Landscapes and Seascapes (or: Community and Household?)

Households, Hierarchies, Territories and Landscapes in Bronze Age and Iron Age Greece

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Abstract

This chapter investigates how the socio-political meanings and the practical significance of land were entwined in Bronze and Iron Age Greece to shape landscapes and territories by approaching settlement hierarchies from a new perspective. In virtually all 'Mediterranean' societies, in all periods, it is households, in dialectic relationships with community, state and other agents, that inhabit, cultivate, exploit and, ultimately, shape a major portion of both rural and 'urban' landscapes. The aggregate of household decisions, therefore, plays a key role in the formation of the archaeological landscape record for any specific society or period. Local concepts of household, property and succession varied, along with the socio-political conventions that regulated access to land and labour: households were set in quite different kinds of political systems over the course of the Bronze and Iron Ages. It was the enactment of these local habits in their spatial and political settings that built territories. 'Territory', however, was not the monolithic imposition of omnipotent state power penetrating all sectors of a landscape, even in the relatively centralized states of the Aegean Bronze Age. Rather it is more of a spectrum with fuzzy edges, with more or less control over particular places or people.

Introduction

The aim of this paper is to re-examine from a new perspective the settlement hierarchies of the later Bronze Age and Iron Age in mainland Greece and Crete, as revealed through archaeological survey and excavation. I want to take a bottom-up approach, to explore (1) the levels at which decisions that shaped specific local landscapes were taken, and by whom; (2) how these decision-making processes changed over time; and (3) how decisions taken by different groups and individuals became enmeshed to produce the archaeological landscapes we discover. I will combine our understanding of households, as we know them through houses, settlements and occasionally texts, with the archaeology of the wider landscapes they inhabited, including agricultural fields and other areas of economic exploitation and social use. Analysis focuses in particular on the formation and functioning of rural or village houses in the settlement networks of two case studies, with less attention paid to ritual and mortuary landscapes, and urban habitation.

My key questions centre on how different kinds of spaces were used and who or what factors influenced the choices made about how and where spaces were construed, constructed and modified. What roles did state or other political authorities play, or did such decisions emerge as a consensus of social convention? At what level were decisions taken about how to use communal space, or space allocated to (or claimed by) households or other agents? To what extent did the decisions of individual households shape the uses of spaces and form relationships or links between different kinds of spaces, and the allocation of activities and functions among them? And to what extent were household decisions shaped by constraints emanating from, on the one hand, other members of the communities in which they lived and worked, and on the other hand by political and economic forces extending beyond the local community?

Changes over time and regional variation are critical: as the hierarchical structures of the countryside change, and rural households adjust their activities, uses of space and use of material culture alter accordingly. This exercise should help us to understand in greater depth both the extent and the limits of elite power over small-scale cultivators in their wider landscape settings, as well as the loci of decisions with taphonomic impact for archaeologists.

Theoretical Contexts

In the Bronze and Iron Age Aegean, archaeological treatments of territory, insofar as it has ever been consciously considered, have largely begun from a top-down perspective (Chadwick 1972; Bennet 1995; Knappett 1999; Schoep 1999; Adams 2006; Shelmerdine

2006; Shelmerdine and Bennet 2008). Several studies explore aspects of the territorial domains of individual polities in Bronze Age Crete, investigating very different lines of evidence, for example material cultural links, which may express shared culture and identity (Knappett 1999; Adams 2006), horizontal ('integration') and vertical ('connectedness') links across the landscape (Haggis 2002), or administrative documents (Schoep 1999). All of these have suggested that smaller, regional territories and competing elites operated independently rather than monolithic centralized states, but the key focus remains the state or polity (see also Damilati and Vavouranakis 2011; Vansteenhuyse 2011). Cavanagh's (2009a: 55) notion of territory in prehistoric Laconia, inspired by Delaney (2005), is quite loosely formulated, stressing historical contingency and cultural embeddedness. Cavanagh applies the rank-size rule (plotting the site size, as a proxy for population, against their ranking in the sequence on a logarithmic scale) for early and later Bronze Age sites in the Peloponnese to show that socio-political demands warp the distribution of population and settlement hierarchy; in the case of Late Bronze Age Laconia he interprets this as 'the naked expression of political power', in which small sites lose out to larger ones (Cavanagh 2009a: 63-4; cf. Cavanagh 2009b). None of these approaches, however, address the inner workings of how a territory might be constructed and enacted in these societies, or the specific roles played by different agents; most treat territory as a concept quite generally and schematically, or as a given.

In recent years some political geographers have attempted to interrogate the concept of territory, mostly in relation to the contemporary world, but also in terms of its historical precedents and development. This body of literature is exceptionally helpful insofar as it dissects the in-built assumptions about what 'territory' might be, and its significance. Most of this work, however, reaches back into historical contexts only as far as the early modern period. Often it zooms in on the eighteenth century as a tipping point within a larger intellectual project to span the birth of modernity and transitions to post-modernity, in particular the impact on and role of territory of the development of the nation-state and its post-modern metamorphoses into a global world (Antonsich 2009; 2011). A few scholars (Soja 1989; Sassen 2006; most notably Elden 2003; 2010; 2011; n.d.) have attempted to look further back in time, to medieval Europe and classical Greece and Rome, depending for the most part on elite texts for understanding the conceptualization and operation of territory. This body of scholarship, however, shows little awareness of the large amount of relevant archaeological data on settlement, space and landscapes and their cultural construction.

Starting with the archaeological evidence, and focusing on the very different ways in which ancient states formulated and enacted territory, i.e. the ways in which state power did

and did not operate successfully in the spaces of inhabited landscapes, it is possible to add further depth and clarification to this work of unpicking concepts and practices of territory to expand our understanding of its key components, as well as its social and political roles in a wide range of human societies. The intricacies of the political and social geographies of the ancient past reveal that the spatial expression of power was very complex, deeply embedded in specific social and economic relationships, limited by technologies of administration and governance, and usually fragile and highly fragmented. The data that we have more often show households rather than individuals or communities: the latter in their landscape setting are often composed of the aggregate of many household decisions shaped by specific political, economic, social and environmental agents and constraints. In addition, the archaeological evidence reveals that choices about shaping local landscapes were often very localized, indeed taken at household level. Although a significant part of the context for these specific decisions includes a range of other agents, elites, polities and states among them, territory is certainly not the monolithic imposition of a virtually omnipotent state power penetrating all sectors of a landscape, even in the relatively centralized states of the Aegean Bronze Age. ‘Territory’ then is not a uniformly coloured-in map of power, control or group identity, and ‘borders’ might often have been quite fuzzy. Rather it is more of a spectrum, with more or less control over particular places or people in those settings.

In the following sections I investigate the potential of this theoretical framework through two case studies that cover the transition between the Bronze and Iron Ages. The first focuses on the area of Messenia (including Pylos) in the southwest Peloponnese of mainland Greece, the area of a major Bronze Age polity that changed radically in terms of its political and social geography during the Iron Age. The second focuses on the area around Mirabello Bay in east Crete, where the complex settlement record of the later Bronze and Iron Ages has been particularly well explored.

Messenia, Pylos and Nichoria

Messenia, in the southwest Peloponnese, has been the subject of two excellent archaeological surveys: the Pylos Regional Archaeological Project (PRAP) (Davis et al 1997; Davis 1998; Alcock et al. 2005) and the pioneering Minnesota Messenia Expedition (UMME) (McDonald and Rapp 1972), as well as excavations at the palace site of Pylos (Blegen and Rawson 1966-1973) and the settlement of Nichoria (McDonald et al. 1992; 1983). This body of research has generated a very full archaeological record, suitably detailed for the investigation of how people inhabited the landscape and constructed territories.

>>Insert Figure 1 and Table 1 about here<<

The area around the so-called Palace of Nestor at Pylos (located at Ano Englianos) was the primary focus of settlement in the Middle and Late Bronze Age (Figure 1; for dates, see Table 1). The predecessor to the surviving Late Helladic (LH) IIIB palace (built around 1300 BC and destroyed about 1200 BC) was constructed in LH IIIA (around 1400 BC) (Shelmerdine 1998: 81), a phase widely attested on PRAP sites. The site had almost certainly been fortified much earlier, perhaps around 1700-1600 BC (Davis 1998: 67-8), but the LH IIIB palace had no fortification wall. Most of the *tholos* tombs on outlying sites had gone out of use by the end of LH IIIA, a phenomenon interpreted by the PRAP team as an element of the palace 'restructuring its power' and its relationships with local elites to focus more on religious events and feasting, 'state sponsored conspicuous consumption', which were part of 'palace-based rituals of display' (Davis et al 1997: 421; Bennet 1998: 126). One interesting exception is the construction of a new *tholos* tomb at Nichoria just at this time (see below). Throughout the later Bronze Age there were many small sites, and almost all sites occupied in Middle Helladic (MH) II – LH II continued to be occupied in LH III, but the numbers of small sites farther distant from the palace seem to rise slightly between MH II – LH II to LH III (Davis et al 1997: 420-21, figs. 9 and 10). Not only was the palace the largest site by far in the survey area (around 18 ha or more), but intensive survey also documented a very substantial lower town that grew up around the palace. This settlement was already expanding considerably in MH (5.5 ha), growing further in LH I-II (7 ha), and reaching an extent of 12.4 ha by LH IIA-B (Davis et al 1997: 430; Bennet 1998: 135).

Two relatively large sites well beyond the palace were identified: Koryfasio Beylerby (I01, over 3.53 ha) and Gargaliani Ordines (K01, 2.1 ha) (Davis et al 1997: 422-23, 425-26). Smaller sites were discovered near I01 Koryfasio Beylerby (D01, D02, G03, I03, I04, UMME 400) and at some distance inland from the palace (GAC D20). Small sites, however, were absent from the immediate vicinity of the palace on the Englianos ridge itself (Davis et al 1997: 428). In the area east of Mount Aigaleon, LH III material was sparse, but there was more LH I-II material: PRAP researchers suggest that this region perhaps formed a boundary zone when the palace reached the extent of its full power, or that palace attention focused more to south towards the 'second order' settlement at Nichoria (for which there is also textual evidence of close connections) (Davis et al 1997: 423-4; Bennet 1998: 134-8). The PRAP team have also argued that the two larger non-palace sites can be identified with toponyms in list of the nine 'towns' of the Hither Province found in the Linear B documents:

K1 Gargliani Ordines (*pe-to-no*), I01 Koryfasio Beylerbey (*a-ke-re-wa*). (Davis et al. 1997: 425-27).

Bronze Age Nichoria

The settlement of Nichoria, a substantial and long-lived site spreading over two flat ridges joined by a saddle (ca. 500 m long, and ca. 200 m at widest point) lasted from MH through the eighth century BC, spanning the later Bronze Age and early Iron Ages. The evidence that it served as a second order administrative centre for the palace at Pylos appears strong. It is generally identified with one of the towns of the Hither Province found in the Linear B tablets, *ti-mi-to-a-ke-e*. Like other second order centres it was probably already an elite headquarters before taken over by palace (Shelmerdine 2006: 73; 1998: 142-44). The site peaked in LH IIIA and remained stable or even decreased in size during LH IIIB (the period of the surviving palace at Pylos). Nichoria was abandoned at end of LH IIIB2, approximately contemporaneous with the destruction of the palace at Pylos, but there is no sign of disaster or destruction at Nichoria (Walsh and McDonald 1992: 459). The LH town was quite large, covering over 4 ha of built space in LH III (McDonald et al. 1972: 280), and thus it was considerably larger than either of the two settlements (K01 Gargliani Ordines and I01 Koryfasio Beylerbey) identified as second order administrative centres by the PRAP survey. There is no evidence at Nichoria of the small rural outlying hamlets or farms in the immediate vicinity, as appeared in survey (Walsh and McDonald 1992: 458). The closest site that might be such an outlying hamlet or farm is Velika Skordhakis (UMME 112), on a small rise near the coast close to the mouth of Velika River, about 0.8 ha, and located about 2.5-3 km from Nichoria (McDonald et al 1972: 282). This pattern suggests exploitation of farmland directly from the nucleated settlement.

>>Insert Figure 2 about here<<

The settlement itself consisted of a sprawl of houses along the length of the ridge, with no evidence of fortification (Figure 2). These houses were not monumental or elaborately decorated, but built as stone socles with mudbrick or mud superstructures; those of LH IIB were the most carefully built (Walsh and McDonald 1992: 456), perhaps by expert masons. During the LH IIIA peak of settlement probably about 150 houses were in use simultaneously (Walsh and McDonald estimated a population of about 700). Although 22 of these have been excavated to some extent, few were fully excavated. Houses were freestanding and no two share walls. They were not all built at once (Walsh and McDonald 1992: 463), and some houses were modified considerably over their life span (e.g., units II-6, III-2 —

Aschenbrenner et al. 1992: 369-71, 385). House plans were very poorly preserved so it is not possible to determine internal spatial organization. Most seem to be rectangular, consisting of two to four rooms, but there is at least one apsidal house (e.g. unit III-3, McDonald et al. 1992: 398), and occasional curving sections of house walls. Most had only a single story (only five had evidence for an upper story), and one seems to have had a cellar. The excavators believed that the modest size of houses and their plans suggested that they were intended for nuclear families.

There was some variation in building techniques; for example, one house appears to have had a half-timbered front wall (Walsh and McDonald 1992: 455). Their orientation was regular (NE-SW), but the main entrances faced different directions. There appears to have been open space around each house, with a considerable amount of refuse between houses suggesting trash piles, gardens and animal stabling. There was limited evidence for craft working in some houses (e.g., an exceptional concentration of spindle whorls in unit II-3, Walsh and McDonald 1992: 461). A few houses may display specific consumption patterns (e.g. concentration of worked stone in unit IV-4, the one elite house; recovery of large numbers of metal artefacts in the fill of the nearby W gulley [Area IV SW]; similarly in area III, 58% of all metal items appeared in one house, III-4).

Despite the existence of a series of monumental tombs close to the site, including a very grand *tholos* tomb constructed in LH IIIA1 and continuing in use into LH IIIB, there is evidence for only one elite house, the partially excavated complex Unit IV-4A. It seems to have been built above large complexes of earlier LH IIIA1 and LH II date (Walsh and McDonald 1992: 460), so perhaps elite occupation on this particular sector of the site was quite long-lived. This unit (IV-4A) covered an area of at least 70 m², and contained the only formal *megaron* on the site (a room with a central hearth flanked by columns) (Walsh and McDonald 1992: 460-64).

So what exactly did 'palace control' of second order centres consist of in the Late Bronze Age? It is clear from the Linear B tablets found at Pylos that the palace officials divided their territory into two administrative districts called the 'Further' and 'Hither' provinces, each of which contained a number of settlements that served as administrative nodes. These are often called 'towns' in the scholarly literature, but the Mycenaean Greek term for them seems to be *damoi* (*da-mo*), 'communities', the equivalent of later Greek *dêmos*, and they were perhaps communities predating palatial authority (Lupack 2011: 212; Shelmerdine 2006: 76). The 'Further' province, with seven 'towns', is widely thought to be the inland area beyond Mt. Aigaleon; the 'Hither' province, with nine 'towns', covered the

western area towards the coast (Chadwick 1972: 104-5; Davis et al. 1997: 424). The *damoi* appear to have officials: *ko-re-te* and *po-ro-ko-re-te*; ‘mayor’ and vice-mayor’, and there is also a ‘*da-mo-ko-ro*’ who managed all the *damoi* in an administrative district (province), and perhaps mediated between the palace and the individual *damoi*. Although chosen by the ‘king’ (*wanax*), he may be from the provincial elite (Chadwick 1972: 105; Lupack 2011: 212-13).

There is also a category of people among the local elites listed individually or in groups called ‘land holders’ (*ko-to-no-o-ko* – *ktoina*, ‘plot, possession’ + *echô*, ‘have, hold’). These people both held land in the *damos* and seem to have been involved with the local management of the community. Although the *damoi* paid taxes to the palaces, they appear to have organized themselves locally, and probably for the most part independently. Most of the land listed in the administrative records of the palace appears to belong to the *damoi*, although in some cases the palace influenced who had access to it and what obligations in services or goods were due back in return (Shelmerdine 2006: 75-76). Conversely, it is clear that there was also a considerable amount of land never mentioned in the Linear B documents that was within the remit of the *damos* but over which the palace appears to have had no authority and in which it took no interest. Similarly archaeological evidence of commodities such as legumes, which appear in the palace but never in the administrative records, and the limited nature of the palace’s direct economic interests in the documents, suggests that palace control was limited and selective (Lupack 2011: 212-14; Halstead 2011: 231-32; 1992: 58; Shelmerdine 2006: 74-76). Geographically, palatial authority was not necessarily contiguous or equally powerful throughout the entire landscape. Instead, the territory appears to be fragmented, and territorial authority operated through relationships between specific people in key posts or statuses, and focused on particular locations in the landscape, fading with distance from the palace.

In the case of Nichoria and other second order settlements, what elements of the Late Bronze Age archaeological remains that we see might result from palace control, influence or management? What kind of relationships might we see between the palace and Nichoria through the archaeological remains? It is immediately striking how small and unpretentious Nichoria is even at its peak, and the second order (and other) settlements identified by PRAP are considerably smaller (Bennet 1998: 134). Concomitantly, the great difference in scale between Nichoria and the palace is equally striking. The peak of settlement at Nichoria (LH IIIA) seems to predate the peak of the palace and its accompanying lower town (LH IIIB).

Does this mean that officials and some of the elite population lived in, and perhaps moved to, the palace and the lower town at this time?

The one identifiably elite house in Nichoria (IV-4A, Figure 3a, below) had at least five rooms with a second story, but it can hardly be considered palatial, even though it shares features of palatial style architecture. This does not look like a building where a bevy of administrators were living, but seems more like one elite household, not necessarily a very large one. It seems probable that the occupants were connected to or working for the palace authorities. Yet it seems equally possible that at least some members of this household did not live in Nichoria permanently, but dwelt part or full time at the palace or in the associated lower town. The elite tombs, however, especially the LH IIIB *tholos*, may suggest that these people were buried locally, near their home settlement. This may suggest an elite cultural identity within the local community and landscape, at least in part for the purposes of maintaining local relationships and a regional power base.

Both the construction and the modifications of the more modest Nichoria houses all seem to have had their own trajectory, and were not coordinated. The speed of change and phasing appears quite rapid within units, within a few generations between LH IIIA1 – LH IIIA2 – LH IIIB. Sometimes the orientation of houses changes slightly from one phase to another, but many remain in the same spot in one form or another over the whole period of 200 years or so (e.g. Units II-7, II-6). Decisions on construction and modification appear to be purely household based: there is no evidence for the interference of central or local authorities in the actual work of house building and remodelling (e.g. the presence of uniform masonry built all at once). Nonetheless the masonry techniques are quite expert (and far less variable than Iron Age building work), perhaps suggesting access to expert builders, although there are many variations in house forms and building techniques. The occasional child burials within settlements also suggest household/family management of the physical space of individual houses. Despite the poor preservation of the architecture, however, the separateness of houses is also interesting: there is no evidence of agglutinative or clustered settlement, the substantial growth of houses over time, or the combining or division of houses, all of which might suggest family or household-based succession over several generations.

Who put the people in these houses? The Linear B documents suggest that palace authorities may have had some impact (Shelmerdine 2006: 76), along with the elites (probably) of local origin in charge of managing the *damos*. Could we therefore be looking at a physical arrangement suggesting that households had responsibility for organization and

modification of household space, but most at least had no (or only limited) rights of succession? Were lands linked to houses? Could such tenure arrangements partly explain the complete abandonment of Nichoria upon the collapse of the palace authority around 1200 BC, if some people had family origins and affiliations elsewhere and only superficial relationships to this particular elite local family?

The cultivators of lands around the settlement must have been inhabitants of Nichoria during the Bronze Age, given the lack of outlying small sites. Yet it is interesting that there is little evidence for archaeologically visible processing facilities or extensive storage areas beyond the levels needed for household use in the actual settlement. While it is possible that the elite house IV-4A had large storage facilities, there does not seem to be much in the way of, for example, *pithos* sherds that would suggest exceptionally large storage areas. Any storage on site, therefore, must have been quite short term, and perhaps may have consisted mostly of sack-stacking space. Could this suggest, for example, that collection of grain for the palace took place in the fields, perhaps at the threshing floor, from where it was transported to the big house for a short time then rapidly sent on to the palace?

Finally, what were the human relationships behind the visible archaeological remains? It seems most likely from the combined evidence of the texts and the material culture that the palace created some kind of relationship, perhaps clientage and/or a marriage/kinship link to local families in the *damoi*. This would provide an easy way, embedded in social relationships, to ensure the delivery of goods and labour, and to provide the informed oversight and management of the local area. But were at least some of the local inhabitants clients of palace authorities or administrators directly, rather than only being clients of local elites? This might have been a good strategy for the palace to prevent prominent local families from developing too secure a regional power base of their own, one that might challenge their authority. The evidence from LH IIIB and the demise of the palace and its territorial reach at the end of the period suggests that there must have been considerable tensions between local and central power during the period.

Messenia and Nichoria in the Postpalatial Period and the Iron Age

After the demise of the palace at Pylos at the end of LH IIIB, around 1200 BC, the ways in which households and communities engaged with the Messenian landscape changed radically. Except for a small amount of Early Iron Age activity on the palace site (Griebel and Nelson 1998), the palace was abandoned, and there is little evidence for any substantial continuity of settlement (Harrison and Spencer 1998: 148-49). A couple of LH IIIC *kylix*

stems from the area around the palace have been found. There is a small group of Submycenaean through Geometric sherds concentrated in a small area just south of the site fence, beyond the Southwestern Building, and 14 Geometric sherds have been recovered from a wider area around the palace (Davis et al 1997: 423-24). Only a few other sites in the PRAP survey area had Submycenaean-Geometric material, and even by the Late Geometric period (eighth century BC) there were but a few nucleated settlements, notably K01 (Gargaliani Ordines) and B07 (the palace), and only limited traces of rural activity. Clearly such inhabitants as remained in the area confined themselves to small villages and cultivated only the nearest and best agricultural land (Davis et al 1997: 452-3; Alcock et al. 2005: 165; Foxhall n.d.).

After the fall of the palace, the focus of settlement in Messenia moved towards Nichoria, following an initial phase of abandonment of about a century. The Iron Age (called 'Dark Age' by the excavators) phase of the settlement began as several clusters of Dark Age I (1075-975 BC) occupation across site (perhaps kin/family based?), with the main cluster in area IV. This sector of the site eventually became the core of the Dark Age II (975-850 BC) and III (850-750) settlements. At its peak in the Dark Age II phase, the settlement consisted of about 40 one-roomed houses, and by Dark Age III it had shrunk to about half this size. In the Iron Age phases, house walls were much more variable than the LH house walls, often built directly on the foundations of the Bronze Age houses, recycling worn, rounded limestone blocks originating from them (Walsh and McDonald 1992: 458).

>>Insert Figure 3 about here<<

Area IV contained the 'chief's house', notably in the same sector of the site as the one elite house of the Mycenaean period (McDonald et al. 1983: 57-58; Mazarakis-Ainian 1997: 74-80) (Figure 3b, c). This house (IV-1/IV-5), built of wattle and daub and supported by posts, was much modified and expanded in **the period its second phase** around 850-800 BC. An apse was added to the original, more or less rectangular structure to include substantial storage facilities; a large paved circle with possible ritual functions was made more prominent; a new entrance was added on the northern side and a courtyard area was added on the eastern end. Most of the material found in the house suggested a domestic assemblage (60% coarse wares, 40% fine wares) (McDonald et al. 1983: 19-33). This was probably the only house on the site with permanently fixed cooking facilities. The size and special features of this house, along with the fact that the only metal finds on the Iron Age phases of the site were discovered in it, suggests that an elite household inhabited it. Especially in its larger second phase, the building may also have hosted communal events such as feasting

(suggested by the relatively large number of animal bones) and/or religious ritual, although it is difficult to be certain of this. Evidence is less strong for the architectural history of other Iron Age houses, but there certainly seems to be an increase in house numbers and settlement density in Area IV over time, whatever the precise spatial organization.

It would seem that like the LH settlement, the Iron Age settlement at Nichoria came to be dominated by one elite family or household, although precisely what the relationship of this elite group was to other households in the settlement is difficult to ascertain. Even at its peak the Iron Age settlement was much smaller than in the Bronze Age. Unlike their LH predecessors, the Iron Age inhabitants preferred one-roomed houses: even the 'chief's house' is one-roomed, albeit a very large one, and when it was expanded it still fundamentally consisted of one large room for household living space, with a storeroom and court added on. The ordinary houses are poorly preserved and most are not fully excavated, which may partially explain why new households appear to have built new houses rather than adding on to old ones.

Apart from the Mycenaean street which remained in use, decisions about how and where to build appears to have been made by individual households: there is no indication of regular, coordinated or coerced planning. The site was not fortified in this period, so security would not appear to be the obvious reason why settlement remained tightly nucleated; yet over time the village became more clustered around the 'chief's house'. While this is distinctly different from the Cretan tradition of 'agglutinative' building (see below), this trend may suggest that the builders of new houses in Area IV had some kind of socio-political relationship to the occupants of the big house. Whether this relationship involved kinship, clientage, community identity or all of these is uncertain, but it encouraged households to choose to build on locations close to it. The agricultural exploitation of the landscape from the village must have concentrated on the abundant, nearby, high quality farmland, since there is no evidence of any isolated rural settlement at this time. Although it has been argued that the community became more 'pastoral' in the Iron Age, the archaeobotanical remains include all of the common subsistence cultigens, so this view is not now widely accepted (Dickinson 2006: 98-101). It could be that we are seeing the return of the *damos* as it was before the rise of later Bronze Age palatial states (Deger-Jalkotzy 2008: 403). Yet it seems more likely that we have here a new kind of community, one in which households conceptualized themselves, their living space and their relationship to the wider productive landscape quite differently than in the Bronze Age, even if later Greeks appear to have inherited some of the old terminology.

East Crete

The Wider Context

The settlement history of Late Bronze Age Crete, and the relationships between different kinds of settlements and activity areas in the landscape, are quite different from those of mainland Greece. There has been a long and continuing debate on the role of Knossos, by far the largest and most impressive palace site. Did it hold sway over the entire island or did it lead one polity among a number of others, and did this change in different periods (Vansteenhuyse 2011; Wallace 2010: 42-44; Younger and Rehak 2008: 150-52)? More importantly for the argument here, we also find a wider range of different types of settlements, both across the island and within specific regions: the relationships between settlements and political geography seem to have been generally more varied and complex than on the mainland. During the Neopalatial period (approximately Middle Minoan [MM] II-Late Minoan [LM] IB, with regional variations, ca. 1800-1450 BC), we see the rise of larger and smaller ‘palaces’ across the island, many of which, like Knossos, had substantial adjacent towns. However there were also small towns and village-type settlements, large elite houses generally called ‘villas’ and small rural farmsteads (Younger and Rehak 2008: 141-46; Gkiasta 2008: 212-14). During the Third Palace Period (LM II-III B, around 1450-1200 BC), Greek became the language of administrative documents at Knossos and its political role within the island may have changed, at least for a time, while the material culture of the island was more widely influenced by mainland Greece (Preston 2008: 310-12).

During the Iron Age Crete also has a completely different settlement history from that of mainland Greece, lacking the profound rural abandonment we see in the Peloponnese and elsewhere. After the final collapse of palatial culture and administration starting shortly after 1200 BC, a number of small settlements arose, and at present about 120 of these are known. Many were located in relatively inaccessible places, but generally near good agricultural land (Wallace 2010: 54). The impact of this development is that a completely different relationship between households and landscape developed in Crete.

The Mirabello Bay Region

The area of east Crete adjacent to Mirabello Bay has been particularly well explored through archaeological survey and excavation (Figure 4a, 4b). The substantial town of Gournia was the largest settlement in the later Bronze Age, and has some kind of large elite dwelling that

possibly served as a ‘palace’ (Soles 1991), although it is much smaller than other palaces on Crete. Palace or not, the town must have served as the major political and economic centre for the region. The total size of the Late Minoan town may have been up to 4 ha, although the excavated area on the acropolis covers only about 1.5 ha (Soles 1991: 74).

>>Insert Figure 4 about here<<

The smaller ‘town’ of Pseira to the east reached its peak population in LM IB, when it was rebuilt after its destruction at the end of MM III. At this time the settlement consisted of about 60 houses (Betancourt 2005: 291). Pseira was destroyed in LM IB, only thinly occupied in LM II, with further reoccupation in LM III, but never reaching the population levels of LM I. This settlement was destroyed by fire in LM IIIB and subsequently abandoned. Settlement moved away from the coast more generally at this time (Betancourt 2005: 294-95). The nearby town of Mochlos was quite substantial in size during its LM I phase, but was destroyed by fire at the end of LM IB. A small LM III settlement reoccupied the site (Soles and Davaras 1989: 418; 1994; 1996: 210).

The diversity and density of rural settlement has been well documented by the Kavousi survey, covering an area that includes excavated sites at Vronda, Kavousi Kastro, Azoria and Chrysokamino to the east. The Kavousi sites lie about 6-7 km from Gournia, and about 10 km from Mochlos, while the rural farmhouse at Chrysokamino is situated less than 10 km distant from Gournia and about 6 km from Mochlos (Wallace 2010: 63, fig. 12). Helpfully, there is a continuous archaeological record between prehistoric and historical times covering the late Bronze Age–Iron Age transition. Settlement hierarchy in the region and the relationships between different kinds of settlements appears to have been quite complex (Betancourt 2006b: 270).

Rural settlement on small sites generally appears to expand in MM times, probably as clusters of farmsteads or hamlets (Haggis 2002; 2005: 40; 2006: 230-31; 2007: 707). A decrease in rural site numbers in LM I (to 41 sites) appears to coincide with the growth of towns and larger villages where elites (and others) congregated (Haggis 2005: 41; Haggis 2006: 229). These nucleated settlements appear to reach their peak in LM I, while at this time Haggis also notes more diversity in different types of settlements, including large farmsteads/‘villas’, hamlets, larger villages/small towns. Indeed isolated rural houses seem to be an LM phenomenon in contrast to the Early Minoan [EM]-MM pattern of clustered settlements (Haggis 2005: 40-41). By LM IIIA-B, there is even less rural settlement with only 10 sites recorded, most of which appear to be single houses, reflecting the disruptions after the LM IB-II destructions. In the following sections I focus specifically on two of these rural

houses, to address the questions of how and why they were located where they are, and what this tells us about their autonomy, or lack of it, in the wider context of the territory and its complex settlement hierarchy.

There are two substantial excavated farmsteads in the region, Chrysokamino (Kavousi) and Chalinomouri (Mochlos). For both, excavation and micro-level studies have been carried out on the houses themselves and their immediate vicinity; they are situated in a wider area that has been well explored and where the settlement history is relatively well understood. These seem to be neither small-scale ‘subsistence’ farms nor elite ‘villa’ sites that might have served as the headquarters for a large estate. Built as single structures, ones that were modified over time, they do not accumulate extra rooms or units. The occupation and character of both seems to be dependent on the geopolitics of settlement trends elsewhere in the region.

Both sites appear to have traces of MM occupation that was obliterated during the LM phases. Both also have LM I and LM III phases, but the character and chronology of the occupation appears to be somewhat different, and the two phases are not linked. It is probably the case that neither of these sites was occupied continuously in each phase for more than 100 years (a few generations). At Chrysokamino, located some way inland and at a higher elevation, the LM III phase appears to be bigger, better preserved and quite differently oriented from the LM IB phase, arising as it did during a period of general settlement nucleation in the area (Floyd 2006: 205, 209; Haggis 2006: 231). At Chalinomouri, on the eastern end of the Mochlos coastal plain, the LM I phase is the most important and LM III reoccupation is significantly smaller and more casual (Soles and Davaras 1996: 207-10; Soles 2003: 103-32). This seems to be in line with the abandonment of the coastal plain area and the decline of the larger coastal settlements during LM III.

Chalinomouri

This house is located on a defensible promontory above the coast (Figure 5). Terracing explored in the area to the northeast may suggest modification in the immediate vicinity of the site for intensive farming, and certainly suggests access to a significant amount of labour, if these terraces are indeed LM I in date. It is clear from nearby Pseira that labour was available at this time for landscape modifications aimed at intensifying agriculture during LM I, where dams to slow winter run-off water in seasonal rivers and agricultural terraces dating fairly securely to LM I have been carefully excavated (Hope Simpson et al. 2005: 251-62, Betancourt 2005: 290-91).

>>Insert Figure 5 about here<<

The building at Chalinomouri measures overall 8.5 x 14 m and contained seven to eight rooms. Rooms 3 and 6 appear to be the main activity rooms, fitted with benches against the walls, and with evidence of cooking and eating in both. Room 6 is the largest and seems to be a multipurpose workspace. There is evidence of a range of activities including agricultural processing and food preparation (quern, pestle), considerable food storage (at least eight *pithoi* and other large storage jars, especially rooms 1-2), and the manufacture of green serpentine vases (rooms 1-2) exploiting a source of raw materials close to the house (Soles and Davaras 1994: 427-28; 1996: 207-10). Faunal remains include sheep, goat (one dog chewed) and pigs in the LM IB period, while cattle bones appear only in LM IIIB. Botanical remains include almond, fig, olive, vine, fenugreek, legumes and cereal weeds. Olive and almond fragments were recovered from hearths, suggesting that olive press cake and nut shells were probably used as fuel (Soles 2003: 128). The pottery all appears to come from Mochlos, and Soles and Davaras consider it to be a 'third order' site dependent on the 'second order' settlement of Mochlos.

The LM I house certainly looks like a place occupied by a household in regular contact with the main town, but there is no indication from the material culture that it was an elite dwelling. It seems possible that the inhabitants could be dependents of higher status town-dwellers. The amount of storage looks too great merely for household subsistence, suggesting the production of substantial agricultural surpluses of some kind. The evidence of skilled craftwork may suggest lower status persons of some kind living on the premises: this is certainly an activity that depends on a pool of wealthier consumers located in a nucleated settlement.

What was the point of siting a farmhouse here and not simply exploiting the local resources from the town? Was it visited regularly by higher status owners? Were decisions about the particular activities to be performed here made by the inhabitants? The answer is most likely no, or at least not entirely. Certainly decisions about how to organize activities on a day-to-day basis probably were decided by the occupants: these could have been specialist craftsmen who were also farmers, integrating these two different activities depending on seasonality, weather, etc. One possible reason for situating a house in this particular location, however, might be to lay claim to a specific resource, green serpentine; occupation of the site might have had legal or political significance in relation to that resource and might also have restricted other people's access to it. If the fate of inhabitants at Chalinomouri was tied to the geopolitics of Mochlos town, in combination with the availability of a specific resource, the

decline of the site in tandem with the decline of town is not altogether surprising. There is no indication, however, that any larger, elite-occupied centre in the region (such as Gournia, not far distant) exerted ‘control of territory’ over the site, directly or indirectly.

Chrysokamino

The different size and orientation of the superimposed LM I and LM III buildings at Chrysokamino (Figure 6a) may suggest different and unconnected reasons for the existence of a farm headquarters here in different periods. The LM III structure, which represents the best-preserved and most extensive phase, may be more independent of neighbouring larger settlements and more self-contained. Yet it still clearly has links to other places, as indicated by the find of a seal stone, suggesting links to administrative networks. This may be a higher status dwelling than the Chalinomouri house, but the household could have included members of multiple statuses, and it certainly does not qualify as a ‘villa’ of the type that one would expect to find as the headquarters of a very large estate.

>>Insert Figures 6 a, b about here<<

Certainly this is a significantly larger building with more rooms, although the plan is similar in overall conception, with one large general workspace room (10) and two rows of smaller rooms behind (1, 2, 3, 6, 7). It is possible that the ‘channels pecked into rock’ (Floyd 2006: 211) are vestiges of or related to pressing or other kinds of agricultural processing installations. The material assemblage seems to be generally domestic, perhaps with more elite items than we see at Chalinomouri (for example a bronze jug). There is also some evidence of cult space and practice. Yet there is no serious evidence of activities other than household maintenance (cooking, eating, storage vessels) and agriculture (chisel, knife, pounders, rubbers querns—Floyd 2006: 212), and the storage facilities do not seem to be as extensive as at Chalinomouri (for example there is no mention of numerous *pithoi*). This is interesting since the primary attraction of the site appears to be the presence of good agricultural land (Haggis 2006: 229-30; Betancourt 2006a: 241). There is also no specific evidence of craft production. Nothing at this site suggests that decisions about immediate landscape and its use or modification were taken or carried out by any agent except the household itself, which appears to be relatively autonomous.

In terms of the wider setting of the house, the building here seems to increase in importance as the town declines, and careful investigation of background sherd counts in the nearby fields certainly suggests that area around the building was being carefully cultivated. Selective manuring of terra rossa soils close to the house (which need more manure than

phyllitic soils) has been inferred, correctly in my view, from high counts of small, eroded ‘background’ sherds. The excavators suggest this indicates the use of these fertilized fields for gardens, but vines seem to be at least as likely since they demand intensive work throughout the year and are thus more conveniently located close to the house (the modern name of one of these areas, Lakkos Ambeliou, the ‘viney hole’, might be suggestive).

Chrysokamino, however, was not necessarily ‘in control of’ or cultivating a continuous block of territory as the excavators believed, although Betancourt (2006: 238-39) acknowledged that areas such as those for grazing might have been shared territory. The nearly 69 ha area suggested as the ‘territory’ of the house by Onyshkevych and Hafford (2006: 204) seems wildly unrealistic, given the number of people it would take to cultivate or even control it in any sense (even allowing for grazing etc.) (cf. Foxhall 2003). Rather it seems more likely that the occupants of the house would have occupied and used bits of the surrounding landscape selectively. It also seems probable that some of this area ‘belonged’ in one sense or another to other agents, either inhabitants of nearby nucleated settlements or of other rural houses. There are two other ‘farmhouses’ located close by this site documented in survey (Figure 6b), but the relation to Chrysokamino farmhouse is unknown, as are the ways the land between them might have been used (Betancourt 2006: 239 and fig. 20.2). More importantly, we do not know the extent to which occupation at all these sites was simultaneous or overlapped, and whether the occupants were in contact with each other. It is also impossible to tell in the LM III phase how this site related to other settlement sites, especially since larger towns were all in decline at this time, though village sites continued.

In sum, despite many similarities of form and occupational phases, these two rural houses are rather different in character, and their occupants shaped their surroundings in quite different ways. The Chrysokamino house was perhaps more independent a household than the one at Chalinomouri, better situated to shape its own landscape and uses of space, but not inhabited by upper-echelon elites. In Chalinomouri, decision-making may have been more divided between different agents. The choice about where to locate the Chalinomouri house was not necessarily that of the inhabitants, and may have been strongly influenced by the availability of a specific resource (green serpentine) and the desire to stake some sort of claim to it.

Chrysokamino, however, was situated on a site whose attraction was agricultural, one which had already been the headquarters for cultivation on and off for hundreds of years. Thus although both of these houses have links to larger settlements, in neither case do such links appear to lead directly to the highest level elites in the region who, logically, ought to be

situated in Gournia, at least during LM I. Instead, the clearest and most direct links would appear to be with agents located in much smaller towns and settlements. This could suggest that both the complex settlement hierarchies we see in the archaeological record, and the administrative structures in which they were embedded, were highly personalized. These were not simply faceless bureaucracies, nor was territory enacted as depersonalized political control continuously over space directly from elites in urban centres. Rather, in these relatively small communities of east Crete, elites and lower status individuals and households must have been bound together in a complex web of politicized social relationships, through which a range of different agents shaped spaces and landscapes.

LM IIIC-EIA Changes

In the Kavousi area, resettlement in the LM IIIA-B (ca. 1350-1200 BC) phase continues at a steady rate during LM IIIC (ca. 1200-1180 BC) (Haggis 2005: 41; 1993: 143), but sites move inland and upward, and become larger and more nucleated. Single farmhouses disappear from the archaeological record. Sites appear to be organized in clusters, which Haggis (1993) has suggested are probably family based. If this interpretation is correct, however, and in the context of the LM I-III background this seems a logical inference, then it is probably also the case that people from sites within and between these clusters (which are quite close together) were intermarrying. This might lead to a fragmented, rather patchwork agrarian landscape as land (or access to it) was divided and recombined as it passed from one generation to the next.

Within sites, houses were also clustered (Haggis 1993:143-49; Wallace 2010: 63-66) and the ‘agglutinative growth’ of settlements, where new units are built on to existing units, becomes characteristic in many places (Wallace 2010: 108-112). Some sites like Azoria may have been inhabited continuously from LM IIIC to the early seventh century BC (Haggis 2007: 696). But on other sites settlement comes and goes, as at Kavousi Vronda, which began in LM IIIC then was largely abandoned at the end of the period, after which the site was used mainly as a cemetery from Late Geometric times (eighth century BC) down to the early seventh century BC when it was completely abandoned (Gesell et al. 1995: 116; Preston Day et al. 2009).

At the Kavousi Vronda site, ordinary houses have two to five rooms connected by doorways, with one main large room and the rest smaller. Each house appears to have its own hearth, and benches, pot-stands and ovens also appear regularly. Across the site, houses were arranged in groups, starting with a core house, to which other rooms were gradually added;

these became independent units as doors were blocked (Figure 7a). All of this happened quite quickly over the 100 or so year lifespan of the site, i.e. within three to four generations. Building A/B was larger and more complex, perhaps belonging to elites according to the excavators, but interpreted as more of a ‘public’ building by Wallace (2010: 112-13). The *pithoi* in this building were dramatically larger than in the rest of the ‘ordinary’ houses (Glowacki 2004: 130 and fig. 9.8). Building G was a shrine.

>>Insert Figures 7 a, b, c about here<<

House plans for Houses C, D, I, O, N are relatively complete, and it is possible to zoom in on the agglutinative growth of the settlement. Glowacki (2004: 128-31) has analysed building sequences in detail for the group of houses I-O-N including plotting the distribution of pottery (Figure 7b) and worked stone (Figure 7c). Building I starts as a three room structure (Rooms I4, I3, I5) with total interior area of 31.3 m²: basically a one room house with small porch in front and store room at back (with at least two *pithoi* in I5). Cooking and other main activities took place in room I3, which has a fixed hearth, oven and bench along with pottery for cooking and dining, as well as one *pithos* and a selection of pounding, rubbing, chopping and grinding stone tools. Rooms I1 and I2 (total 8.49 m²) were added later. Animal bones were found largely in the courtyard to the north of the house (mostly sheep/goat, but also pig, cow rabbit/hare); their condition and appearance in this area suggests that they were butchery debris.

The original excavators suggested that this developmental pattern was ‘linked to family or social groups’ (Gesell et al. 1995: 116). Indeed, it certainly seems to mirror the reproduction of households over time, where adult children build additions to a parental home and a loosely familial extended kin cluster develops (Glowacki 2004: 134) Such patterns of residential development are documented in the Mediterranean at many different times and places from antiquity to the present (see Forbes 2007: 287-314; Foxhall 2009: 498-500). In particular it appears to be a physical and spatial manifestation of kin-focused, household-based societies in which inheritance is partible, and an original household spawns several new ones in the next generation by dividing property and other resources among children or other heirs. Although it is not so easily visible in the archaeological record, it is likely that these households similarly imprinted themselves on the agrarian and wild landscapes they exploited.

Although these small early Iron Age sites are defensible, with many being quite inaccessible, all have good agricultural land in the vicinity (Wallace 2010: 59-60). Houses were much smaller than in the Bronze Age, suggesting smaller household units and possibly

less status differentiation within the household. Buildings are much more similar in size across different settlements. In many of these communities one or more houses may be larger than the rest, suggesting that there were still significant social/status differences within the community (Wallace 2010: 114-16), but there is no indication that they had much impact on the use of space within the settlement. Communities appear to be made up of relatively autonomous households (Glowacki 2004: 134), at least in terms of taking decisions about organizing the space available to them, although we cannot be certain about what social or political obligations or relationships bound them to such elite families as there were.

Agglutinative building patterns within settlements suggests that individual household reproduction and decisions were the major factor in settlement growth and construction, which must also have been reflected in the agrarian and productive landscape, with the clustering of sites. In such a political landscape, with the apparent absence of any large-scale centralized authority, the ‘territory’ of any particular settlement must have consisted for the most part of the aggregate of household decisions for shaping the space to which they had access. Given the proximity of communities to each other in the ‘clusters’ identified by Haggis, it seems probable that in some sense that the ‘territories’ of communities overlapped and were interwoven in a network of kinship and property holding enacted by households.

Conclusions

In later Bronze Age and Iron Age Crete and Greece, households and their social practices over time had completely different impacts on both built and agrarian rural landscapes. In both areas, isolated rural sites emerged as viable entities in the later Bronze Age, but often for different reasons and in different circumstances. In east Crete, the Chrysokamino and the Chalinomouri houses appear to have been built and occupied for quite different reasons. In Messenia, it is clear that the location of isolated rural dwellings had existed under the patronage of local elites who were themselves entangled in complex political relationships with the palatial centre. During the Iron Age, household impact on the landscape and the use of space is barely visible except at Nichoria, where the focus of Dark Age II settlement on one elite house or household might also have been reflected in the agrarian landscape in terms of access to land and productive resources. In east Crete, however, we seem to see kin-based groups banding together as autonomous but related households in small villages, engaged in a web of relationships across the landscape.

By looking at settlement and landscapes from the point of view of households and how their decisions shape their immediate spaces, we acquire a new perspective on the role of

households in larger geospatial, economic and political networks, and thus on the operation of these networks themselves. Frequently, the political and economic landscapes of Bronze Age Greece have been investigated by archaeologists from a top-down perspective, envisaging them as the outcome of the agency of a centralized state. In fact, most of the communities with which we are dealing are quite small in scale, even if they are linked together in complex ways, and relationships between individuals, households and other agents and institutions should not be imagined as being depersonalized. Simultaneously, theories of territory need to be adjusted to accommodate these rather different kinds of states and polities we find in societies like Bronze Age and Iron Age Greece.

As recent work in this area by political geographers has shown (Elden 2010; Antonsich 2009), even in the modern world the notion of territory is highly relevant but complex. Many approaches have been too top-down, missing the nuances of interactions and relationships that composed a territory. Many have stressed sovereign power, implying a capability to enforce territorial cohesion greater than even some modern states can manage, let alone states in earlier periods. Other approaches that have emphasized cultural cohesion and identities coterminous with a particular geographical space have come to be viewed as problematic in a multi-cultural, ethnically fragmented, global world (Antonsich 2009). Conversely, it is clear that ‘territory’, as the spatial manifestation of a set of complex political relationships acted out, remains as important today as it was in the past. This is not to say that a territory is simply a coherent geopolitical space enclosed by borders. The power to make everyday decisions about space is more dispersed and fragmented, and it is the repeated combination of choices and actions at many different levels that merge to construct a territory, whose edges might be rather fuzzy, erratic and sometimes unexpected.

In particular, sovereignty appears to operate in a completely different way in the territories of these Bronze Age states: it was spotty and selective, not uniform across space. Therefore we might better envisage territory as the intersection between agents and landscapes as enacted within culturally and historically contingent socio-political relationships. How this might play out on the ground in specific contexts will, as we have seen from the case studies presented here, vary radically. The examples of Bronze and Iron Age Greece and Crete offer different but related societies over a long time period when the nature and extent of political authority and relationships, as well as landscapes and the use of space, changed dramatically. By approaching the issue of ‘territory’ and how households operated in landscapes, we can see how they fill the spaces left by more powerful agents with their own decisions, as these other agents come and go.

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References

Adams, E.

- 2006 Social strategies and spatial dynamics in neopalatial Crete: an analysis of the north-central area. *American Journal of Archaeology* 110: 1-36.

Alcock, S., A. Berlin, A. Harrison, S. Heath, N. Spencer and D. Stone

- 2005 Pylos Regional Archaeological Project, Part VII: historical Messenia, Geometric through Late Roman. *Hesperia* 74: 147-209.

Antonsich, M.

- 2009 On territory, the nation-state and the crisis of the hyphen. *Progress in Human Geography* 33: 789-806.
- 2011 Rethinking territory. *Progress in Human Geography* 35: 422-25.

Aschenbrenner, S., W. Coulson, W. Donovan, R. Hope Simpson, W. McDonald and N. Wilkie

- 1992 Late Helladic settlement: stratigraphy and architecture. In W. McDonald and N. Wilkie (eds.), *Excavations at Nichoria in Southwest Greece*. Volume II, *The Bronze Age Occupation*, 359-454. Minneapolis: University of Minnesota Press.

Bennet, J.

- 1995 Space through time: diachronic perspectives on the spatial organization of the Pylian state. In W.-D. Niemeier and R. Lauffineur (eds.) *POLITEIA: Society and State in the Aegean Bronze Age*. *Aegaeum* 12: 587-602. Liège: Université de Liège.
- 1998 The PRAP Survey's contribution. In J. Davis (ed.), *Sandy Pylos. An Archaeological History from Nestor to Navarino*, 134-38. Austin: University of Texas Press.

Betancourt, P.

- 2005 Discussion and conclusions. In P. Betancourt, PC. Davaras, R. Hope Simpson (eds.), *The Archaeological Survey of Pseira Island*. Part 2, *The Intensive Surface Survey*, 275-306. Philadelphia: INSTAP Academic Press.
- 2006a Land use on the Chrysokamino farm. In P. Betancourt (ed.), *The Chrysokamino Metallurgy Workshop and its Territory*. *Hesperia Supplement* 36: 241-56. Athens: American School of Classical Studies.

- 2006b Survey conclusions. In P. Betancourt (ed.), *The Chrysokamino Metallurgy Workshop and its Territory*. Hesperia Supplement 36: 257-78. Athens: American School of Classical Studies.
- Blegen, C. and Rawson, M. (eds.)
- 1996-1973 *The Palace of Nestor at Pylos in Western Messenia*. 3 vols. Princeton: Princeton University Press.
- Cavanagh, W.
- 2009a Territory in prehistoric Laconia. In W. Cavanagh, C. Galou and M. Georgiadis (eds), *Sparta and Laconia from Prehistory to Premodern*. British School at Athens Studies 16: 55-65. London: British School at Athens.
- 2009b Settlement structure in Laconia and Attica at the end of the archaic period: the fractal dimension. *American Journal of Archaeology* 113: 405-21.
- Chadwick, J.
- 1972 The Mycenaean documents. In W. McDonald and G. Rapp (eds.), *The Minnesota Messenia Expedition. Reconstructing a Bronze Age Regional Environment*, 100-16. Minneapolis: University of Minnesota Press.
- Damilati, K., and G. Vavouranakis
- 2011 ‘Society against the state?’ Contextualizing inequality and power in Bronze Age Crete. In N. Terrenato and D. Haggis (eds.) *State Formation in Italy and Greece. Questioning the Neoevolutionist Paradigm*, 32-60. Oxford: Oxbow.
- Davis, J. (ed.)
- 1998 *Sandy Pylos. An Archaeological History from Nestor to Navarino*. Austin: University of Texas Press.
- Davis, J., S. Alcock, J. Bennet, Y. Lolos and C. Shelmerdine
- 1997 The Pylos Regional Archaeological Project. Part I: overview and the archaeological survey. *Hesperia* 66: 391-494.
- Day, L., N. Klein and L. Turner
- 2009 *Kavousi IIA: The Late Minoan IIIC Settlement at Vronda. The Buildings on the Summit*. Philadelphia: INSTAP Academic Press.
- Delaney, D.
- 2005 *Territory: A Short Introduction*. Oxford: Blackwell.
- Deger-Jalkotzy, S.

- 2008 Decline, destruction, aftermath. In C. Shelmerdine (ed.) *The Cambridge Companion to the Aegean Bronze Age*, 387-415. Cambridge: Cambridge University Press.
- Dickinson, O.
- 1994 *The Aegean Bronze Age*. Cambridge: Cambridge University Press.
- 2006 *The Aegean from Bronze Age to Iron Age*. London and New York: Routledge.
- Elden, S.
- 2003 Another sense of demos: Kleisthenes and the Greek division of the polis. *Democratization* 10: 135-56.
- 2010 Land, terrain, territory. *Progress in Human Geography* 34: 799-817.
- 2011 Response to Antonsich: the role of history. *Progress in Human Geography* 35: 426-29.
- n.d. *The Birth of Territory*. <http://progressivegeographies.com/the-birth-of-territory/>
- Floyd, C.
- 2006 A summary of the habitation site at Chrysokamino-Chomatas. In P. Betancourt (ed.), *The Chrysokamino Metallurgy Workshop and its Territory*. Hesperia Supplement 36: 205-13. Athens: American School of Classical Studies.
- Forbes, H.
- 2007 *Meaning and Identity in a Greek Landscape. An Archaeological Ethnography*. Cambridge: Cambridge University Press.
- Foxhall, L.
- 2003 Cultures, landscapes and identities in the Mediterranean world. In I. Malkin (ed.), *Mediterranean Paradigms. Mediterranean Historical Review* 18: 75-92. [special issue]. London: Taylor and Francis.
- 2009 Gender. In K. Raaflaub and H. van Wees (eds.), *Blackwell Companion to Archaic Greece*, 483-507. Oxford: Blackwell.
- n.d. Can we see the 'hoplite revolution' on the ground? Archaeological landscapes, material culture and social status in early Greece. In G. Viggiano and D. Kagan (eds.) *Hoplite Warfare in Ancient Greece*. Princeton: Princeton University Press.
- Knappett, C.

- 1999 Assessing a polity in protopalatial Crete: the Malia-Lasithi state. *American Journal of Archaeology* 103: 615-39.
- Gesell, G., L. Preston Day and W. Coulson
- 1995 Excavations at Kavousi, Crete 1989 and 1990. *Hesperia* 64: 67-120.
- Gkiasta, M.
- 2008 *The Historiography of Landscape Research on Crete*. University of Leiden. Archaeological Studies Leiden 16. Leiden: Leiden University Press.
- Glowacki, K.
- 2004 Household analysis in Dark Age Crete. In L. Preston Day, M. Mook and J. Muhly (eds.), *Crete beyond the Palaces: Proceedings of the Crete 2000 Conference*, 125-36. Philadelphia: INSTAP Academic Press.
- Griebel, C. and M. Nelson
- 1998 The Ano Englianos hilltop after the palace. In J. Davis (ed.), *Sandy Pylos. An Archaeological History from Nestor to Navarino*, 97-100. Austin: University of Texas Press.
- Haggis, D.
- 1993 Intensive survey, traditional settlement patterns, and Dark Age Crete: the case of Early Iron Age Kavousi. *Journal of Mediterranean Archaeology* 6: 131-74.
- 2002 Integration and complexity in the late pre-palatial period. A view from the countryside in eastern Crete. In Y. Hamilakis (ed.), *Labyrinth Revisited. Rethinking Minoan Archaeology*, 120-42. Oxford: Oxbow.
- 2005 Kavousi I. *The Archaeological Survey of the Kavousi Region*. Philadelphia: INSTAP Academic Press.
- 2006 Chrysokamino in context: a regional archaeological survey. In P. Betancourt (ed.), *The Chrysokamino Metallurgy Workshop and its Territory*. *Hesperia Supplement* 36: 221-32. Athens: American School of Classical Studies.
- 2007 Excavations at Azoria 2003-2004, part 2. The Final Neolithic, Late Prepalatial and Early Iron Age occupation. *Hesperia* 76: 665-716.
- Halstead, P.
- 1992 Agriculture in the Bronze Age: towards a model of the palatial economy. In B. Wells (ed.), *Agriculture in Ancient Greece*. Proceedings of the 7th International Symposium at the Swedish Institute at Athens. *Skrifter*

- utgivna av Svenska Institutet i Athen, series in 410, 42: 105-17. Stockholm: Swedish Institute at Athens.
- 2011 Redistribution in Aegean palatial societies: terminology, scale and significance. *American Journal of Archaeology* 115: 229-35.
- Harrison, A., and N. Spencer
- 1998 After the palace: the early 'history' of Messenia. In J. Davis (ed.), *Sandy Pylos. An Archaeological History from Nestor to Navarino*, 147-62. Austin: University of Texas Press.
- Hope Simpson, R., P. Goldberg and J. Clark
- 2005 The two agricultural terraces chosen for excavation. The two dams. In *The Archaeological Survey of Psira Island. Part 2, The Intensive Surface Survey*, 251-62. Philadelphia: INSTAP Academic Press.
- Lupack, S.
- 2011 A view from outside the palace: the sanctuary and the *damos* in Mycenaean economy and society. *American Journal of Archaeology* 115: 207-17.
- McDonald, W., and G. Rapp (eds.)
- 1972 *The Minnesota Messenia Expedition. Reconstructing a Bronze Age Regional Environment*. Minneapolis: University of Minnesota Press.
- McDonald, W., W. Coulson and J. Rosser (eds.)
- 1983 *Excavations at Nichoria in Southwest Greece. Volume III. Dark Age and Byzantine Occupation*. Minneapolis: University of Minnesota Press.
- McDonald, W. and N. Wilkie (eds.)
- 1992 *Excavations at Nichoria in Southwest Greece. Volume II. The Bronze Age Occupation*. Minneapolis: University of Minnesota Press.
- Mazarakis-Ainian, A.
- 1997 *From Rulers' Dwellings to Temples: Architecture, Religion and Society in Early Iron Age Greece (1100-700 B.C.)*. Stockholm: P. Åströms Förlag.
- Onyshkevych, L., and W. Hafford
- 2006 Topography of the Chrysokamiono region. In P. Betancourt (ed.), *The Chrysokamiono Metallurgy Workshop and its Territory*. Hesperia Supplement 36: 197-204. Athens: American School of Classical Studies.
- Preston, L.

- 2008 Late Minoan II to IIIB Crete. In C. Shelmerdine (ed.) *The Cambridge Companion to the Aegean Bronze Age*, 310-26. Cambridge: Cambridge University Press.
- Preston Day, L., N. Klein and L. Turner
- 2009 *Kavousi IIA. The Late Minoan IIIC Settlement at Vronta. The Buildings on the Summit*. Philadelphia: INSTAP Academic Press.
- Sassen, S.
- 2006 *Territory, Authority, Rights: From Medieval to Global Assemblages*. Princeton: Princeton University Press.
- Schoep, I.
- 1999 Tablets and territories? Reconstructing Late Minoan IB political geography through undeciphered documents. *American Journal of Archaeology* 103: 201-21.
- Shelmerdine, C.
- 1998 The palace and its operations. In J. Davis (ed.), *Sandy Pylos. An Archaeological History from Nestor to Navarino*, 81-96. Austin: University of Texas Press.
- 2006 Mycenaean palatial administration. In I. Lemos and S. Deger-Jalkotzy (eds), *Ancient Greece from the Mycenaean Palaces to the Age of Homer*, 73-86. Edinburgh: Edinburgh University Press.
- Shelmerdine, C., and J. Bennet
- 2008 Economy and administration. In C. Shelmerdine (ed.) *The Cambridge Companion to the Aegean Bronze Age*, 289-309. Cambridge: Cambridge University Press.
- Soja, E.
- 1989 *Postmodern Geographies: The Reassertion of Space in Critical Social Theory*. London: Verso.
- Soles, J.
- 1991 The Gournia palace. *American Journal of Archaeology* 95: 17-78.
- 2003 *Mochlos IA. Period III. Neopalatial Settlement on the Coast: The Artisans' Quarter and the Farmhouse at Chalinomouri. The Sites*. Philadelphia: INSTAP Academic Press.
- Soles, J., and T. Brogan (eds)

- 2003 *Mochlos IA. Period III, Neopalatial Settlement on the Coast, the Artisans' Quarter and the Farmhouse at Chalinomouri. The Sites*. Philadelphia: INSTAP Academic Press.
- Soles, J. and C. Davaras
- 1989 Excavations at Mochlos, 1989. *Hesperia* 61: 413-45.
- 1994 Excavations at Mochlos, 1990-1991. *Hesperia* 63: 391-436.
- 1996 Excavations at Mochlos, 1992-1993. *Hesperia* 65: 175-230.
- Vansteenhuyse, K.
- 2011 Centralisation and the political institution of Late Minoan IA Crete. In N. Terrenato and D. Haggis (eds.) *State Formation in Italy and Greece. Questioning the Neoevolutionist Paradigm*, 62-74. Oxford: Oxbow.
- Wallace, S.
- 2010 *Ancient Crete: From Successful Collapse to Democracy's Alternatives, Twelfth to Fifth centuries BC*. Cambridge: Cambridge University Press.
- Walsh, V. and W. McDonald
- 1992 House construction and town layout. In W. McDonald and N. Wilkie (eds.), *Excavations at Nichoria in Southwest Greece. Volume II, The Bronze Age Occupation*, 455-66. Minneapolis: University of Minnesota Press.
- Younger, J., and P. Rehak
- 2008 The material culture of Neopalatial Crete. In C. Shelmerdine (ed.) *The Cambridge Companion to the Aegean Bronze Age*, 140-64. Cambridge: Cambridge University Press.

Table 1: Aegean Chronology

Crete (dates BC)			Historical terminology		Mainland Greece (dates BC)	
Middle Minoan (MM) IA	2000-1900	}	Protopalatial (First Palace Period)	{	Middle Helladic (MH) I	2000-1900
		}		{		
MM IB	1900-1100	}		{	MH II	1900-1700
MMII	1800-1700	]		[		
MM III	1700-1600	]		[	MH III	1700-1600
Late Minoan (LM) I A	1600-1500	]	Neopalatial (Second Palace Period)	[	LH (Late Helladic) I	1600-1500
LM IB	1500-1450	]		[	LH IIA	1500-1450
LM II	1450-1370	}		}	LH IIB	1450-1400
LM IIIA	1370-1300	}	Third Palace Period	}	LH IIIA	1400-1300
LM IIIB	1300-1200	}		}	LH IIIB	1300-1200
LM IIIC	1200-1050	]	Postpalatial	[	LH IIIC	1200-1050
Subminoan	1050-950				Submycenaean	1050-1000
Protogeometric	950-900				Protogeometric	1000-900
Protogeometric B	900-800				Early Geometric	900-800
Middle Geometric	800-750				Middle Geometric	860-750
Late Geometric	750-700				Late Geometric	750-700

The chronology used here is based on Shelmerdine 2008: 4-5; Dickinson 1994: 13, 19; 2006: 23. Wallace 2010: 28 uses slightly earlier dates for the Minoan sequence. All dates are approximate and much debated.