

Crafts, Specialists, and Markets in Mycenaean Greece

Exchanging the Mycenaean Economy

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Abstract

This article examines the palatial and nonpalatial organization of craft production and exchange in the Late Bronze Age Argolid. The Late Bronze Age elites controlled markers of status and prestige, which were institutionalized in palatial control of the production and consumption of prestige goods. At Mycenae, the existence of attached ceramic workshops is evidence for palatial interest in the production and distribution of a wider range of ceramics than existed at the palace at Pylos, which was interested only in kylikes. Communities in Mycenae's territory, such as Tsoungiza, used ceramic assemblages nearly identical to those of the palatial elites. Given the quantities of ceramic vessels needed annually to supply the entire polity, it is unlikely that these were allocated via mechanisms of palatial control. Instead, we must consider multiple mechanisms of distribution in addition to redistribution, including market exchange. Likewise, we must consider one individual to be engaged in transactions both with the palace (redistribution, tax payments) and with the surrounding communities (reciprocity and market exchange). Markets serve to horizontally integrate households in a community or region and to vertically integrate those households with the center. Other evidence for market exchange, such as weights and measures and the road network, is explored.*

INTRODUCTION

One of the principal methods of studying the political economy of a society is to examine how the production, distribution, and consumption of goods and commodities are controlled by the various institutions of that society. In this article, I focus on craft production and its distribution, particularly the role

that exchange of manufactured items, such as ceramics, may have played in the political economy of the Late Bronze Age (ca. 1600–1100 B.C.E.) Argolid, Greece. The Argolid presents an interesting case, for it holds at least three palace centers, perhaps competing with one another, in a region similar in size to Messenia, which has a single palace center (ca. 2,000 km²). Although Linear B has been found at several sites—Mycenae, Tiryns, Midea—we lack a large, well-studied Linear B archive such as that of the Palace of Nestor at Pylos in Messenia. We have arguably more excavations of Late Bronze Age sites in the Argolid than of any other similar region in mainland Greece, but for some topics, such as the palatial economy, our understanding of the region is less comprehensive than our understanding of the palatial economy of Late Bronze Age Messenia.¹ Nevertheless, my aim is to construct a model of craft production and exchange that emphasizes both the palatial and the nonpalatial components. Because I emphasize variability within the Argolid, I use the term “Mycenaean” only in reference to the site of Mycenae—I use the term “Late Bronze Age” for all other sites and areas within the Argolid and elsewhere.

THE POLITICAL ORGANIZATION OF THE ARGOLID

Perhaps one of the most important results of recent work on the nature of the state in the Aegean is the realization of great variability among the Late Bronze Age mainland polities (as well as among the Bronze Age Cretan polities) based in part on different historical

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Naomi J. Norman for her enthusiastic support of this Forum and our previous one on redistribution (Galaty et al. 2011). I would like to dedicate this article to the memory of Harold K. Schneider, who first introduced me to the study of economics in anthropology as a graduate student at Indiana University—I hope I have succeeded in meeting his expectations.

¹Shelmerdine and Bennet 2008, 289–90.

trajectories.² Detailed architectural studies of the palaces at Pylos and Mycenae have demonstrated very different developmental histories of those structures, and this certainly contributes to our questioning of how different the societies were in the two regions.³ The political geography of the Argolid is very different from that of Messenia, and one wonders how different the political organization was as well. The political geography of the Argolid is complicated by the presence of multiple palaces, fortified citadels, and other major centers, most of which are within but a few hours' walk from one another.⁴ This has led to several different mappings of the political geography, from one with Mycenae as the only true administrative center, and Tiryns thus subordinate,⁵ to one with six or more independent polities.⁶ Cherry, largely following Renfrew's division based on the presence of Linear B tablets at Mycenae and Tiryns,⁷ suggested that the Argolid was divided into two states.⁸

Rather than imposing a model derived from the Linear B texts at Pylos as in the previous models, Voutsaki uses the data from the Argolid itself to suggest three centers, Mycenae, Tiryns, and Midea, in the peak palatial period, Late Helladic (LH) IIIB.⁹ She employs a diachronic approach to illustrate the shifting importance of sites in the Argolid,¹⁰ from the beginning of the Middle Helladic to LH IIIB. Her analysis is based on the appearance of valuable items in mortuary contexts, the only body of evidence she believes suitable for this diachronic study. Voutsaki's

study has the advantage of reconstructing the process of centralization toward the palatial sites of Mycenae, Tiryns, and Midea/Dendra at the expense of sites such as Argos, Lerna, and Asine. In addition to the mortuary evidence, she uses the settlement evidence in LH IIIB to label Mycenae, Tiryns, and Midea the three palatial centers of the Argive Plain. Here, I follow her identification of three palatial centers for the Argolid in LH IIIB, but with the caveat that the relationships among these three centers are still open for debate.

More important than the division of the Argolid into distinct states is the application to Late Bronze Age Greece of Renfrew's peer-polity interaction model,¹¹ in which multiple small-scale states "share a number of features—political, ideological, linguistic, symbolic, and material—at a level of specificity which does not find ready explanation in terms of common descent or environmental constraint."¹² As Voutsaki and Parkinson and I, among others, argue, the Argolid political geography developed in a system of intense competition and interaction among similar-sized polities.¹³ Craft production and distribution, I believe, played a key role in that system.

PALATIAL AND NONPALATIAL CRAFT PRODUCTION IN THE POLITICAL ECONOMY OF THE ARGOLID

As several scholars have noted recently,¹⁴ our understanding of Late Bronze Age political economies has radically changed in the last few years. No longer do we characterize the political economy of a Late

² Parkinson and Galaty 2007; Nakassis et al. 2010. Kilian's (1988, 293, fig. 1) hierarchical model of the Mycenaean state, which he based on the Linear B tablets from Pylos, is often used to illustrate the political organization, and by extension the economic organization, of the Late Bronze Age kingdoms. While this makes for a neat illustration, it glosses over a number of issues, such as the assumption that all the Late Bronze Age states functioned in an identical manner.

³ For Pylos, see Nelson 2001. For Mycenae, see Fitzsimons 2006.

⁴ Voutsaki 2010a, 606.

⁵ Bintliff 1977.

⁶ Kilian (1988, 297, fig. 3) applied his hierarchical model of the Late Bronze Age state to the Argolid, making each of the five fortified citadel sites, Mycenae, Midea, Tiryns, Argos, and Nauplion, as well as the sites of Lerna and Asine, centers of independent kingdoms, with each controlling smaller sites in the surrounding region in a classic "central place" model; see also Burns 2010a, 168.

⁷ Renfrew 1975; Cherry 1986. Midea has produced only Linear B nodules so far (Walberg 2007, 179).

⁸ This division of the Argolid (and indeed the entire northeastern Peloponnese, including the Corinthia and much of Arcadia and Achaia) into two polities of roughly equal size, by employing Thiessen polygons, was corroborated, in Cherry's (1986) view, by the rough equivalence of the theoretical poly-

gon drawn on Pylos with the territory of the Pylian kingdom as delineated in the Linear B archives, as well as the similarity between the proposed Thiessen territories and Homer's (*Il.* 2.559–80) assignment of towns in the Argolid contributing men to the Trojan expedition under either Agamemnon or Diomedes in the Catalogue of the Ships; see also Burns 2010a. Cf. the arguments of Pullen and Tartaron (2007) that the northern Corinthia was not part of the territory of Mycenae, at least before Late Helladic (LH) IIIB.

⁹ Voutsaki 2010b.

¹⁰ I.e., Asine, Argos, Mycenae, Tiryns, Midea, and Berbati.

¹¹ Renfrew 1986.

¹² Cherry 1986, 19. Aspects of the peer-polity interaction model have been invoked by other scholars in the study of Late Bronze Age polities (e.g., Galaty and Parkinson 2007; Parkinson and Galaty 2007). Renfrew (1975, 12–16), in his original formulation of the early state module, based in part on Late Bronze Age Greece, suggested 1,500 km² for the average size of the individual territories within a group of peer polities, with an average distance between centers of ca. 40 km (though that could vary from 20 to 100 km). A circle of 1,500 km² has a radius of ca. 22 km, similar to the estimated daily distance of human or animal portage.

¹³ Voutsaki 2010b; Parkinson and Pullen (forthcoming).

¹⁴ See papers in Pullen 2010a; Parkinson et al. 2013.

Bronze Age state as a monolithic, redistributive institution controlled entirely by the palaces. It is now clear that there were large segments of the economy that the palatial centers were not heavily involved in or ignored completely.¹⁵ Instead, we now understand that the palatial component of the economy coexisted and interacted with the nonpalatial component, especially in economic realms such as agriculture, ceramics, and chipped stone. Still, recent studies of political economy continue to focus on the nonpalatial component from the perspective of the palatial centers, and consumption studies rarely move beyond mortuary consumption of elite products at palatial centers.¹⁶ In part, this focus on the palatial centers is due to our data sources: most of our data comes from mortuary contexts and palatial and other large centers, but very little comes from domestic contexts. Regional surveys, exploration of nonpalatial centers, and new readings of the Linear B texts have greatly contributed to this revised understanding of the Late Bronze Age palatial economies. The use of the plural “economies” should be noted; because there is variation among the Late Bronze Age states, we should consider each state’s political economy on its own.¹⁷

The Late Bronze Age elites were concerned with the control of markers of status and prestige. This became institutionalized in palatial control of the production and consumption of prestige goods, whether through control of the raw (and often imported) materials or the distribution of the finished goods to selected consumers. This pattern is well established in both the Linear B data at Pylos and in the distribution of material in tombs in the Argolid. But the pattern of palatial involvement varies from one center to another, even within the Argolid. Voutsaki has gathered data on the production and consumption of valuable items at the three palatial sites in the Argolid. Her table of the workshops working with precious materials at the three sites clearly shows that Mycenae controlled the production of items in ivory and gold,¹⁸ though Midea and Tiryns have evidence for production of items (esp. jewelry) made of glass, semiprecious stones, and metals

such as bronze and lead. Likewise, her table of consumption of valuables in the domestic sphere, rather than in mortuary contexts,¹⁹ shows that Mycenae far exceeds the number of items at Tiryns and Midea. Furthermore, Mycenae has a greater diversity of materials and more unique items, such as the famous Ivory Trio, than the other two sites. From these data, Voutsaki argues that the “evidence suggests that Mycenae exerted control over both the production and consumption of prestige items, primarily the most coveted ones such as gold and ivory, and thereby controlled the means for social reproduction . . . [and] the means by which people negotiated their position and competition for status.”²⁰ This control was through networks of alliances, as can be seen in the shifting importance of sites across the Argolid from Middle Helladic (MH) I to LH IIIB. As Voutsaki emphasizes, however, this control was not over all aspects of life, nor indeed over all aspects of production, exchange, and consumption, but over the means to create social distance between elites and nonelites, as well as between those elites at Mycenae and those elites at Tiryns and Midea.

But what about nonprestige craft items, such as ceramics, or nonpalatial craft production, exchange, and consumption? This is an area that has seen little attention, other than studies of, for example, chipped stone and ceramics.²¹ This is in part due to the inherent assumption by many that the more important components in the political economy were controlled by the elites. But perhaps the greatest hindrance for the issue at hand is the great lack of data from household contexts.²² We can discuss craft production at palatial centers, such as Midea, but without data for household production and consumption we cannot really address the full range of craft production and consumption in the economy.

Sjöberg, in her review of the settlement data from the Late Bronze Age Argolid, was hard-pressed to find much evidence for workshops outside the palatial centers, other than the well-known pottery kiln at the Berbati Mastos site.²³ But we must keep in mind that there is very little domestic architecture of Late Bronze

¹⁵ Halstead 1992, 2007; Sjöberg 2004.

¹⁶ Whitelaw 2001.

¹⁷ Pullen 2010b. This is not to deny that there may well have been great similarities among the various states, as modeled by peer-polity interaction, but until we understand the individual political economies of the Late Bronze Age states we cannot generalize to “the Late Bronze Age Political Economy.” For an example of new interpretations of Linear B texts, see Nakassis 2006, (forthcoming).

¹⁸ Voutsaki 2010b, 102, table 5.4.

¹⁹ Voutsaki 2010b, 102, table 5.5.

²⁰ Voutsaki 2010b, 102.

²¹ Parkinson 2007, 2010; Galaty 2010.

²² E.g., we lack much botanical or faunal evidence for examining agriculture. See Dabney (1997, 471) for a plea for the excavation of more domestic structures to better understand the scale of craft production throughout the Late Bronze Age economy.

²³ Sjöberg 2004; see also Åkerström 1968.

Age date from any Argolid site outside the three palatial centers.²⁴ Farther afield, in the Corinthia, domestic architecture appears at Zygouries and Tsoungiza, which may have been connected to the Argolid in the Palatial period.²⁵ At LH III Tsoungiza, there is virtually no evidence for craft products other than ceramic items,²⁶ yet Thomas' study of the LH IIIB1 pottery suggests consumption patterns of ceramics at Tsoungiza that emulate those of the elites at Mycenae.²⁷ If this is the case, then the inhabitants of Tsoungiza most likely obtained their ceramics from the same sources as the elites did at Mycenae. The question of relevance here, then, is the mechanism by which the inhabitants of Tsoungiza obtained those ceramics.

Given that ceramics seem to be one of the principal sets of data available for examining the issue of palatial control of the political economy,²⁸ I focus on pottery production, exchange, and consumption. In a paper to be published soon, Parkinson and I argue that there are differences between the ways pottery distribution and consumption were organized in the Argolid compared with Messenia.²⁹ The scale and organization of specialized ceramic production seems to have been similar in Mycenae and Pylos, but the distribution and consumption of the specialized ceramics produced in these different regions were significantly different. The Messenian elite attempted to control the production of kylikes, which were used during feasts sponsored by the palatial elite to promote alliance formation.³⁰

At Mycenae, though, the elites seem to have controlled a wide variety of ceramic forms, in part for export consumption. Mycenae developed within the context of intense peer-polity interaction among the centers in the Argolid. One strategy employed by the

elite at Mycenae was the control of exotic items and materials obtained through long-distance trade and the transformation through attached workshops of these materials into objects that could be used to cement alliances with elites at lower levels and in neighboring polities.³¹ Palatial administrators needed to co-opt craft production, such as production of ceramics, in part to fuel this alliance building. As a result of this peer-polity interaction, there was increased urgency for the elite at Mycenae to control not only those aspects of specialized production that related to internal systems of alliance formation and status negotiation (i.e., the workshops specializing in high-value items) but also those aspects, such as ceramic production, that articulated with external systems of exchange. The relative uniformity of Late Bronze Age ceramic products in the Argolid, and elsewhere, suggests a few large-scale producers, which would have been likely candidates for palatial control.³² But did the palatial elite at Mycenae control the entire production and distribution of ceramic vessels from these workshops? Were there alternate mechanisms for the distribution of ceramic vessels?

EXCHANGE AND MARKETS IN THE LATE BRONZE AGE AEGEAN

The study of exchange in Aegean archaeology in particular has been hindered by the very data that allow detailed knowledge of the economy: the Linear B tablets. A particular lacuna has been the study of markets, in large part because of the adherence to Finley and Polanyi's model, based on the tablets from Pylos, of the total redistributive economy controlled by the palace.³³ Renfrew, in his study of trade that featured

²⁴ Only Asine and Berbati have produced domestic architecture with significant preservation. Buildings G, I, and K at Asine were originally dated to LH IIIB (Frödin and Persson 1938, 90) but are now dated to LH IIIC, along with Building H (Sjöberg 2004, 31–9). At Berbati, the building succeeding the kiln is still dated to LH IIIA2–B (Schallin 2002; Sjöberg 2004, 73).

²⁵ Blegen's (1928, 30–8) so-called Potter's Shop at Zygouries is now identified as a mixed domestic and workshop structure, not for the manufacture of pottery but for some other product (Thomas 1992). For Tsoungiza, see Wright et al. 1990, 629–38. In addition, there is limited domestic architecture from Korakou (Houses P, M, and H from LH IIIB–C) (Blegen 1921). The extensive LH IIIB architecture at Kalami-anos has not been excavated (Tartaron et al. 2011).

²⁶ Dabney (1997, 469) mentions a bronze dagger of Peshiera type as one of the few exceptions to the lack of non-ceramic craft products.

²⁷ Thomas 2005, 540; see also Dabney 1997, 469–70.

²⁸ Whitelaw (2001) also sees ceramics as an appropriate

data set to address the question of palatial control—in this case, those ceramics found in the palace at Pylos.

²⁹ Parkinson and Pullen (forthcoming).

³⁰ Galaty and Parkinson 2007; Galaty 2010; Nakassis 2010.

³¹ For long-distance trade, see Burns 2010a. For attached workshops, see Shelton 2010; Voutsaki 2010b. Shelton (2002–2003) suggests that the intensive ceramic production at Mycenae's Petsas House seems to have been in the process of becoming attached to the palace; some of the earliest Linear B tablets known on the mainland, dating to LH IIIA2, are found in the Petsas House. The Mastos workshop in the Berbati Valley (Åkerström 1968), which was used through LH IIIB, is another example of intensive, attached ceramic production. Both the Petsas House and Berbati workshops are associated with the Mycenae-Berhati instrumental neutron activation analysis (INAA) chemical group and shared a common clay source (Mommsen et al. 2002), and they likely were associated with the palatial center at Mycenae.

³² Thomas 2005, 540 (citing Sherratt 1982).

³³ Polanyi 1968; Finley 1973.

variations on distance-decay models, found similar patterns in central-place redistribution and central-place marketplace exchange,³⁴ and, as Stark and Garraty comment, this similarity in product dissemination contributed to the lack of interest in pursuing market exchange.³⁵ Sjöberg, in an attempt to test whether centralized redistribution or market exchange could be identified in the Late Bronze Age Argolid, concludes that “a controlled and centralized economy based on redistribution could not be confirmed,”³⁶ in large part because of the lack of large-scale storage facilities. She argues that the poor archaeological evidence for workshops does not indicate that production was concentrated in the palatial centers. As noted above, the workshop evidence from the Argolid is primarily associated with palace centers, and these workshops were producing goods for obvious elite consumption. She emphasizes exchange at various levels, from local household-to-household exchange to the vertical flow of goods to the three palatial centers in LH IIIB. Exchange not associated with the palaces most likely involved reciprocity or, as she seems to prefer, market exchange. In the literature of the Aegean Bronze Age, occasionally a reference will be made to “exchange” without specifying the mode, and one wonders whether “markets” were in the mind of the writer; more often, however, the term “exchange” is attached to the word “trade” and means “international trade.”³⁷

In the last few years, though, the study of markets in other regions of the world by archaeologists has grown.³⁸ This increased interest coincides with the reconsideration of political economies and the emergence of the state, coupled with an increasing

critique of the Polanyian paradigm. The identification of markets, market exchange, and marketplaces is problematic,³⁹ but a number of studies point to the integration of several different institutions in the political economy of a culture, including elite control of prestige goods, market exchange (with involvement, even outright control, by elites), reciprocity, and so on, as Hruby discusses.⁴⁰ Thus, we should consider market exchange along with gift exchange, redistribution, and other modes of distribution of products.

If the palace at Mycenae was heavily involved in pottery distribution and consumption, how did a small community like Tsoungiza (with perhaps only 10 households) obtain its large quantity of pottery that seems to mirror that of Mycenae in assemblage, shapes, and decoration? Was it through means of allocations by the palatial authorities? Could the palatial authorities handle, or would they want to, the necessary 700–1,000 vessels per annum suggested for replacement of broken pots at Tsoungiza?⁴¹ And if we consider the larger territory dependent on the center at Mycenae to consist of 5,000 or even 10,000 households, the scale of production and distribution of ceramic vessels becomes enormous.⁴² While it is possible that the palace allocated the pots needed by individual households, it would seem more likely that communities in Mycenae’s orbit used other means of obtaining these vessels, such as the mechanism of market exchange.⁴³ The palace at Mycenae would have constituted the largest consumer of ceramics, commanding a higher percentage of ceramic production than did the palace at Pylos for the purposes of export, and thus could well have set the “standards” of consumption that a community like

³⁴ Renfrew 1975, 42–3.

³⁵ Stark and Garraty (2010, 40–1). Renfrew (1975, 52) identified storage facilities as a necessary feature of redistribution, but it is unclear whether he thought such facilities were a defining criterion of redistribution as opposed to market systems (Stark and Garraty 2010, 41). This criterion of large storage facilities was later examined by Sjöberg (2004) and was found to be lacking in the Argolid. For a reassessment of the role of redistribution in the Aegean Bronze Age, see the contributions in Galaty et al. 2011, esp. Nakassis et al. 2011; Pullen 2011.

³⁶ Sjöberg 2004, 144.

³⁷ E.g., Burns 2010b.

³⁸ Some 25 ago, Morris (1986) addressed the issue of the dominance of the redistribution model in Late Bronze Age archaeology and the possibility of other modes of exchange, specifically markets. She focused on Nichoria, not Pylos—as of course Aprile (2013) also does. Morris, in a foreshadowing of Hirth’s (1998) regional distribution model, concluded that local and regional consumption patterns would reflect market and other forms of exchange, not the redistribution that

would characterize the palatial center of Pylos. Unfortunately, her study languished for years, ignored by most scholars.

³⁹ Feinman and Garraty 2010; Garraty and Stark 2010. Much of the literature on Mesoamerican markets seems to focus on the identification of marketplaces per se (e.g., Shaw 2012).

⁴⁰ Hruby 2013.

⁴¹ See Thomas (2005, 536–37) for discussion of ceramic vessel breakage and replacement rates.

⁴² Whitelaw (2001, 64–5), in his discussion of palatial involvement in ceramic production in Late Bronze Age Messenia, estimates 50–100 vessels per household per annum for a replacement rate; a polity the size of Messenia, with an estimated population of 12,500 households, would therefore need 612,500–1,225,000 ceramic vessels per year. Consumption by the palace, Whitelaw suggests, constituted no more than 1–2% of this total, though the palace still remained the single largest consumer.

⁴³ Stark and Garraty (2010, 43–4) also conclude that products such as ceramics, produced by a few specialists, could not have been effectively supplied through redistribution.

Tsougiza would emulate. Thomas, though, points out that subtle differences in painting particular motifs on the most common shapes is “highly reminiscent of how high-volume manufacturers in modern economies produce masses of similar, yet subtly differentiated, products to meet a paradoxical desire for both individuality and commonality,”⁴⁴ suggesting an interest in meeting the demands of the market.

There are two sets of Late Bronze Age material culture independent of ceramics that I believe point to the existence of market exchange, if not markets themselves. The first set comprises the weights and measures present in a wide variety of contexts, both palatial and nonpalatial.⁴⁵ The topic of weights in itself is a large one, but suffice it to say that systems of weights surely indicate the establishment of equivalent values for commodities, whether for market exchange or reciprocal exchange. Halstead noted that the payment of some tax assessments on individual subcenters, as recorded in the Pylos tablets, of small and “indivisible” commodities such as oxhides would have been “impracticable without some sort of prior exchange in different commodities among liable taxpayers.”⁴⁶ The instances of “purchases” by the Pylos palace of linen textiles and alum would have necessitated the establishment of equivalences for the exchange to take place.⁴⁷

The second set is the Late Bronze Age road systems, best known in the Argolid. One criterion characterizing market systems is the construction of facilities for exchange to take place or the construction or establishment of ways to facilitate exchanges.⁴⁸ The Argolid road system would be ideal for transporting agricultural products, raw materials, and finished craft products among the various communities and centers, as Sjöberg notes.⁴⁹ Some of these roads run to or near Mycenae; some converge on Tiryns and Midea. The evidence for the roads beyond the Argolid is paltry, but that has not prevented some from positing that they were intended to connect the far-flung corners of a state centered on Mycenae.⁵⁰ Jansen, however, suggests that a number of these roads were for local circulation and connected areas of agricultural production with the urban centers.⁵¹ Sjöberg extends this suggestion to argue that the roads facilitated horizontal integration in the Argolid, thus linking communities beyond the

local neighbors in horizontal arrangements, perhaps in the periodic markets that are so common throughout the world.⁵² One can easily imagine the local elites involved in these markets providing a means of vertical integration between the common households of the countryside and the palatial centers.

This is where Nakassis’ work on the multiple roles played by actors in the Late Bronze Age economy helps explain how this integration might work.⁵³ Nakassis demonstrates that individuals named in the Linear B tablets at Pylos often recur in different contexts, suggesting that an individual could be involved in more than one role in the Pylian political economy. Some roles seem to be directly associated with the palace, while other roles seem to be associated with the regions, district capitals, and other places outside the palace. This implies that individual actors operated at multiple levels within the hierarchy of the Pylian state. While we have cautioned against assuming similar patterns among the Late Bronze Age states without direct evidence, in this instance the assumption of multiple roles played by an individual is well grounded in anthropological theory of the social persona. Indeed, it would be surprising to find that individuals do not play multiple roles in their interactions with others. It is likely, then, that local elites, interacting occasionally with the palace centers, also interacted with individuals in their own communities; in economic interactions, this would have involved market exchange. One of the characteristics of markets is how they facilitate the horizontal integration of many actors as well as provide opportunity for relationships to emerge between actors at different levels.

In the model of craft production and distribution advocated here, the owner of the Petsas House ceramic workshop would play (at least) two roles in the political economy of the Mycenae polity. As part of the elite with palatial ties, he would be obligated to provide the palace with certain quantities of ceramic vessels, perhaps receiving in return land—the large, well-appointed Petsas House indicates a wealthy owner. This type of transaction would perhaps be recorded in the palace archives. Production of ceramic vessels beyond the needs of the palace would be distributed through other mechanisms, including market exchange, whether at Mycenae itself or in one of

⁴⁴ Thomas 2005, 540.

⁴⁵ Halstead 1992, 72; Sjöberg 2004, 17.

⁴⁶ Halstead 1992, 72.

⁴⁷ Halstead 1992, 71; see also Hruby 2013.

⁴⁸ Hruby (2013) suggests a similar motive behind the construction of the artificial harbor in Messenia; see also Zang-

ger 2008.

⁴⁹ Sjöberg 2004, 144.

⁵⁰ E.g., Hope Simpson 1998.

⁵¹ Jansen 2002.

⁵² *Supra* n. 49.

⁵³ Nakassis 2006, (forthcoming).

the communities easily reached via the extensive road system. The Petsas House ceramics merchant, then, would serve to integrate vertically the communities around Mycenae with the palatial center.

There are many dimensions to the study of markets that cannot be examined here, such as the scale of markets and market exchange, the periodicity or regularity of markets, or the presence of physical marketplaces. But by way of conclusion, I would like to speculate about exchange after the palaces collapsed. There seems to have been a shift in the LH IIIc period to small workshops that strove to produce items for marking prestige and status, and items of exotic origin or heirlooms seem to have increased in significance to their owners,⁵⁴ since monumental architecture and tombs had gone out of existence. With the palace-centered redistributive component of the political economy removed, this freed individuals to pursue alternate modes of obtaining goods, such as the market. Perhaps those local elites who had already established local authority after the collapse of the palaces found it necessary to manipulate the market, and not the palatial redistributive system, to maintain their power. Tiryns and Asine in the LH IIIc period fit this model. This new reliance on market exchange as the main mode for economic transactions among elites and nonelites set the stage for the eventual appearance of marketplaces such as the Athenian Agora, where one found “everything sold together.”⁵⁵

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Works Cited

- Åkerström, Å. 1968. “A Mycenaean Potter’s Factory at Berbati near Mycenae.” In *Atti e Memorie del I Congresso Internazionale di Micenologia, Roma, 27 settembre–3 ottobre 1967*, 48–53. *Incunabula Graeca* 25. Rome: Edizioni dell’Ateneo.
- Aprile, J.D. 2013. “The New Political Economy of Nichoria: Using Intrasite Distributional Data to Investigate Regional Institutions.” *AJA* 117(3):429–36.
- Bintliff, J.L. 1977. *Natural Environment and Human Settlement in Prehistoric Greece*. BAR Suppl. 28. 2 vols. Oxford: British Archaeological Reports.
- Blegen, C.W. 1921. *Korakou: A Prehistoric Settlement near Corinth*. Boston: American School of Classical Studies at Athens.
- . 1928. *Zygouries: A Prehistoric Settlement in the Valley of Cleonae*. Cambridge, Mass.: Harvard University Press, for the American School of Classical Studies at Athens.
- Burns, B.E. 2010a. *Mycenaean Greece, Mediterranean Commerce, and the Formation of Identity*. Cambridge: Cambridge University Press.
- . 2010b. “Trade.” In *The Oxford Handbook of the Bronze Age Aegean*, edited by E.H. Cline, 291–304. Oxford: Oxford University Press.
- Cherry, J.F. 1986. “Politics and Palaces: Some Problems in Minoan State Formation.” In *Peer Polity Interaction and Socio-Political Change*, edited by C. Renfrew and J.F. Cherry, 19–45. Cambridge: Cambridge University Press.
- Dabney, M.K. 1997. “Craft Product Consumption as an Economic Indicator of Site Status in Regional Studies.” In *TEXNH: Craftsmen, Craftswomen, and Craftsmanship in the Aegean Bronze Age. Proceedings of the 6th International Aegean Conference, Philadelphia, 18–21 April 1996*, edited by R. Laffineur and P.P. Betancourt. Vol. 2, 467–71. *Aegaeum* 16. Liège and Austin: Université de Liège and University of Texas at Austin.
- Dickinson, O.T.P.K. 2006. *The Aegean from Bronze Age to Iron Age: Continuity and Change Between the Twelfth and Eighth Centuries B.C.* London: Routledge.
- Feinman, G.M., and C.P. Garraty. 2010. “Preindustrial Markets and Marketing: Archaeological Perspectives.” *Annual Review of Anthropology* 39:167–91.
- Finley, M.I. 1973. *The Ancient Economy*. Sather Classical Lectures 43. Berkeley: University of California Press.
- Fitzsimons, R.D. 2006. “Monuments of Power and the Power of Monuments: The Evolution of Elite Architectural Styles at Bronze Age Mycenae.” Ph.D. diss., University of Cincinnati.
- Frödin, O., and A.W. Persson. 1938. *Asine: Results of the Swedish Excavations, 1922–1930*. Stockholm: Generalstabens Litografiska Anstalts Förlag.
- Galaty, M.L. 2010. “Wedging Clay: Combining Competing Models of Mycenaean Pottery Industries.” In *Political Economies of the Aegean Bronze Age: Papers from the Langford Conference, Florida State University, Tallahassee, 22–24 February 2007*, edited by D.J. Pullen, 230–47. Oxford: Oxbow.
- Galaty, M.L., and W.A. Parkinson. 2007. “Mycenaean Palaces Rethought.” In *Rethinking Mycenaean Palaces II*. 2nd rev. ed., edited by M.L. Galaty and W.A. Parkinson, 1–17. Cotsen Institute of Archaeology Monograph 60. Los Angeles: Cotsen Institute of Archaeology.
- Galaty, M.L., D. Nakassis, and W.A. Parkinson, eds. 2011. “Redistribution in Aegean Palatial Societies.” *AJA* 115(2): 175–244.
- Garraty, C.P., and B.L. Stark, eds. 2010. *Archaeological Approaches to Market Exchange in Ancient Societies*. Boulder: University Press of Colorado.
- Halstead, P. 1992. “The Mycenaean Palatial Economy: Making the Most of the Gaps in the Evidence.” *PCPS* 38:57–86.
- . 2007. “Toward a Model of Mycenaean Palatial Mobilization.” In *Rethinking Mycenaean Palaces II*. 2nd rev. ed., edited by M.L. Galaty and W.A. Parkinson, 66–73. Cotsen Institute of Archaeology Monograph 60. Los Angeles: Cotsen Institute of Archaeology.
- Hirth, K.G. 1998. “The Distributional Approach: A New

⁵⁴Dickinson 2006, 72.

⁵⁵Ath. 14.640b–c.

- Way to Identify Marketplace Exchange in the Archaeological Record." *CurrAnthr* 39:451–67.
- Hope Simpson, R. 1998. "The Mycenaean Highways." *Ech-Cl* 42, n.s. 17:239–60.
- Hruby, J. 2013. "The Palace of Nestor, Craft Production, and Mechanisms for the Transfer of Goods." *AJA* 117 (3):423–27.
- Jansen, A.G. 2002. *A Study of the Remains of Mycenaean Roads and Stations of Bronze-Age Greece*. Mellen Studies in Archaeology 1. Lewiston, Me.: Edwin Mellen Press.
- Kilian, K. 1988. "The Emergence of *Wanax* Ideology in the Mycenaean Palaces." *OJA* 7:291–302.
- Mommsen, H., T. Beier, and A. Hein. 2002. "A Complete Chemical Grouping of the Berkeley Neutron Activation Analysis Data on Mycenaean Pottery." *JAS* 29:613–37.
- Morris, H.J. 1986. "An Economic Model of the Late Mycenaean Kingdom of Pylos." Ph.D. diss., University of Minnesota.
- Nakassis, D. 2006. "The Individual and the Mycenaean State: Agency and Prosopography in the Linear B Texts from Pylos." Ph.D. diss., University of Texas at Austin.
- . 2010. "Reevaluating Staple and Wealth Finance at Mycenaean Pylos." In *Political Economies of the Aegean Bronze Age: Papers from the Langford Conference, Florida State University, Tallahassee, 22–24 February 2007*, edited by D.J. Pullen, 127–48. Oxford: Oxbow.
- . Forthcoming. *Individuals and Society in Mycenaean Pylos*. *Mnemosyne* Suppl., History and Archaeology of Classical Antiquity 358. Leiden and Boston: Brill.
- Nakassis, D., M.L. Galaty, and W.A. Parkinson. 2010. "State and Society." In *The Oxford Handbook of the Bronze Age Aegean*, edited by E.H. Cline, 239–50. Oxford: Oxford University Press.
- Nakassis, D., W.A. Parkinson, and M.L. Galaty. 2011. "Redistributive Economies from a Theoretical and Cross-Cultural Perspective." *AJA* 115(2):177–84.
- Nelson, M.C. 2001. "The Architecture of Epano Englianos, Greece." Ph.D. diss., University of Toronto.
- Parkinson, W.A. 2007. "Chipping Away at the Mycenaean Economy: Obsidian Exchange, Linear B, and Palatial Control in Late Bronze Age Messenia." In *Rethinking Mycenaean Palaces II*. 2nd rev. ed., edited by M.L. Galaty and W.A. Parkinson, 87–101. Cotsen Institute of Archaeology Monograph 60. Los Angeles: Cotsen Institute of Archaeology.
- . 2010. "Beyond the Peer: Social Interaction and Political Evolution in the Bronze Age Aegean." In *Political Economies of the Aegean Bronze Age, Papers from the Langford Conference, Florida State University, Tallahassee, 22–24 February 2007*, edited by D.J. Pullen, 11–34. Oxford: Oxbow.
- Parkinson, W.A., and M.L. Galaty. 2007. "Secondary States in Perspective: An Integrated Approach to State Formation in the Prehistoric Aegean." *American Anthropologist* 109:113–29.
- Parkinson, W.A., and D.J. Pullen. Forthcoming. "The Emergence of Craft Specialization on the Greek Mainland." In *KE-RA-ME-JA: Studies Presented to Cynthia Shelmerdine*, edited by D. Nakassis, J. Gulizio, and S.A. James. Philadelphia: INSTAP Academic Press.
- Parkinson, W.A., D. Nakassis, and M.L. Galaty. 2013. "Crafts, Specialists, and Markets in Mycenaean Greece: Introduction." *AJA* 117(3):413–22.
- Polanyi, K. 1968. *Primitive, Archaic, and Modern Economies: Essays of Karl Polanyi*. Edited by G. Dalton. Boston: Beacon Press.
- Pullen, D.J., ed. 2010a. *Political Economies of the Aegean Bronze Age: Papers from the Langford Conference, Florida State University, Tallahassee, 22–24 February 2007*. Oxford: Oxbow.
- . 2010b. "Introduction: Political Economies of the Aegean Bronze Age." In *Political Economies of the Aegean Bronze Age: Papers from the Langford Conference, Florida State University, Tallahassee, 22–24 February 2007*, edited by D.J. Pullen, 1–10. Oxford: Oxbow.
- . 2011. "Before the Palaces: Redistribution and Chiefdoms in Mainland Greece." *AJA* 115(2):185–95.
- Pullen, D.J., and T.F. Tartaron. 2007. "Where's the Palace? The Absence of State Formation in the Late Bronze Age Corinthia." In *Rethinking Mycenaean Palaces II*. 2nd rev. ed., edited by M.L. Galaty and W.A. Parkinson, 146–58. Cotsen Institute of Archaeology Monograph 60. Los Angeles: Cotsen Institute of Archaeology.
- Renfrew, C. 1975. "Trade as Action at a Distance: Questions of Integration and Communication." In *Ancient Civilizations and Trade*, edited by J.A. Sabloff and C.C. Lamberg-Karlovsky, 3–59. Albuquerque: University of New Mexico Press.
- . 1986. "Introduction: Peer Polity Interaction and Socio-Political Change." In *Peer Polity Interaction and Socio-Political Change*, edited by C. Renfrew and J.F. Cherry, 1–18. Cambridge: Cambridge University Press.
- Schallin, A.-L. 2002. "Pots for Sale: The Late Helladic IIIA and IIIB Ceramic Production at Berbati." In *New Research on Old Material from Asine and Berbati in Celebration of the Fiftieth Anniversary of the Swedish Institute at Athens*, edited by B. Wells, 141–55. *ActaAth* 8°, 17. Stockholm: Svenska Institutet i Athen.
- Shaw, L.C. 2012. "The Elusive Maya Marketplace: An Archaeological Consideration of the Evidence." *Journal of Archaeological Research* 20:117–55.
- Shelmerdine, C.W., and J. Bennet. 2008. "Mycenaean States: Economy and Administration." In *The Cambridge Companion to the Aegean Bronze Age*, edited by C.W. Shelmerdine, 289–309. Cambridge: Cambridge University Press.
- Shelton, K. 2002–2003. "A New Linear B Tablet from Petsas House, Mycenae." *Minos* 37–38:387–96.
- . 2010. "Citadel and Settlement: A Developing Economy at Mycenae, the Case of Petsas House." In *Political Economies of the Aegean Bronze Age: Papers from the Langford Conference, Florida State University, Tallahassee, 22–24 February 2007*, edited by D.J. Pullen, 184–204. Oxford: Oxbow.
- Sherratt, E.S. 1982. "Patterns of Contact: Manufacture and Distribution of Mycenaean Pottery, 1400–1100." In *Interaction and Acculturation in the Mediterranean: Proceedings of the Second International Congress of Mediterranean Pre- and Protohistory, Amsterdam, 19–23 November 1980*, edited by J. Best and N. Devries, 177–79. Amsterdam.
- Sjöberg, B.L. 2004. *Asine and the Argolid in the Late Helladic III Period: A Socio-Economic Study*. BAR-IS 1225. Oxford: Archaeopress.
- Stark, B.L., and C.P. Garraty. 2010. "Detecting Marketplace Exchange in Archaeology: A Methodological Review." In *Archaeological Approaches to Market Exchange in Ancient Societies*, edited by C.P. Garraty and B.L. Stark, 33–58. Boulder: University of Colorado Press.
- Tartaron, T.F., D.J. Pullen, R.K. Dunn, L. Tzortzopoulou-Gregory, A. Dill, and J.I. Boyce. 2011. "The Saronic Harbors Archaeological Research Project (SHARP): Investigations at Mycenaean Kalamianos, 2007–2009." *Hesperia* 80:559–634.
- Thomas, P.M. 1992. "LH IIIB:1 Pottery from Tsoungiza

- and Zygouries." Ph.D. diss., University of North Carolina at Chapel Hill.
- . 2005. "A Deposit of Late Helladic IIIB1 Pottery from Tsoungiza." *Hesperia* 74:451–573.
- Voutsaki, S. 2010a. "Argolid." In *The Oxford Handbook of the Bronze Age Aegean*, edited by E.H. Cline, 599–613. Oxford: Oxford University Press.
- . 2010b. "From the Kinship Economy to the Palatial Economy: The Argolid in the Second Millennium BC." In *Political Economies of the Aegean Bronze Age: Papers from the Langford Conference, Florida State University, Tallahassee, 22–24 February 2007*, edited by D.J. Pullen, 86–111. Oxford: Oxbow.
- Walberg, G. 2007. *Midea: The Megaron Complex and Shrine Area. Excavations on the Lower Terraces, 1994–1997*. Prehistory Monographs 20. Philadelphia: INSTAP Academic Press.
- Whitelaw, T.M. 2001. "Reading Between the Tablets: Assessing Mycenaean Palatial Involvement in Ceramic Production and Consumption." In *Economy and Politics in the Mycenaean Palace States: Proceedings of a Conference Held on 1–3 July 1999 in the Faculty of Classics, Cambridge*, edited by S. Voutsaki and J.T. Killen, 51–79. Cambridge Philological Society Suppl. 27. Cambridge: Cambridge Philological Society.
- Wright, J.C., J.F. Cherry, J.L. Davis, E.E. Mantzourani, S.B. Sutton, and R.F. Sutton. 1990. "The Nemea Valley Archaeological Project: A Preliminary Report." *Hesperia* 59:579–659.
- Zangger, E. 2008. "The Port of Nestor." In *Sandy Pylos: An Archaeological History from Nestor to Navarino*. 2nd ed., edited by J.L. Davis, 69–74. Princeton: American School of Classical Studies at Athens.