From Prehistoric Villages to Cities
Settlement Aggregation and Community Transformation

Edited by Jennifer Birch
Contents

List of Figures vii
List of Tables xi
Preface xiii

1 Between Villages and Cities: Settlement Aggregation in Cross-Cultural Perspective 1
JENNIFER BIRCH

2 The Anatomy of a Prehistoric Community: Reconsidering Çatalhöyük 23
BLEDA S. DÜRING

3 Coming Together, Falling Apart: A Multiscalar Approach to Prehistoric Aggregation and Interaction on the Great Hungarian Plain 44
PAUL R. DUFFY, WILLIAM A. PARKINSON, ATTILA GYUCHA, AND RICHARD W. YERKES

4 Social Organization and Aggregated Settlement Structure in an Archaic Greek City on Crete (ca. 600 BC) 63
DONALD C. HAGGIS

5 Appropriating Community: Platforms and Power on the Formative Taraco Peninsula, Bolivia 87
ROBIN A. BECK, JR.

6 Social Integration and the Built Environment of Aggregated Communities in the North American Puebloan Southwest 111
ALISON E. RAUTMAN

7 Competition and Cooperation: Late Classic Period Aggregation in the Southern Tucson Basin 134
HENRY D. WALLACE AND MICHAEL W. LINDEMAN
Contents

8 Organizational Complexity in Ancestral Wendat Communities 153
   JENNIFER BIRCH AND RONALD F. WILLIAMSON

9 Community Aggregation through Public Architecture:
   Cherokee Townhouses 179
   CHRISTOPHER B. RODNING

10 The Work of Making Community 201
   STEPHEN A. KOWALEWSKI

Contributors 219
Index 223
Settlement aggregation is a normative, culturally conditioned, and adaptive process in the Aegean from the Neolithic period on, seeing several phase transitions that resulted in village-size communities; middle-range settlements, such as towns and cities; and political or ritual centers of state-level configurations, such as palace- and city-centered territorial states. Aggregation and nucleation are perhaps interchangeable terms, though in many cases the actual material components and spatial organization of nucleated sites—especially those derived through surface survey—are not sufficiently understood to present the details or form of aggregation. The recurrence and ubiquity of nucleated sites in the Greek landscape are probably related to kinship structures and concepts of the household; social and cultic connections to places; exchange patterns; and land use and subsistence practices. The motives and processes involved in periodic aggregation, as Jennifer Birch points out in the introduction to this volume, have perhaps received more attention in the context of regional surveys than in detailed site-level analysis of intracommunity organization. Even though work in the Aegean commonly addresses details of settlement organization, architecture, and spatial syntax, especially when they are relevant to culture- or period-specific questions (e.g., Glowacki and Vogeikoff-Brogan 2011; Westgate et al. 2007), because aggregation is both scale-sensitive and variable, and perhaps simply accepted as a normative settlement structure, it has not received as much critical attention or analytical focus as has the study of broad historical trends of settlement patterns. Even recent studies of Greek urbanization tend to apply broadly construed regional data and perspectives of landscape archaeology, marginalizing the form of aggregation and actual structure of urban settlements in their earliest forms (eighth to sixth centuries BC) (e.g., Branigan 2001; Cullen 2001; Morgan and Coulton 1997; Osborne and Cunliffe 2005; Owen and Preston 2009). While urbanization per se is not, properly speaking, the focus of this collection, I think that the small scale of Aegean cities in the Archaic period (seventh to sixth centuries BC), their variable sizes, organizations, and hinterlands, and the problems in defining their earliest forms, especially on Crete, suggest that looking at aggregation from the ground up could be a useful analytical tool for

4 Social Organization and Aggregated Settlement Structure in an Archaic Greek City on Crete (ca. 600 BC)

Donald C. Haggis
visualizing the emergence of the new kinds of settlements in the Archaic period. The purpose of this chapter is to present an example of settlement aggregation on Crete in the context of Archaic-period urbanization.

Over the past two decades, the publication of a number of archaeological surveys in the Aegean has contributed compelling regional histories and considerable discussion of the sociopolitical and economic meanings of settlement patterns, while significantly shaping the direction of Greek archaeology and prehistory into the twenty-first century (e.g., Alcock and Cherry 2004; Bennett and Galaty 1997; Branigan 2001; Cullen 2001; Kardulias 1994). That said, our focus on the region as the highest-order or effective analytical scale, and the increasing cost and logistical complexity of excavation—as well as commonplace methodological skepticism and philosophical ambivalence (e.g., Cherry 2011)—have gradually steered us away from detailed site-level analyses, and indeed the close evaluation of data sets that we should be using to assign functions to units of artifacts on the ground. We may need to take a step back from the mosaic of sherd densities and site hierarchies (the collages of dots and smudges on the map) and think critically about what aggregation means at the site level and on various spatial and organizational scales, perhaps reconsidering entirely our uncritical and broadly conceptual and spatial definitions of houses, hamlets, villages, towns, and cities.

Generally speaking, in most Aegean surveys, site hierarchies tend to predict degrees of regional complexity (e.g., Driessen’s 2001 overview), with settlement dispersal correlating to strong integration—that is, the expansion of numerous small sites into a hinterland whose structure and carrying capacity are evidence for territoriality, sociopolitical cohesion, and economic complexity (as in Bintliff 1982). Understanding aggregation as both process and structure should be critical in determining the meaning of such sites as well as in developing models of social and political organization based on settlement data. The so-called hamlets and villages of dispersed regional patterns are often presented as merely the lower-level in-filling of the countryside (Cavanagh 1991: 108; Morris 1998: 16; Watrous, Hadzi-Vallianou, and Blitz 2004); that is, the result of political and economic changes accompanying the centralization of resources and institutionalization of power in larger aggregates that comprise the upper end of sociopolitical or economic hierarchies. In short, settlement dispersal is visualized as a socio-economic configuration directly dependent on the development of bigger aggregated sites and more complex systems, the end result of centrifugal integration rather than a form of primary settlement development. In other words, rarely do Aegean surveys encounter primary dispersal (lots of little villages or hamlets), giving way, through time, to aggregation in precisely the way described in Birch’s introduction: “people abandoning a regional pattern of small, dispersed settlements in favor of aggregation into larger, more nucleated settlements.” Even when these kinds of dominant village patterns appear in Greek prehistory, such as in certain phases of Neolithic Thessaly, Early Bronze Age Crete, or Middle Bronze Age or Early Iron Age Greece,
they can reflect long-lived and stable communities and remarkably complex and integrated systems of interregional economic and social organization. Thus, a dispersed pattern of villages correlates no more to subsistence, simplicity, or intraregional isolation than nucleation or large-scale aggregation does to complexity, integration, and regional interdependence.

Thus, strictly speaking, the Aegean data present situations that may not be precisely comparable to those of some other case studies in this volume. What constitutes periodic shifts in settlement behavior in the Aegean—nucleation and dispersal in the parlance of survey—might be better construed as changes through time in the configuration, scale, replication, and distribution of aggregated sites or perhaps the culturally specific kind of aggregation: changes in the size, scale, form, location, and function of nucleated sites rather than, strictly speaking, a clear shift from small, dispersed hamlets or villages to larger more complex aggregations. Although the issue of aggregation in any cultural context should be, of course, dependent on scale and regional context as well as a myriad of environmental and historically specific cultural variables, an Aegean example may offer the present discussion some resolution on the process of aggregation itself, addressing a central theme of how such processes “played out at the community level” (Birch, this volume).

I present here a brief case study of the site of Azoria, located near the modern village of Kavousi in eastern Crete (Figure 4.1), which generally fits Birch’s conceptual outline of aggregation as set forth in the introduction (Haggis et al. 2004, 2007a, 2007b, 2011a, 2011b). The settlement history encompasses the transition from the Early Iron Age (ca. 1200–700 BC) to the Archaic periods (ca. 700–500 BC). The picture derived from both survey and excavation shows a protracted period of fairly static settlements, a cluster of dispersed villages in the Early Iron Age (about ten to twenty houses each), remaining stable for a period of some 400 to 500 years (Haggis 1993, 2001, 2005). A change at the end of the seventh century BC evidently involved both abandonment of the long-lived village pattern as well as the movement and nucleation of population to the site of Azoria, which expanded to at least 15 hectares in size (Figure 4.2). What we see about 600 BC is a very different idea and configuration of settlement structure, economy, and arenas for intrasite interaction compared to what the settlement had been before. Azoria became a large aggregate by the sixth century BC (Figures 4.2 and 4.3)—broadly speaking, fitting the chronology, form, and process of urbanization as we understand it in the Aegean. The regional pattern of nucleation at the end of the seventh century, combined with a radical reorganization and increase in the scale of public and domestic space, have suggested to us that Azoria had become an urban center of a protopolis (a nascent city-state), consisting of a community that grew out of preexisting Early Iron Age village clusters (Figure 4.2). We propose that the population of the region had literally come together, relocating population as well as social, political, and economic consciousness and activities from initially dispersed villages and hamlets in the wider region to the South.
Acropolis of Azoria (Haggis and Mook 2011a) (Figure 4.2). This chapter explores the sociopolitical implications of this aggregation.

BACKGROUND OF ARCHAIC AGGREGATION: THE EARLY IRON AGE VILLAGE PATTERN ON CRETE

In the Early Iron Age on Crete, a village pattern was the norm for several centuries, from as early as Late Minoan (LM) IIIC (ca. 1200–1100 BC) to as late as the Orientalizing period (ca. 700–600 BC). During this protracted period, the settlement structure, not dissimilar from other areas of the
Figure 4.2 Settlement patterns in the Early Iron Age and Archaic periods in the Kavousi area: Panagia Skali (70); Azoria (71); Vronda (77); Kastro (80); cemeteries (68; 78–79; 81); Avgo Valley Early Iron Age settlement cluster (83–85; 89–91).
Aegean, generally consisted of small-scale dispersed nucleated communities of various sizes (Wallace 2010b: 104). Results of surveys on both Crete and mainland Greece show that settlement sizes vary considerably, though the details of settlement structure—the physical layout, spatial syntax, and functional attributions of architectural aggregates and open space, through time and across the full extent of the site—are rarely forthcoming. Some sites seem to be spatially isolated groups (sometimes called an “island” settlement pattern in the Argolid of mainland Greece), which were probably large villages or small towns, while others form clusters of smaller village sites of similar size (Cavanagh 1991; Dickinson 2006: 84–93; Hall 2007; Morris 1998: 16; Whitley 2001: 88–89). Although our understanding of Early Iron Age Crete is still mostly dependent on survey data and mortuary remains, the best evidence from excavated habitation contexts comes from early in the period, especially Late Minoan IIIC (twelfth to eleventh centuries BC), or relatively late, in the eighth and seventh centuries BC. That is, only in rare instances, such as the Kastro in eastern Crete (Figures 4.1 and 4.2), can a reasonably complete stratigraphic sequence and full settlement history be considered detailed (Coulson et al. 1997; Mook 2004). Early Iron Age settlements range from as small as about 0.6 hectares to as large as 20 hectares or more, though the great majority are probably no larger than 1 to 2 hectares (Figure 4.2). Their sizes and configurations depend on a number of variables, including environmental context, periods and longevity of use, preexisting population levels, available resources, topography and terrain, as well as regional cultural practices and kinship structures (Wallace 2010a). The smaller villages, under 2 hectares in size, most often appear as parts of socially and economically related groups or clusters of similar sites located near each other (up to about 0.5 kilometer). Interdependency is suggested by aspect, topography, proximity, shared water supplies, arable resources, cult places or cemeteries, and biological viability; isolation is unlikely, because the sites show a good deal of interregional and intraregional economic interaction and even multiethnic populations.

The cluster pattern is probably more common in east Crete than in the central or western parts of the island because of topography and traditional land use patterns (Wallace 2010a: 67). Individual sites are no larger than about 0.6 to 1.5 hectares, containing about twelve to twenty houses, with populations not exceeding about 150 to 200 people per site. The settlement structure at Kavousi, the immediate hinterland of Azoria, follows this village-cluster arrangement (Haggis 1993, 2001) (Figure 4.1). In LM IIIC it consisted of a primary pattern of no less than four sites—Vronda, Azoria, Kastro, and Panagia Skali—with similar neighboring clusters in the areas of the modern villages of Avgo and Monastiraki. Cemeteries are equally dispersed, and multiple burials in collective built tombs probably correlate to extended households or larger kinship divisions. By the end of the seventh century BC, all the villages and cemeteries in the cluster were abandoned with the exception of Azoria, which grew, becoming a large aggregated
settlement by 600 BC (Figure 4.2), a process we have linked to urbanization (Haggis et al. 2004, 2007b, 2011a).

Evidence for this kind of village pattern and subsequent Archaic aggregation is apparent elsewhere in Crete. At Gortyn (south-central Crete), for instance, a cluster of three Early Iron Age sites in the northern hills bordering the plain was eventually abandoned as population moved down into the area later occupied by the Archaic and Classical city (Perlman 2000: 74–76; Wallace 2003: 263–266; Watrous and Hadzi-Vallianou 2004b: 342). We do not really know the disposition of the site of Phaistos (near Gortyn in the western Mesara plain) in the Early Iron Age, but it could well have grown by the sixth century, developing a centrifugal series of dependent farmhouses or hamlets in the hinterland, indeed the very kind of structure we imagine for Crete and Greece in general in the Archaic and Classical periods (Bintliff 1982; Watrous and Hadzi-Vallianou 2004a: 314–317, 2004b: 342–344). While Early Iron Age and Archaic remains have been uncovered from a number of different locales at Phaistos, the structure of the settlements is unknown, though the team that surveyed the hinterland is convinced that there was a significant nucleation, increase in size, and restructuring by sometime in the seventh century BC (Erickson 2010: 320; Watrous and Hadzi-Vallianou 2004a: 313–316).

More like Kavousi and Gortyn is the Vrokastro/Kalo Chorio region in eastern Crete, where, in the seventh and sixth centuries, settlement gradually shifted from a cluster of Early Iron Age villages in the upper Ayios Phanourios region of Vrokastro inland into the adjacent valleys of Skinavria and Meseleroi to two possible aggregated Archaic settlements (Erickson 2010: 192, 246; Hayden 1997, 2004: 179–180). Finally, the shift in settlement from a cluster of sites at Karphi to the site of Papoura seems to reflect an Early Iron Age aggregation (ca. 1000–900 BC), but we still do not know the actual structure of the Papoura settlement or changes down into the seventh and sixth centuries (Wallace 2010a: 23–24).

Thus, not all Early Iron Age sites are villages. Large settlements do exist before the Archaic-period threshold (Nowicki 2000: 241–247; Wallace 2010a), and many sites, such as Papoura (18.2 hectares) in east-central Crete, mentioned above, and Kalamafki (9 hectares) in far eastern Crete (Wallace 2010a: 23; Whitley 1998: 33), could be examples of large-scale and early (LM IIIC-Protogeometric; ca. 1200–900 BC) nucleation of settlement. Saro Wallace has outlined the forms and regional functions of such large sites, arguing for a significant period of early aggregation in the tenth century (2010a: 66–68). Although Wallace insists that the substantial size of these settlements—some as large as 40 hectares—and their potentially mixed population could not have sustained significant kinship connections as a meaningful basis for their organization, she does admit that their development occurred within bounded localities that would have required links to earlier social configurations. That said, it must be emphasized that, from survey data alone, we cannot yet determine whether these larger settlements
represent contiguous aggregates or dispersed groups of related but physically separate settlement locations over large areas—neighborhoods of closely spaced groups of hamlets, presumably kinship groups, operating not that much differently from the clusters in eastern Crete. Furthermore, because many of the larger sites were evidently inhabited through the duration of the Early Iron Age, the periodicity of occupation could very well affect their appearance in surface samples. So even though there are documented large aggregates well before the Archaic horizon, the distribution, date, and function of the remains needs to be recovered and critically evaluated, as does evidence of contiguous building and continuity and extent of occupation into the seventh and sixth centuries. In my view, the structure of the larger aggregated sites may not have differed substantially from a cluster—that is, a group of related villages probably linked by kinship connections and traditional land use and subsistence patterns, forming separate groups, neighborhoods, or hamlets, with in-field land or open areas in between.

The actual site-level structure demonstrated through excavation brings into focus the significance of this dispersed configuration. It is clear that proximate residential groups formed distinct building complexes. Contiguous houses probably related by kinship (clans or segmented lineages), were patterned sequentially, forming, over time, agglutinative compounds or spatially separate neighborhoods. The excavated Early Iron Age sites near Azoria (Figure 4.2), such as Vronda (1200–1100 BC) and Kastro (1200–600 BC), provide the clearest pictures of these kinds of proximate or coresidential groupings (Coulson et al. 1997; Glowacki 2004, 2007; Glowacki and Klein 2011; Mook 1998, 2011). In such groups, growth was internal, additive, centripetal, and integrative (Figure 4.4). The structure of settlement manifests itself as agglomerative clusters of individual houses, sharing party walls, most likely representing expanding family groups; compounds that show gradual growth variously over a period of 100 to 500 years. The static, entrenched, and integrated structuring of space indicates the existence of intergenerational and locus-bound groups, expressing social continuity and their connection between the physical place and surrounding landscape (Wallace 2010b: 111). The coherence of these Early Iron Age groups was ultimately related to the need to maintain cohesive landholdings and agropastoral resources as well as a sufficiently large and stable household labor pool to effectively exploit these resources (Foxhall 2003). The village pattern at Kastro, Vronda (Figure 4.4), and probably Karphi, demonstrates this physical growth and extension of domestic space, a periodically shifting cultural landscape that necessitated the negotiation of space with neighboring households and common spaces as well as across the cluster of villages in the region (Glowacki 2007; Glowacki and Klein 2011; Mook 1998, 2011; Wallace 2010b: 105–113). What is more, the act of building was an active reconstruction and rearticulation of identity and continuity with every generational change and addition to the house unit. In such settlements, communal or intergroup interrelationships were circumscribed and mediated through ritual venues of communal feasting,
such as bench shrines and so-called chieftain’s houses early in the period (LM IIIC), and hearth temples sometime later (Protogeometric-Orientalizing periods) (Prent 2005, 2007).

AGGREGATION IN THE ARCHAIC PERIOD
(LATE SEVENTH AND SIXTH CENTURIES BC)

At the end of the seventh century BC, this Early Iron Age village pattern dissolved completely, giving way to new large-scale nucleated communities. The threshold of the Archaic period constitutes a stratigraphically definable phase transition (Yoffee 1997, 2005: 229–231), including significant changes in mortuary, cult, and settlement behavior (Kotsonas 2002). There is evidence for new social institutions and new modes of communal interaction, as well as scalar shifts in interregional communication, and production and exchange. Changes in agricultural surplus storage and mobilization and internecine warfare are likely indications of territorialism, inter-polity rivalries, and dynamic peer-polity interaction (Erickson 2010: 307–308; Kotsonas 2002; Wallace 2010a, 2010b; Watrous and Hadzi-Vallianou 2004b: 348). In general, the situation on Crete in the late seventh century resonates not only with the idea of the phase transition but with tenets of coalescence, a concept that does not predict a particular kind of society per se but conditions, processes, and strategies for creating integrative institutions and corporate structures responsive to scalar stress (Kowalewski 2006): in particular, demographic movement and settlement aggregation, increased interregional interaction and conflict, and political and economic intensification. Material evidence for coalescence in Archaic Crete would include a shift from stable dispersed communities to large nucleated settlements; the formation of multilingual or multiethnic populations; and the appearance of institutions that encouraged social integration and new architectural designs and innovations in material culture.

While the archaeology of sixth-century Crete remains largely unexplored, especially in settlement contexts, the evidence currently available suggests a reorganization of the cultural and political geography of the island at the end of the seventh century, fitting well with the broad outlines of a relatively rapid phase transition and coalescence (Erickson 2010: 1–22; Haggis et al. 2004: 344, 393; Kotsonas 2002; Morris 1998: 65–66; Perlman 2010: 108; Prent 1996–1997). Saro Wallace (2010a), for example, has recently supported the idea of the expansion of state territories and interpolity conflict in the Archaic period, strengthening or reaffirming what she sees as preexisting state-level identities. Although the process must have involved complex interregional and intraregional variables, such as territorial expansion and the formation of new political and economic alliances, at the core of the changes is the elite control of surplus production and redistribution (Wallace 2010a: 78; 2010b: 346–347, 374–375; Erickson 2009).
At Azoria, the one of the most interesting pieces of evidence is the complete rebuilding of the site—the reintegration, redefinition, and restructuring of domestic and communal spaces (Haggis and Mook 2011a) (Figure 4.3). That is, the process of rebuilding in the late seventh century constituted the obliteration of earlier architecture, and then the construction of an entirely new physical form. The redesign constitutes a drastic increase in both the scale of building and the labor allocation and organization required to implement it; and the introduction of new kinds of buildings for entirely new venues of suprahousehold interaction (Haggis et al. 2011a). The latter take the form of public or civic buildings—the Monumental Civic Building and Communal Dining Building (Figure 4.4)—that is, structures designed for the restricted use of an elite citizen class, according well with historical sources that suggest an agroliterate structure of Cretan society at this time (Morris 1997; Small 2010; Watrous and Hadzi-Vallianou 2004b: 342–348).

**ARCHAIC HOUSES AND HOUSEHOLDS**

Differentiation of corporate groups provides an important indicator of intracommunity organization and interaction. By the sixth century at Azoria, the houses are new constructions, complex in design and larger than their Early Iron Age predecessors, and are fully integrated into the plan of the Archaic settlement (Haggis and Mook 2011b; Haggis et al. 2011b). They seem to form single households (Figures 4.3 and 4.5), with clearly differentiated functional spaces: storerooms, halls (or living rooms), and kitchens with adjoining courtyards. Not only were the dimensions of the basic sixth-century house unit larger than those of the eighth and seventh centuries, but the external elaboration and internal configurations of space have changed as well (Figures 4.4 and 4.5). Houses no longer have hearth rooms—that is, the combined living, working, and food producing areas of typical Early Iron Age houses—but are spatially complex. The hall mediates between storage rooms and kitchens (Figure 4.5), suggesting both the economic and social-symbolic importance of *pithos* storage (large decorated storage jars) and the use of halls for food consumption rather than production or primary processing.

Furthermore, the relationship of the house to the settlement changed as well. Houses were physically integrated into the armature of spine walls, which were constructed systematically in the early sixth century, evidently destroying or burying Early Iron Age houses, and extending through zones of public and domestic building (Haggis et al. 2004, 2007a, 2011a, 2011b). This break from the old system of blocks of houses or neighborhoods of previous periods emphasizes the dynamic social changes in the phase transition. The Archaic houses were single residences, incorporated into the citywide plan, and show direct formal and spatial relationships to the communal or civic buildings (Figure 4.3). The layout of the settlement in the sixth century...
Figure 4.3  Azoria South Acropolis (R. D. Fitzsimons and G. Damaskinakis).
Figure 4.4 Development of Building I-O-N at Vronda in LM IIIC (top) (after Glowacki 2007: 133, Fig. 14.4); development of the Northwest Building on the Kastro (bottom) (drawing by M. S. Mook).
emphasizes the close relationship between individual houses and the public buildings. The Early Iron Age pattern, by way of contrast, strongly indicates mediation of communal activities at the level of the household cluster or proximate kinship group. While the essential corporate identity of the

Figure 4.5 Northeast Building at Azoria (Archaic house) (R. D. Fitzsimons).
household may not have fundamentally changed in the sixth century—the new urban residences must have been centers of larger dispersed or multiloc- cal households—the physical relationship of these houses to the public or communal sphere had changed and, as a result, so too did the way in which the household interacted socially and economically with broader political and agropastoral environments.

The range of foods and evidence for food processing in domestic contexts adds to the picture, showing that a large part of primary production at Azoria was conducted away from these houses, probably in related or extended households yet unexcavated down slope from the center or on rural estates. The animal and plant remains, tool kits, and kitchen assemblages, in marked contrast to their Early Iron Age predecessors, are characteristic of final-stage meal preparation. That is, the predominance of small querns, hand stones, and mortars for reducing whole clean grains and pulses; metal graters; terracotta strainers; and a wide range of small-scale storage, transport, cooking, and serving vessels are evidence of meal preparation. Moreover, storage vessels (amphorae, *pithoi*, and perishable containers) evidently held clean grains, wine, must, oil, and olives and other fruit, ostensibly prepared and gathered in the houses for use rather than for long-term or primary surplus storage. The lack of evidence for primary-stage processing of grain, wine, and olive oil in the houses, and the character of butchering debris, suggest that houses of the center were primarily consumers. The controlled access to storerooms from the halls, as well as distinctly separate kitchen areas (sometimes separated from the halls by courtyards or corridors), also point to the semipublic or formal use of halls for routine dining as well as receptions. Indeed, the full range of drinking and dining equipment is found preserved in the halls at the time of abandonment, a good indication that by the early fifth century BC, halls were principally used for dining and perhaps more formal symposia and other commensal activities.

Finally, the storage capacity, and material elaboration of decorated *pithoi* in the houses exceeds what we would expect for immediate or normal subsis- tence needs of individual families. This indicates the organization, control, mobilization, and management of surplus by those houses in the center most closely associated with the civic buildings. The kinds of foods that survive in archaeological contexts, such as wine or must, oil (by inference of burning, cooking, lamps, and residues), olives, and perishables such as fruit, clean grains, and pulses, suggest that houses were cycling and managing such produce through their stores for personal consumption as well as for redistribution, perhaps in the form of payments or taxes owed to public or civic dining halls, such as the Communal Dining Building and the Monumental Civic Building. Epigraphical documents on Crete refer to public officials, called *karpodaistai*, who were responsible for locating *karpon* (produce) that had failed to be distributed. Such produce included fresh figs and must, two commodities found in both houses and public buildings at Azoria (Perl- man forthcoming). Thus, the form of the houses, their assemblages, physical
location within the settlement, and their relationship to public space suggest that these buildings were not only elite urban residences but centers of larger multilocal *oikoi* (households), probably consisting of kin, dependents, serfs, and slaves.

From the archaeology we could argue that the evidence in the sixth century BC demonstrates new forms of interaction within the community that might have weakened the interpersonal bonds and affiliations that were fostered by the more direct kinship connections within the Early Iron Age neighborhoods and clusters. What is more, epigraphical and historical sources refer to supra-household sodalities, such as the *startos* (military/civic subdivision), *betairia* (fellowship or association), and *phyle* (tribe) (Erickson 2010: 310; Perlman forthcoming), that may have cross-cut or superseded direct kinship ties and seem to have been responsible for the structuring membership in civic institutions. Indeed, we expect, but cannot prove, that it was such groups that used the Communal Dining Building and Monumental Civic Building. But the evidence of a direct connection between the large houses and the communal venues also means that new institutions may have served to crystallize if not enhance the identities of certain households. Indeed, the payment of agricultural produce as a form of harvest tax must have been an obligation of citizen families (Perlman forthcoming). It remains to understand the social and economic structure and complexity of such household groups (clans or extended *oikoi*), whose economic functions are clear enough but whose political roles may not have been the direct purview of the state and thus escape the inscribed historical record of the Archaic and Classical periods.

From the perspective of the Archaic household, settlement aggregation at Azoria could be seen as an active institutionalization of the residential kinship-corporate group, solidifying and codifying their social profile and political power, economic roles, and probably their position with respect to formal sodalities and civic associations such as *startoi*, *betairias*, and tribes. Whatever social ties were weakened by the shift from proximate to dispersed residences, they were compensated by new communal institutions that did not erode the essential function of the corporate group, but rather reintegrated it in venues of public rituals of assembly, dining, and sacrifice.

**THE ARCHAIC PUBLIC BUILDINGS**

The juxtaposition of public buildings at Azoria, the Communal Dining Building and Monumental Civic Building, suggest different scales and levels of integration within the city center (Haggis et al. 2004, 2007a, 2011a) (Figure 4.3). The layout of the buildings suggests communal activities, but within regulated and perhaps exclusionary systems of participation (Small 2010). The buildings mirror each other’s basic functions: both have substantial storage and kitchen spaces; cult installations; and rooms for communal drinking and dining.
The arrangement of space in the Communal Dining Building (Figure 4.3) is complex and compartmentalized, indicating the division of activities and the segregation of groups. Although we are tempted to see clan, fellowship, or tribal divisions reflected in the compartmentalization of space, the archaeology only gives us the broad outlines of segregated, but group-oriented, dining. Food processing and storage facilities are centralized on the lower terrace of the complex. That is, the kitchens (A600, A1600) and storerooms (A1200, A1400–A1500) are interconnected but physically separate from the dining rooms (A800, A2000) (Figure 4.3). It is clear that the communication patterns within the building are radial, internalizing, and essentially dendritic, with exclusive access to the dining rooms controlled by a porch and vestibule (A1900S). The cult room, with its ground altar (A1900N), is centered between two dining rooms. In general, the ceremonial areas of the Communal Dining Building are internally differentiated: separate rooms probably accommodated different groups or different modes or occasions of drinking and dining. The food remains suggest prepared meals: dressed cuts of meat and individual servings. Stands for large wine mixing bowls exhibit distinctly different styles, which we think relate to the differentiation of the identities of household or suprahousehold groups permitted to take part in the feast. Individual drinking cups are of a standard size and shape, and the plain black surface treatment suggests a formal austerity that would have promoted an egalitarian ethos in the context of public feasting. The organization of space in the building thus presents a picture of horizontal divisions of participating groups.

The adjacent Monumental Civic Building (Figure 4.3; D500, D900–D1000), in contrast, has a single undivided hall designed to accommodate assemblies that were more openly communal, or perhaps less restricted or segregated than those of the Communal Dining Building, though in all likelihood the buildings would have accommodated about the same number of people. A shrine (D900–D1000) is directly connected to the main hall but has restricted and perhaps hierarchical use and access. The rooms of the shrine are small, and practical use would have been limited to just a few people, though offerings could have been paraded into and out of the public’s view within the main hall. The main hall, with its stepped bench running around the walls on the interior, had ample space for open participation and public spectacle, irrespective of group or subgroup identity. Stews were ladled out in large vessels, and meat remains represent whole leg portions spit-roasted on hearths within the kitchens of the adjacent Service Building. This is not to say that social distinctions did not exist in the context of communal consumption or that they could not have been expressed through differentiated portioning of meat, such as the leg segments, or other foods, or even by means of arranged seating within the building. But the open plan and fixed seating indicate a structured communal experience.

The Service Building (Figure 4.3), directly adjoining the Monumental Civic Building on the south, consists of a series of kitchens (B1500, B2200–2300) with large rectangular hearths, storerooms (B700, B1200), and an olive-oil
press (D300). The structure is somewhat larger than the service facilities of the Communal Dining Building and certainly represents an important component of the political economy of the early city. Storage in pithoi and amphorae is in evidence throughout the complex, but rooms B700, B1200, and D300 (east room) were built specifically as storage magazines. Food preparation is indicated by the permanent hearths and cooking equipment in B2200/2300, B1500, and D300 as well as a substantial hearth and butchering dump in the courtyard B3100. The processing of olive oil had its own separate building (D300), taking up almost 100 square meters of space. The Service Building also housed considerable pantries containing food processing equipment, as well as a plethora of drinking, dining, and serving vessels. The foods represented in the main kitchens and stores—grapes, olives, wheat, barley, chickpea, lentil, fig, almond, and pistachio—represent a diverse assemblage of consumable products, readily available for final-stage processing or eating. The Service Building complex thus seems to have been used for the final stages of preparation for dining on a large scale, most likely meals, banquets, and other occasions of feasting in the adjacent Monumental Civic Building. This unusual concentration of food storage and processing, and the evidence for the organization and mobilization of both produce and labor, suggest a state-level enterprise that, by the sixth century BC, must have been driven by a new civic institutional structure.

COMMENTS ON SETTLEMENT STRUCTURE

The Archaic urban houses at Azoria functioned as estate managers and centers of economically complex and dispersed households. The social mechanisms of surplus production would have been geared not to the survival or self-sufficiency of the immediate or nuclear family but to support households and dependents and venues of public commensality that reinforced the equality, identity, and the economic roles of the citizenry. In the transition from Early Iron Age to Archaic periods, production intensified and shifted dramatically from individual households to public buildings—that is, to scaled-up civic facilities—as well as to dependents of the urban houses located away from the center, if not on rural estates.

On the intrasite level, houses were located with direct reference to the public buildings, codifying their locations and status relationships to the dining halls. This unusual investment in public feasting demonstrates the rapid development of the communal institutions. Moreover, the altars or shrines in the civic buildings show clearly the use of ritual to shape communal practices and performances that expressed the collective identity of the participants. Finally, the rapid and synchronic integration of houses and public buildings in the center suggests a deliberate act of constructing a new and probably exclusive social community and nucleus and of articulating and cementing social roles and relationships that served to maintain and reinforce the urban
political economy (Small 2010). The allocation of household surpluses to formal civic contexts of consumption was an integral part of a highly ritualized practice of public taxation and community formation.

The changing role of the house is of particular importance in understanding this Archaic coalescence. The traditional history of the Greek house presents a uniform picture of architectural and syntactic simplicity and lack of material elaboration in the sixth century BC (Morris 1998: 27–29; Nevett 1999: 158–160). Lisa Nevett has recently attributed this condition to broader social trends in which tendencies toward material restraint in the domestic sphere could reflect a distinct pattern of sociopolitical integration: the expression of shared social values of equality and community membership in emergent Greek city-states (Nevett 2007: 370–375). In the traditional view of the Archaic Greek polis, early civic institutions promoted democratic inclusivity, often in opposition to aristocratic, oligarchic, and tyrannical power and material accoutrements. Such trends may have manifested in the more subdued and less elaborate or distinctive forms of mortuary display and domestic building. Monumentality in the sixth century was reserved for early temples.

The evidence from sixth-century Azoria thus presents a fascinating contrast to the normal developmental model of the Greek house and urban settlement. In the Archaic renovation of site, the houses of the peak of the South Acropolis take on a monumental form along with adjacent civic buildings. They are complex in plan, structurally elaborate, and contain social spaces that interacted with a broader community. If domestic architecture at Azoria expresses the concept of the social house, it predates such forms on the mainland by at least a century (Nevett 2007: 371). Linked to the urban transformation of the site, the houses develop monumental and physically permanent forms, not unlike the adjacent civic buildings themselves. They are part and parcel of the process of urbanization, not merely incidental to the construction of the civic buildings. The houses at Azoria are thus very different from their mainland contemporaries in their functional complexity, size, and degree of elaboration (Nevett 2007: 370–371), but at the same time, among the houses in the center, there is no differentiation between them. That is, there is a uniformity that suggests the equal status among residences of the city center. Their size, elaboration, location and physical orientation, and proximity to the civic dining halls strongly indicates not only a group of equals but a group of tightly knit elites, controlling and restricting access to the public stores and banquet halls of the peak of the South Acropolis.

CONCLUSION

The specific form of aggregation in the Archaic period at Azoria presents several interesting archaeological correlates of coalescence (Kowalewski 2006: 117). The large-scale nucleation of population, substantially increasing the size of the settlement by the end the seventh century, must have drawn
population not only from the immediate Early Iron Age village cluster but from the neighboring valley of Avgo and further afield (Figure 4.1). Although the character of this population is still hard to define, we assume that it is made up principally of ancient households from Azoria itself as well as the neighboring site of the Kastro, which was abandoned at the same time that Azoria was rebuilt and expanded. There is, however, also evidence of a more diverse ethnic/linguistic population in the private inscriptions, and thus a possible mixing of groups. Sherds inscribed in both Greek and Eteocretan (indigenous Cretan) indicate a mixture of local and Greek cultural groups (Haggis et al. 2011a). Although we have no way of knowing the ethnicity of the original population of Early Iron Age Azoria or any of the other sites in the cluster, in general, by the fifth century BC, Cretan cities were ethnically diverse, with tribal names preserving local Cretan, Mycenaean, Dorian, and other extrasan Greek groups (Perlman forthcoming; Watrous and Hadzi-Vallianou 2004a: 309–310, 2004b: 342). The extent to which these names preserve coherent linguistic, cultic, or ethnic identities and their roles or significance in the Archaic period are not known.

Collective defense is certainly suggested by the remains of a fortification wall along the eastern ridge of the South Acropolis at Azoria, but more important is perhaps the scale and degree of the architectural elaboration of the entire settlement. The radical reorganization of space and the construction of megalithic spine walls suggest an unprecedented investment and scalar shift in the organization of labor and resources. Furthermore, the placement of the civic buildings, while not centrally prominent or spatially engaging from within the city itself, has a dominant western aspect and viewshed, visible from the lowland plain, the north Isthmus of Ierapetra, and the Bay of Mirabello, and no doubt the neighboring territories of Archaic sites of Oleros, Istron, Olous, Lato, Anavlochos, and perhaps Milatos. That is, the buildings of the civic center communicated on a local level within a closed community of urban households, and on a regional level, they projected a physical presence and identity outward toward other early cities rather than into the settlement’s own hinterland.

Evidence of extraregional trade is extensive. While imported pottery, manufactured along the western coast of the Mirabello Bay, is common at Azoria, goods from the wider Aegean sphere are also found, including Attic, Corinthian, Lakonian, Aiginetan, east Aegean, and Thasian imports. Even so, the critical changes in the economy of the site are perhaps better visualized in contexts of agricultural production, storage, and consumption. The elaboration of public ritual and communal feasting within the civic buildings, as well as the carefully constructed venues for those activities, point to the institutionalization of collective leadership structures, while evidence for centralization of storage and production emphasizes a transformation of both the scale and social context of agriculture.

Our interpretation of houses, detailed above, adds to the picture. The houses at Azoria were not only part of the rebuilding of the site at the end
of the seventh century, and architecturally integrated into the overall settlement plan along with the civic buildings, but they also played a critical role in establishing and maintaining a new social and political order that cross-cut local kinship-based interests and identity structures. If we are right in seeing the urban houses as elite residences, the centers of corporate kinship groups or clans, then it is these social units that were fundamentally responsible for mobilizing produce for public consumption and for maintaining or contributing the labor force. While we do not know the precise political or economic role of the household in the Archaic Cretan economy, one view would see a circumscribed lineage-based elite (essentially sets of clans) that had preexisted in the Early Iron Age, surviving into the Archaic period, and ultimately forming the ruling or citizen class of the Archaic city (Wallace 2010b: 347–348). The conservative clan-based system was tied to its control of agricultural and pastoral resources and the intensification of use of ancestral land holdings (Bintliff 1982: 108; Jameson 1992). Such a system would perhaps have internally inhibited both complex social stratification and expansion or mobility of systems of management and identity, while ultimately encouraging the proliferation or replication of numerous relatively small-scale states (Wallace 2010b: 341).

The conditions that engendered this form of aggregated settlement invite both historical particularism as well as speculation on global processes that affected almost every area of Crete by the end of the seventh century. The period of transition is characterized by scalar stress, involving territorial expansion, changes in trading patterns, extreme political intensification, and a pronounced increase in internecine conflict and interpolity warfare—a picture resonating with the idea of coalescence. Political intensification, changes in labor allocation and mobilization, and the social mechanisms for production are strongly in evidence at Azoria, indicating a marked break from Early Iron Age patterns in the broader region. The analytical lens of coalescence enhances the picture of sixth-century aggregation at Azoria, in particular, emphasizing the viability of clan-based systems, their rematerialization, and their potential to direct or facilitate long-distance exchange and to maintain corporate holdings of property and control agricultural production over generations. The process of Archaic coalescence, while predicated and preconditioned by a preexisting social structure, created a new political community, fundamentally changed earlier modes of behavior, and ultimately entrenched and codified new kinds of interaction. The Archaic community was a new way of thinking and living—a purposive redirection of resources and reshaping of power relationships in many ways in direct opposition to the Early Iron Age settlement structure and regional identity. The new aggregated settlements on Crete were essentially a collection of institutionalized households. Clans were woven into the urban fabric of the settlement, making up a network of similar houses whose identity and stability were derived from communal institutions combining cult and feasting practices that reaffirmed and facilitated the social, political, and economic order of the Archaic community.
REFERENCES


Dickinson, Oliver. T. P. K. 2006 The Aegean from Bronze Age to Iron Age: Continuity and Change between the Twelfth and Eighth Centuries BC. Routledge, London.


———. 2005 Cretan Sanctuaries and Cults: Continuity and Change from the Late Minoan IIIC to the Archaic Period. Brill, Leiden.
Donald C. Haggis


