by lighter grey lines. It is immediately clear that Tell Tayinat formed the major political center, at least according to the assumptions of the gravity model. Because of its disproportionate size and population, Kunulua is predicted to have likely had a significant amount of political authority over much of the area, even when distance from other sites is considered.

Tell Tayinat is also predicted to have held a significant amount of political gravity over sites that were far away, including those sites on the western and northern edge of the Amuq Valley. However, this is at least partially because there are no sites in the area

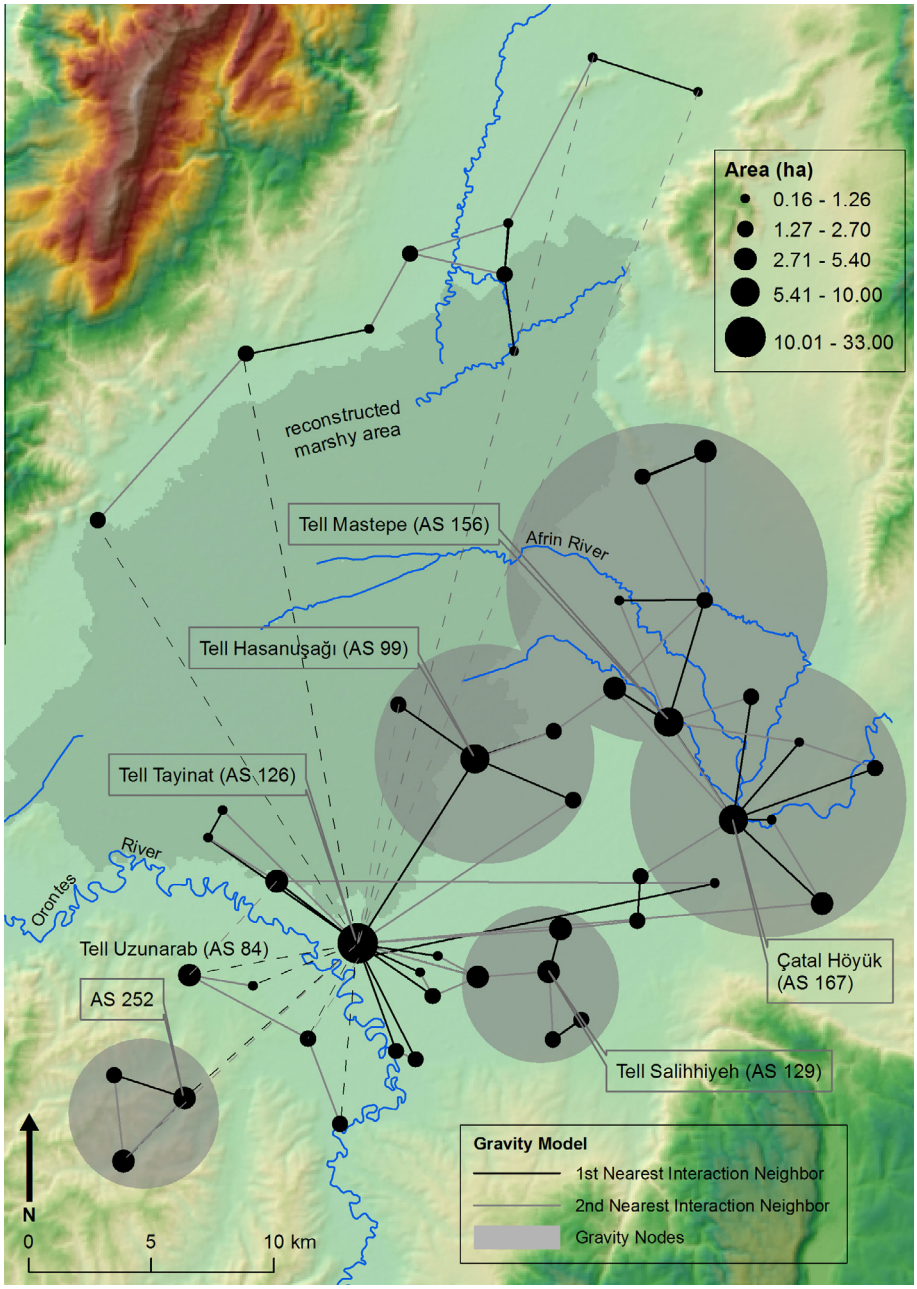

Fig. 5. Gravity model of Iron II settlements in the Amuq Valley and resultant settlement clusters, with sites scaled according to size. Sites' first nearest interaction neighbors connected with a black line, second nearest interaction neighbors connected with a grey line. Dashed lines indicate the presence of a possible topographic obstacle between sites, such as the Orontes River and the possible marshy area reconstructed by hydrological modeling.

between the eastern portion of the plain and its western edge, a stretch of land that was possibly left unoccupied due to a perennial body of marshy land in this area, the lowest portion of the plain. This suggests the area was unsuitable for occupation even though there may not have been a permanent body of water there (although at present the possibility that taphonomic processes have destroyed or covered sites in this area cannot be discounted). We thus must account for the possibility that it was difficult to transverse, and that roads or paths leading between settlements on the western and northern fringes of the plain had to go around this marshy area, unlike the gravity model's assumption of a direct line of access between sites.

The issue of direct-line access between sites is problematic for all but the nearest settlements to Tayinat. The problem is less severe for most other settlements since they are located on a flat, featureless plain, and thus one could conceivably have walked or ridden straight to Tayinat, but the possibility that other, less optimal routes were used for any number of reasons, remains open. If such non-direct routes were in place across the entire plain, then the result would be a lessening of the political gravitational force of Tell Tayinat. (No ancient pathways, such as the hollow-ways still visible in the landscape of northeast Syria [Ur, 2010: 129–46], are visible in CORONA satellite imagery of the Amuq, presumably because sedimentation has covered them too deeply, unlike elsewhere in the Syro-Anatolian region [Casana, 2013: 261–3]). This problem is most significant for sites on the western and northern fringes of the plain. The distance between these sites and Tayinat would double if one assumes that travel between these sites and

Tell Tayinat had to go around the reconstructed marsh by skirting the foothills of the Amanus Mountains. Since distance is the primary mitigating factor to size in the gravity model equation, it follows that modeling would predict these sites to have felt the political gravitational pull of Kunulua less strongly. Fig. 5 acknowledges this problem visually by using dashed lines to represent all nearest neighbor connections that ostensibly crossed the marsh that possibly existed in this area.

A closer inspection of the gravity model in the eastern and southern portions of the marsh reveals internal patterning in the settlement system. What emerges from the gravity model analysis is the existence of five smaller nodes of interaction, each with several small sites connected to a larger center by two or more primary nearest interaction bonds and several secondary nearest interaction bonds (Fig. 5). From southwest to northeast, these nodes are centered on AS 252 (unnamed), Tell Salihhiye (AS 129), Çatal Höyük (AS 167), Tell Mastepe (AS 156), and Tell Hasanuşağı (AS 99).

The first node, with AS 252 at its apex, may be another consequence of applying an abstracted spatial model onto diverse physical terrain, for this area consists of several thin intermontane valleys that splice the foothills of the Jebel al-Aqra. In addition, the model does not mathematically factor the influence of the Orontes River into the calculations; it would have acted as a constraining factor between those settlements to the south and west of the river and Tayinat, and thus several of these sites might have had more interaction with AS 252 than the results of the gravity model indicate. As with the reconstructed marsh, each neighbor relationship that crosses the Orontes is represented with a dashed line. For this reason, this node is the least secure reconstruction. It is thus not surprising that a previous study has preferred to see Tell Uzunarab/Bozhöyük (AS 84) as the most significant settlement in this portion of the plain by virtue of its striking height, which implies the presence of an Iron Age fortification system (Casana, 2009: 22).

The settlement node around Tell Salihiyye, AS 129, may have already existed in the second millennium (Casana, 2007: 204 and Fig. 6). Tell Salihiyye forms a very prominent mound in the plain, not only relatively large in expanse at 4.5 ha, but also quite tall at 19 m (Fig. 6). Large amounts of ceramic slag were identified in the overwhelmingly Iron II pottery collections of the AVRP survey, pointing to the possibility that Tell Salihhiye served an additional role as a ceramic production center. The site's dominant morphological feature is a deep saddle on its northwest edge (Casana and Wilkinson, 2005a: 228), indicating a likely gate in this area and suggesting also that this site was fortified during the Iron II period.

Çatal Höyük (AS 167), at 10 ha the second largest Iron II site in Patina, forms the center of a third node. Five sites are connected to it as their nearest political neighbor, and another as a second nearest neighbor. Of these six sites, only one (AS 176, Tell Judaidah) is connected to Tell Tayinat (by a second degree), indicating that perhaps Çatal Höyük was the major political center in this portion of the plain. Excavations in the 1930s demonstrated that the city was fortified in the Iron Age with a 3 m wide mudbrick wall (Fig. 7) (Haines, 1971: 4–5), emphasizing the city's political significance during this period much the same as Tell Salihhiye's probable fortifications. Çatal Höyük's location at the junction of the Afrin and Amuq Valleys likely has something to do with the site's prominence in the region, and suggests that Çatal Höyük was a significant node in the trade network that would have connected Patina to polities to the east, especially the kingdom of Bit Agusi (Fig. 1).

A cluster of sites around the 6.24 ha site AS 156, Tell Mastepe, appears to the north of the Çatal Höyük node. Its close predicted relationship with Tell Kurcoğlu (AS 55) to the northwest also connects this node with those sites in the furthest northeast reaches of the plain. Although no fortification system is immediately apparent, examination of a CORONA satellite image reveals that in fact there is a small 100 × 100 m upper city, which is where most of the Iron II pottery was reportedly found (Casana and Wilkinson, 2005a: 252). The site's morphology suggesting that this site, too, was politically stratified even if a fortification system *per se* is not evidenced.

A fifth and final cluster of settlements is attested around the 7 ha site of AS 99, Tell Hasanuşağı (Fig. 8). In addition to being Patina's third-largest settlement, Tell Hasanuşağı is remarkable for its surrounding moat, starkly visible in the satellite imagery: rainwater collects in the depression, promoting greater floral growth than in the area around it. The satellite imagery also shows clearly that the perimeter of the mound is characterized by several saddles, suggesting the presence of a fortification wall and gate system. Finally, it is important to note that "a large quantity" of copper and iron slag was found on the site by the AVRP surveyors (Casana and Wilkinson, 2005a: 220, Plate 2F). As with Tell Salihhiye, this surface collection suggests that Tell Hasanuşağı may also have been a center for craft production, in this case with metals.

This gravity modeling supports the hypothesis that Patina's regional political interaction was structured in the form of a three-tiered hierarchy. At the top was the disproportionately large Tell Tayinat, the capital city of Kunulua, with all its accompanying evidence of social stratification as revealed by excavation. A secondary tier of node centers, comprised of AS 252, Tell Salihhiye, Çatal Höyük, Tell Mastepe, and Tell Hasanuşağı, were characterized by their large size, their evidence of elaborate fortification systems, and preliminary indications of large-scale craft specializations. The third and lowest tier consisted of the many smaller sites that were linked to these secondary nodes.

These secondary sites may correspond to the *ālāni dannūti*, or "fortified settlements," referred to in the Assyrian annals, of which three to five are listed for a given kingdom, and whose salient morphological attribute is the fortification system. Gravity modeling thus provides support for the Assyrian understanding of Syro-Anatolian political structure at the regional scale, and indicates preliminarily where these settlements were located in the plain. That these towns were indeed fortified has been demonstrated through excavation in the case of Çatal Höyük, and through satellite imagery and site morphology in the cases of Tell Hasanuşağı, Tell Salihhiyeh, and possibly Tell Mastepe. In short, gravity modeling seems to have provided a preliminary, and testable, sense of how the three-tiered settlement hierarchy described in the texts were situated spatially, a fruitful way of beginning to approximate the distribution of authority across the landscape.

Gravity modeling's low level of resolution is helpful when settlement dynamics are described only in broad strokes, as is the

Fig. 6. Tell Salihiyyah (AS 129) from the valley floor, viewed from the north. Note the wide depression on the site's north face, a morphological feature characteristic of Iron Age fortifications. Photograph by the author.

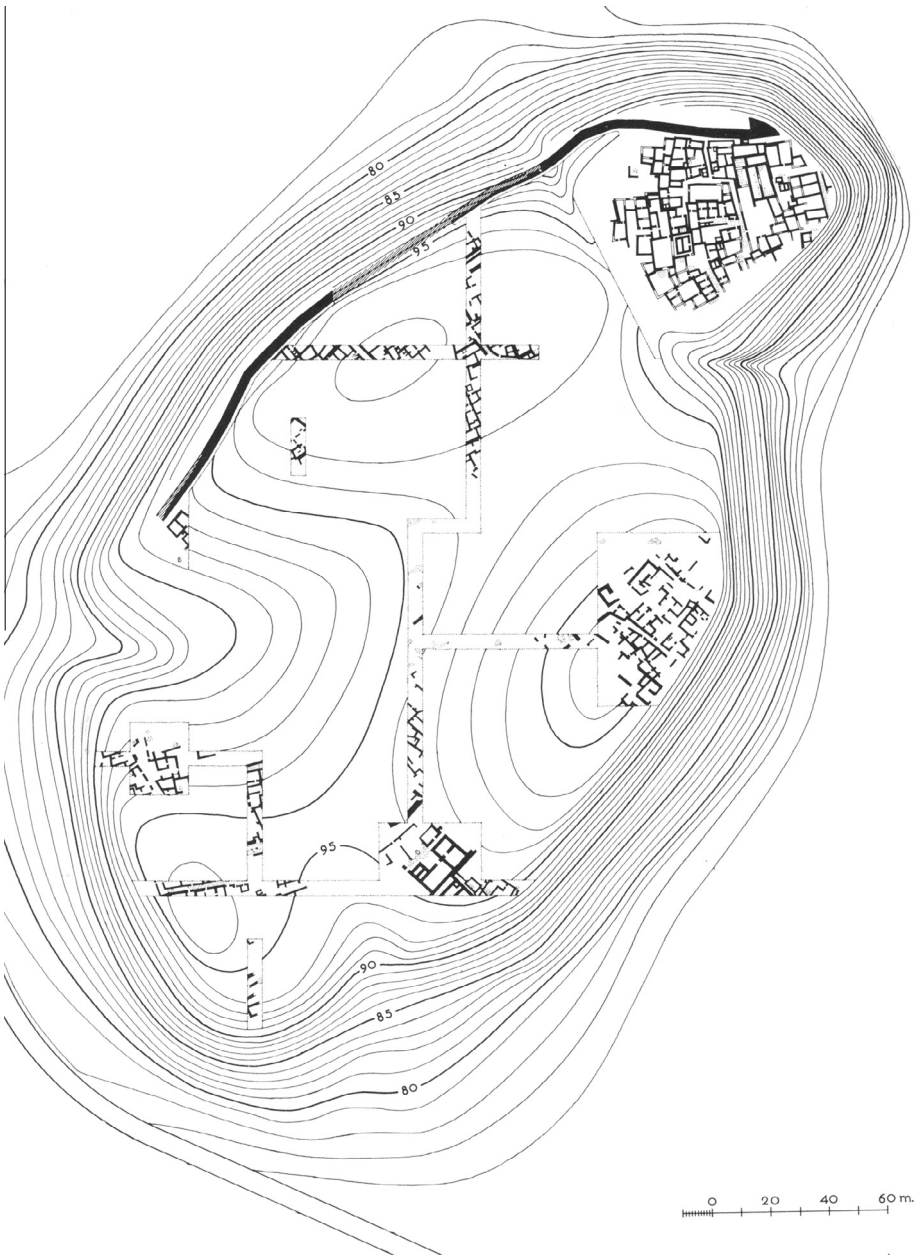

Fig. 7. Plan of the excavated Iron II remains from Çatal Höyük (AS 167) in the Amuq Valley. Note the substantial fortification wall excavated along the north and west edge of the settlement. Adapted by the author from Haines, 1971: Pl. 20.

case when site locations are determined from surface sherd collections and only a few have undergone excavation. In the meantime, I noted Tell Salihhiyeh's high quantities of ceramic slag and Tell Hasanuşağı's high quantities of metal slag in those sites' surface collections, which perhaps indicate specialized production in those crafts taking place at those settlements. If this impression can be confirmed through excavation, we might be able to achieve more accurate conclusions than the broad statements offered by gravity modeling and begin to consider specific emergent practices of political interaction between sites.

Al Mina and the Iron II settlements in the Orontes Delta provide good examples of how excavated material data correct some of the interpretations made from quantitative settlement pattern analysis. As might have been expected, none of these sites have a nearest political interaction neighbor in the Amuq Valley proper at either the first or second degrees. Nevertheless, as we have seen, Al Mina was very likely to have been a local, Levantine port rather than a Greek site, and from the historical texts it is best understood as having been part of the kingdom of Patina. The gravity model does little to contribute to this interpretation, which is why this paper argues for a dialectical tacking between multiple sources of mutually reinforcing and corrective analyses, both qualitative and quantitative.

Discussion

The above analyses and interpretations illustrate the complex nature of political territoriality in the Iron Age kingdom of Patina. On the one hand, royal inscriptions from Assyria and from the Syro-Anatolian city–states themselves indicate that they understood these kingdoms at the regional scale to operate politically within three distinct tiers of organization: a single urban center

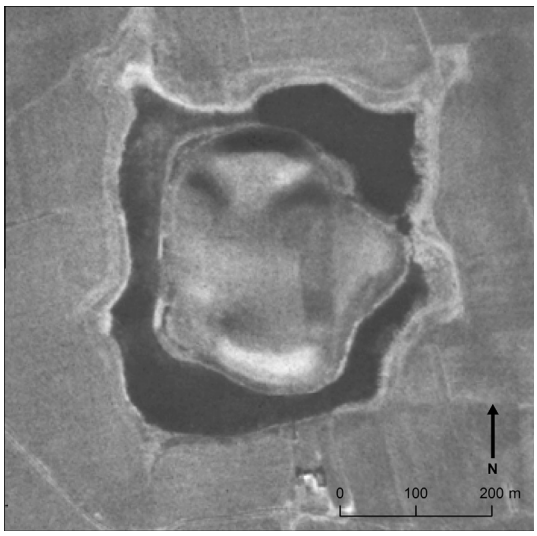

Fig. 8. CORONA satellite image of Tell Hasanuşağı (AS 99) (DS1112-2203DA039). Note at least three depressions around the edge of the mound, likely indicating city gates. Additional fortifications are indicated by the dense vegetation cover surrounding the tell, visible in the image as a black band around the mound. This vegetation is the result of a topographic depression in this area, possibly a relic from an ancient moat.

and capital city and a small number of fortified secondary settlements that were surrounded by a cluster of small rural hamlets. Meanwhile, Syro-Anatolian royal ideology proclaimed a vision of royal authority that blanketed the entire extent of the kingdom richly and evenly, leaving no space for alternative authorities to operate.

In some respects, this vision appears to have been confirmed by formal analysis. Gravity modeling, for example, though reductive, illustrates the disproportionate influence wielded by the capital city, and also identifies a three-tiered settlement hierarchy similar to that described in contemporary textual sources.

In other respects, however, these same sources complicate our understanding of territoriality. The small sites along the western and northern edges of the Amuq Valley do not appear to belong to any of the identified clusters, but rather float in spatial isolation. These sites are likely to have been untethered politically to either the capital city or any of the secondary fortified centers. Similarly, the material culture from the coastal site of Al Mina indicates a close economic relationship with Tell Tayinat, just as the reference in an Assyrian inscription to a "royal storehouse" on the shore places it within Patina politically. In this case, we see a site that, like those on the edge of the plain, is distant in space, but nevertheless appears to have been very much an active part of Patina's political and economic practices. The strongest challenge to the assumption that proximity in space necessarily correlates with political interaction is the Antakya Stele, found along the Orontes between Al Mina and the entrance to the plain, since its inscription indicates settlement-trading between city–states, even settlements geographically remote from a given city–state's political center. Similar pockets of sites belonging to other polities may even have existed in the Amuq Valley proper, but without explicit historical documentation identifying them as such, their political affiliations may forever go unknown.

There is no reason to assume that the co-existence of ranked settlement hierarchies, dispersed trading centers, and the transfer of site ownership was problematic in ancient conceptions of territoriality. A recent study of Patina's historical predecessor in the Amuq Valley, the Late Bronze Age kingdom of Mukish, has similarly argued that Bronze Age rulers owned and traded settlements that were located at considerable distances from their capital cities, often in areas that scholars conventionally assume to have been controlled by rival kingdoms. This insight was gained through a historical–geographical analysis of the detailed tablets from Tell Atçana, ancient Alalaḫ, then the regional capital city (Casana, 2009; in press). We have to be open to the likelihood that a similar principle was operative within Patina during the subsequent Iron Age, and to the possibility that such practices were not aberrant, but rather quite normal.

The phenomenon of patchy, variegated political authority, what I have called malleable territoriality, constituted a form of territoriality in which authority was not evenly distributed across the landscape, nor contained within a fixed border. Contiguity of land and settlements was not a necessary requirement for political control. Although Patina was located in the Amuq and neighboring valleys in a broad sense, this political zone may have been permeated with areas or settlements that were technically not under Patina's domination.

Cartographically, a malleable territoriality implies that maps like those illustrated in Fig. 1, which refuse to relinquish the modern nation-state's bundling of political sovereignty and territory, are poorly suited to portray how Iron Age political authority was projected regionally. How best to represent fluid borders, variable ownership of settlements, and noncontiguous areas of territorial control in a two-dimensional map remains a difficult, if not impossible, problem to resolve. Monica Smith (2005) has proposed node-and-connector networks as a convenient visualization of ancient states like the Mauryan polity, and indeed such reconstructions provide a helpful corrective to simplistic representations of large-scale states and empires where vast expanses of land are included in a single map. At the relatively high scale of resolution required by city–state formations, however, the utility of node-and-connector drawings is significantly decreased, and still does not capture the principle of malleability in city–state territoriality described here. If malleable territoriality does apply to city–states cross-culturally, then the geographic visualization of city–state systems becomes a significant cartographic challenge, and may even have to be abandoned in favor of schematic representations of city–state political authority, as Campbell has attempted for the Late Shang polity (2009, Fig. 7).

Conclusion

The issue of the degree to which the malleable territoriality model presented here represents the political life of city–states cross-culturally, *contra* the typical definition of city–states in standard treatments (e.g., Charlton and Nichols, 1997:1; Hansen, 2000b: 16; Trigger, 2003: 94), is a question to be addressed in ongoing research. It is important to note, however, that current research in other regions is arriving at findings broadly similar to those presented here. For example, a recent study of political territories in the Toluca Valley of central Mexico during the Postclassic period has come to similar conclusions, arguing that city–states (Nahuatl: *altepetl*) in the Mexican highlands were likewise not characterized by political authority evenly distributed across a continuous space within fixed boundaries (Tomaszewski and Smith, 2011: 26). Instead of being defined by their territorial extent, sovereignty in these city–states operated in terms of the relationships that existed between subject and ruler regardless of spatial location, with subjects of neighboring and rival rulers often living interspersed among one another (see also Hodge, 1984). It will take considerably more research before we can move from isolated instances such as these to broad conclusions about malleable territoriality in city–states generally.

One significant impediment to anthropological research of this kind in many places – and everywhere before the arrival of writing

– is the lack of "experience-near" sources of information such as lengthy historical documents. Sources like these are critical to the dialectical approach advocated here. By virtue of possessing data on both sides of the "experience-near" and "experience-distant" formulation, the historical periods of the ancient Near East, especially the second and first millennia BC, provide a rare opportunity to explore ancient sociopolitical processes from multiple interpretive angles, and to complement the cross-cultural theories of anthropological archaeology with the particularist sensibility that historical context provides.

Acknowledgments

This paper benefited from close readings by several friends and colleagues, especially Patrick Fazioli, Emily Hammer, Timothy Harrison, Michael Harrower, and Jacob Lauinger. Peter Machinist, Lawrence Stager, Jason Ur, and Irene Winter also read closely an early version as part of my doctoral dissertation. Survey data collected by the Amuq Valley Regional Projects was made available to the author by AVRP director Aslıhan Yener of Koç University, and I am very grateful for her generosity. AVRP field director Lynn Swartz Dodd graciously helped facilitate the processing of data in the field. The research presented here was funded by a Fulbright scholarship to Turkey and travel fellowships from the Graduate School of Arts and Sciences at Harvard University, and much of the text was written under the wonderful hospitality of the British Institute at Ankara and the American Research Institute in Turkey. The present manuscript was written during my time as a postdoctoral scholar with the Institute of European and Mediterranean Archaeology (IEMA) and the Department of Anthropology at the State University of New York at Buffalo, and revised during a postdoctoral fellowship at Johns Hopkins University. This paper benefited greatly from the close reading and thorough comments of three anonymous peer reviewers, and I thank them for their efforts.

References

Agnew, J., 1994. The territorial trap: the geographical assumptions of international relations theory. Review of International Political Economy 1, 53–80.
Agnew, J., 2009. Globalization and Sovereignty. Rowman & Littlefield Publishers, Inc., Lanham.
Alden, J., 1979. A reconstruction of toltec period political units in the valley of Mexico. In: Cooke, K., Renfrew, C. (Eds.), Transformations: Mathematical Approaches to Culture Change. Academic Press, New York, pp. 169–200.
Algaze, G., 2005. The Uruk World System: The Dynamics of Expansion of Early Mesopotamian Civilization, second ed. University of Chicago Press, Chicago.
Altunel, E., Meghraoui, M., Karabacak, V., Akyüz, S.H., Ferry, M., Yalçıner, Ç., Munschy, M., 2009. Archaeological sites (tell and road) offset by the Dead sea fault in the Amik basin, southern Turkey. Geophysical Journal International 179, 1313–1329.
Appadurai, A., 1991. Disjuncture and difference in the global cultural economy. Public Culture 2, 1–24.
Appadurai, A., 1996. Modernity at Large: Cultural Dimensions of Globalizations. University of Minnesota Press, Minneapolis.
Binford, L.R., 1977. Introduction. In: Binford, L.R. (Ed.), For Theory Building in Archaeology. Academic, New York, pp. 1–10.
Boardman, J., 1959. Greek Potters at Al Mina? Anatolian Studies 9, 163–169.
Boardman, J., 1965. Al Mina and Greek chronology. The Journal of Hellenic Studies 85, 5–15.
Boardman, J., 1990. Al Mina and history. Oxford Journal of Archaeology 9, 169–190.
Boardman, J., 1999. The Greeks Overseas, fourth ed. Thames and Hudson, London.
Boardman, J., 2001. Aspects of "Colonization". Bulletin of the American Schools of Oriental Research 322, 33–42.
Boardman, J., 2002. Al Mina: the study of a site. Ancient West & East 2, 315–331.
Bonatz, D., 2000a. Das syro-hethitische Grabdenkmal: Untersuchungen zur Entstehung einer neuen Bildgattung in der Eisenzeit im nordsyrisch-südostanatolischen Raum. P. von Zabern Verlag, Mainz.
Bonatz, D., 2000b. Syro-Hittite funerary monuments: a phenomenon of tradition or innovation? In: Bunnens, G. (Ed.), Essays on Syria in the Iron Age. Peeters Press, Louvain, pp. 189–210.
Braidwood, R.J., 1937. Mounds in the Plain of Antioch: An Archeological Survey. The University of Chicago Press, Chicago, Ill.
Brenner, N., 1998. Between fixity and motion: accumulation, territorial organization and the historical geography of spatial scales. Environment and Planning D: Society and Space 16, 459–481.
Bryce, T., 1998. The Kingdom of the Hittites. Oxford University Press, Oxford.
Bunnens, G., 1995. Hittites and Aramaeans at Til Barsip. In: Lerberghe, K.V., Schoors, A. (Eds.), Immigration and Emigration within the Ancient Near East. Festschrift E. Lipinski. Uitgeverij Peeters en Departement Oriëntalistiek, Leuven.
Burkert, W., 1992. The Orientalizing Revolution: Near Eastern Influence on Greek Culture in the Early Archaic Age. Harvard University Press, Cambridge.
Çalışkan, V., 2008. Human-induced Wetland Degradation: A Case Study of Lake Amik (Southern Turkey). BALWOIS, 1–10.
Campbell, R.B., 2009. Toward a networks and boundaries approach to early complex polities: the late Shang case. Current Anthropology 50, 821–848.
Casana, J., 2003. From Alalakh to Antioch: Settlement, Land Use, and Environmental Change in the Amuq Valley of Southern Turkey. University of Chicago, Chicago.
Casana, J., 2007. Structural transformations in settlement systems of the northern Levant. American Journal of Archaeology 112, 195–221.
Casana, J., 2008. Mediterranean valleys revisited: linking soil erosion, land use and climate variability in the northern Levant. Geomorphology 101, 429–442.
Casana, J., 2009. Alalakh and the archaeological landscape of Mukish: the political geography and population of a late Bronze age kingdom. Bulletin of the American Schools of Oriental Research 353, 7–37.
Casana, J., 2013. Radial route systems and agro-pastoral strategies in the fertile crescent: new discoveries from western Syria and southwestern Iran. Journal of Anthropological Archaeology 32, 257–273.
Casana, J., in press. Settlement, territory, and the political landscape of late Bronze age polities in the northern Levant. In: Osborne, J., VanValkenburgh, N.P. (Eds.), Territoriality in Archaeology. American Anthropological Association, Arlington, VA.
Casana, J.J., Wilkinson, T.J., 2005a. Gazetteer of sites. In: Yener, K.A. (Ed.), The Amuq Valley Regional Projects, vol. 1. The Oriental Institute of the University of Chicago Press, Chicago, Ill, pp. 203–280.
Casana, J.J., Wilkinson, T.J., 2005b. Settlement and landscapes in the Amuq region. In: The Amuq Valley Regional Projects. Surveys in the Plain of Antioch and Orontes Delta, Turkey, 1995–2002, vol. 1. The Oriental Institute of the University of Chicago, Chicago, pp. 25–65.
Cecchini, S.M., Mazzoni, S., 1998. Tell Afis (Siria): scavi sull'acropoli 1988–1992. Ediziones ETS, Pisa.
Charlton, T.H., Nichols, D.L., 1997. The city–state concept: development and applications. In: Nichols, D.L., Charlton, T.H. (Eds.), The Archaeology of City–States: Cross-Cultural Approaches. Smithsonian Institution Press, Washington, DC, pp. 1–14.
Coldstream, J.N., 1968. Greek Geometric Pottery: A Survey of Ten Local Styles and their Chronology. Methuen & Co., London.
Cooper, L., 2011. States of hegemony: early forms of political control in Syria during the third millennium BC. In: Bolger, D., Maquire, L.C. (Eds.), Development of Pre-State Communities in the Ancient Near East. Oxbow Books, Oxford, pp. 87–94.
Cowgill, G.L., 2004. Origins and development of urbanism: archaeological perspectives. Annual Review of Anthropology 33, 525–549.
Denel, E., 2006. Development of Elite Cultures and Sociopolitical Complexity in Early Iron Age Kingdoms of Northern Syria and Southeastern Anatolia. Bryn Mawr College, Philadelphia.
Donbaz, V., 1990. Two Neo-Assyrian Stelae in the Antakya and Kahramanmaraş Museums. Annual Review of the Royal Inscriptions of Mesopotamia Project 8, 5–24.
Donner, H., Röllig, W., 1966. Kanaanäische und Aramäische Inschriften, second ed. Harrassowitz, Wiesbaden.
Elden, S., 2009. Terror and Territory: The Spatial Extent of Sovereignty. University of Minnesota Press, Minneapolis.
Elden, S., 2010. Land, terrain and territory. Progress in Human Geography 34, 1–19.
Esse, D.L., 1989. Secondary state formation and collapse in early Bronze age Palestine. In: Miroschedji, P.D. (Ed.), L'urbanisation de la Palestine à l'âge du Bronze Ancien: Bilan et Perspectives des Recherches Actuelles. BAR, Oxford, pp. 81–96.
Feinman, G.M., Marcus, J., 1998. Introduction. In: Feinman, G.M., Marcus, J. (Eds.), Archaic States. School of American Research Press, Santa Fe, NM, pp. 3–13.
Fried, M.H., 1967. The Evolution of Political Society: An Essay in Political Anthropology. Random House, New York.
Geertz, C., 1979. From the native's point of view: on the nature of anthropological understanding. In: Rabinow, P., Sullivan, W.M. (Eds.), Interpretive Social Science: A Reader. University of California Press, Berkeley, pp. 225–242.
Gerritsen, F., Giorgi, A.D., Eger, A., Özbal, R., Vorderstrasse, T., 2008. Settlement and landscape transformations in the Amuq Valley, Hatay: a long-term perspective. Anatolica 34, 241–314.
Gibson, J.C.L., 1975. Textbook of Syrian Semitic Inscriptions. Aramaic Inscriptions Including Inscriptions in the Dialect of Zenjirli, vol. II. Clarendon Press, Oxford.
Gilibert, A., 2011. Syro-Hittite Monumental Art and the Archaeology of Performance: The Stone Reliefs at Carchemish and Zincirli in the Earlier First Millennium BCE. De Gruyter, Berlin.
Giusfredi, F., 2010. Sources for a Socio-Economic History of the Neo-Hittite States. Universitätsverlag Winter, Heidelberg.
Gjerstad, E., 1948. The Swedish Cyprus Expedition, vol. IV. Part 2. The Cypro-Geometric, Cypro-Archaic, and Cypro-Classical Periods. The Swedish Cyprus Expedition, Stockholm.
Glatz, C., 2009. Empire as network: spheres of material interaction in late Bronze age Anatolia. Journal of Anthropological Archaeology 28, 127–141.

Graham, A.J., 1986. The historical interpretation of Al Mina. Dialogues d'Histoire Ancienne 12, 51–65.
Grayson, A.K., 1991. The Royal Inscriptions of Mesopotamia, Assyrian Periods. Assyrian Rulers of the Early First Millennium BC I (1114–859 BC), vol. 2. University of Toronto Press, Toronto.
Grayson, A.K., 1996. The Royal Inscriptions of Mesopotamia, Assyrian Periods. Assyrian Rulers of the Early First Millennium BC II (858–745 BC), vol. 3. University of Toronto Press, Toronto.
Griffeth, R., Thomas, C.G., 1981. The City–State in Five Cultures. ABC-Clio, Santa Barbara, CA.
Haines, R.C., 1971. Excavations in the Plain of Antioch II: The Structural Remains of the Later Phases. Chatal Hüyük, Tell al-Judaidah, and Tell Ta'yinat. University of Chicago Press, Chicago.
Hallo, W.W., Younger, K.L., 2003. The Context of Scripture. Monumental Inscriptions from the Biblical World, vol. 2. Brill, Leiden.
Hansen, M.H., 2000a. A Comparative Study of Thirty City–State Cultures: An Investigation Conducted by the Copenhagen Polis Center. The Royal Danish Academy of Sciences and Letters, Copenhagen.
Hansen, M.H., 2000b. The concepts of city–state and city–state culture. In: Hansen, M.H. (Ed.), A Comparative Study of Thirty City–State Cultures: An Investigation Conducted by the Copenhagen Polis Center. The Royal Danish Academy of Sciences and Letters, Copenhagen, pp. 11–34.
Harding, C., Lim, C.L., 1999. Renegotiating Westphalia: Essays and Commentary on the European and Conceptual Foundations of Modern International Law. M. Nijhoff, The Hague.
Harmanşah, Ö., 2011. Moving landscapes, making place: cities, monuments and commemoration at Malizi/Melid. Journal of Mediterranean Archaeology 24, 55–83.
Harrison, T.P., 2001. Tell Ta'yinat and the kingdom of Unqi. In: Daviau, P.M.M., Wevers, J.W., Weigl, M. (Eds.), The World of the Aramaeans. Sheffield Academic Press, Sheffield, pp. 115–132.
Harrison, T.P., 2009a. Lifting the veil on a "Dark Age": Ta'yinat and the north orontes valley during the early Iron age. In: Schloen, J.D. (Ed.), Exploring the Longue Durée: Essays in Honor of Lawrence E. Stager. Eisenbrauns, Winona Lake, IN, pp. 171–184.
Harrison, T.P., 2009b. Neo-Hittites in the "Land of Palistin": renewed investigations at Tell Ta'yinat on the plain of Antioch. Near Eastern Archaeology 72, 174–189.
Harrison, T.P., Osborne, J.F., 2012. Building XVI and the neo-Assyrian sacred precinct at Tell Tayinat. Journal of Cuneiform Studies, 125–143.
Hausleiter, A., Reiche, A., 1999. Iron age pottery in northern Mesopotamia, northern Syria and south-east Anatolia. Papers Presented at the Meetings of the International "Table Ronde" at Heidelberg (1995) and Niebrow (1997). Ugarit-Verlag, Münster.
Hawkins, J.D., 1982. The Neo-Hittite States in Syria and Anatolia. Cambridge Ancient History. Cambridge University Press, Cambridge, pp. 372–441.
Hawkins, J.D., 1995. The political geography of north Syrian and south-east Anatolia in the neo-Assyrian period. In: Liverani, M. (Ed.), Neo-Assyrian Geography. University of Rome, Rome, pp. 87–102.
Hawkins, J.D., 2000. Corpus of Hieroglyphic Luwian Inscriptions. Inscriptions of the Iron Age, vol. 1. Walter de Gruyter, Berlin and New York.
Hodder, I., Orton, C., 1976. Spatial Analysis in Archaeology. Cambridge University Press, Cambridge.
Hodge, M.G., 1984. Aztec City–States. Museum of Anthropology. University of Michigan, Ann Arbor, MI.
Ikeda, Y., 1979. Royal cities and fortified cities. Iraq 41, 75–87.
Janeway, B., 2006–2007. The nature and extent of Aegean contact at Tell Ta'yinat and vicinity in the early Iron age: evidence of the sea peoples? In: Harrison, T.P. (Ed.), Cyprus, The Sea Peoples and the Eastern Mediterranean: Regional Perspectives of Continuity and Change. Canadian Institute for Mediterranean Studies, Toronto, pp. 123–146.
Joffe, A.H., 2002. The rise of secondary states in the Iron age Levant. Journal of the Economic and Social History of the Orient 45 (4), 425–467.
Kaufman, S.A., 2007. The phoenician inscription of the Incirli Trilingual: a tentative reconstruction and translation. Maarav 14, 7–26.
Kearsley, R., 1989. The Pendent Semi-Circle Skyphos: A Study of its Development and Chronology and an Examination of it as Evidence for Euboean Activity at Al Mina. Institute of Classical Studies, University of London, London.
Keightley, D.N., 1983. The late Shang state: when, where, and what? In: Keightley, D.N. (Ed.), The Origins of Chinese Civilizations. University of California Press, Berkeley, pp. 523–564.
King, L.W., 1915. Bronze Reliefs from the Gates of Shalmaneser, King of Assyria B.C. 860–825. Printed by Order of the Trustees, London.
Knauf, E.A., 1992. The cultural impact of secondary state formation: the cases of the Edomites and Moabites. In: Bienkowski, P. (Ed.), Early Edom and Moab: The Beginning of the Iron Age in Southern Jordan. J. R. Collins Publications, Sheffield.
Krasner, S.D., 1995. Compromising Westphalia. International Security 20, 115–151.
Lebeau, M., 1983. La Céramique de l'âge du Fer II-III: à Tell Abou Danné et ses Rapports avec la Céramique Contemporaine en Syrie. Éditions Recherche sur les Civilisations, Paris.
Lehmann, G., 1996. Untersuchungen zur späten Eisenzeit in Syrien und Libanon: Stratigraphie und Keramikformen zwischen ca. 720 bis 300 v.Chr. Altertunkskunde des Vorderen Orients, Münster.
Lehmann, G., 1998. Trends in the local pottery development of the late Iron age and Persian period in Syria and Lebanon, ca. 700 to 300 B.C. Bulletin of the American Schools of Oriental Research 311, 7–37.
Lehmann, G., 2005. Al Mina and the east: a report on research in progress. In: Villing, A. (Ed.), The Greeks in the East. British Museum, London, pp. 61–92.
Lipiński, E., 2000. The Aramaeans: Their Ancient History, Culture, Religion. Peeters Publishers, Leuven.
Liverani, M., 1988. The growth of the Assyrian empire in the Habur/middle Euphrates area: a new paradigm. State Archives of Assyria Bulletin II, 81–98.
Liverani, M., 1992. Studies on the Annals of Ashurnasirpal II. 2: Topographical Analysis. Centro Stampa d'Atenio, Roma.
Luke, J., 2003. Ports of Trade, Al Mina and Geometric Greek Pottery in the Levant. Archaeopress, Oxford.
Lupton, A., 1996. Stability and change: Socio-political development in North Mesopotamia and South-East Anatolia, 4000–2700 B.C. Hadrian Books Ltd., Oxford.
Malamat, A., 1973. The Aramaeans. In: Wiseman, D.J. (Ed.), Peoples of Old Testament Times. Clarendon Press, Oxford, pp. 134–155.
Mantha, A., 2009. Territoriality, social boundaries and ancestor veneration in the central Andes of Peru. Journal of Anthropological Archaeology 28, 158–176.
Marcus, J., 2004. Primary and secondary state formation in southern Mesoamerica. In: Bell, E.E., Canuto, M.A., Sharer, R.J. (Eds.), Understanding Early Classic Copan. University of Pennsylvania Museum of Archaeology and Anthropology, Philadelphia, pp. 357–373.
Marcus, J., Sabloff, J.A., 2008. Introduction. In: Marcus, J., Sabloff, J.A. (Eds.), The Ancient City: New Perspectives on Urbanism in the Old and New World. School for Advanced Research Press, Santa Fe, N.M., pp. 3–26.
Mazzoni, S., 1994. Aramaean and Luwian new foundations. In: Mazzoni, S. (Ed.), Nuove Fondazioni nel Vicino Oriente Antico: Realtà e Ideologia. Giardini Editori E Stampatori, Pisa, pp. 319–340.
Mazzoni, S., 1995. Settlement pattern and new urbanization in Syria at the time of the Assyrian conquest. In: Liverani, M. (Ed.), Neo-Assyrian Geography. University of Rome, Rome, pp. 181–191.
Merton, R.K., 1968. Social Theory and Social Structure, third ed. Free Press, New York.
Messerschmidt, L., 1906. Corpus Inscriptionum Hettiticarum, Zweiter Nachtrag. Mitteilungen der Vorderasiatischen Gesellschaft XI.
Na'aman, N., 2007. Borders and districts in descriptions of the conquest of the west in Tiglath-pileser III's inscriptions and in biblical historiography. State Archives of Assyria Bulletin 16, 39–61.
Nichols, D.L., Charlton, T.H., 1997. The Archaeology of City–States: Cross-Cultural Approaches. Smithsonian Institution Press, Washington, DC.
Olsson, G., 1965. Distance and Human Interaction: A Review and Bibliography. Regional Science Research Institute, Philadelphia.
Osborne, J.F., 2011. Spatial Analysis and Political Authority in the Iron Age Kingdom of Patina, Turkey, Near Eastern Languages and Civilizations. Harvard University.
Osborne, J.F., in press. The pottery. In: Snow, H. (Ed.), The University of Chicago's Excavations at Tell Ta'yinat, Amuq Plain, Southeastern Turkey. The Oriental Institute of the University of Chicago Press, Chicago.
Osborne, J.F., VanValkenburgh, N.P., in press. Territoriality in archaeology. In: Costin, C. (Ed.), Archeological Papers of the American Anthropological Association. American Anthropological Association, Arlington, VA.
Paasi, A., 1996. Territories, Boundaries and Consciousness: The Changing Geographies of the Finnish–Russian Boundary. J. Wiley & Sons, New York.
Paasi, A., 2002. Place and region: regional worlds and words. Progress in Human Geography 26, 802–811.
Paasi, A., 2003. Region and place: regional identity in question. Progress in Human Geography 27, 475–485.
Pamir, H., 2005. The Orontes delta survey. In: Yener, K.A. (Ed.), The Amuq Valley Regional Projects, Surveys in the Plain of Antioch and Orontes Delta, Turkey, 1995–2002, vol. 1. The Oriental Institute of the University of Chicago, Chicago, pp. 67–98.
Pamir, H., Nishiyama, S., 2002. The Orontes Delta survey: Archaeological investigation of ancient trade stations/settlements. Ancient West and East 1, 294–314.
Parker, B.J., 2001. The Mechanics of Empire: The Northern Frontier of Assyria as a Case Study in Imperial Dynamics. Neo-Assyrian Text Corpus Project, Helsinki.
Parker, B.J., 2003. Archaeological Manifestations of Empire: Assyria's Imprint on Southeastern Anatolia. American Journal of Archaeology 107, 525–557.
Parker, B.J., 2006. Towards an understanding of borderland processes. American Antiquity 71, 77–100.
Parkinson, W.A., Galaty, M.L., 2007. Secondary states in perspective: an integrated approach to state formation in the prehistoric Aegean. American Anthropologist 109, 113–129.
Price, B., 1978. Secondary state formation: an explanatory model. In: Cohen, R., Service, E.R. (Eds.), Origins of the State: The Anthropology of Political Evolution. Institute for the Study of Human Issues, Philadelphia, pp. 161–186.
Pucci, M., 2008. Functional Analysis of Space in Syro-Hittite Architecture. British Archaeological Reports, Oxford.
Raffestin, C., 1984. Territoriality: a reflection on the discrepancies between the organization of space and individual liberty. International Political Science Review 5, 139–146.
Röllig, W., 1999. Appendix I. The Phoenician inscriptions. In: Çambel, H. (Ed.), Corpus of Hieroglyphic Luwian Inscriptions: Karatepe-Arslantaş, vol. II. Walter de Gruyter, Berlin and New York, pp. 50–81.
Rothman, M.S., 2001. Uruk Mesopotamia and its Neighbors: Cross-cultural Interactions in the Era of State Formation. School of American Research Press, Santa Fe, NM.
Ruggie, J.G., 1993. Territoriality and beyond: problematizing modernity in international relations. International Organization 47, 139–174.

Sack, R., 1986. Human Territoriality: Its Theory and History. Cambridge University Press, Cambridge.
Sader, H., 2000. The Aramaean kingdoms of Syria: origin and formation processes. In: Bunnens, G. (Ed.), Essays on Syria in the Iron Age. Peeters, Louvain, pp. 61–76.
Sahlins, M., 2004. Apologies to Thucydides: Understanding History as Culture and Vice Versa. University of Chicago Press, Chicago and London.
Sbeinati, M.R., Darawcheh, R., Mouty, M., 2005. The historical earthquakes of Syria: an analysis of large and moderate earthquakes from 1365 B.C. to 1900 A.D. Annals of Geophysics 48, 347–435.
Schacht, R., 1987. Early historic cultures. In: Hole, F. (Ed.), The Archaeology of Western Iran. Smithsonian Institution Press, Washington, D.C., pp. 171–203.
Schniedewind, W.M., 2002. The rise of the Aramaean states. In: Chavalas, M., Younger, K.L. (Eds.), Mesopotamia and the Bible: Comparative Explorations. Sheffield Academic Press, London; New York, NY, pp. 276–287.
Schreiber, N., 2003. The Cypro-Phoenician Pottery of the Iron Age. Brill, Leiden.
Sewell, W.H.J., 2005. Logics of History: Society, Theory and Social Transformation. University of Chicago Press, Chicago.
Smith, A.T., 2003. The Political Landscape: Constellations of Authority in Early Complex Polities. University of California Press, Berkeley.
Smith, M.L., 2005. Networks, territories, and the cartography of ancient states. Annals of the Association of American Geographers 95, 832–849.
Smith, M.L., 2007. Territories, corridors, and networks: a biological model for the premodern state. Complexity 12, 28–35.
Smith, A.T., 2011. Archaeologies of sovereignty. Annual Review of Anthropology 40, 415–432.
Smith, M.E., 2011. Empirical urban theory for archaeologists. Journal of Archaeological Method and Theory 18, 167–192.
Stager, L.E., 1995. The impact of the sea peoples in Canaan (1185–1050 BCE). In: Levy, T.E. (Ed.), The Archaeology of Society in the Holy Land. Leicester University Press, London.
Stein, G., 1999. Rethinking World-Systems: Diasporas, Colonies, and Interaction in Uruk Mesopotamia. University of Arizona Press, Tucson.
Stone, E.C., Zimansky, P., 2004. The Anatomy of a Mesopotamian City: Survey and Soundings at Mashkan-Shapir. Eisenbrauns, Winona Lake, Indiana.
Swartz Dodd, L., 2011. Later Patterns: Recent Research in the Northern Amuq Valley Region. American Schools of Oriental Research, San Francisco, CA.
Swartz Dodd, L., 2012. Squeezing blood from a stone: the archaeological context of the incirli inscription. In: Lundberg, M.J., Fine, S., Pitard, W.T. (Eds.), Puzzling Out the Past: Studies in Northwest Semitic Languages and Literatures in Honor of Bruce Zuckerman. Brill, Leiden, Boston, pp. 213–233.
Tadmor, H., Yamada, S., 2011. The Royal Inscriptions of Tiglath-pileser III (744–727 BC) and Shalmaneser V (726–722 BC)), Kings of Assyria. Eisenbrauns, Winona Lake, IN.
Taylor, J.d.P., 1959. The Cypriot and Syrian pottery from Al Mina, Syria. Iraq 21, 62–92.
Taylor, T., 2008. Prehistory vs. archaeology: terms of engagement. Journal of World Prehistory 21, 1–18.
Thuesen, I., 2002. The neo-Hittite city–state. In: Hansen, M.H. (Ed.), A Comparative Study of Six City–State Cultures: An Investigation Conducted by the Copenhagen Polis Centre. The Royal Danish Academy of Sciences and Letters, Copenhagen.
Thurston, T.L., 1997. Historians, prehistorians, and the tyranny of the historical record: Danish state formation through documents and archaeological data. Journal of Archaeological Method and Theory 4, 239–263.
Tolun, N., Pamir, H., 1975. Explanatory Text of the Geological Map of Turkey. Maden Tetkik ve Arama Enstitüsü Vagınlarından, Ankara.
Tomaszewski, B.M., Smith, M.E., 2011. Polities, territory and historical change in postclassic matlatzinco (Toluca valley, central Mexico). Journal of Historical Geography 37, 22–39.
Trigger, B., 2003. Understanding Early Civilizations: A Comparative Study. Cambridge University Press, Cambridge.
Tropper, J., 1993. Inschriften von Zincirli: Neue Edition und Vergleichende Grammatik des Phönizischen, Sam'alischen und Aramäischen Textkorpus. Ugarit-Verlag, Münster.
Tschauner, H., 1996. Middle-range theory, behavioral archaeology, and postempiricist philosophy of science in archaeology. Journal of Archaeological Method and Theory 3, 1–30.
Ur, J.A., 2003. CORONA satellite photography and ancient road networks: a northern Mesopotamian case study. Antiquity 77, 102–115.
Ur, J.A., 2010. Urbanism and Cultural Landscapes in Northeastern Syria: The Tell Hamoukar Survey, 1999–2001. The Oriental Institute of the University of Chicago, Chicago.
Ussishkin, D., 1971. Was Bit-Adini a neo-Hittite or Aramaean state? Orientalia 40, 431–437.
VanValkenburgh, N.P., Osborne, J.F., in press. Home turf: archaeology, territoriality, and politics. In: Osborne, J.F., VanValkenburgh, N.P. (Eds.), Territoriality in Archaeology. American Anthropological Association, Arlington, VA.
Varien, M.D., Ortman, S., 2004. Accumulations research in the southwest United States: middle-range theory for big-picture problems. World Archaeology 37, 132–155.
Waldbaum, J.C., 1994. Early Greek contact with the southern Levant, ca. 1000–600B.C.: the eastern perspective. Bulletin of the American Schools of Oriental Research 293, 53–66.
Waldbaum, J.C., 1997. Greeks in the east or Greeks and the east? Problems in the definition and recognition of presence. Bulletin of the American Schools of Oriental Research 305, 1–17.
Ward, W.A., Joukowsky, M.S., 1992. The Crisis Years: The 12th Century B.C.: From Beyond the Danube to the Tigris. Kendall/Hunt Pub., Dubuque, IA.
Weippert, M., 1992. Die Feldzüge Adadnararis III. nach Syrien: Voraussetzungen, Verlauf. Folgen. Zeitschrift des Deutschen Palästina-Vereins 108, 42–67.
Wilkinson, T.J., 1997. The history of the lake of Antioch: a preliminary note. In: Young, G.D., Chavalas, M.W., Averbeck, R.E. (Eds.), Crossing Boundaries and Linking Horizons: Studies in Honor of Michael C. Astour on His 80th Birthday. CDL Press, Bethesda, pp. 567–576.
Wilkinson, T.J., 2000. Geoarchaeology of the Amuq Plain in "The Amuq Valley Regional Project, 1995–1998". American Journal of Archaeology 104, 168–179.
Woolley, C.L., 1938a. Excavations at al Mina, Sueidia. I. The archaeological report. The Journal of Hellenic Studies 58, 1–30.
Woolley, C.L., 1938b. Excavations at al Mina, Sueidia. II. The Journal of Hellenic Studies 58, 133–170.
Wylie, A., 1989. Archaeological cables and tacking: the implications of practice for Bernstein's 'options beyond objectivism and relativism. Philosophy of the Social Sciences 19.
Yasuda, Y., Kitagawa, H., Nakagawa, T., 2000. The earliest record of major anthropogenic deforestation in the Ghab valley, northwest Syria: a palynological study. Quaternary International 73 (74), 127–136.
Yener, K.A., 2005a. The Amuq valley regional projects. In: Yener, K.A. (Ed.), The Amuq Valley Regional Projects, Surveys in the Plain of Antioch and Orontes Delta, Turkey, 1995–2002, vol. 1. The Oriental Institute of the University of Chicago, Chicago, pp. 1–23.
Yener, K.A., 2005b. The Amuq Valley Regional Projects. Oriental Institute of the University of Chicago, Chicago, Ill.
Yener, K.A., Edens, C., Harrison, T.P., Verstraete, J., Wilkinson, T.J., 2000. The Amuq valley regional project, 1995–1998. American Journal of Archaeology 104, 163–220.
Zadok, R., 1996. Geographical and onomastic remarks. Nouvelles Assyriologiques Brèves et Utilitaires 1, 11–13.