

Household Archaeology in the Andes

By: Donna J. Nash

[Nash, Donna J.](#) 2009. "Household Archaeology in the Andes". *Journal of Archaeological Research*. 17 (3): 205-261. DOI 10.1007/s10814-009-9029-7

Made available courtesy of Springer Verlag. The original publication is available at:
<http://link.springer.com/article/10.1007%2Fs10814-009-9029-7>

*****Reprinted with permission. No further reproduction is authorized without written permission from Springer Verlag. This version of the document is not the version of record. Figures and/or pictures may be missing from this format of the document. *****

Abstract:

Data from domestic contexts can be used to address significant anthropological research questions. Archaeological investigations in the Andes (areas once incorporated into the Inka empire, including northwestern Argentina, highland Bolivia, northern Chile, Ecuador, and Peru), like many parts of the world, rely on ethnohistory and ethnography to interpret the archaeological remains of domestic areas and make inferences about households. In this review I describe the ideas about Andean households that archaeologists are using and how domestic remains are being examined to infer social, economic, and political processes. Household archaeology in the Andes requires ethnoarchaeology and theory-building in order to understand the complex social dynamics at the foundation of ancient Andean societies.

Keywords: domestic archaeology | residential archaeology | household archaeology | andes | archaeology

Article:

Introduction

In *The Early Mesoamerican Village*, Flannery writes an amusing tale to camouflage the revelation of a harsh reality. He claims that his Real Mesoamerican Archaeologist “knows that the Formative was a time of ‘village farming communities,’ [but] he does not dig sites and analyze sites as if they were village farming communities. He digs them and analyzes them as if they were huge layer cakes of discarded sherds” (Flannery 1976, p. 5). In this review, I make a similar claim for the Andes: many archaeologists know they are digging in houses, but they do not excavate them as houses. They instead dig houses as if they were homogeneous containers, taking a sample of any part and thinking it will provide data to evaluate relative differences in economy, exchange, production, diet, and an array of other attributes between “households.” Yet, to make meaningful comparisons requires an understanding of houses as artifacts and how houses might be correlated with “household organization” (Wilk and Rathje 1982, p. 620; see

also Stanish 1989) or the activities of a coresidential group. Since residential data are paramount for understanding the fundamental parts of any societal whole, more effort needs to be invested in understanding ancient Andean households and domestic life.

Households can be considered from a number of perspectives. Several models, implicit and explicit, affect the archaeological investigation of domestic units. Structuralist models contrast the domestic sphere and the public sphere and would have anthropologists examine residential settings as something beyond or outside the important political activities of the community (for a recent review see Spencer-Wood 1999). Gero and Scattolin (2002, pp. 168–169; see also Feinman and Nicholas 2004) have discussed how the study of production reifies this dichotomy by considering only items produced for exchange or consumption outside of the household as specialized production. Important feminist research has revealed the significant androcentric bias behind the dichotomy opposing the “private” house space to the “public” political realm of the community. These ideas are derived largely from Western ideology, isolating the passive female in the house, out of sight. In contrast, the recent emphasis on the power of palaces in archaic states (Flannery 1998; Parkinson and Galaty 2007) or the dwellings of chiefs in ranked societies (e.g., Smith and David 1995) regards houses as the political tools of the elite. The symbolic importance maintained by houses of state, such as the United States’ “White House,” in contemporary politics shows the potential political significance of some residential complexes.

Other structuralist models applied to ethnography and a few ethnoarchaeological studies show how houses can be cosmograms or “structuring structures” (e.g., Bourdieu 1977, p. 90; Donley-Reid 1990; Douglas 1973; Giddens 1979). Residential space has been described as the “world view writ small” (Rapoport 1969, p. 2). In some societies houses are used directly as a metaphor for the natural or supernatural world (i.e., the Berber House [Bourdieu 1979], the Ainu House [Onuki-Tierney 1972], the Iroquois Longhouse [Tooker 1978]), or these scripts can be implicit and reflect underlying values (Glassie 1975). As such, houses can represent the complementary relations between genders in the family or the social hierarchy of the entire society. Other agency-focused studies have considered house structures as active participants in social relations (e.g., Tringham 1991, p. 106), with construction choices making statements to exterior observers, as well as having an effect on the relations between members of the coresidential group (Blanton 1994; Drucker-Brown 2001; Faust and Bunimovitz 2003; Rapoport 1990). Many authors from several paradigmatic persuasions also have noted the dialectical relationship between people designing space and space-designing people (e.g., Ardener 1981; Bachelard 1969; Gabrielopoulos et al. 2002; Kent 1990).

Materialist models focused on ecology and economy describe how households might fulfill functions of production, distribution, transmission, and reproduction, but Wilk and Rathje (1982, p. 627) are careful to point out that larger social units in the community may compete with households and control certain aspects of group activity. Thus households may function differently in different areas and vary in size and organization, even within the same community (see Goody 1972). At the other end of the scale, recent household studies suggest that such

approaches to domestic units discount the individuals that make up the social grouping, ignoring different agendas and competition within the household itself (Allison 1999, p. 2). Yet, without historical documents or attributing activities to gender or age groups based on cross-cultural generalizations, it is difficult to describe a course of action for archaeologists to consider individuals, without unique circumstances. Thus it is important for archaeologists not to discuss households as homogeneous units with members sharing a unified agenda, but at the present time studying individuals in households is a scale of analysis unavailable to most prehistorians.

Neoevolutionary models describe households as building blocks or units at the foundation of polities irrespective of size or complexity. It is the ability of households to produce surpluses that allows specialization and the emergence of leadership; further, households provide their extra labor to build states (Earle 1997, p. 71; Feinman 1991; Kristiansen 1991, p. 21; Orans 1966; Stanish 1994; Webster 1985; Yoffee 2005, pp. 35–36). Houses are the middle ground between potsherds and polities (Deetz 1982), and that is why many studies of complex societies incorporate data sets derived from residential contexts. Changes in household production and consumption patterns are correlated with political transformations (e.g., Hastorf and D’Altroy 2001), which are typically first identified through investment in infrastructure or the sudden appearance of monuments (e.g., Haas 1987, p. 31). Given the importance of households and their residential activities for many models of state formation or increasing complexity, the configuration of the household is rarely a matter of study in itself but is often assumed based on ethnography or ethnohistoric research. In other words, few Andean archaeologists have linked the material dwelling (size, number of rooms, or features) with a model of a household’s social composition. Comparing the social composition of households between different polities could provide important insights to understand broader issues of economic and political organization. In general, the study of archaeological households and domestic contexts is underdeveloped in the Andes.

Archaeological research in the Andes unearthed and described residential remains very early on (e.g., Bird [1948] at Huaca Prieta; Kroeber and Collier [1998] in Nasca; Kidder [1943] at Pukara; Uhle [1991, p. 57] at Pachacamac), but most studies focused on chronological questions of development. The realization that residential data could be applied to understand culture change through time; social difference in regions or urban settings; relations of production, consumption, and exchange; or the political economy of complex societies has not been utilized to its full potential because of the focus on spectacular tomb and temple finds. Residential components are pervasive; they are the most common unit at most archaeological sites, and domestic areas are often identified within more specialized contexts. Research has shown that political activity is embedded in elite residential complexes (e.g., Brewster-Wray 1983; Couture 2004; Day 1982; Isbell 1984; Morris 2004; Nash and Williams 2005; Shimada 1994). Many specialized goods, for states or other large-scale societies, were manufactured by enclaves in (e.g., Janusek 1999; Rivera-Casanovas 2003; Topic 1982) or near the artisans’ living quarters (e.g., Russell and Jackson 2001; Topic 1982). Even temple mounds and sacred precincts may have residential

components for theocratic leaders or ritual specialists, be they male, female, or both (e.g., Cardal [Burger and Salazar-Burger 1991], the Akapana at Tiwanaku [Kolata 1993, p. 118], Huaca Grande at Pampa Grande [Haas 1985], Inka temples of the sun [Cobo 1990 [1653], pp. 173–174]). Thus it is important how we approach residential remains in the study of ancient Andean societies. In general, research has been in houses rather than about households. Domestic units have not been problematized or systematically compared. Domestic activities are assumed and rarely described. Ethnoarchaeology has not contributed to current models of activity, and in general archaeologists rely too much on history and ethnography rather than cross-cultural comparisons or experimental archaeology. As long as Inka history and ethnographic studies of highland peasant communities provide the only sources for archaeological interpretation, little progress will be made. Andean household archaeology needs new approaches to understand prehistoric societies.

In this article I review the ethnohistoric and ethnographic information most commonly used by Andeanists to interpret archaeological households in order to expose the problems generated by mixing history and ethnography; however I also highlight some useful insights from ethnography that have been underutilized in model building. I describe the scales of research and the implications of middle-range theory to household archaeology and attempt to reconcile definitions introduced from early household research with more recent results from domestic studies. I examine how Andean archaeologists have applied domestic data to describe demography, the development of social stratification and other social differences in complex societies, the domestic economy, craft specialization and production; the household's role in the political economy; and cosmological attributes of Andean dwellings. Sites and regions mentioned in the text appear on maps of five areas of the Andes (Fig. 1, Ecuador; Fig. 2, northern Peru; Fig. 3, central Peru; Fig. 4, southern Peru and Bolivia; Fig. 5, Argentina). In writing this review I endeavor to interest more scholars in examining Andean households for their own sake and to encourage archaeologists to build more viable models that link house remains to lived communities, polities, and multiplicity spheres of interaction.



Fig. 1

Sites and regions of Ecuador mentioned in the text. 1, Achuar; 2, Las Vegas; 3, Real Alto

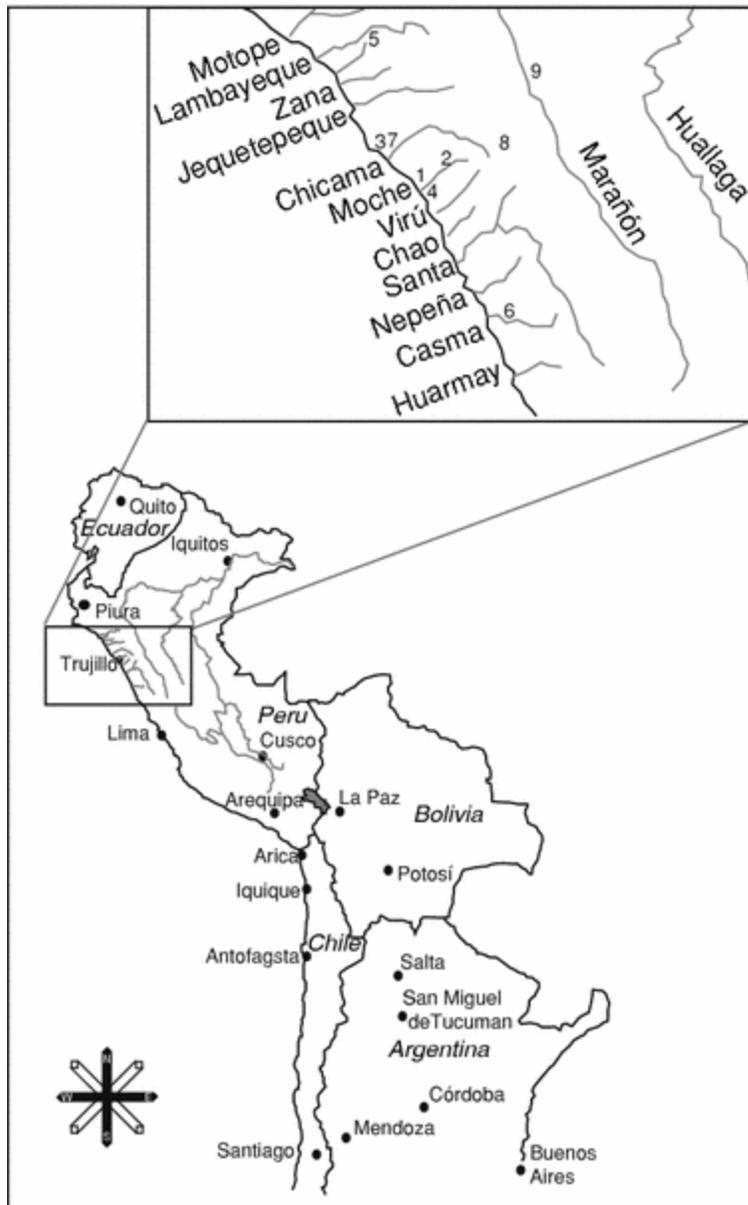


Fig. 2

Sites and valleys of northern Peru mentioned in the text. 1, Chan Chan; 2, Galindo; 3, Huaca Prieta; 4, Huacas de Moche; 5, Pampa Grande; 6, Sechin Alto; 7, Sonolipe; 8, Virachochapampa; 9, Uchumarca

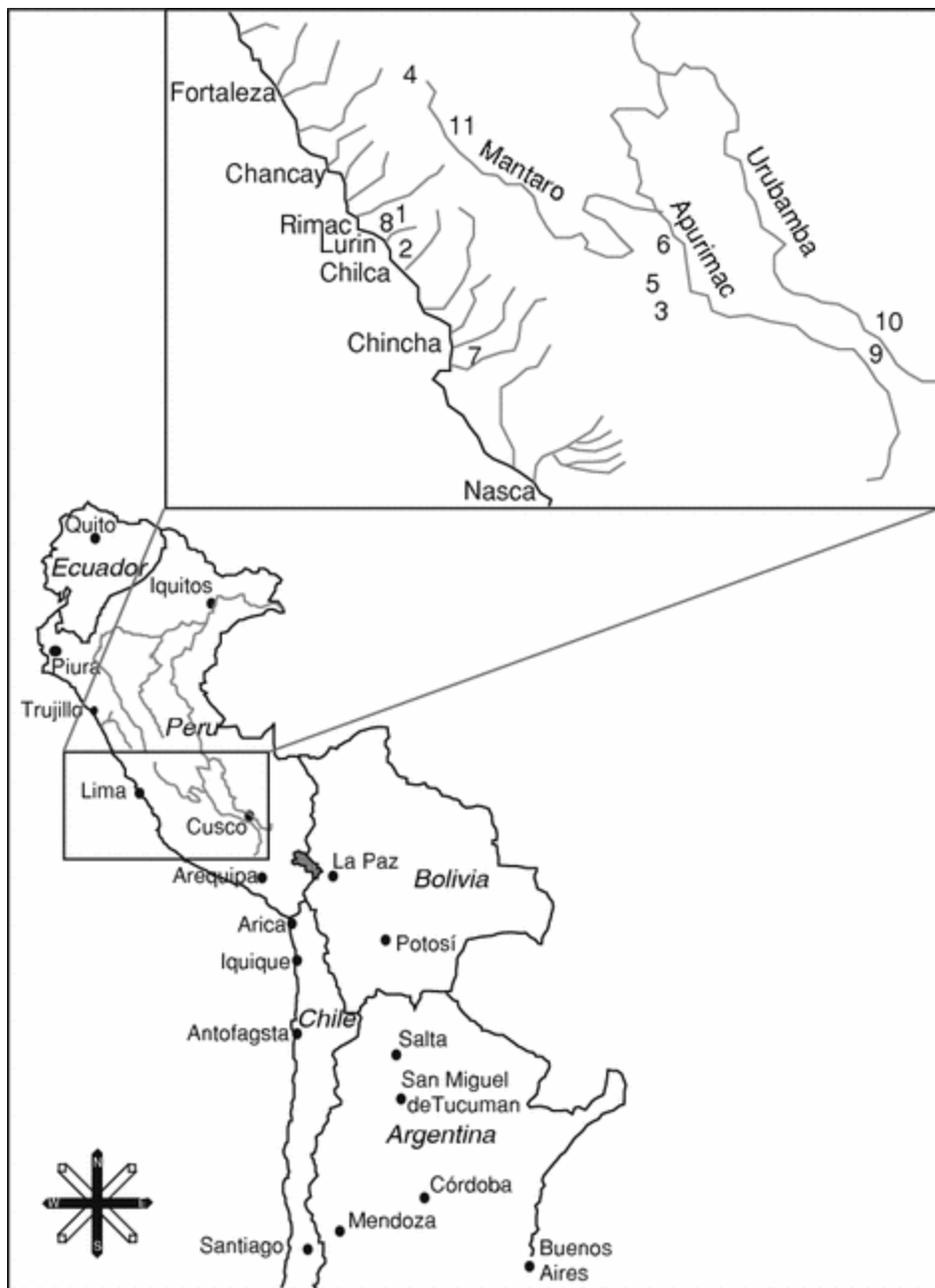


Fig. 3

Sites and valleys of central Peru mentioned in the text. 1, Cardal; 2, Chilca; 3, Conchopata; 4, Huánuco Pampa; 5, Huari; 6, Jargampata; 7, La Centinela; 8, Pachacamac; 9, Pikillacta; 10, Sonqo; 11, Xauxa



Fig. 4

Sites and valleys of southern Peru and Bolivia mentioned in the text. 1, Asana; 2, Cerro Baúl and Cerro Mejía; 3, Chiribaya; 4, Chiripa; 5, Lukurmata; 6, Omo; 7, Pukara; 8, Quebrada de los Burros; 9, San Antonio; 10, Tiwanaku



Fig. 5

Sites and provinces of northwestern Argentina mentioned in the text. 1, Campo del Pucar; 2, La Rinconada; 3, Rincn del Toro

Ideas about Andean households

A great deal of archaeological interpretation about Andean households is based on published ethnographic research of mostly highland Andean communities and households, ethnohistorical research of documents from the colonial era immediately following the Inka period, and the experiences of archaeologists themselves as they live and work in remote communities. Ideas and techniques pioneered by Mesoamerican household archaeologists also have been

transplanted farther south (e.g., Netting et al. 1984; Wilk 1991). But given that there is only one edited volume (Aldenderfer 1993a) dedicated to household archaeology, it is clear that Andean research has taken a different direction.

Andean ethnohistoric and ethnographic literature provides archaeologists with broad ideas of domestic life, and thus such sources have played a major role in archaeological interpretations of households. A few anthropological and historical studies of residential groups have had a great impact on archaeological investigations. I discuss the problems with this below. Andean archaeologists' different views of households and the nature of residential remains determine their approaches to domestic contexts and provide the basis for their interpretations of households and thus their models of ancient societies.

Ethnohistoric models of coresidential groups

Archaeologists working in the coastal valleys and those studying groups that occupied the intermontane valleys or the high altiplano typically have different conceptions of the coresidential group. These ideas are based on two major models proposed by ethnohistorians studying the respective areas: (1) Murra and his descriptions of verticality or zonal complementarity in the south, along with application of this model to the Inka empire, and (2) Rostworowski's accounts of societies of specialists engaged in horizontal coastal trade in the north, characterized by the Kingdom of Chimor and smaller polities of the central coast, such as the Ychsma who controlled the large oracle center of Pachacamac.

Verticality and nuclear family households

Murra's (1968, 1980; Murra et al. 1986) ideas are widely applied to understand patterns of subsistence and political economies, particularly in the southern highlands. His models, which are based on ethnohistoric accounts, have been tested by a number of archaeologists and projected back into earlier times (Aldenderfer 1993a; Janusek 2004a; Masuda et al. 1985; Rice et al. 1989; cf. Van Buren 1996). In Murra's model, households were partially self-sufficient. They were given access to land (the society's primary capital good), and households were "the contributing unit" to local communities and the Inka empire because "tasks were allotted to households, not individuals" (Murra 1980, pp. 91–92, 1982).

From Murra's reading of the ethnohistoric sources and descriptions of the household's labor contribution to the Inka state, the household is equated with a conjugal pair along with their offspring and perhaps unmarried relatives, implicitly the nuclear family (Murra 1980, p. 98). At the same time, communities were collectives holding land and rights to resources in common,

whose members shared the responsibility for taking care of the infirm and elderly. Some of these communities may have corresponded to a social grouping known as an ayllu.

Yet ayllu are elusive. The size of ayllu varies; settlements may correspond to ayllu, some settlements will have more than one ayllu, and some ayllu occupy several smaller dispersed communities. An ayllu, according to Janusek (2004a, p. 28), “was a flexible term for community,” a group of people building relations on shared productive, political, and ritual experiences. Their relationships were based on kinship, real or fictive. Ayllu members expressed a common identity, and their membership gave them use of common resources, and perhaps other entitlements. Ayllu were “to varying degrees an economic, ritual, and political group” (Janusek 2004a, p. 28). Ayllu have nested memberships, with macro-ayllu segmented into micro-ayllu (Abercrombie 1998; B. Isbell 1978; Platt 1986; Rostworowski and Murra 1960).

Given the variability in the way modern groups use the term ayllu, it is unlikely that archaeologists can recognize ayllu-type sociopolitical groupings. Yet the ayllu concept is a key component in explanations of Andean economies. In Murra’s model, communities or ayllu may send small groups of households to settle in other ecological zones. While retaining rights to land and resources in the home community, migrant households produced agricultural goods or secured distant resources that would be funneled back to the home community. This practice preceded and continued during Inka times.

Murra’s ideas of Andean community and associated social organization, including its satellite extensions and nuclear family base, has been glossed as zonal complementarity, or referred to as verticality. The application of this model to understanding the political economy of past societies has drawn attention to the importance of archaeological households and fueled the development of household archaeology in the Andes. Stanish (1989, 1992) identified residential architecture—the form and organization of archaeological households—as the best indicator of ethnicity. He asserted that examining houses, rather than the percentage of foreign pottery, was the most salient methodology for recognizing and studying colonizing populations, connecting satellite communities with their origin communities, or sorting out groups from a complex and heterogeneous “patchwork of ethnic enclaves” (Stanish 1989, p. 7). Following Murra, Stanish (1989, p. 8) argues that the household is the fundamental unit of communities; citing a host of ethnographic studies he defines nuclear families as “the fundamental productive, consumptive, and exchange units” because they participate in relations of reciprocity, redistribution, and labor tribute as a collective unit.

Many authors in a volume edited by Aldenderfer (1993a) used this methodology to study zonal complementarity through time in southern Peru, Bolivia, and northern Chile by comparing the style of residential architecture and associated domestic material culture. The introduction to the volume describes the facets of style and the authors’ application of “identification by comparison” (Wiessner 1989). Many of the chapters in the volume examined house ruins and

residential material culture to assess the degree to which colonists engaged in zonal complementarity maintained expressions of their ethnicity (Aldenderfer and Stanish 1993).

Research continues to identify groups engaged in zonal complementarity and to consider the ways that groups are socially and economically integrated in dispersed ecological zones (e.g., Blom et al. 1998; Goldstein 2000, 2005; Hastings 1987; Parsons et al. 1997; Sutter 2000); others have used the style of domestic architecture to identify different groups through periods of change (Bermann 1994; Vaughn 2004, 2005) or to define ancient cultural boundaries (Bonnier 1997). Many Chilean archaeologists reporting on regional settlement surveys now include descriptions of the “use of space” in which they detail the residential and nonresidential components of sites and classify the forms of domestic structures, often contrasting between rounded and rectilinear buildings and associating different forms with groups of *altiplano*, *sierra*, or coastal origins (e.g., Adán et al. 2007; Chacama 2005; Muñoz Ovalle 2005). Style of masonry and form of domestic space also have been used to infer differences between Inka and support staff on royal estates in the Sacred Valley of Cuzco (Niles 1987) or to identify similar differences at provincial centers (Morris and Thompson 1985, p. 70). Yet imperial colonies and elites seeking to emulate more prestigious imperial-style architecture may present problems for scholars relying solely on survey and the surface examination or mapping of residential architecture (see DeMarrais 2001). As Aldenderfer and Stanish (1993) suggest, excavations of numerous households can be expensive, but such investigations are crucial to realizing the full impact of residential analysis, especially since residential architecture in many areas is constructed of ephemeral material and does not leave evidence of building outlines on the surface. Below, I return to the importance of research methodology.

Horizontality and extended family households

Not all Andean economies were based on zonal complementarity. Societies living in rich coastal environments did engage in exchange with other regions but not all zonal complementarity was direct; some also may have been based on affinal ties between communities (Salomon 1985). Exchange between groups was a significant factor in many complex polities. Some coastal societies may have been organized as groups of specialists where identity was based on occupation and polities consisted of confederations of specialists. Rostworowski (1970, 1975, 1977) describes societies organized as a combination of different *parcialidades* or communities of specialists under the direction of their lords. The size and complexity of these societies varied but are typically referred to as *señoríos* (see also Netherly 1984; Ramirez-Horton 1981; Shimada 1982, 1994; Topic 1990). Although *señorío* roughly translates to chiefdom, its application to societies is based on ethnographic texts or the application of Rostworowski’s model. Thus not all *señoríos* were organized “horizontally,” neither were all horizontally organized polities *señoríos*. Also, for this model it is important to keep in mind that farmers and fisherfolk are considered groups of specialists and that these subsistence producers exchanged their goods with each other

and with the producers of manufactured goods such as ceramic vessels. Fisherfolk were not restricted to the coast but additionally occupied and controlled resources around other bodies of water, such as the cultivation of reeds. There also were those who specialized in trade and transported goods and bartered in many areas. Polities were made up of several of these groups.

Rostworowski (1970, 1975, 1977) describes the interdependencies among groups of occupational specialists interacting through their leaders and exchanging items of necessity and wealth, such as fish, agricultural products, and manufactured goods. Settlements in many coastal areas were specialized and to some degree dependent on their trade partners. Further, these groups were reportedly endogamous, had their own leaders, and may have formed marriage alliances between valleys rather than between groups of specialists in the same valley. The most illustrious of such groups were the enclaves of coastal and overland traders associated with the Chinchá señorío, centered in the valley of the same name (Sandweiss 1992). Lozada and Buikstra (2002, 2005) applied this political model to interpret the segmentary nature of Chiribaya society on Peru's far south coast. Shimada (1994) used this model to explain Moche expansion. He suggests that the Moche expanded horizontally to provide more "local" resources to subsistence specialists. Thus more fishing spots were made accessible to fisherfolk, and fields in different valleys could be utilized by Moche farmers. In effect, the areas acquired or used through expansion could accept the same technology rather than requiring the development of new technologies in different environments (cf. Bawden [1996, pp. 47–50] who stresses unique resources in some north coast valleys as the motivation for exchange or conquest).

As Shimada (1982) and others suggest, these two kinds of social organization may coexist within a polity or among a group of interacting polities. Each, however, may have different implications for the nature of coresidential units or the size of households cooperating in aspects of production, distribution, consumption, and reproduction. It may be that households relying on exchange were necessarily larger and may have needed more members to fulfill all the tasks related to certain kinds of specialized production (see Lambert 1977).

These ethnohistoric polities correspond well with large residential compounds found at precontact north coast urban sites, such as Huacas de Moche (Chapdelaine 1998, 2000, 2001, 2006; Chapdelaine et al. 1997; Uceda and Armas 1998; Van Gijseghem 2001), Pampa Grande (Shimada 1994), and Chan Chan among others. Residential compounds vary in size and elaboration, with those of the elite being large and located near monumental constructions at the core of these population centers. Excavations have revealed that some compounds incorporate dwelling spaces and specialized production activities (Shimada 1994) such as pottery manufacture (Uceda and Armas 1998) or metal working (Chapdelaine 2002; Topic 1982). Less extensive work at large highland urban centers such as Huari and Conchopata in Ayacucho, Peru, and Tiwanaku in Bolivia suggest that residential compounds also housed groups larger than a nuclear family and that specialized production was carried out in and along with residential activities (Isbell and Cook 2002, p. 279; Isbell et al. 1991; Janusek 1999, 2004a, pp. 146–147, 176–183; Rivera-Casanovas 2003).

Hendrick Van Gijseghem (2001) has suggested that Moche urban residential compounds that were constructed and remodeled between Huaca de la Luna and Huaca del Sol (Huacas de Moche) represent the strategies of elite families who built durable settings representing continuity in relative socioeconomic status. He demonstrates the chronological longevity of some residential structures in which particular walls and rooms were maintained and used over several phases of rebuilding and refurbishment. Buildings with long life histories exhibit elaborate construction and contrast with smaller modest buildings that were abandoned after one occupation floor. He links these differences to the strategies of elite extended families to establish “cross-generational socioeconomic stability” (Van Gijseghem 2001, p. 268; see also Blanton 1994; Bourdieu 1976; Santley 1993; Wilk 1983). Moore (2005, p. 189) has suggested that similar aspects of Chimu ciudadelas may indicate organization similar to that of a house society (Levi-Strauss 1983), but he is careful to stress that this organization probably only defines the elite stratum of society.

If either inference is valid, it is tenable that elites and lower-class families within the same society participated in different household arrangements; thus their material remains may manifest very different patterns of residence and household composition (see Netting 1982; Wilk and Rathje 1982). Similarly, there may be differences between urban and rural patterns of residence, or household composition may be linked to occupational pursuits. In other words, many variables affect the size of the coresidential group and the ways families configure their dwellings (e.g., Faust and Bunimovitz 2003; Foster and Rosenzweig 2002). Archaeological investigators should be aware of the potential for variation and strive to increase the comparative sample of houses so that important patterns can be identified. At the current time a great deal of interpretation relies on the ethnographic present.

Ethnographic models of coresidential groups

The American Anthropological Association’s volume, *Andean Kinship and Marriage* (Bolton and Mayer 1977), remains an important resource for archaeologists looking for a survey of different coresidential groups, household economies, and environmental situations. Andean ethnographers have encountered a variety of household configurations; however, the dimensions and architectural arrangements of houses are often omitted, making it difficult for archaeologists to translate coresidential groups and forms of social organization into material correlates. Likewise, when anthropologists describe activities that take place in residential settings, the spatial context, features, tools, and resulting residues are not the focus of their narratives. In fact, the significant variables that anthropologists use to define and discuss Andean households are nearly impossible for the archaeologist to explore.

Residence and social organization

Ethnographers often focus their efforts at the scale of the community, but several anthropologists have provided material details of Andean households and are repeatedly cited by archaeologists (e.g., Allen 2002, B. Isbell 1978). A review of the ethnographic literature reveals a range of family sizes and larger kin-based productive units. Such variety is overshadowed by a few common threads such as reciprocal labor exchange and the redistributive nature of festivals, both of which figure prominently in the explanations archaeologists provide for situating archaeological households in prehistoric polities. Yet other significant descriptions of social organization and the household's participation in the political and economic landscape are not as easily evaluated with archaeological remains.

Ethnographic studies of households often stress attributes that would be difficult for archaeologists to track. Many ethnographers focus on the importance of larger cooperative groups over the coresidential unit, showing that relationships outside the household are essential. Mayer (1977, 2001) has emphasized that no modern agropastoral household is really self-sufficient and very few coresidential groups have enough members to conduct all the tasks necessary for the group's reproduction (see also Bolin 2006; Sikkink 2001). Wealth is often associated with family size, with larger families producing larger surpluses and participating in community leadership. Peasants engaged in agriculture, pastoralism, or both in a particular community are not all social equals, and some families find themselves in client relationships to others. Such relationships are certainly important; however, without some material indication of such cooperative groups, it would be difficult for archaeologists to study a community or region based on these larger social formations.

In some cases such relationships might be recoverable. For instance, Brush (1977a, pp. 134–137) discusses the affinal relationships between people in Uchucmarca (eastern Marañón watershed, department of La Libertad, northern Peru), sharing houses and the arrangement of houses in compounds and neighborhoods occupied by related households. He divides the community into seven large extended families who occupied variable numbers of house structures in compounds; however, the internal residential arrangements of these compounds are not described. In most cases walls do not enclose groups of cooperating households, regardless of their interdependency. Gose (1991) has discussed how superhousehold affiliations may be seasonal, with a contrast in group unity between periods of cooperative labor actions and the subsequent division of agricultural produce to smaller coresidential groups. Whether relations of cooperation are temporary or not, many variables can affect the spatial organization of large cooperative groups. Some groups of cooperating families may spread their members between land holdings in different zones (Bastien 1978) so that a large central residence or multiresident compound is largely unoccupied except during periods of exchange or ritual. Likewise, the practice of “dual residence” in which agropastoralists, pastoralists, or agriculturalists move between houses to manage distant resource holdings (Arnold 1992; Göbel 2002; Platt 1982) can inflate population estimates, with the same family seasonally occupying two or more dwellings.

Concepts linking the coresidential unit to larger cooperative suprahousehold economic groups, such as ayllu, have not been addressed from an archaeological perspective (for exceptions see Conrad and Webster 1989; DeMarrais 2001, p. 131). For the most part, this type of research is beyond current methodologies. Nevertheless, from ethnographic and ethnohistorical information we know that it is these larger wealthier groups that hold the most political and economic power; such suprahousehold groups were royalty in the Inka empire (Rowe 1946, pp. 257, 260–261; Zuidema 1977, 1990) and prominent in other polities (Hastorf 2001). When houses are agglutinated or arranged within a well-defined compound, archaeologists can study these larger social groups. Yet if the members of a cooperating group are dispersed throughout a settlement, these relationships would be difficult to detect.

At the same time, researchers should not assume that all persons occupying a residential compound are members of the same family group (Yanagisako 1979). For instance, it is reported that Inka and noble elites had servants, but archaeologists have not specifically looked for live-in servants or members of a household that held a lower socioeconomic status to that of the primary residents (see Day 1982, p. 61, for an exception); neither have archaeologists seriously considered ethnohistorically documented family arrangements such as polygyny (Mayer 1972, p. 349; Murra 1967, pp. 389–390), which also have been reported ethnographically (e.g., Brush 1977b; for an exception see Rostain 2006).

The architecture itself is a major factor from which archaeologists have inferred the size and organization of coresidential groups (e.g., Malpass and Stothert 1992; Muñoz Ovalle 2005). Compounds or enclosures including several house units are interpreted very differently from dispersed residential structures within unbounded or nondemarcated communities. Cross-cultural research of larger coresidential groups and cooperative groups that are not coresidential may provide some insights for archaeologists trying to understand the social composition of the basic units involved in production, distribution, transmission, and reproduction, but for now it is important to recognize that the coresidential group may not fulfill all of these purposes (Wilk and Rathje 1982). The archaeological household as an artifact is difficult to link to ethnographic concepts of household, and it may be that archaeologists must focus, given the inherent limitations of the data, on comparable material units that can be identified within sites and compared between settlements (Bermann 1994; Flannery and Marcus 2005; Stanish 1989).

Ethnographic analyses of residential groups and larger clusters of cooperating kin groups demonstrate that understanding ancient communities may require looking for subdivisions or coalitions of households. In most instances, the analyses of households are being conducted on very complex societies with clear evidence of social stratification, craft specialization, and thus a multiplicity of lifeways that crosscut urban and rural settlements and like settlements located in different environmental settings. Thus we should expect that the coresidential group may vary between communities and within a particular society. The corresponding intrahousehold relations may be very different based on a suite of contextual variables (Bawden 1990).

Ethnographic insights on domestic activity

Given the complexity of some archaeological sites, especially densely occupied urban centers, it is not always clear whether a building contains domestic activities, especially if excavation units are small. Several archaeologists have embraced the ideas presented by Brush (1977a; see also Weismantel 1988, 1989) in associating cooking hearths with family units (e.g., Bawden 1982a; Brewster-Wray 1989; Gero and Scattolin 2002; Isbell et al. 1991; Nash 2002; Rostain 2006). In general, interpretations follow that a structure with more than one hearth is occupied by an extended family of subunits, whereas a structure with a single hearth is occupied by a nuclear or modified nuclear family. The Andean ethnographic literature contains instances of adult women having their own cooking facilities (e.g., Brush 1977a; Zeidler 1983), as well as affines sharing such work zones (e.g., Van Vleet 2008). Thus it remains up to the archaeologist to assess the particular situation based on a sample of excavated houses, paying attention to the size and distribution of cooking features and how these relate to the size of dwellings as well as other types of domestic production, to determine the relationship between cooking and familial affiliation. Archaeologically, cooking and other essential domestic activities may occur only once in a residential structure or be repeated in different areas of a larger residential complex. Extensive excavations are needed to establish patterns of domestic activity; such patterns should not be assumed based on ethnographic analogy. Nevertheless, some ethnographic and ethnoarchaeological studies have insights to aid in archaeological interpretations.

The use of house space

A few ethnographies provide useful descriptions of the way in which residential space is used and what kinds of activities might be situated inside or just outside the house structure. For instance, Allen's (1984, 2002) work in Sonqo, Department of Cuzco, Peruvian central highlands, includes details of house interiors, features, household assemblages, and activities. Allen describes how quotidian activity and occasional celebrations intersect in residential settings, demonstrating that residential spaces may have had different situational uses (see also Bolin 2006; Matos Mendieta 1972; Mayer 2001; Meyerson 1990), with the construction of the house being a ritual affair in itself (e.g., Arnold 1992; Gose 1991; Mayer 1977).

Descriptions of ethnographic dwellings demonstrate the importance of outdoor spaces for productive activity, whether it is a defined patio or the yard between domestic structures (e.g., Göbel 2002; Meyerson 1990). Productive activity generally includes spinning, weaving (Dransart 2002), and food preparation (Babot 2007), typically associated with women; however, many more activities are present, such as tool production and maintenance and the manufacture of ornaments and other goods (Zeidler 1983). Although many traditional groups still use pottery for some food-related purposes (Hildebrand and Hagstrum 1999), a major hole exists when it

comes to interpreting lithic remains. All precontact Andean societies were stone-age cultures, and all dwellings would contain chipped stone tools and the knapping kits to make them. The ethnoarchaeology of many characteristic Andean activities needs to be documented from a depositional perspective to ascertain just how applicable the ethnography of current communities is to archaeological interpretations.

Perhaps the most useful study for interpreting archaeological remains is Zeidler's (1983) work among the Achuar of Ecuador. He wanted to understand depositional patterning in order to interpret the remains of activity areas. He also examined the overall use and organization of the dwelling space as well as the movement and discard of objects in domestic space. Zeidler describes gendered difference in the use of space; areas associated with men contained and accumulated fewer materials than women's areas where daily food preparation and storage of goods laid down thicker domestic deposits. One critical distinction Zeidler makes is between activity areas that are created by individuals practicing multiple tasks in personal space versus activity areas resulting from the fixed location of a specific task carried out by multiple persons. This simple dichotomy distinguishes different ways that dwelling space is used. Interestingly, in Zeidler's example the grinding stone used to process maize by multiple women was kept in the men's area of the house. Based on general attribution of gendered activity, an archaeologist would affiliate grindstones and grinding activity with women and not be able to recognize the coresidential group's concept of gender-divided space. Such findings warn researchers of the limitations inherent in the archaeological record.

Currently there is no material yardstick to measure changes between the past and the present. Mayer (2001) asserts a radical break between prehistoric communities and modern peasant communities caused by Toledan reform and *reducción*, which essentially reshaped the way people occupied the Andean landscape. Ethnography becomes useful because it demonstrates the potential complexities in relating households to the community or to larger regional economies. Some ways in which households cope with Andean ecology have not been considered, particularly the scope of mobility, but some may be important for modeling subsistence regimes in different environmental zones.

Knowledge of the Andean ethnographic literature is important; yet there are other ways archaeologists can interpret remains and establish links between the material record and social processes. In particular, one problem with the use of ethnography and ethnohistory to interpret archaeological societies in the Andes is the close-knit relationships that underlie some of the early seminal studies. Murra trained and influenced an entire generation of archaeologists, historians, and ethnographers. Ethnographers have read the Inka literature as well as Murra's interpretations of it. Thus ideas about how the Inka empire worked underpin some ethnographic interpretations and vice versa. Perhaps the largest possible flaw is the assumption that an empire can be projected on a village (Inka → ethnographic community) and a village can be projected onto an empire (community ethnography → Inka). Some researchers assume that relations were essentially the same between village leaders and commoners as those between the Inka empire

and provincial governors. Yet when we consider the scale of difference in access to resources, diversification of specialists at the two levels, and the fact that Inka emperors were considered gods on earth, such simplistic projections require closer scrutiny.

The archaeology of houses

Many research programs now incorporate some form of residential data in regional models of political organization, economy, and chronological developments. Methodologies vary along a continuum of scale from estimating population and changing demography to focused spatial analyses of residential contexts and their affiliated activity areas. Many researchers are using materials from residential areas of a settlement or sites in a region to examine socioeconomic differences, or are comparing households from different periods to understand changes through time. Research programs in the Andes parallel those of anthropological archaeologists working in other areas and approach ancient societies from a number of scales and theoretical perspectives.

Matters of scale and middle-range theory

Andean archaeologists are using residential remains at a number of scales to address diverse questions and are examining their data using different sets of middle-range theory. I discuss these different modes of research and their implications for archaeological interpretation. Roughly, domestic remains are used at three different scales: regional, community, and household; each of these can address different kinds of questions or may represent different phases of investigation.

Regional and chronological schemes

At the maximal scale, most investigators use the presence and size of domestic areas to estimate populations of different periods (e.g., Brennan 1980; Keatinge 1975; Moore 1981), examine demographic changes in terms of density or dispersal (e.g., Bandy 2004), or chart other important shifts in regional settlement patterns (e.g., Schreiber 1992; Stanish 2003; Wernke 2007). As part of their survey techniques, archaeologists may map residential sites and note changes or differences in residential architecture and thus propose migration, invasion, or changes associated with shifting patterns of social organization or political development. Although this information is important, this level of analysis provides only a trajectory of change at the society level. Investigations based on floor plans and surface collections necessarily must rely heavily on analogy; this scale of analysis reveals little about the particulars of the Andean

culture area (Bawden 1982a). Ideally, these types of investigations form the foundation for further detailed examinations of different temporal phases and extensive excavations.

Community archaeology

Most researchers using residential data wish to demonstrate or explain major changes and their impacts through the quantification of economically oriented remains (such as diet and the percentage of luxury goods) or how the stylistic changes of artifacts (such as ceramic vessels and house form) signal significant political or religious shifts. Alternatively, studies sampling house remains may compare social differences between groups living at a particular site or occupying different sites of a region in a particular period. Although these scholars recognize the importance of context, they often compare the frequency or types of artifacts between excavated areas. Data gleaned from postexcavation analysis is favored over reporting the specifics learned during excavation. They utilize a concert of different material traits obtained through extensive postexcavation analysis to characterize the nature of large societal reorganizations, documenting cultural change writ large. Although these studies vary to a great extent, these data on houses are typically synthesized and the research is aimed at the level of the community and broad subdivisions within it.

Household archaeology

At the smallest scale, some researchers are excavating entire houses or large contiguous portions of residential areas. They present descriptions of features, and often present in situ artifacts and activity areas. These scholars are interested in broad processes of change as well but are grappling with large and highly varied residential assemblages. These activity-focused archaeologists do quantify their comparisons of artifacts and economy, but the number of houses included in these studies is small. These research programs have diverse aims but consider the differences that arise from particular contexts in their descriptions. For the most part, they interpret deposited materials as evidence of primary use, the product of de facto refuse, or document the differences between primary and secondary deposits. Researchers in this group have much in common with community-focused archaeologists but have designed their research programs based on a different set of “middle-range theories.”

Middle-range theory

Many excavators seem to be seeking residential residue, detritus, or midden accumulation, whereas other investigators have tried to understand activity areas and construct models of the use of residential space. These different approaches may reflect the nature of the deposited

remains and their apparent preservation; however, in large part these choices may be based on the underlying assumptions investigators hold about archaeological depositional processes (see Schiffer 1985). Even at Pompeii, it would seem that the nature of archaeological study and subsequent analyses led to decontextualized typologies focused on diachronic change, while synchronic issues of activity and organization are addressed using the empty residential architecture (Allison 2004, pp. 4–8).

Archaeological sites can be very different and formation processes vary. One site may have in situ *de facto* refuse, while another may be filled with garbage from later occupations. Both kinds of deposition may be present at the same site. Zeidler's (1983; Stahl and Zeidler 1990) work in Ecuador showed that within the same dwelling distinct depositional processes may cause different patterns of accumulation. Thus comparisons between materials derived from small test pits can be problematic. Artifacts and ecofacts out of context are likely to provide faulty results. Excavated samples that are drawn from different parts of houses (e.g., "sala," "cocina," or "depósito," see Bawden 1982a) may not be comparable. If the excavators do not obtain an understanding of the spatial organization of the residence, they may sample parts of houses and recover assemblages that represent different activity sets. Comparisons between two kinds of domestic contexts, such as a kitchen with a storage room, may provide a skewed picture of the differences between households.

One way to avoid nonrepresentative and noncomparable domestic samples is to excavate entire houses (e.g., Feinman et al. 2002; Flannery and Marcus 2005). Alternatively, some scholars have excavated a small number of houses in order to target areas within residential structures for further test excavations (e.g., Earle et al. 1987; Vaughn 2004). These kinds of samples are an expedient way to examine broad processes of change, but such data cannot be used to answer all research questions. Such approaches may be possible when there is a standard house form or the site consists of fairly uniform patterns, but it would be difficult to implement in multiethnic settlements, large centers with cottage industries, or urban settlements with a great variety of people and dwelling morphology. It is perhaps for this reason that many scholars working in large complex sites have chosen to excavate entire houses or large contiguous sections of residential architecture to answer their respective research questions.

At smaller sites researchers may be able to describe typical domestic patterns replicated in different structures or within structures to understand the household units or the relative size of the coresidential group (e.g., Stanish 1989). In larger, more complex sites, excavations of residential sectors should be extensive enough to allow for the comparison of rooms, features, and repeated elements before investigators label architectural remains as domestic units. In archaeological terms, built structures, like artifacts, have functional and stylistic attributes; houses as artifacts need to be described as they were made, used, decorated, and discarded. Studying residential areas and comparing domestic data to understand social, economic, and political processes requires archaeologists to understand the units of analysis and their attributes.

Archaeological households and domestic areas

Wilk and Rathje (1982) explain that archaeologists do not excavate households but rather the remains of dwellings. A great deal of effort is needed to bridge the gap between dwellings and households, but this effort is required if archaeologists want to understand the social, economic, or political composition of a society. As ethnographic studies show, the coresidential group does not always correspond to a household; without historical documents archaeologists cannot split such hairs. Instead, archaeologists can focus on understanding domestic production and reproduction as well as the ways coresidential groups participate in the social, economic, and political spheres of a community and the larger society.

The goal of household archaeology is to understand, as best as archaeology permits, the basic social unit in a community or the array of social units in a society, with the presumption that this social unit is also the basic unit of economic and political interaction. Current ethnographic literature suggests this is often not the case; however, in archaeology it is a necessary place to start. The household unit rather than the individual is visible in the archaeological record because it can be linked to a type of artifact—the house or dwelling. I prefer dwelling in this narrative over house because I am referring to an archaeological artifact par excellence rather than a particular social formation, as in the recent house society literature (e.g., Joyce and Gillespie 2000), which may be centered on other types of artifacts such as mortuary monuments or integrative ceremonial complexes.

The archaeological household is the coresidential group that used the occupation surface, features, and the artifact assemblage of a dwelling (Flannery 1983; Kramer 1982). Some members of these groups may contribute to the house's assemblage only during seasonal events; other members of the community also may contribute to the dwelling's assemblage. Such depositional uncertainties have some theorists ready to discard the domestic unit as a means of analysis in favor of the set of practices carried out in domestic settings (Vaquer 2007). I suggest the concept of household is a necessary heuristic field for comparison of different societies and their respective social compositions. The coresidential group, with their differing agendas and individual tasks, live together, co-organize the activities in the dwelling, and perform domestic activities repeatedly in a patterned way. Even if the dwellings were filled with refuse after they were abandoned, doorways, hearths, storage features, sealed subfloor offerings, and the organization of spaces can still reveal some of this patterning; I would argue that some kinds of deposits should not be labeled garbage until comparative and contextual analyses have been completed (see house interment below). Even though many materials associated with daily use are regularly cleared away, techniques such as microdebris analysis (e.g., Hardin 2004; Login and Hill 2000) or soil chemistry of floors (e.g., Manzanilla and Barba 1990) can often provide important information about domestic activity.

Dwellings vary and thus there are several middle-range aspects essential to household archaeology. First, household archaeology requires a material definition of a dwelling. The dwelling may be composed of one or more structures and includes indoor and outdoor spaces. The definition of a dwelling includes the architecture, the features, and the suite of domestic activities. For this work to be comparable and useful to other researchers, domestic activities must be linked to the material assemblage, and the attributes of features must be described (such as hearth morphology). Second, since the composition of the coresidential group varies, it is important to determine whether a dwelling contains a single set of domestic activities or several. In other words, by looking for duplicate hearths, grinding tables, and storage bins one may determine that a dwelling was occupied by more than one social unit or a group of subunits.

The most difficult aspect of defining a dwelling is grappling with the variation observed in many complex societies. Nevertheless, a third crucial aspect of household archaeology is determining what types of production (craft specialization, political activity, or religious activity) may occur in some dwellings but not all dwellings in a sample. For example, pottery production may take place in residential yards, whereas metallurgy—perhaps because of toxicity—is located on the periphery of a settlement. Knowing what types of specialization occur in houses and what may occur in special-purpose areas is necessary for modeling the settlement's economy. Also, the composition of a coresidential group may be linked to class or occupation. Finally, it is necessary to sample dwellings of different sizes and forms rather than assume that all dwellings exhibit the same patterns of activity or similar social units. In complex societies several patterns of domestic activity may be present in villages, exist between villages, or only be apparent in larger population centers. Household archaeology can reveal these important differences and permit researchers to explore a wide range of social, economic, and political questions.

The difference between household archaeology and the archaeology of domestic remains is one of context. Household archaeology examines artifacts and ecofacts in relationship to each other and to features such as hearths or benches to model the use of space in different parts of the house or surrounding residential areas. Context is the key to defining activity areas and locating activities in and around dwellings. Linking domestic remains to household units requires the identification of use surfaces and the analysis of materials recovered from such a surface as a household assemblage. Dwellings can be defined only in contrast to other structures and in comparison to similar and dissimilar assemblages, just as an elite dwelling cannot really be identified without comparison to a range of nonelite dwellings. Thus a proper household archaeology must collect multiple samples of entire dwellings and be designed to identify residential spaces and link domestic activities to these spaces.

There are conceptual problems in implementing household archaeology because of the widespread notion that abandoned houses are filled with refuse rather than evidence of primary use. In some cases postoccupation disturbance may completely destroy use surfaces or residential structures, but the lack of documented house floors may be related to expectations (that floors were flat or well prepared) and language rather than preservation. Many

archaeologists refer to excavations as pits, trenches, and cuts, indicating that their excavation goals are vertical rather than horizontal. Given that vernacular architecture often exhibits small investments in floor construction, a horizontal approach is required to learn what house floors look like and to successfully find them. Even when structure walls are identified, a clear pattern of postholes emerges, or hearths are found adjacent to grind stones, it would seem that some researchers are still unwilling to consider the possibility that they are excavating more than just midden, garbage, or refuse. It is no wonder that some archaeologists might consider midden excavations to constitute household archeology, while others would include the descriptions of house forms in the absence of excavation to also fall under the aegis of household archaeology. Based on the definition I have provided, the following review of household archaeology includes only works that describe excavated dwellings or domestic remains along with their contexts.

Households as social units

Several projects have examined residential areas to define the functional characteristics of settlements using residential data to describe or understand differences between the social strata of a society. These projects were typically multiyear collaborative affairs that sampled a broad number of contexts to understand the nature of urban centers or the different social categories in a regional polity.

Urbanism

Moseley and Mackey designed the Chan Chan-Moche Valley Project (1968–1974) to examine the Chimu capital (A.D. 850–1470; Moseley 2001, p. 272) and the city's rural hinterland to understand how the differing components functioned together. Mapping, surface collections, hydrological studies, and stratigraphic and horizontal excavations from sites of many periods were carried out to establish chronological controls and to examine change over time. The team excavated a variety of building types in order to identify the function of different architectural units. For the most part, architectural forms and features were the main attributes of their comparative analysis, with artifactual remains supplementing interpretation (for an exception see J. Topic 1982 below). Historical documents and myths were used to flesh out the contours of the polity and contextualize the archaeological record (see Moseley 1990; Netherly 1990; Ramirez 1990; Rostworowski 1990). The findings of this project are detailed in many dissertations (Conrad 1974; Day 1973; Keatinge 1973; Klymyshyn 1976; Kolata 1978; Netherly 1977; J. Topic 1977; T. Topic 1977), two edited collections (Moseley and Cordy-Collins 1990; Moseley and Day 1982), and several journal articles (e.g., Andrews 1974; Keatinge 1974, 1975; Keatinge and Conrad 1983; Keatinge and Day 1973; Netherly 1984).

Chan Chan had three different classes of residential architecture—ciudadelas, intermediate architecture (Klymyshyn 1982), and blocks of small irregular agglutinated rooms (SIAR) (J. Topic 1982, 1990). Each class was examined to understand repetitive features and basic organization, and all three building classes combined residential areas with specialized activities, including political administration, storage/redistribution, craft specialization, and mortuary ritual. Day (1982) described the common features of ciudadelas, interpreted as the seats of power where Chimu rulers lived and governed their expansive polity. Surprisingly, the only domestic areas mentioned within the complex were for service personnel, who occupied small irregular structures near wells in the southern sectors of the compounds. It remains unclear where elites lived and how such areas intersected with political activity. Nevertheless, because Moseley and Mackey (1974) made and published detailed maps of the ciudadelas and other areas of Chan Chan, a few scholars (e.g., Moore 1996; Pillsbury and Leonard 2004) have included these “palaces” in their analyses of early state power relations (see below).

In the same region, under the auspices of the ZUM project (Zona Urbana Moche) since 1995, Chapdelaine (2000, 2001, 2002, 2003) and his Peruvian collaborators Uceda Castillo and Morales have examined Moche urbanites by mapping and excavating structures between Huaca de la Luna and Huaca del Sol and conducting excavations on Huaca de la Luna (e.g., Uceda 2001; Uceda and Tufinio 2003). They focused on understanding the composition and variety of urban dwellers at this early Moche city. Chapdelaine (2001, 2006) provides a general description of the social structure present at the site and provides a detailed exemplar of a Moche urban residential complex. Excavation reports provide rich detail of most excavated contexts and are available in a series of publications (Uceda and Mujica 1994, 2003; Uceda et al. 1997, 1998).

According to Chapdelaine (2001, 2006), Moche was occupied by an urban middle class and/or a lower upper class (he found no evidence of lower-class dwellings or agricultural implements). Nevertheless, the diversity in compound size and construction represents familial/coresidential groups of variable size, wealth, and occupation. Architectural compounds at the site incorporate residential areas, work areas (Uceda and Armas 1998), and storage facilities that seemingly exceed the needs of the affiliated domestic group. Many compounds also include platforms or dais-type constructions, perhaps used by administrators to oversee workers or to serve as central venues for political or ritual activities. The research program is ongoing and has shifted focus to hinterland sites. A synthetic presentation of comparisons drawn between urban and rural households is eagerly awaited by the Andean scholarly community.

Those working on the north coast of Peru, like ZUM, have built on the comparative data produced by the Virú Valley Project and the Chan Chan-Moche Valley Project to understand the political development of the area. In particular, several studies have compared their work at other Chimu sites to the urban core and have examined differences between urban and rural settlements (e.g., Keatinge 1974, 1975; Moore 1981). Other researchers have taken the collaborative and comparative aspects of the Chan Chan-Moche Valley Project as a model and have sampled an area of different architectural remains to understand the functional components

of a large settlement. Among these programs are Brennan's work (1980, 1982) at the Salinar center of Cerro Arena, Shimada's Pampa Grande research program (see below), and Bawden's analyses of social structure at Galindo.

Social stratification and diversity

Related to studies of urbanism are those research programs that use residential data to construct models of social hierarchy or heterarchy. Ranging from Marxist models of class conflict to studies of social difference based on prestige, occupation, or ethnic identity, a few studies of domestic remains have examined the social composition of large sites or regional polities.

One of the most cross-culturally cited studies of residential archaeology from the Andes was published by Bawden (1982a, see also 1982b, 1990). It describes class differences between discrete sectors of the Moche Valley site of Galindo. Galindo is assigned to Moche V (A.D. 600–750) and is located at the valley neck above the area where irrigation permits coastal agriculture. The site is complex, including extensive residential remains, specialized production areas, storage, and monuments (huacas).

Bawden excavated half of each domestic room in his study. He tested many structures; 28 were exclusively residential and consisted of a cooking area, "cocina," a benched patio space, "sala," and one or more storage rooms, "depósitos." These were compared based on overall size, the dimensions of different room types, the relative frequency of different ceramic types, and the presence of silver artifacts (Bawden 1982a). He grouped residential structures according to site sector and described the salient differences between socioeconomic classes living at the site. He concluded that the marked social difference between classes at Galindo could not be sustained and ultimately led to important shifts in the following Chimu period. For its time, Bawden's focus on and systematic presentation of domestic data were unprecedented and provided an interesting glimpse of variation within late Moche society.

Nevertheless, details from other publications (Bawden 1982b, 1996, 2005) reveal that residential areas were more widespread, more variable, and more complex. It seems that there may be at least two classes of elite residence not included in Bawden's classic analysis. Bawden correlates cooking or "kitchen refuse" with domesticity and reports such remains associated with platform monuments (Platform A), formal compounds (cercaduras A, B, and C), and specialized production facilities. Given the current popularity of linking feasting to political and religious ceremony (in the Andes and many world regions), "kitchen refuse" becomes a problematic term for interpreting areas of the site that do not exhibit the typical domestic arrangement (sala, cocina, depósito). This research shows that domestic patterns may vary substantially when quotidian pursuits take place side by side with craft specialization or political activities. Feasting remains can be labeled as such only if quotidian meals and their debris are well understood. Different patterns of consumption cannot be categorized without comparative analysis.

Urban and rural households have been an important line of evidence to understand sociopolitical relations underpinning the growth and development of Tiwanaku. The large multiyear Proyecto Wila-Jawira (1986–2000), directed by Kolata (1986, 1993, 1996, 2003a, b), built on methodologies developed during the Chan Chan-Moche Valley Project but went beyond functional analyses and attempted to describe Tiwanaku as a socially and ethnically cosmopolitan urban center. Unfortunately, the architecture was built primarily of adobes set on stone foundations, and seasonal rains have melted walls and left a barren undulating landscape of mounds and concavities. Thus it is challenging to understand the organization of this altiplano city.

Like Bawden's research at Galindo, residential remains have been found in conjunction with ritual space (e.g., the Akapana [Kolata 2003a, pp. 188–190, Fig. 7.17]), craft production (suburban Ch'iji Jawira [Rivera-Casnovas 2003]), and semipublic administrative areas (the Putuni Complex [Couture 2004; Couture and Sampeck 2003]). Comparisons between many contexts provide important insights and have contributed a great deal to understanding Tiwanaku society at large.

Janusek's (1999, 2002, 2003, 2004a, b, 2005) research on the Tiwanaku state compares household activities to understand the social character of the Tiwanaku polity. His recent synthesis pulls in many data sets and examines both diachronic and synchronic differences between residential areas in the Tiwanaku core and other areas of the heartland. While Janusek's (2004a, pp. 88–89) published works examine the diversity of Tiwanaku urban dwellers, identity, and avenues of power, his research was fundamentally conceived to “define the material constitution of the household unit...and investigate the practical rhythms of daily life.” He presents a diverse set of theoretical perspectives on ethnographic households as social phenomena, interpretive models of their material partner (archaeological households), and his approach to residential contexts (Janusek 2004a, pp. 88–94). He describes domestic remains and residential transformations in the Tiwanaku and Katari Basins from the beginning of the Late Formative (200 B.C.) to the Early Pacajes period (A.D. 1150–1470, known more broadly as the Late Intermediate period). Janusek contextualizes these transformations by examining corresponding changes in settlement patterns, monumental constructions, agricultural expansion, and supraregional contact with distant regions to the south and east. His work is a unique contribution because it provides a cross section of Tiwanaku society as viewed through residential activities and articulates social transformations in the residential sphere with broader political processes.

Complementing Janusek's examination of the Tiwanaku heartland, Goldstein's (1993, 2005) work in the Moquegua middle valley reveals an interesting ethnic division between Tiwanaku communities and social segmentation within different settlements. Importantly, Goldstein's household excavations appear to contain in situ deposits. As Goldstein points out, “...quincha (cane-walled) and other ephemeral domestic buildings do not remain standing long after abandonment, and thus their fill may more accurately reflect actual room activities” (Goldstein

2005, p. 194). Ceramic materials and features were the primary means of interpreting room function, but other materials also were included in the analysis. He uses the well-documented residential sample from Tiwanaku altiplateau settlements to draw connections between Moquegua colonists in both tool technology (e.g., utilized camelid mandibles and appearance of locally produced domestic wares) and direct importation of some Tiwanaku-style redware vessels. Nevertheless, the layout and organization of household space demonstrate marked disparities.

Goldstein describes differences between Tiwanaku ethnic groups (Omo, Chen Chen, and Tumilaca) formerly interpreted as chronological phases of occupation affiliated with Tiwanaku IV, V, and poststate populations. House plans of some structures can be found in the volume edited by Aldenderfer (1993a; Goldstein 1993), whereas the more developed descriptions and interpretations are published in his book (Goldstein 2005), along with a large number of artifact photographs and illustrations. Goldstein's (2005, pp. 181–237) focus on household archaeology is in some respects similar to that of Stanish (1989, 1992); he tries to link colonists to a heartland, but coming more than a decade later and having access to far more regional research, Goldstein is able to use the available archaeological data to discuss the many facets in which households are affected by the state.

Also in Moquegua, Conrad and Webster (1989) investigated community sociopolitical organization at the Late Intermediate period site of San Antonio, located in the sierra zone of the drainage. Like Stanish (1989), they examined household patterning to determine if the settlers of San Antonio were an altiplateau enclave. Conrad and Webster (1989) describe dwellings consisting of kitchens and activity rooms, with such units clustered together in larger blocks as groups of related families. Considering their surface and excavation data together, they propose that San Antonio was organized on principles of nested duality with the community organized into two sectors, each of which was further divided in two; thus the site may have been composed of paired moieties like many Inka and modern communities.

Researchers working in northwest Argentina are examining the use of residential space in an effort to understand the relative sociopolitical complexity of the Aguada societies (A.D. 900–1450, uncalibrated). Following the pioneering work of Albeck (1997) and Nielsen (1995, 2001), these scholars are applying concepts drawn from Bourdieu (1977), Giddens (1979), Kent (1990), and Rapoport (1990) to examine the social organization of these complex societies (Nielsen et al. 2007). For instance, Callegari (2007) compares the remains from several residential structures at Rincón del Toro (central Vinchina Valley, La Rioja, A.D. 850–1400) where the dwellings are small, are built on terraces of a hill slope, and fall between round and quadrangular in shape. She demonstrates that relative size difference positively correlates with access to resources. Callegari interprets the local Aguada society in this region as one with existing social stratification. Gordillo (2007), working at La Rinconada (also known as Inglesia de los Indios, located in the Ambato Valley, Catamarca), encounters more formal living arrangements, with a number of rectilinear residences, sharing common walls, arranged around a communally shared patio area. She emphasizes the importance of face-to-face interaction in shared patio space for reproducing

group identity (Gordillo 2007) and the importance of the patio's social unit as a characteristic of Aguada in Ambato. She links this type of social arrangement to antecedents at the Formative period Alamito sites located in the Campo del Pucará (Núñez Regueiro 1998).

Although analyses of the use of space can be successful in defining the social composition of the coresidential group, it seems that researchers dealing with the Aguada phenomenon are challenged by the functional, regional, and temporal variation exhibited by settlements sharing this style of pottery. Rivolta (2007) suggests that vast difference in dwelling morphology relates to the long time span of the Aguada phase; other scholars have asserted that Aguada sites are functionally different, with elites and artisans living near ceremonial complexes and apart from the agropastoral members of the broader society (e.g., Tartusi and Núñez Regueiro 2001). Much work remains to resolve these issues, but as sample sizes grow, the "use of space" approach promises to reveal the degree of social variation within and between settlements as well as regional variation among Aguada groups in northwest Argentina.

Households as economic units

Many definitions of households describe them from an economic perspective as a coresidential group that cooperates in production, consumption, distribution, and reproduction (e.g., Hastorf and D'Altroy 2001; Netting 1982; Rice 1993; Wilk and Rathje 1982). Included in this work are studies of the economies and social composition of hunter-gatherers and early sedentary populations, whereas projects examining complex societies have focused on defining the domestic economy or charting changes in domestic production over time. Other researchers interested in craft production have found that this activity is embedded in residential settings.

Subsistence and the coresidential group

The earliest dwellings in the Andes include temporary shelters made of cane or woven vegetable material built near food resources or in caves (e.g., Engel 1970; Gambier 2002). One may question whether a cluster of temporary shelters qualifies as a dwelling; however, I would argue that comparisons are key to understand developments and that innovations that coincide with sedentary groups building the first permanent dwellings cannot be understood without reference to the constructions of earlier mobile groups. Mobility remains a key aspect of human adaptations in the Andes; in some regions people are still building and occupying such temporary and ephemeral dwellings as part of their subsistence strategy (e.g., Göbel 2002).

To understand subsistence strategies during the Archaic, Levallée and his colleagues (1999) examined campsite activity areas and discard to infer the range of food-getting technologies practiced by hunter-gatherers using the coastal plain in southern Peru. They conducted

stratigraphic probes and horizontal excavations in the Quebrada de los Burros, a dry gully located north of the Sama River in the Atacama Desert of southern Peru. The research team made vertical cuts but also took systematic biological samples across a horizontal occupation zone to quantify botanical and faunal materials. They were able to locate three shelters by noting dense semicircular shell deposits that outlined relatively cleaner areas with far fewer shells. The excavators presume that the dense shell arcs are materials deposited along the exterior edges of tents or hut walls. Having identified such an occupation surface, they associated the variety of tools and food remains present with a single group who could fish with line, nets, or harpoons, on shore or from boats, as well as hunt terrestrial species. Thus ca. 7400 B.P. (corrected shell date see Levallée et al. 1999, p. 23) hunter-gatherers using this zone were versatile, possessed a number of technologies, and were not solely dependent on marine or terrestrial resources.

Aldenderfer (1993b, 1998) used residential remains at Asana to examine changes in subsistence through time. Asana is an open-air, high-altitude site in the upper Moquegua (also known as the Osmore) drainage of southern Peru that was occupied for much of the Archaic period (ca. 9800–3600 B.P.). Aldenderfer (1998, p. 109) documented foragers' adaptations to conditions at high altitude and was concerned with "activity performance." He studied the materials on living floors to classify them as primary or secondary deposits. The resulting study is useful for researchers interested in domestic groups and quotidian activities in this early period. Horizontal block excavations uncovered 14 occupation levels, 12 of which exhibited shelters or dwellings and the intervening exterior spaces. In all, 60 residential units were exposed, but many of these were not excavated in their entirety, overlapped other house floors, or were otherwise disturbed.

Aldenderfer uses this exceptional sample to compare subsistence patterns based on faunal and botanical material as well as lithic technology. It is an exceptional archaeological example of changing domestic patterns during the Archaic period as subsistence activities moved from hunting toward herding.

Damp (1988) excavated at Real Alto, a Valdivia site located in the Chunduy Valley, Ecuador, to examine the economy of a small settlement in the early phase of sedentary lifeways (the earliest occupation of Real Alto, ca. 3300 B.C., uncalibrated; see Damp 1984, p. 574 and Damp 1988, pp. 28–29 for a discussion of dating). Damp was able to identify several shelters on an occupation surface and differentiate disposal areas from activity areas. He provides a broad description of the early settlement at Real Alto and suggests that it and contemporary Valdivia I sites were purposely located near arable land, basing their economies on resources within a 5-km catchment zone. This contrasts with the earlier Las Vegas occupation (10,000–6600 B.P., uncalibrated), which consisted of nonspecialized foragers. Stothert (1985) worked at the earlier Las Vegas site where she looked for dwellings and activity areas; however, she was able to identify only one structure. She suggests this was due to the mobile and shifting nature of the occupation; shelters had little longevity and sequential reoccupations of the sites disturbed most domestic areas (Malpass and Stothert 1992). Together the work of Stothert (1985), Damp (1984, 1988), and Zeidler (1983; Stahl and Zeidler 1990) shows how residence, subsistence, and the

composition of coresidential groups changed from Las Vegas to Valdivia I as groups became less mobile; they also were transformed later as Real Alto grew into a ceremonial center in Valdivia III (ca. 2100 B.C., uncalibrated).

The domestic economy

One of the largest multidisciplinary and long-term projects undertaken in the Andes is the Upper Mantaro Archaeological Research Project (UMARP), which was led by Earle in the late 1970s to the mid-1980s. The project integrated investigations at a number of scales and primarily focused on data derived from survey and household excavations to examine changes in the Xauxa domestic economy between the Late Intermediate period, when regional groups were autonomous (Wanka II-A.D. 1300–1460), and the Late Horizon as they came under Inka hegemony (Wanka III-A.D. 1460–1533).

The scope of the UMARP project, in terms of sites ($n = 6$) examined and houses sampled ($n = 31$), is rare in Andean research. Houses reportedly consisted of one or more circular rooms (called structures) facing inward onto an irregularly bounded patio space. Each patio group's architectural layout is carefully illustrated, with features such as middens, hearths, and burials indicated (Earle et al. 1987). Wanka II settlements were densely packed, surrounded by defensive walls, and located on hilltops. More dispersed settlements followed during what is inferred as peace imposed by the Inka during Wanka III.

Dwellings were classified as either elite or commoner based on the quality of wall construction, overall size, number of rooms, and location within the site in relation to public spaces. The sampling strategy prioritized the collection of botanical materials (Earle et al. 1987, p. 6). Houses were selected by random and judgmental sampling. Excavations focused on collecting dense accumulated midden deposits along the interior of patio walls.

The initial monograph resulting from the project synthesized the results (Earle et al. 1987) by phase (Wanka II or III), by site, and by commoner versus elite units. This research documented interesting facets of the local economy and how residential production, consumption, and exchange were affected by the incursion of the Inka empire. Later publications provide more nuanced views of social, political, and economic change. Hastorf and D'Altroy's (2001) introduction to *Empire and Domestic Economy* (D'Altroy and Hastorf 2001) provides many new perspectives on the potential for household data to document the nature of face-to-face interaction and the role of different kinds of spaces for feasting and political activity. The accompanying chapters present detailed analyses of different artifact types that complement previous interpretations. Given the contextual manner in which the dwellings were excavated and the high quality of postexcavation analysis, the opportunity remains to publish a monograph linking artifact types with domestic activities that would contribute to interregional comparisons and allow other researchers to build on this important data set.

Bermann's (1993, 1994, 1997, 2003) research at Lukurmata examined changes at a smaller scale and provides the material correlates archaeologists need to make comparisons between settlements or societies. He excavated a sequence of households from several periods of occupation (ca. 100 B.C.–A.D. 1300) to gain a bottom-up view of political formations and social change. Lukurmata is located in the Katari Basin overlooking large tracts of ridged fields (Kolata 1986) and is sometimes referred to as the second city of the Tiwanaku heartland. Bermann, in general, is cautious about the enterprise of household archaeology and views remains found in houses as incomplete and nonrepresentative of the total range of domestic activities. Despite his cautious nature, Bermann's work remains one of the best examples of household archaeology in the Andes because he examines activity areas, distinguishes between primary and secondary deposits, and presents his findings in a detailed manner, dwelling by dwelling.

Bermann (1994, p. 9) advocates multilevel approaches because “they prevent us from assuming that similar sites interact equally with the capital, or that smaller sites are passive, static recipients of change from higher levels.” He suggests that culture change often originates at the household level. He compares 11 different occupation floors at the regional, site, household, and subhousehold levels. Each phase of occupation is described and accompanied by valuable artifact illustrations and corresponding inferences about the domestic activities they represent. Bermann uses Wilk's (1991, p. 37) “activity groups” because this concept facilitates diachronic comparison and comparative analysis between domestic activity groups and other activity groups in the broader community; it further views households as systems that follow a set of rules that can be inferred from documenting repeated patterns of material remains. Bermann (1994, p. 25 citing Bawden 1990) asserts that “the goal of household archaeology should involve study of the organizational principles underlying patterns of household remains.”

To examine the impact of Lukurmata's participation in the Tiwanaku state on this previously independent settlement, Bermann (1993, 1994, 1997, 2003) compares changes in architecture, common domestic activities, and the domestic pottery assemblage. He found that artifacts representing common domestic activities changed the least throughout Lukurmata's occupation at the same time that the organization of these activities changed in dramatic ways. Interestingly, the most notable changes in the ceramic assemblage did not correspond to shifts in residential architecture or the organization of domestic activities in dwelling space.

Craft production

In the Andes today and in the past, craft production is more commonly embedded in the domestic economy rather than located in a specialized production facility. Thus researchers examining domestic zones have uncovered production areas, and scholars targeting craft production surface scatters find themselves digging in dwellings.

Topic's (1982, 1990) early research as part of the Chan Chan-Moche Valley Project examined the characteristic activities that took place in small irregular agglutinated rooms, which clustered in four areas of the Chimú capital. These constructions were at times residential but also included other kinds of facilities. Topic sought to understand the organization of urban residence, the relationships between residents in the four barrios, and the relationships between barrio dwellers and elites at the site. He described different residential structures and their features, workshops, other barrio complexes, and a special facility perhaps meant to house transient traders who moved goods in and out of the city via camelid caravans. He noted some differences in the use of residential space but did not encounter a repetitive residential layout like that reported by Bawden for Galindo.

Topic (1982, 1990) does an exceptional job of describing activities in residential and nonresidential spaces. He provides the material details that correspond to his interpretation, thus allowing the reader to judge if these conclusions are correct or not. The reader can evaluate these early data based on more recent findings. As such, Topic's research continues to be valuable to scholars working in the region and serves as a building block to understand how craft specialization can simultaneously be housed in residences and special facilities. Arguably, Topic's rich narrative, which intertwines space, artifact, and activity, sets the model for later Andean researchers interested in the relationships between groups interacting in dense urban settlements.

Similarly, Shimada's (1994) work at the Lambayeque Valley site of Pampa Grande in 1975 and 1978 focused on craft activities, particularly craft specialization of urban dwellers on the north coast of Peru. Shimada's comprehensive book emphasizes different aspects of the urban sphere at this late Moche (ca. A.D. 600–750) center. The research program at Pampa Grande was extensive and could be grouped with other studies that focus on the functional components of urban settlements, but Shimada went a step further. In general, Shimada (1994, p. 169) finds that residences at Pampa Grande exhibit similar patterns to that described by Bawden for Galindo; however, they are combined in larger complexes with shared special facilities for administration, crafts, or both. One extra wrinkle adding to class differentiation at Pampa Grande is the idea that both Mochica and non-Mochica locals occupied different areas of the site and can be distinguished based on differences in residential architecture and the affiliated assemblages (Shimada 2001, pp. 181–183).

Importantly, many of the Pampa Grande contexts that Shimada describes can be considered residential, but it takes a dedicated close reading of the presented data to extract information about specific households and the nature of residential space as it intersects with various other facets of urban life. Shimada (1994, p. 222) asserts that his goals were to examine individual activity areas and integrate them into larger scales of spatial organization, but given his research questions, the activity areas that are presented in detail are more focused on craft rather than domestic behavior. He makes valuable comparisons of the material remains of chicha production

versus food preparation and provides descriptions of weaving, shell ornament production, ceramic production, and metallurgy (Shimada 1994, pp. 199–224, 2001).

Shimada interprets the production of most goods as the result of commuting laborers under the close supervision of coordinating elite officials at the site. He emphasizes the existence of specialized workshops but does concede that the laborers could have been commuting from other parts of the same compounds (Shimada 1994, p. 224). It would, of course, change the structural dynamic of production if these workshops were located within the residences of overseeing elites or within the extended family group compound of a kin-based production group. In either case, Shimada successfully demonstrates that administration, formal political activities, and craft production were at times embedded in household space, making the published works on Pampa Grande a relatively good source for cross-cultural comparisons of urban residential organization.

Households as political units

Some researchers have considered households as subunits of large polities; although they similarly look at production and consumption, they are particularly interested in how the domestic economy intersects with the political economy. These researchers use domestic data and are interested in the economic activities of the household, even though these economic activities are rarely described.

Households and the state

One of the earliest such projects was focused on Huánuco Pampa in the central Peruvian highlands; yet it was more broadly conceived by Murra to understand village life under provincial Inca rule by combining historical information from a 16th century visita to Huánuco (Ortiz de Zuñiga 1967 [1562], 1972 [1562]) with archaeological research (Morris and Thompson 1970, p. 344). The project was conducted from 1964 to 1966 and included mapping, surface collection, and test excavations of the vast Inka installation, as well as survey of the Huánuco region and test excavation of subsidiary sites. Historical details of political organization, populations, and settlements in the region were used to interpret archaeological sites and affiliated remains. The research resulted in a huge quantity of data.

The majority of published work describes Inka-style monumental architecture at the provincial center of Huánuco Pampa, its storage facilities, and how this center fit into the administrative hierarchy of the state and served Inka imperial logistics of expansion (see Morris 1982, 1985, 1992). Featured residential contexts include an Inka palace and a residential complex interpreted as an aqllawasi (Morris 2004; Morris and Thompson 1985). Both are specialized residential contexts; the palace exhibits evidence of political activity, and the aqllawasi, an enclosure where

selected girls and women lived and worked, contains evidence of weaving and beer making. The facilities within these two contexts, combined with the vast size of the adjoining central plaza and the sheer volume of storage space for consumables, are the necessary material correlates for the Inka mode of production (see Godelier 1977) or the state's political economy based on reciprocity. Thus food production and consumption, conventionally confined to the domestic realm, were transformed with the application of ethnohistory and discussed as part of the public political domain.

The support settlements, while apparently documented and studied, quickly took a back seat to more spectacular finds that fit more easily into generalized models of Andean statecraft or imperial expansion. Residential contexts, at both the center and surrounding sites, are described primarily as architectural artifacts that exhibit differences of form and as contextual containers of pottery. Based on these comparisons, details of differences between houses with regard to activity and affiliated assemblages were known to the extent that conclusions could be drawn about the variety of constituent domestic groups, productive activities, and politico-economic status. Nevertheless, the residential activities were not selected from the large corpus of findings for more than cursory description in the resulting publications. The most detailed account of modest residential structures appears in Huánuco Pampa (Morris and Thompson 1985, pp. 119–162). The features supporting political activities were emphasized. One remarkable facet of this research was the opportunity to match ruined sites with historical census. Thus in many cases Morris and Thompson were able to correlate descriptions of the social units that actually lived in a location during a particular period in time with the archaeological remains of house structures. This research also demonstrated that ethnic differences documented historically could be recognized by examining community organization and house form.

The Huánuco Pampa project provided valuable information about Inka state logistics, storage technology, administrative organization, and the nature of interactions with local populations. Insights about residential units at the provincial center and their relations with the surrounding sites remain to be achieved. Since Huánuco Pampa is the best-preserved, large-scale Inka provincial center, and there are existing ethnohistorical data for the towns and villages in the region shortly after the Spanish conquest, comparative household research combining archaeology and ethnohistory still holds great potential for revealing significant aspects of “Inka provincial life” as the project originally proposed (Morris and Thompson 1970, p. 344).

An earlier intrusive provincial center of the Wari empire at Cerro Baúl has been the subject of a similar study; although lacking historical documents, researchers are looking at the imperial province to understand the political organization of the Wari polity. Excavations at Cerro Baúl have uncovered monumental structures used as secluded temples, theatres of public ceremony, storage facilities, meeting halls, and both Wari and Tiwanaku affiliated residences (Moseley et al. 1991, 2005; Nash and Williams 2005, 2009; Williams 2001; Williams and Nash 2002, 2006). A comparative examination of households is revealing interesting differences between socioeconomic groups occupying different sites in the colony. Monumental residential

complexes and more modest houses at Cerro Baúl have been compared with residences of various sizes at other settlements in the colony, such as Cerro Mejía (Nash 2002), to examine the political economy of the Wari colony (Nash and Williams 2009).

Residential contexts were compared based on the inventory of different activities, the spatial organization of those activities, and how artifacts such as cooking pots or hammerstones varied in form, use, or production technology among different residential settings. In addition, connections between the elites running the colony and other people occupying sites in the region were traced using INAA and ICPMS to chart the exchange of undecorated pottery (Moseley et al. 2005; Nash 2002; Nash and Williams 2009; Williams et al. 2003). In situ artifacts were plotted on house floors and the assemblage from each house was compared to enumerate a suite of common residential activities. Interesting patterns emerge when household assemblages are examined and compared in a contextualized manner. For instance, lithic analysis permits finished goods to be plotted differently from production waste to identify bead production as a potential tribute activity; based on spatial patterning garbage can be distinguished from ritual deposits; and faunal remains resulting from ritual versus quotidian activity can be considered separately to define dietary differences (see Moseley et al. 2005; Nash and Williams 2009).

Examination of the organization of activities within house structures brought the social composition of households into focus, while comparisons between residential domains identified Wari administrative activities and significant elements of the political economy. Similar to Van Gijsegem's (2001) interpretations for Moche, the largest house structures at Cerro Mejía have the longest occupation history. Also, household assemblages with the largest quantity of fineware ceramics correspond to houses that exhibit evidence of remodeling, expansion, and duplicate activity areas that likely indicate extended family groupings. Houses with no overt trappings of Wari affiliation could be tied to the overarching political hierarchy because small-scale village leaders used a more modest assemblage to emulate the patterned ceremonial activity practiced by provincial officials in their palaces (Nash in press). Given the class-related difference in the relevant ritual assemblage, such a connection would have been difficult to make without looking at the deposition of materials documented on field maps. The number of houses excavated at Cerro Mejía remains small ($n = 10$). Future work, however, is planned and comparisons between houses of different size and elaboration promise to provide significant data sets for understanding dietary differences, tributary production, and the Wari provincial political economy.

Houses of state

Current research of residential contexts reflects trends in the discipline and uses a number of means, primarily architecture, to understand power relations. For this reason palatial complexes are often described in more detail, both in layout and artifactual remains. In recent years two

edited volumes on ancient palaces have been published. Both collections include articles pertaining to Andean societies (Christie and Sarro 2006; Evans and Pillsbury 2004). Palaces have received special attention for many years and have been described because of their importance in understanding political activities and as markers of political complexity.

Although some scholars would define palaces as “the residence of a sovereign” (see Isbell 2004a, p. 194), it may be more productive to broaden the search and look for those residential complexes that incorporate activities essential to managing the state. Determining which large house is the biggest or the grandest may be less important than defining what elites are doing in their houses and how these activities relate to political interactions, control of the polity’s economy, or the use of symbols to legitimize power relations. As such, comparing “palaces” between polities might reveal significant differences in their respective political organization and the roles of elite actors.

Shelia and Tom Pozorski (2002) have identified what might be called the earliest Andean palace. They have been examining large nucleated sites of the Initial period (2150–1000 B.C., calibrated) in the Casma Valley in northern Peru for more than two decades. Their research has revealed a series of connected sites with monumental architecture, including elite residences elevated on truncated, stone-faced adobe pyramidal constructions. At *Taukachi Konkán* (a component of the larger *Sechín Alto* complex), the principal monument, the *Mound of the Columns*, seems to have served as an elaborate elite residence or palace.

The *Mound of the Columns* is a symmetrical pyramidal building (80 m × 90 m), elevated 10 m above the plain. The complex is named for its spectacular public area, featuring more than 100 columns in the central atrium and surrounding structures. Radiocarbon dates and architectural style show that the residence was built and used during the *Moxeke* phase (2150–1350 B.C., calibrated) of the Initial period. Excavation has identified areas for storage, audience, ritual activity, and private living quarters. The elites and their activities were served by kitchen facilities just off the mound to the south, accessible by a narrow hidden stairway. Like later *Chimu* *ciudadelas* and *Inka* palaces, the mound architecture was divided into three zones and incorporated large-scale public areas and smaller private quarters (Pozorski and Pozorski 2002).

This rare find and synthesis must be credited to the Pozorskis’ comparative knowledge of the contemporary architectural features and the extensive excavation strategy that allowed them to understand the organization of the whole complex. After the Initial period, palaces in the archaeological record are not known until the Middle Horizon. This may have to do with the association between palaces and state-level societies (see Flannery 1998); but as Pillsbury (2004) has discussed, it is equally likely that Andean archaeologists just shy away from cross-cultural phenomena. Hidden in the writing about elite residences or domestic activity on temple mounds may lie a few “palaces” (e.g., at *Cardal* [Burger and Salazar-Burger 1991]) from earlier periods.

The Huari Urban Prehistory Project (HUPP), led by Isbell, focused on understanding the development of the urban center Huari, the capital of the Wari empire. This work built on his earlier excavations at Jargampata (W. Isbell 1978). The project also used survey findings from the Ayacucho Archaeological Botanical Project (MacNeish et al. 1981) to provide a regional backdrop. HUPP conducted survey, mapping, surface collection, and excavation between 1974 and 1981. Further work and follow-up analysis was unfortunately cut short by the growing threat of terrorism from the Sendero Luminoso (The Shining Path).

Nevertheless, HUPP produced several dissertations, one of which was focused on a large elite residential compound, Moraduchayoq (Brewster-Wray 1990), the construction of which corresponds to the development of Huari as an urban center. Huari was organized to some degree on a grid and was “composed of walled compounds surrounded by streets” (Isbell et al. 1991, p. 47). Moraduchayoq has become the basis for modeling the development of state administrative practices in the Wari empire, which are of interest here because they are described as taking place within the residential sphere (Brewster-Wray 1983; Isbell et al. 1991). This urban residential compound, as described and mapped by the investigators, includes different components: nine patio groups, a platform area, and a cluster of small irregular agglutinated rooms (to borrow from J. Topic [1982]). The large repeated units, dubbed “patio groups,” received the most emphasis, perhaps because these larger features could be identified at other known Wari installations (e.g., Pikillacta [McEwan 1987, 2005]; Viracochapampa [J. Topic 1991; J. Topic and T. Topic 2001]).

Excavations sampled “lateral halls” and “patio space” in all but one of the nine patio groups of the Moraduchayoq compound (see Isbell et al. 1991, p. 39, Figs. 21, 22). Lamentable is the level of disturbance reported, which often made it difficult to interpret features such as hearths from other forms of ash deposit. In addition, most of the materials were described as secondary deposits and interpreted as garbage produced within the compound. Interpretation of the activities within Moraduchayoq was based on the frequency of serving vessels (cups and bowls) relative to the frequency recorded from a previously excavated domestic compound at the hinterland site of Jargampata (W. Isbell 1978). Since material evidence of craft activity was absent and artifacts associated with chicha serving predominated, the compound as a whole was interpreted as the living quarters for a group of middle-class administrators charged with feasting subordinates (Brewster-Wray 1983; Isbell et al. 1991). This interpretation has important implications for understanding the nature of political activity in archaic states and was based to some degree on Morris and Thompson’s (1985) work at Huánuco Pampa.

Isbell has continued to look at elite residential areas and their relationship to state administration. In a recent publication he combines the characteristics of known royal housing from the Inka empire (Morris 2004) and the Kingdom of Chimor (Day 1982) to define attributes that may help archaeologists identify earlier palace complexes (Isbell 2004a). His analysis starts with a summary of Eeckhout’s (2000) research on the “pyramids with ramps” at Pachacamac, which were occupied during the Late Intermediate period and Late Horizon, and then moves backwards

in time, applying palace criteria to a number of Middle Horizon monumental complexes. Unfortunately, the discussion relies primarily on architectural features and the presence of human remains. Isbell (2004a) postulates interesting research objectives for future research at sites such as Huari, Viracochapampa, Pikillacta, Omo, and Tiwanaku. In a later article, he revisits these issues and expands his analysis to consider different types of elite residences and discusses a larger number of sites, particularly the evidence from Conchopata (Isbell 2006, see also Isbell 2000).

Tiwanaku, as a capital city, should incorporate a palace structure and elite dwellings that exhibit lesser-quality goods and architecture. Although the layout of the urban settlement at Tiwanaku remains unclear, monumental constructions at the site's core have been excavated by a wide array of investigators. Couture's (2004) research of the Putuni complex, built during Tiwanaku V (ca. A.D. 800–1100), situates the palace in the context of elite activity and changing political ritual. The complex consists of an elevated platform with sunken rectangular court, which incorporates finely made stone compartments or niches with doors. These niches may have held ancestral mummy bundles or other ritual goods, and like much of Tiwanaku's monuments these features are related to earlier ceremonial architecture in the region (e.g., Chiripa [see Hastorf 2005, pp. 76–80]). A more private sector consists of a group of four buildings surrounding a stone-paved patio, two of which have been excavated (Couture 2004; Couture and Sampeck 2003). An earlier underlying Tiwanaku IV complex, although elite, demonstrates a different configuration of residential space. Couture contextualizes these changes and discusses how transformations in elite activities and political organization are reflected in the remodeling of palatial architecture.

State development in the Middle Horizon also can be linked to changes in the role that elite residential structures played in Wari provincial political relations. Similar to Tiwanaku, the Wari site of Cerro Baúl saw major renovations sometime between A.D. 800 and 900 (Williams 2001; Williams and Nash 2002). Some complexes at the site were used as elite residences, ritually abandoned, and left without remodeling. The activities set within these earlier compounds were seemingly shifted to larger, more monumental constructions located away from elite residential compounds in the later half of the Middle Horizon. By taking state hospitality out of the personal domain of provincial intermediaries, perhaps the Wari state was attempting to consolidate its power by making more direct ties between local lords and state bureaucrats rather than supporting the power bases of provincial elites (see Nash and Williams [2005] for a complete discussion). While this hypothesis requires further testing at Cerro Baúl, the timing of these shifts in the organization of elite residential space and other monumental venues at two Middle Horizon sites may signal important changes in elite power, such as the solidification of royal power as Couture (2004) suggests for Tiwanaku.

Andeanists must be careful not to project too much of the Inka or the Chimu back onto earlier states, such as the Moche, Tiwanaku, and Wari. Archaeologists have long held an interest in and have examined how the polities of the Middle Horizon are related to those of the Late Horizon.

In fact, some have suggested that the *ciudadelas* of Chan Chan have their origin in Wari compounds such as Moraduchayoq (e.g., McEwan 1990; Topic 1991); however, compound architecture predates Wari expansion. Nevertheless, Moore (1992, 1996, 2005) has looked at this idea and others related to the development of elite residential architecture, particularly on the north coast of Peru (see also Bawden 1983). He suggests that the high walls of the Chan Chan *ciudadelas* represented exclusive boundaries separating Chimú's royal class, particularly the king, from the subject population. In his book, *Architecture and Power in the Ancient Andes*, Moore (1996) focuses primarily on public architecture. In several cases, however, this overlaps with monumental complexes containing residential components. Interestingly, he notes a similar trend on the north coast to that exhibited by Wari and Tiwanaku architecture. Contrasting the relative accessibility of the Huaca de la Luna at Moche with the enclosed mound architecture at Galindo (Bawden 1982a) and Pampa Grande (Haas 1985), Moore (1996, p. 58) refers to these differences as an expression of the "greater social stresses between commoners and elites on the north coast." Recent excavations at Huaca de la Luna, however, show that it also was relatively inaccessible (Uceda and Tufinio 2003); restricted access was an early development that may have become more pronounced in the Chimú polity.

Pillsbury and Leonard (2004) examine features of monuments in the Moche and Chicama Valleys and identify Galindo and Sonolipe (a monumental center in the Chicama) as precursors to the *ciudadelas* at Chan Chan. Pillsbury and Leonard emphasize the shift from large huacas built in stages, perhaps in a sacred location expressing continuity, to smaller monuments and associated compounds built as singular events extending over larger horizontal spaces. Nevertheless, they stress that *ciudadelas* seem to be a unique "Chimú experiment," with the colorful friezes displayed on public monuments ultimately sequestered within the restricted confines of high *ciudaduela* walls (Pillsbury and Leonard 2004, p. 285). Current dates from the Moche site complicate a smooth chronological narrative, and it may be that for a time north coast elites using different strategies and occupying different kinds of residential complexes competed for power in pre-Chimú times. These debates use the architectural forms as their primary type of evidence; however, practices can change without immediate modification to the built environment (Conklin 1990).

Morris' early work in the Inka royal residence at Huánuco Pampa and later comparisons between it and the Inka palace at La Centinela in Chíncha are perhaps the catalyst for much of the research on the role of feasting and its significant part in the state's political economy. Further research of elite residential compounds and the activities of elites at large centers can add greatly to our understanding of state development in the Andes and other world regions. Nevertheless, such analyses with few exceptions are problematic because they are typically made based on architectural features alone and often lack the necessary sample of "commoner" or "middle class" houses to make meaningful comparisons. Monumental dwellings are typically disturbed by looting or filled with large quantities of postoccupation material presumed to be later refuse;

however, a few recent studies show that these deposits may not be garbage but materials associated with the ritual interment of the dwelling.

Dwelling interments

Research from all parts of the Andes has documented human burials in dwellings and under house floors. This pattern goes back to the earliest dwellings in the Archaic (Engel 1970) and culminated with the royal Chimu palace interment (Conrad 1982) or the Royal Inka practice of venerating unburied mummies in the dead ruler's palace (Sarmiento de Gamboa 2007 [1572], p. 154). As these latter cases indicate, residential interment was a selective phenomenon. Burials below house floors, in abandoned houses, or within the walls of dwellings were not restricted to elite members of society. It also appears that not all members of the coresidential group were chosen for this type of burial.

Residential burial is so common and widespread through space and time in the Andes that the topic could be the subject of its own review article. In many cases, such finds are documented in great detail along with associated goods. The excellent preservation in most areas of the Andes often permits detailed studies of the individual. Burials may be primary or secondary, complete or partial (such as a trophy head), and in some cases may have been dedicatory sacrifices or interments that coincide with the construction of the house. Although review of the numerous cases is not appropriate here, it is important to recognize the close relationship that some forms of ancestor worship had with the dwelling itself, its occupation, and its abandonment.

Since dwellings may have been built through a ritual process like those of the ethnographic present (e.g., Arnold 1992; Gose 1991; Mayer 1977), it stands to reason that their abandonment, especially when corresponding to the death of a family member, may also have required ritual activity (see B. Isbell 1978, pp. 128–132). The practice of temple interment in the Andes is well documented (e.g., Bragayrac 1991; Burger and Salazar-Burger 1985, p. 116; Izumi and Terada 1972, p. 30; Shimada 1986; pp. 166–172), and these successive build-and-fill events often incorporate human remains as well (see also Blom and Janusek 2004). Recent research, particularly horizontal excavations of residential areas, suggests that some houses also received ritual closure. It remains to be seen if this practice relates to the burials within or is related to other cosmological imperatives.

Donnan (1964) describes a cane house dating to 5370 ± 120 B.P. (uncalibrated) from the Preceramic site of Chilca in central Peru. The house appears to have been purposely collapsed over the burials of seven people because stones were placed on some walls. The house was semisubterranean and the human remains were wrapped in mats laid on the floor, piled on one another rather than being placed in cists below the floor. The preservation of the skeletal material was poor; the cane house, however, was in such good shape that the research team was able to create a full-scale replica at the Paracas Museum to understand its construction.

Clearly the burials prevented further use of the house, but this is not always the case. At the Wari site of Conchopata residential structures include a mortuary room in which individuals were buried below the floor and offerings to the deceased were placed on the floor of the room. Evidence suggests that subsequent offerings were added over a period of time and the density of offerings would have prevented the room from being used for other purposes. In contrast, other individuals were buried under patio floors associated with ritual pot smashes of fine Wari pottery (Isbell 2000, 2004b; Isbell and Cook 2002) that essentially put these spaces out of use and likely ended the use of the entire dwelling. Thus when the individual that was buried in the patio space died, the dwelling lost its life too.

Cerro Baúl, the Wari provincial center in Moquegua, also exhibits this pattern; however, the subpatio burials found thus far have been looted. Interestingly, the palace on Cerro Baúl exhibits only ritual pottery smashing on floors where subfloor burials were located. Other rooms have smaller numbers of pots clustered as abandonment offerings in doorways rather than covering the entire area of the room. Further research is needed to document the relationship between burials in dwellings and other patterns of ritual abandonment. Such pot smashes might be easily mistaken for postoccupational garbage disposal; however, the high percentage of unexhausted obsidian bifaces, intact metal objects, and unbroken ornaments of different kinds may be useful in determining if dense pottery deposition, once presumed to be garbage, may have been the material of a ritual deposition. Of course, the future excavation of dwellings can document the patterning of deposition, the size of discarded fragments, and the presence of ash and other kinds of organic sediment to determine if dense artifact deposits found on house floors resulted from episodic garbage disposal or ritual activity.

Conclusions

Although Andean households are being investigated by archaeologists in a number of ways, such studies are difficult to find. If one searches for “household,” “house,” “residence,” “residential,” or “domestic,” few articles that discuss excavated residential remains appear (see Table 1). It is as if these topics are somehow kept undercover, out of sight, and in the more limited sphere of dissertations or unpublished project reports. As this review has shown, Andean archaeologists recognize the value of data from residential contexts, but the topic of domestic behavior or the material features and residential activity are rarely reported. Other broader issues are in the forefront, such as the political economy, the role of prestige goods or craft production, and other issues pertaining to social complexity or state development. Domesticity, quotidian activity, and daily home life are not sexy, and the archaeological methodology required, in both excavation and analysis, is costly in time and labor. In economic terms, the rate of return between investment and publication is low relative to other themes, and archaeologists must often dedicate 5 to 10 years to a site or small region before meaningful results can be compiled and described.

Table 1JSTOR Article Abstract Search Results for Archaeological Publications^a

Search terms		Articles	Total
House or Household	Andes	Hildebrand and Hagstrum 1999; Stanish 1989	2
	Argentina	Lanning and Hammel 1961	1
	Bolivia	Lanning and Hammel 1961	1
	Chile	Lanning and Hammel 1961; Pärssiene and Siiriäinen 1997	2
	Ecuador	Stahl and Zeidler 1990	1
	Peru	Costin and Earle 1989; Costin and Hagstrum 1995; Donnan 1964; Lanning and Hammel 1961; Stanish 1989; Van Gijsegem 2001; West 1970	7
Domestic	Andes	Aldenderfer 1988; Goldstein 2000; Kadwell et al. 2001; Stanish 1989	4
	Argentina		0
	Bolivia	Bermann 1997; Bermann and Estévez Castillo 1995	2
	Chile		0
	Ecuador	Stahl and Zeidler 1990	1
	Peru	Aldenderfer 1988; Burger and Matos Mendieta 2002; Burger and Salazar-Burger 1991; Goldstein 2000; Pozorski and Pozorski 1986; Schreiber and Lancho Rojas 1995; Shimada and Shimada 1985; Stanish 1989 and 1994; Vaughn and Neff 2000; Verano et al. 1999	11
Residential or Residence	Andes	Aldenderfer 1988; Blom and Janusek 2004; Goldstein 2000; Janusek 1999	4
	Argentina		0

Search terms		Articles	Total
	Bolivia	Bermann 1997; Bermann and Estévez Castillo 1995	2
	Chile	Dillehay 1990	1
	Ecuador		0
	Peru	Aldenderfer 1988; Bawden 1982a; Dillehay et al. 1989; Goldstein 2000; Haas 1985; Isbell 2004b; Marcus et al. 1999; Rice 1996; Shady Solis et al. 2001; Van Gijsegem 2001	1
All terms		Combined results	32

^a Search conducted on June 1, 2008 through the University of Illinois-Chicago Library resources

Yet, as a handful of studies show, the contextualized analysis of residential remains can address problems of anthropological significance better than the isolated consideration of a particular artifact type. Topic, Bawden, and Janusek have been able to address complex questions in stratified societies because they problematized the sources of their data—households—and incorporated ideas about these fundamental social groups in developing their diverse theoretical and methodological approaches to the archaeological study of state-level societies.

The pattern Allison (1999, 2004; see also Flannery 1976; Flannery and Marcus 2005) has outlined for household archaeology in general pertains to the Andes. Many use architecture to discuss activity and artifacts to understand social, economic, and political differences. The nature of archaeological specialization often divides the excavator from the analyst so that contexts are described in one set of publications or chapters while decontextualized materials are classified and compared in others. More productive would be to combine context and artifact to understand activities and the use of space, especially when building comparative models of social, political, or economic difference.

In many respects the Andean research region is a young one. There are valleys, both coastal and highland, that have not been surveyed, and many sites and archaeological cultures remain to be discovered, documented, and reported. Andean archaeologists have few published typologies to standardize the terms of artifact classification, and many regions lack a solid culture history on which to base hypothesis-testing research. Household archaeology is a phase of research that necessarily is designed and undertaken after regional settlement patterns have been defined and cultural chronologies are established. The prodigious work involved in excavating and analyzing large contiguous horizontal layers of well-preserved sites in arid areas is equally daunting to the

challenge of finding and defining residential areas in dense clusters of collapsed stone-wall debris in remote highland locations. But to understand extinct Andean societies in their own terms and to make work on these groups comparable to the work of other archaeologists, detailed residential excavations are required; typologies of both domestic goods and elaborate elite artifacts need to be published.

Since more and more projects are turning to domestic data sets to test their models, Andean archaeologists must describe and discuss the material correlates of their residential finds. A laundry list of activities without artifact drawings or a listing of artifacts without context or interpretation does not allow for meaningful comparisons. The biggest challenge facing the archaeology of Andean households is to find middle-range connections between ethnographic and ethnohistoric institutions (e.g., *m'ita*, feasting versus daily meals, ritual smashing versus secondary garbage disposal, etc.) and their material correlates. To move the research of Andean households forward, I suggest that ethnoarchaeology of domestic activities and experimental archaeology accompany research programs to aid in understanding depositional processes, to test the material correlates associated with different kinds of activities, and to examine the material overlap in dwelling assemblages between houses occupied seasonally by the same coresidential group and the dwellings used by related cooperative families in different ecological zones.

In this review I have highlighted some of the important research being done on residential contexts in Andean archaeology. I also have discussed different approaches to domestic data sets and the wide variety of research questions being addressed through the exploration of residential remains. This review is not comprehensive; I have tried, however, to highlight some of the important trends in the history of household research. For the most part, there has been a positive trend away from a “monument-only” focus to a broader, more encompassing strategy that includes houses and their associated material remains. There is much remaining to be discovered about ancient Andean societies, and a more contextualized examination of archaeological households offers great promise for building more nuanced models of the social, political, and economic facets of this rich and diverse culture region.

Acknowledgments

My interest in household archaeology, especially in the Andes region, has been cultivated by fieldwork and discussions with a number of colleagues including Monika Barrionuevo Alba, Nicole Couture, Paul Goldstein, Elizabeth Klarich, John Janusek, Charles Stanish, Jason Toohey, Hendrik Van Gijseghem, and Kevin Vaughn. I am particularly grateful for Susan de France, Michael Moseley, and Ryan Williams who have been supportive collaborators in my research of Andean households on the Cerro Mejía and Cerro Baúl Projects. I also must thank Betty and Roberto de Olazabel whose warm welcomes into their Andean household have always made my visits to Peru like arriving at a second home. I thank the editors for inviting this contribution and the reviewers for making it worthy of publication. Any errors are, of course, my own.

References cited

- Abercrombie, T. A. (1998). *Pathways of Memory and Power: Ethnography and History among an Andean People*, University of Wisconsin Press, Madison.
- Adán A., L., Urbina A., S., and Uribe R., M. (2007). Arquitectura pública y doméstica en las quebradas de Pica-Tarapaca: asentamientos y dinámica social en el Norte Grande de Chile (900–1450 D.C.). In Nielsen, A. E., Rivolta, M. C., Seldes, V., Vásquez, M. M., and Mercolli, P. H. (eds.), *Procesos sociales prehispánicos en el sur andino: la vivienda, la comunidad y el territorio*, Editorial Brujas, Córdoba, Argentina, pp. 143–162.
- Albeck, M. E. (1997). Areas de actividad doméstica en Pueblo Viejo de Tucute. *Estudios Atacameños* 12: 69–81.
- Aldenderfer, M. S. (1988). Middle Archaic period domestic architecture from southern Peru. *Science* 241: 1828–1830.
- Aldenderfer, M. S. (ed.) (1993a). *Domestic Architecture, Ethnicity and Complementarity in the South-Central Andes*, University of Iowa Press, Iowa City.
- Aldenderfer, M. S. (1993b). Domestic space, mobility, and ecological complementarity: The view from Asana. In Aldenderfer, M. S. (ed.), *Domestic Architecture, Ethnicity and Complementarity in the South-Central Andes*, University of Iowa Press, Iowa City, pp. 13–24.
- Aldenderfer, M. S. (1998). *Montane Foragers: Asana and the South-Central Andean Archaic*, University of Iowa Press, Iowa City.
- Aldenderfer, M. S., and Stanish, C. S. (1993). Domestic architecture, household archaeology, and the past in the south-central Andes. In Aldenderfer, M. S. (ed.), *Domestic Architecture, Ethnicity and Complementarity in the South-Central Andes*, University of Iowa Press, Iowa City, pp. 1–12.
- Allen, C. J. (1984). Patterned time: the mythic history of a Peruvian community. *Journal of Latin American Lore* 10: 151–174.
- Allen, C. J. (2002). *The Hold Life Has: Coca and Cultural Identity in an Andean Community*, 2nd ed., Smithsonian Institution Press, Washington, DC.
- Allison, P. M. (1999). Introduction. In Allison, P. M. (ed.), *The Archaeology of Household Activities*, Routledge, New York, pp. 1–18.
- Allison, P. M. (2004). *Pompeii Households: An Analysis of Material Culture*, Monograph 42, Cotsen Institute of Archaeology, University of California Press, Los Angeles.

- Andrews, A. P. (1974). The U-shaped structures at Chan Chan, Peru. *Journal of Field Archaeology* 1: 241–264.
- Ardener, S. (ed.) (1981). *Women and Space: Ground Rules and Social Maps*, Croom Helm, London.
- Arnold, D. Y. (1992). La casa de adobes y piedras del Inka: genero, memoria y cosmos en Qaqachaka. In Arnold, D. Y. (ed.), *Hacia un orden andino de las cosas*, HISBOL, La Paz, Bolivia, pp. 31–108.
- Babot, M. de P. (2007) Organización social de la práctica de molienda: casos actuales y prehispánicos del noroeste Argentino. In Nielsen, A. E., Rivolta, M. C., Seldes, V., Vásquez, M. M., and Mercolli, P. H. (eds.), *Procesos sociales prehispánicos en el sur andino: la vivienda, la comunidad y el territorio*, Editorial Brujas, Córdoba, Argentina.
- Bachelard, G. (1969). *The Poetics of Space*, Beacon Press, Boston.
- Bandy, M. S. (2004). Fissioning, scalar stress, and social evolution in early village societies. *American Anthropologist* 106: 322–333.
- Bastien, J. W. (1978). *The Mountain of the Condor*, West Publishing, St. Paul, MN.
- Bawden, G. (1982a). Community organization reflected by the household: A study of pre-Columbian social dynamics. *Journal of Field Archaeology* 9: 165–181.
- Bawden, G. (1982b). Galindo: A study in cultural transition during the Middle Horizon. In Moseley, M., and Day, K. (eds.), *Chan Chan: Andean Desert City*, University of New Mexico Press, Albuquerque, pp. 285–320.
- Bawden, G. (1983). Cultural reconstitution in the late Moche period: A case study in multidimensional stylistic analysis. In Leventhal, R. M., and Kolata, A. L. (eds.), *Civilization in the Ancient Americas*, University of New Mexico Press, Albuquerque, pp. 211–237.
- Bawden, G. (1990). Domestic space and social structure in pre-Columbian northern Peru. In Kent, S. (ed.), *Domestic Architecture and the Use of Space: An Interdisciplinary Cross-Cultural Study*, Cambridge University Press, Cambridge, pp. 153–171.
- Bawden, G. (1996). *The Moche*, Blackwell Press, Oxford.
- Bawden, G. (2005). Ethnogenesis at Galindo, Peru. In Reycraft, R. (ed.), *Us and Them: Archaeology and Ethnicity in the Andes*, Monograph 53, Cotsen Institute of Archaeology, University of California Press, Los Angeles, pp. 12–33.

- Bermann, M. (1993). Continuity and change in household life at Lukurmata. In Aldenderfer, M. S. (ed.), *Domestic Architecture, Ethnicity and Complementarity in the South-Central Andes*, University of Iowa Press, Iowa City, pp. 114–135.
- Bermann, M. (1994). *Lukurmata: Household Archaeology in Prehispanic Bolivia*, Princeton University Press, Princeton, NJ.
- Bermann, M. (1997). Domestic life and vertical integration in the Tiwanaku heartland. *Latin American Antiquity* 8: 93–112.
- Bermann, M. (2003). The archaeology of households in Lukurmata. In Kolata, A. (ed.), *Tiwanaku and Its Hinterland: Archaeology and Paleoecology of an Andean Civilization*, Volume 2: Urban and Rural Archaeology, Smithsonian Institution Press, Washington, DC, pp. 327–340.
- Bermann, M., and Estévez Castillo, J. (1995). Domestic artifact assemblages and ritual activities in the Bolivian Formative. *Journal of Field Archaeology* 22: 389–398.
- Bird, J. (1948). Preceramic cultures in Chicama and Virú. *American Antiquity* 4: 21–28.
- Blanton, R. (1994). *Houses and Households: A Comparative Study*, Plenum Press, New York.
- Blom, D. E., Hallgrímsson, B., Keng, L., Lozada C., M. C., and Buikstra, J. E. (1998). Tiwanaku ‘colonization’: Bioarchaeological implications for migration in the Moquegua Valley, Peru. *World Archaeology* 30: 238–261.
- Blom, D. E., and Janusek, J. W. (2004). Making place: Humans as dedications in Tiwanaku. *World Archaeology* 36: 123–141.
- Bolin, I. (2006). *Growing up in a Culture of Respect: Child Rearing in Highland Peru*, University of Texas Press, Austin.
- Bolton, R., and Mayer, E. (eds.) (1977). *Andean Kinship and Marriage*, Special Publication No. 7, American Anthropological Association, Washington, DC.
- Bonnier, E. (1997). Morfología del espacio aldeano y su expresión cultural en los Andes centrales. In Bonnier, E., and Bischof, H. (eds.), *Archaeologica peruana 2: arquitectura y civilización en los Andes prehispánicos*, Sociedad Arqueológica Peruano-Alemana Reiss-Museum Mannheim, Heidelberg, Germany, pp. 28–41.
- Bourdieu, P. (1976). Marriage strategies as strategies of social reproduction. In Forster, R., and Ranum, O. (eds.), *Family and Society: Selections from the Annales, Economies, Societies, Civilisations*, Johns Hopkins University Press, London, pp. 117–145.

- Bourdieu, P. (1977). *Outline of a Theory of Practice*, trans. by R. Nice, Cambridge University Press, Cambridge.
- Bourdieu, P. (1979). The Kabyle house of the world reversed. In Bourdieu, P. (ed.), trans. by R. Nice, *Algeria 1960*, Cambridge University Press, Cambridge, pp. 133–153.
- Bragayrac D., E. (1991). Archaeological excavations in the Vegachayoq Moqo sector of Huari. In Isbell, W. H., and McEwan, G. (eds.), *Huari Administrative Structure: Prehistoric Monumental Architecture and State Government*, Dumbarton Oaks, Washington, DC, pp. 71–80.
- Brennan, C. (1980). Cerro Arena: Early cultural complexity and nucleation in north coastal Peru. *Journal of Field Archaeology* 7: 1–22.
- Brennan, C. (1982). Cerro Arena: Origins of the urban tradition on the Peruvian north coast. *Current Anthropology* 23: 247–254.
- Brewster-Wray, C. (1983). Spatial patterning and the function of a Huari architectural compound. In Sandweiss, D. H. (ed.), *Investigations of the Andean Past*, Latin American Studies Program, Cornell University, Ithaca, NY, pp. 122–135.
- Brewster-Wray, C. (1989). Huari administration: A view from the capital. In Czwarno R., Meddens, F., and Morgan, N. (eds.), *The Nature of Wari*, BAR International Series 525, Archaeopress, Oxford, pp. 23–33.
- Brewster-Wray, C. (1990). *Moraduchayuq: An Administrative Compound at the Site of Huari, Peru*, Ph.D. dissertation, Department of Anthropology, State University of New York, Binghamton.
- Brush, S. (1977a). *Mountain, Field, and Family*, University of Pennsylvania Press, Philadelphia.
- Brush, S. (1977b). Kinship and land use in a northern sierra community. In Bolton, R., and Mayer, E. (eds.), *Andean Kinship and Marriage*, Special Publication No. 7, American Anthropological Association, Washington, DC, pp. 136–152.
- Burger, R. L., and Matos Mendieta, R. (2002). Atalla: A center on the periphery of the Chavin Horizon. *Latin American Antiquity* 13: 153–177.
- Burger, R., and Salazar-Burger, L. (1985). The early ceremonial center of Huaricoto. In Donnan, C. (ed.), *Early Ceremonial Architecture in the Andes*, Dumbarton Oaks, Washington, DC, pp. 111–138.
- Burger, R., and Salazar-Burger, L. (1991). The second season of investigations at the Initial period center of Cardal, Peru. *Journal of Field Archaeology* 18: 275–296.

Callegari, A. (2007). Reproducción de la diferenciación y heterogeneidad social en el espacio doméstico del sitio Aguada Rincón del Toro (La Rioja, Argentina). In Nielsen, A. E., Rivolta, M. C., Seldes, V., Vásquez, M. M., and Mercolli, P. H. (eds.), *Procesos sociales prehispánicos en el sur andino: la vivienda, la comunidad y el territorio*, Editorial Brujas, Córdoba, Argentina, pp. 37–64.

Chacama R., J. (2005). Patrón de asentamiento y uso del espacio: precordillera de Arica, extremo norte de Chile, siglos X-XV. *Bulletin de l'Institut Français d'Etudes Andines* 34: 357–378.

Chapdelaine, C. (1998). Excavaciones en la zona urbana de Moche durante 1996. In Uceda, S., Mujica, E., and Morales, R. (eds.), *Investigaciones en la Huaca de la Luna 1996*, Facultad de Ciencias Sociales, Universidad Nacional de la Libertad, Trujillo, Peru, pp. 85–111.

Chapdelaine, C. (2000). Struggling for survival: The urban class of the Moche site, north coast of Peru. In Bawden, G., and Reycraft, R. M. (eds.), *Environmental Disaster and the Archaeology of Human Response*, Anthropological Papers No. 7, Maxwell Museum of Anthropology, University of New Mexico Press, Albuquerque, pp. 121–143.

Chapdelaine, C. (2001). The growing power of a Moche urban class. In Pillsbury, J. (ed.), *Moche Art and Archaeology in Ancient Peru*, Center for the Advanced Study of the Visual Arts, National Gallery of Art, Washington, DC, pp. 69–87.

Chapdelaine, C. (2002). Out in the streets of Moche: Urbanism and sociopolitical organization at a Moche IV urban center. In Isbell, W. H., and Silverman, H. (eds.), *Andean Archaeology 1: Variations in Sociopolitical Organization*, Kluwer Academic/Plenum Press, New York, pp. 53–88.

Chapdelaine, C. (2003). La ciudad de Moche: urbanismo y estado. In Uceda, S., and Mujica, E. (eds.), *Moche: hacia el final del milenio, actas del segundo coloquio sobre la cultura Moche (Trujillo, 1 al 7 de Agosto de 1999)*, Tomo II, Universidad Nacional de Trujillo y Pontificia Universidad Católica del Perú, Lima, pp. 247–285.

Chapdelaine, C. (2006). Looking for Moche palaces in the elite residences of the Huacas of Moche site. In Christie, J., and Sarro, P. (eds.), *Palaces and Power in the Americas: From Peru to the Northwest Coast*, University of Texas Press, Austin, pp. 23–43.

Chapdelaine, C., Uceda, S., Montoya, M., Jáuregi, C., and Uceda, C. (1997). Los complejos arquitectónicos urbanos de Moche. In Uceda S., Mujica, E., and Morales, R. (eds.), *Investigaciones en la Huaca de la Luna 1995*, Facultad de Ciencias Sociales, Universidad Nacional de la Libertad, Trujillo, Peru, pp. 71–92.

Christie, J. J., and Sarro, P. J. (eds.) (2006). *Palaces and Power in the Americas: From Peru to the Northwest Coast*, University of Texas Press, Austin.

- Cobo, B. (1990 [1653]). *Inca Religion and Custom*, trans. by R. Hamilton, University of Texas Press, Austin.
- Conklin, W. J. (1990). Architecture of the Chimú: Memory, function, and image. In Moseley, M., and Cordy-Collins, A. (eds.), *The Northern Dynasties Kingship and Statecraft in Chimor*, Dumbarton Oaks, Washington, DC, pp. 43–74.
- Conrad, G. (1974). *Burial Platforms and Related Structures of the North Coast of Peru: Some Social and Political Implications*, Ph.D. dissertation, Department of Anthropology, Harvard University, Cambridge, MA.
- Conrad, G. (1982). The burial platforms of Chan Chan: Some social and political implications. In Moseley M., and Day, K. (eds.), *Chan Chan: Andean Desert City*, University of New Mexico Press, Albuquerque, pp. 87–118.
- Conrad, G., and Webster, A. (1989). Household unit patterning at San Antonio. In Rice, D., Stanish, C., and Scarr, P. (eds.), *Ecology, Settlement and History in the Osmore Drainage, Peru*, BAR International Series 545, Archaeopress, Oxford, pp. 395–414.
- Costin, C. L., and Earle, T. E. (1989). Status distinction and legitimation of power as reflected in changing patterns of consumption in late pre-Hispanic Peru. *American Antiquity* 54: 691–714.
- Costin, C. L., and Hagstrum, M. (1995). Standardization, labor investment, skill, and the organization of ceramic production in late prehispanic highland Peru. *American Antiquity* 60: 619–639.
- Couture, N. C. (2004). Monumental space, courtly style, and elite life at Tiwanaku. In Young-Sanchez, M. (ed.), *Tiwanaku: Ancestors of the Inca*, University of Nebraska Press, Lincoln, pp. 126–149.
- Couture, N. C., and Sampeck, K. (2003). Putuni: A history of palace architecture at Tiwanaku. In Kolata, A. (ed.), *Tiwanaku and Its Hinterland: Archaeology and Paleoecology of an Andean Civilization*, Volume 2, Urban and Rural Archaeology, Smithsonian Institution Press, Washington, DC, pp. 226–263.
- D'Altroy, T., and Hastorf, C. (eds.) (2001). *Empire and Domestic Economy*, Kluwer Academic Press, New York.
- Damp, J. E. (1984). Architecture of the early Valdivia village. *American Antiquity* 49: 573–585.
- Damp, J. E. (1988). *La primera ocupación Valdivia de Real Alto: patrones económicos, arquitectónicos e ideológicos*, Corporación Editora Nacional, Guayaquil, Ecuador.
- Day, K. (1973). *Architecture of Ciudadela Rivero, Chan Chan, Peru*, Ph.D. dissertation, Department of Anthropology, Harvard University, Cambridge, MA.

Day, K. (1982). Ciudadelas: Their form and function. In Moseley, M., and Day, K. (eds.), *Chan Chan: Andean Desert City*, University of New Mexico Press, Albuquerque, pp. 55–66.

Deetz, J. (1982). Households: A structural key to archaeological explanation. *The American Behavioral Scientist* 25: 717–724.

DeMarrais, E. (2001). The architecture and organization of Xauxa settlements. In D'Altroy, T., and Hastorf, C. (eds.), *Empire and Domestic Economy*, Kluwer Academic Press, New York, pp. 115–154.

Dillehay, T. D. (1990). Mapuche ceremonial landscape, social recruitment and resource rights. *World Archaeology* 22: 223–241.

Dillehay, T. D., Netherly, P. J., and Rossen, J. (1989). Middle preceramic public and residential sites on the forested slopes of the western Andes, northern Peru. *American Antiquity* 54: 733–759.

Donley-Reid, L. (1990). A structuring structure: The Swahili house. In Kent, S. (ed.), *Domestic Architecture and the Use of Space*, Cambridge University Press, New York, pp. 153–171.

Donnan, C. (1964). An early house from Chilca, Peru. *American Antiquity* 30: 137–144.

Douglas, M. (1973). *Natural Symbols: Explorations in Cosmology*, Penguin, New York.

Dransart, P. Z. (2002). *Earth, Water, Fleece, and Fabric: An Ethnography and Archaeology of Andean Camelid Herding*, Routledge, London.

Drucker-Brown, S. (2001). House and hierarchy: Politics and domestic space in northern Ghana. *The Journal of the Royal Anthropological Institute* 7: 669–685.

Earle, T. (1997). *How Chiefs Come to Power: The Political Economy in Prehistory*, Stanford University Press, Stanford, CA.

Earle, T., D'Altroy, T., Hastorf, C., Scott, C., Costin, C., Russell, G., and Sandefur, E. (eds.) (1987). *Archaeological Field Research in the Upper Montaro, Peru, 1982–1983: Investigations of Inka Expansion and Exchange*, Monograph 28, Institute of Archaeology, University of California, Los Angeles.

Eeckhout, P. (2000). The palaces of the lords of Ychsma: An archaeological reappraisal of the function of pyramids with ramps at Pachacamac, central coast of Peru. *Revista de Arqueología Americana* 17–19: 217–254.

Engel, F. (1970). Exploration of the Chilca canyon, Peru. *Current Anthropology* 11: 55–58.

Evans, S. T., and Pillsbury, J. (eds.) (2004). *Palaces of the Ancient World*, Dumbarton Oaks, Washington, DC.

- Faust, A., and Bunimovitz, S. (2003). The four room house: Embodying Iron Age Israelite society. *Near Eastern Archaeology* 66: 22–31.
- Feinman, G. (1991). Demography, surplus, and inequality: Early political formations in highland Mesoamerica. In Earle, T. (ed.), *Chiefdoms: Power, Economy, and Ideology*, Cambridge University Press, Cambridge, pp. 229–262.
- Feinman, G., and Nicholas, L. (2004). Unraveling the prehistoric highland Mesoamerican economy: production, exchange, and consumption in the Classic period Valley of Oaxaca. In Feinman, G., and Nicholas, L. (eds.), *Archaeological Perspectives on Political Economies*, University of Utah Press, Salt Lake City, pp. 167–188.
- Feinman, G., Nicholas, L., and Haines, H. (2002). Houses on a hill: Classic period life at El Palmillo. *Latin American Antiquity* 13: 251–277.
- Flannery, K. (1976). Research strategy and Formative Mesoamerica. In Flannery, K. (ed.), *The Early Mesoamerican Village*, Academic Press, New York, pp. 1–12.
- Flannery, K. (1983). The Tierras Largas phase and the analytical units of the early Oaxacan village. In Flannery, K. V., and Marcus, J. (eds.), *The Cloud People: Divergent Evolution of the Zapotec and Mixtec Civilizations*, Academic Press, New York, pp. 43–45.
- Flannery, K. (1998). The ground plans of archaic states. In Feinman, G., and Marcus, J. (eds.), *Archaic States*, School of American Research Press, Santa Fe, NM, pp.15–58.
- Flannery, K., and Marcus, J. (2005). Excavations at San José Mogote 1: The Household Archaeology, *Memoirs No. 40*, Museum of Anthropology, University of Michigan, Ann Arbor.
- Foster, A. D., and Rosenzweig, M. R. (2002). Household division and rural economic growth. *The Review of Economic Studies* 69: 839–869.
- Gabrilopoulos, N., Mather, C., and Apentiik, C. R. (2002). Lineage organization of the Tallensi compound: The social logic of domestic space in northern Ghana. *Africa: Journal of the International African Institute* 72: 221–244.
- Gambier, M. (2002). Las Quinas: un Nuevo sitio de la cultura de la Aguada en San Juan. *Estudios Atacameños* 24: 83–88.
- Gero, J., and Scattolin, C. (2002). Beyond complementarity and hierarchy: New dimensions for archaeological gender relations. In Milledge Nelson, S., and Rosen-Ayalon, M. (eds.), *In Pursuit of Gender: Worldwide Archaeological Approaches*, Altamira Press, New York, pp. 155–172.
- Giddens, A. (1979). *Central Problems in Social Theory: Action, Structure, and Contradiction in Social Analysis*, Allen and Urwin, London.

- Glassie, H. (1975). *Folk Housing in Middle Virginia*, University of Tennessee Press, Knoxville.
- Göbel, B. (2002). La arquitectura del pastoreo: uso del espacio y sistema de asentamientos en la Puna de Atacama (Susques). *Estudios Atacameños* 23: 53–76.
- Godelier, M. (1977). *Perspectives in Marxist Anthropology*, trans. by R. Brain, Cambridge University Press, Cambridge.
- Goldstein, P. S. (1993). House, community, and state in the earliest Tiwanaku colony: Domestic patterns and state integration at Omo M12, Moquegua. In Aldenderfer, M. S. (ed.), *Domestic Architecture, Ethnicity and Complementarity in the South-Central Andes*, University of Iowa Press, Iowa City, pp. 25–41.
- Goldstein, P. S. (2000). Communities without borders: The vertical archipelago and diaspora communities in the southern Andes. In Canuto, M., and Yaeger, J. (eds.), *The Archaeology of Communities: A New World Perspective*, Routledge, London, pp. 182–209.
- Goldstein, P. S. (2005). *Andean Diaspora: The Tiwanaku Colonies and the Origins of South American Empire*, University Press of Florida, Gainesville.
- Goody, J. (1972). The evolution of the family. In Laslett, P., and Wall, R. (eds.), *House and Family in Past Time*, Cambridge University Press, Cambridge, pp. 103–124.
- Gordillo, I. (2007). Detrás de las paredes...arquitectura y espacios domésticos en el área de la Rinconada (Ambato, Catamarca). In Nielsen, A. E., Rivolta, M. C., Seldes, V., Vásquez, M. M., and Mercolli, P. H. (eds.), *Procesos sociales prehispánicos en el sur andino: la vivienda, la comunidad y el territorio*, Editorial Brujas, Córdoba, Argentina, pp. 65–98.
- Gose, P. (1991). House rethatching in an Andean annual cycle: Practice, meaning, and contradiction. *American Ethnologist* 18: 39–66.
- Haas, J. (1985). Excavations on Huaca Grande: An initial view of the elite of Pampa Grande, Peru. *Journal of Field Archaeology* 12: 391–409.
- Haas, J. (1987). The exercise of power in early Andean state development. In Haas, J., Pozorski, S., and Pozorski, T. (eds.), *The Origins and Development of the Andean State*, Cambridge University Press, Cambridge, pp. 31–35.
- Hardin, J. W. (2004). Understanding domestic space: An example from Iron Age Tel Halif. *Near Eastern Archaeology* 67: 71–83.
- Hastings, C. (1987). Implications of Andean verticality in the evolution of political complexity: A view from the margins. In Haas, J., Pozorski, S., and Pozorski, T. (eds.), *The Origins and Development of the Andean State*, Cambridge University Press, Cambridge, pp. 145–157.

- Hastorf, C. (2001). The Xauxa Andean life. In D'Altroy, T., and Hastorf, C. (eds.), *Empire and Domestic Economy*, Kluwer Academic Press, New York, pp. 315–324.
- Hastorf, C. (2005). The upper (middle and late) Formative in the Titicaca region. In Stanish, C., Cohen, A. B., and Aldenderfer, M. S. (eds.), *Advances in Titicaca Basin Archaeology-1*, Cotsen Institute of Archaeology, University of California Press, Los Angeles, pp. 65–94.
- Hastorf, C., and D'Altroy, T. (2001). The domestic economy, households, and imperial transformation. In D'Altroy, T., and Hastorf, C. (eds.), *Empire and Domestic Economy*, Kluwer Academic Press, New York, pp. 1–26.
- Hildebrand, J. A., and Hagstrum, M. B. (1999). New approaches to ceramic use and discard: Cooking pottery from the Peruvian Andes in ethnoarchaeological perspective. *Latin American Antiquity* 10: 25–46.
- Isbell, B. J. (1978). *To Defend Ourselves: Ecology and Ritual in an Andean Village*, University of Texas Press, Austin.
- Isbell, W. H. (1978). The Rural Foundations for Urbanism: Economic and Stylistic Interaction between Rural and Urban Communities in Eighth-Century Peru, *Illinois Studies in Anthropology* No. 10, University of Illinois Press, Urbana.
- Isbell, W. H. (1984). Huari urban prehistory. In Kendall, A. (ed.), *Current Archaeological Projects in the Central Andes: Some Approaches and Results*, BAR International Series 210, Archeopress, Oxford, pp. 95–132.
- Isbell, W. H. (2000). Repensando el Horizonte Medio: el caso de Conchopata. In Kaulicke, P., and Isbell, W. H. (eds.), *Huari y Tiwanaku: modelos vs. evidencias*, *Boletín de Arqueología* 4, PUCP, Lima, pp. 9–68.
- Isbell, W. H. (2004a). Palaces and politics in the Andean Middle Horizon. In Evans, S., and Pillsbury, J. (eds.), *Palaces in the Ancient New World: A Symposium at Dumbarton Oaks*, Dumbarton Oaks, Washington, DC, pp. 191–246.
- Isbell, W. H. (2004b). Mortuary preferences: A Wari culture case study from Middle Horizon Peru. *Latin American Antiquity* 15: 3–32.
- Isbell, W. H. (2006). Landscapes of power: A network of palaces in Middle Horizon Peru. In Christie, J., and Sarro, P. (eds.), *Palaces and Power in the Americas: From Peru to the Northwest Coast*, University of Texas Press, Austin, pp. 44–98.
- Isbell, W. H., and Cook, A. G. (2002). A new perspective on Conchopata and the Andean Middle Horizon. In Silverman, H., and Isbell, W. H. (eds.), *Andean Archaeology II: Art, Landscape, and Society*, Kluwer Academic/Plenum Press, New York, pp. 249–306.

- Isbell, W. H., Brewster-Wray, C., and Spickard, L. (1991). Architecture and spatial organization at Huari. In Isbell, W. H., and McEwan, G. (eds.), *Huari Administrative Structure: Prehistoric Monumental Architecture and State Government*, Dumbarton Oaks, Washington, DC, pp. 19–54.
- Izumi, S., and Terada, K. (1972). *Kotosh 4: Excavations at Kotosh, Peru 1963 and 1966*, University of Tokyo Press: Tokyo.
- Janusek, J. W. (1999). Craft and local power: Embedded specialization in Tiwanaku cities. *Latin American Antiquity* 10: 107–131.
- Janusek, J. W. (2002). Out of many, one: Style and social boundaries in Tiwanaku. *Latin American Antiquity* 13: 35–61.
- Janusek, J. W. (2003). The changing face of Tiwanaku residential life: State and local identity in an Andean city. In Kolata, A. (ed.), *Tiwanaku and Its Hinterland: Archaeology and Paleoecology of an Andean Civilization, Volume 2, Urban and Rural Archaeology*, Smithsonian Institution Press, Washington, DC, pp. 264–295.
- Janusek, J. W. (2004a). *Identity and Power in the Ancient Andes*, Routledge, London.
- Janusek, J. W. (2004b). Household and city in Tiwanaku. In Silverman, H. (ed.), *Andean Archaeology*, Blackwell, Malden, MA.
- Janusek, J. W. (2005). Residential diversity and the rise of complexity in Tiwanaku. In Stanish, C., Cohen, A. B., and Aldenderfer, M. S. (eds.), *Advances in Titicaca Basin Archaeology-1*, Cotsen Institute of Archaeology, University of California Press, Los Angeles, pp. 143–172.
- Joyce, R. A., and Gillespie, S. D. (2000). *Beyond Kinship: Social and Material Reproduction in House Societies*, University of Pennsylvania Press, Philadelphia.
- Kadwell, M., Fernandez, M., Stanley, H. F., Baldi, R., Wheller, J. C., Rosadio, R., and Bruford, M. W. (2001). Genetic analysis reveals the wild ancestors of the llama and the alpaca. *Proceedings: Biological Sciences* 268: 2575–2584.
- Keatinge, R. (1973). *Chimu Ceramics from the Moche Valley, Peru: A Computer Application to Seriation*, Ph.D. dissertation, Department of Anthropology, Harvard University, Cambridge, MA.
- Keatinge, R. (1974). Chimu rural administrative centers in the Moche Valley, Peru. *World Archaeology* 6: 66–82.
- Keatinge, R. (1975). Urban settlement and rural sustaining communities: An example from Chan Chan's hinterland. *Journal of Field Archaeology* 2: 215–227.
- Keatinge, R., and Conrad, G. (1983). Imperialist expansion in Peruvian prehistory: Chimu administration of a conquered territory. *Journal of Field Archaeology* 10: 255–283.

- Keatinge, R., and Day, K. (1973). Socioeconomic organization of the Moche Valley, Peru, during the Chimú occupation of Chan Chan. *Journal of Anthropological Research* 29: 275–295.
- Kent, S. (ed.) (1990). *Domestic Architecture and the Use of Space*, Cambridge University Press, New York.
- Kidder, A. (1943). Some early sites in the Northern Lake Titicaca Basin: Expeditions to Southern Peru, Papers Vol. 27, No.1, Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge, MA.
- Klymyshyn, A. M. (1976). *Intermediate Architecture in Chan Chan, Peru*, Ph.D. dissertation, Department of Anthropology, Harvard University, Cambridge, MA.
- Klymyshyn, A. M. (1982). Elite compounds in Chan Chan. In Moseley, M., and Day, K. (eds.), *Chan Chan: Andean Desert City*, University of New Mexico Press, Albuquerque, pp. 119–143.
- Kolata, A. (1978). *Chan Chan: The Form of the City in Time*, Ph.D. dissertation, Department of Anthropology, Harvard University, Cambridge, MA.
- Kolata, A. (1986). The agricultural foundations of the Tiwanaku state: A view from the heartland. *American Antiquity* 51: 748–762.
- Kolata, A. (1993). *Tiwanaku: Portrait of an Andean civilization*, Blackwell, Cambridge.
- Kolata, A. (1996). *Valley of the Spirits: A Journey into the Lost Realm of the Aymara*, Wiley, New York.
- Kolata, A. (2003a). Tiwanaku ceremonial architecture and urban organization. In Kolata, A. (ed.), *Tiwanaku and Its Hinterland: Archaeology and Paleoecology of an Andean Civilization, Volume 2, Urban and Rural Archaeology*, Smithsonian Institution Press, Washington, DC, pp. 175–201.
- Kolata, A. (2003b). The social production in Tiwanaku: Political economy and authority in a native Andean state. In Kolata, A. (ed.), *Tiwanaku and Its Hinterland: Archaeology and Paleoecology of an Andean Civilization, Volume 2, Urban and Rural Archaeology*, Smithsonian Institution Press, Washington, DC, pp. 449–472.
- Kramer, C. (1982). Ethnographic households and archaeological interpretation. *American Behavioral Scientist* 25: 663–675.
- Kristiansen, K. (1991). Chiefdoms, states, and systems of social evolution. In Earle, T. (ed.), *Chiefdoms: Power, Economy, and Ideology*, Cambridge University Press, Cambridge, pp. 16–43.

- Kroeber, A. L., and Collier, D. (1998). *The Archaeology and Pottery of Nazca, Peru: Alfred L. Kroeber's 1926 Expedition*, ed. by P. Carmichael, Altamira Press, Walnut Creek, CA.
- Lambert, B. (1977). Bilaterality in the Andes. In Bolton, R., and Mayer, E. (eds.), *Andean Kinship and Marriage*, Special Publication No. 7, American Anthropological Association, Washington, DC, pp. 1–27.
- Lanning, E. P., and Hammel, E. A. (1961). Early lithic industries of western South America. *American Antiquity* 27: 139–154.
- Levallée, D., Julien, M., Béarez, P., Usselman, P., Fontugne, M., and Bolaños, A. (1999). Pescadores-recolectores arcaicos del extremo sur peruano: excavaciones en la Quebrada de los Burros (Tacna, Perú) primeros resultados 1995–1997. *Bulletin de l'Institut Français d'Etudes Andines* 28: 13–52.
- Levi-Strauss, C. (1983). *The Way of the Masks*, trans. by S. Modeleski, Douglas and McIntyre, Vancouver, Canada.
- Login, B., and Hill, M. E. (2000). Spatial analysis of small scale debris from a late prehistoric site in the lower Missouri Valley, Kansas. *Journal of Field Archaeology* 27: 241–256.
- Lozada, M., and Buikstra, J. (2002). El Señorío de Chiribaya en la costa sur del Perú, Serie Fuentes e Investigaciones para la Historia del Perú No. 15, Instituto de Estudios Peruanos, Lima.
- Lozada, M., and Buikstra, J. (2005). Pescadores and labradores among the señorío of Chirabaya in southern Peru. In Reycraft, R. (ed.), *Us and Them: Archaeology and Ethnicity in the Andes*, Monograph 53, Cotsen Institute of Archaeology, University of California Press, Los Angeles, pp. 206–225.
- MacNeish, R. S., Garcia Cook, A., Lumbreras, L. G., Vierra, R. K., and Nelken-Terner, A. (eds.) (1981). *Prehistory of the Ayacucho Basin, Peru: Volume II, Excavations and Chronology*, University of Michigan Press, Ann Arbor.
- Malpass, M. A., and Stothert, K. E. (1992). Evidence for preceramic houses and household organization in western South America. *Andean Past* 3: 137–163.
- Manzanilla, L., and Barba, L. (1990). The study of activities in Classic households. *Ancient Mesoamerica* 1: 41–49.
- Marcus, J., Sommer, J. D., and Glew, C. P. (1999). Fish and mammals in the economy of an ancient Peruvian kingdom. *Proceedings of the National Academy of Sciences* 96: 6564–7570.
- Masuda, S., Shimada, I., and Morris, C. (eds.) (1985). *Andean Ecology and Civilization*, University of Tokyo Press, Toyko.

- Matos Mendieta, R. (1972). Wakan y Wamalli: Estudio arqueológico de dos aldeas rurales. In Murra, J. V. (ed.), *Visita de la Provincia de León de Huánuco en 1562*, Vol. 2, Universidad Nacional Hermilio Valdizan, Huánuco, Peru, pp. 367–382.
- Mayer, E. (1972). Censos insensatos: evaluación de los censos campesinos en la historia de Tángor. In Murra, J. V. (ed.), *Visita de la Provincia de León de Huánuco en 1562*, Vol. 2, Universidad Nacional Hermilio Valdizan, Huánuco, Peru, pp. 339–366.
- Mayer, E. (1977). Beyond the nuclear family. In Bolton, R., and Mayer, E. (eds.), *Andean Kinship and Marriage*. Special Publication No. 7, American Anthropological Association, Washington, DC, pp. 60–80.
- Mayer, E. (2001). *The Articulated Peasant: Household Economies in the Andes*, Westview Press, Cambridge.
- McEwan, G. (1987). *The Middle Horizon in the Valley of Cusco, Peru: The Impact of the Wari Occupation of Pikillacta in the Lucre Basin*, BAR International Series 372, Archaeopress, Oxford.
- McEwan, G. (1990). Some formal correspondences between the imperial architecture of the Wari and Chimu cultures of ancient Peru. *Latin American Antiquity* 1: 97–116.
- McEwan, G. (2005). *Pikillacta: The Wari Empire in Cuzco*, University of Iowa Press, Iowa City.
- Meyerson, J. (1990). *Tambo: Life in an Andean Village*, University of Texas Press, Austin.
- Moore, J. (1981). Chimu socioeconomic organization: Recent data from Manchan, Casma Valley, Peru. *Ñawpa Pacha* 19: 115–128.
- Moore, J. (1992). Pattern and meaning in prehistoric Peruvian architecture: The architecture of social control in the Chimu state. *Latin American Antiquity* 2: 95–113.
- Moore, J. (1996). *Architecture and Power in the Ancient Andes: The Archaeology of Public Buildings*. Cambridge University Press, Cambridge.
- Moore, J. (2005). *Cultural Landscapes in the Ancient Andes: Archaeologies of Place*, University Press of Florida, Gainesville.
- Morris, C. (1982). The infrastructure of Inka control in the Peruvian central highlands. In Collier, G., Rosaldo, R., and Wirth, J. (eds.), *The Inca and Aztec States, 1400–1800*, Academic Press, New York, pp. 153–171.
- Morris, C. (1985). From principles of ecological complementarity to the organization and administration of Tawantinsuyu. In Masuda, S., Shimada, I., and Morris, C. (eds.), *Andean*

Ecology and Civilization: An Interdisciplinary Perspective on Andean Ecological Complementarity, University of Tokyo Press, Tokyo, pp. 477–490.

Morris, C. (1992). The technology of highland Inca food storage. In Levine, T. Y. (ed.), *Inca Storage Systems*, University of Oklahoma Press, Norman, pp. 237–258.

Morris, C. (2004). Enclosures of power: The multiple spaces of Inca administrative palaces. In Evans, S., and Pillsbury, J. (eds.), *Palaces in the Ancient New World: A Symposium at Dumbarton Oaks*, Dumbarton Oaks, Washington, DC, pp. 299–323.

Morris, C., and Thompson, D. (1970). Huánuco Viejo: An Inca administrative center. *American Antiquity* 35: 344–362.

Morris, C., and Thompson, D. (1985). *Huánuco Pampa: An Inca City and Its Hinterland*, Thames and Hudson, London.

Moseley, M. (1990). Structure and history in the dynastic lore of Chimor. In Moseley, M., and Cordy-Collins, A. (eds.), *The Northern Dynasties: Kingship and Statecraft in Chimor*, Dumbarton Oaks, Washington, DC, pp. 1–41.

Moseley, M. (2001). *The Inca and Their Ancestors: The Archaeology of Peru*, 2nd ed., Thames and Hudson, London.

Moseley, M., and Cordy-Collins, A. (eds.) (1990). *The Northern Dynasties: Kingship and Statecraft in Chimor*, Dumbarton Oaks, Washington, DC.

Moseley, M., and Day, K. (eds.) (1982). *Chan Chan: Andean Desert City*, School of American Research Press, Santa Fe, NM.

Moseley, M., and Mackey, C. (1974). *Twenty-four Architectural Plans of Chan Chan, Peru*, Peabody Museum Press, Cambridge.

Moseley, M., Feldman, R., Goldstein, P., and Watanabe, L. (1991). Colonies and conquest: Tiahuanaco and Huari in Moquegua. In Isbell, W., and McEwan, G. (eds.), *Huari Administrative Structure: Prehistoric Monumental Architecture and State Government*, Dumbarton Oaks, Washington, DC, pp. 121–140.

Moseley, M. E., Nash, D. J., Williams, P. R., de France, S. D., Miranda, A., and Ruales, M. (2005). Burning down the brewery: Establishing and evacuating an ancient imperial colony at Cerro Baúl, Peru. *The Proceedings of the National Academy of Sciences* 102: 17264–17271.

Muñoz Ovalle, I. (2005). Espacio social y áreas de actividad en asentamientos agrícolas prehispánicos tardíos en la sierra de Arica. *Bulletin de l'Institut Français d'Etudes Andines* 34: 321–355.

- Murra, J. (1967). La visita de los Chupachu como fuente etnológica. In Murra, J. V. (ed.), *Visita de la Provincia de León de Huánuco en 1562*, Vol. 1, Universidad Nacional Hermilio Valdizan, Huánuco, Peru, pp. 381–406.
- Murra, J. (1968). An Aymara kingdom in 1567. *Ethnohistory* 15: 115–151.
- Murra, J. (1980). *The Economic Organization of the Inka State*, JAI Press, Greenwich, CT.
- Murra, J. (1982). The mit'a obligations of ethnic groups to the Inka state. In Collier, G., Rosaldo, R., and Wirth, J. (eds.), *The Inca and Aztec States, 1400–1800*, Academic Press, New York, pp. 239–262.
- Murra, J., Wachtel, N., and Revel, J. (eds.) (1986). *Anthropological History of Andean Polities*, Cambridge University Press, Cambridge.
- Nash, D. J. (2002). *The Archaeology of Space: Places of Power in the Wari Empire*, Ph.D. dissertation, Department of Anthropology, University of Florida, Gainesville.
- Nash, D. J. (in press). Fine dining and fabulous atmosphere: Feasting facilities and political interaction in the Wari realm. In Klarich, E. (ed.), *From Subsistence to Social Strategies: New Directions in the Study of Daily Meals and Feasting Events*, University of Colorado Press, Boulder, pp. 76–109.
- Nash, D. J., and Williams, P. R. (2005). Architecture and power: Relations on the Wari-Tiwanaku frontier. In Vaughn, K., Conlee, C., and Ogburn, D. (eds.), *The Foundations of Power in the Prehispanic Andes*, Archeological Papers No. 14, American Anthropological Association, Washington, DC, pp. 151–174.
- Nash, D. J., and Williams, P. R. (2009). Wari political organization: The southern periphery. In Marcus, J., and Williams, P. R. (eds.), *Foundations of Andean Civilization: Papers in Honor of Michael E. Moseley*, Cotsen Institute of Archaeology, University of California Press, Los Angeles, pp. 255–274.
- Netherly, P. (1977). *Local Level Lords on the North Coast of Peru*, Ph.D. dissertation, Department of Anthropology, Cornell University, Ithaca, NY.
- Netherly, P. (1984). The management of late Andean irrigation systems on the north coast of Peru. *American Antiquity* 49: 227–254.
- Netherly, P. (1990). Out of many, one: The organization of rule in the north coast polities. In Moseley, M., and Cordy-Collins, A. (eds.), *The Northern Dynasties: Kingship and Statecraft in Chimor*, *Dumbarton Oaks*, Washington, DC, pp. 461–488.
- Netting, R. (1982). Some home truths on household size and wealth. In: Wilk, R., and Rathje, W. (eds.), *The Archaeology of the Household*, *American Behavioral Scientist* 25: 641–662.

- Netting, R., Wilk, R., and Arnould, E. (eds.) (1984). *Households: Comparative and Historical Studies of the Domestic Group*, University of California Press, Berkeley.
- Nielsen, A. E. (1995). Architectural performance and the reproduction of social power. In Skibo, J., Walker, W., and Nielsen, A. E. (eds.), *Expanding Archaeology*, University of Utah Press, Salt Lake City, pp. 47–66.
- Nielsen, A. E. (2001). Evolución del espacio doméstico en el norte de Lipez (Potosí, Bolivia): ca. 900–1700 dC. *Estudios Atacameños* 21: 41–61.
- Nielsen, A. E., Rivolta, M. C., Seldes, V., Vásquez, M. M., and Mercolli, P. H. (eds.) (2007). *Procesos sociales prehispánicos en el sur andino: la vivienda, la comunidad y el territorio*, Editorial Brujas, Córdoba, Argentina.
- Niles, S. (1987). *Callachacha: Style and Status in an Inca Community*, University of Iowa Press, Iowa City.
- Núñez Regueiro, V. (1998). *Arqueología, historia y antropología de los sitios Alamito*, Ediciones Interdea, San Miguel de Tucumán, Argentina.
- Onuki-Tierney, E. (1972). Spatial concepts of the Ainu of the northwest coast southern Sakhalin. *American Anthropologist* 74: 426–457.
- Orans, M. (1966). Surplus. *Human Organization* 25: 24–32.
- Ortiz de Zuniga, I. (1967 [1562]). Visita de los cuatro waranqa de los Chupachu. In Murra, J. V. (ed.), *Visita de la Provincia de León de Huánuco en 1562*, Vol. 1, Universidad Nacional Hermilio Valdizan, Huánuco, Peru, pp. 3–316.
- Ortiz de Zuniga, I. (1972 [1562]). Visita de los Yacha y los mitmakuna. In Murra, J. V. (ed.), *Visita de la Provincia de León de Huánuco en 1562*, Vol. 2, Universidad Nacional Hermilio Valdizan, Huánuco, Peru, pp. 3–314.
- Parkinson, W. A., and Galaty, M. L. (2007). Secondary states in perspective: An integrated approach to state formation in the prehistoric Aegean. *American Anthropologist* 109: 113–129.
- Parsons, J. R., Hastings, C. M., and Matos M. R. (1997). Rebuilding the state in highland Peru: Herder-cultivator interaction during the Late Intermediate period in the Tarama-Chinchaycocha region. *Latin American Antiquity* 8: 317–341.
- Pärssiene, M., and Siiriäinen, A. (1997). Inka-style and their chronological relationship to the Inka expansion in the southern Lake Titicaca Area (Bolivia). *Latin American Antiquity* 8: 255–271.

- Pillsbury, J. (2004). The concept of the palace in the Andes. In Evans, S., and Pillsbury, J. (eds.), *Palaces in the Ancient New World: A Symposium at Dumbarton Oaks*, Dumbarton Oaks, Washington, DC, pp. 181–190.
- Pillsbury, J., and Leonard, B. (2004). Identifying Chimú palaces: Elite residential architecture in the Late Intermediate period. In Evans, S., and Pillsbury, J. (eds.), *Palaces in the Ancient New World: A Symposium at Dumbarton Oaks*, Dumbarton Oaks, Washington, DC, pp. 247–298.
- Platt, T. (1982). The role of the Andean ayllu in the reproduction of the petty commodity regime in northern Potosí (Bolivia). In Lehmann, D. (ed.), *Ecology and Exchange in the Andes*, Cambridge University Press, Cambridge, pp. 27–29.
- Platt, T. (1986). Mirrors and maize: The concept of yanatin among the Macha of Bolivia. In Murra, J. V., Wachtel, N., and Revel, J. (eds.), *The Anthropological History of Andean Polities*, Cambridge University Press, Cambridge, pp. 228–259.
- Pozorski, S., and Pozorski, T. (1986). Recent excavations at Pampa de las Llamas-Moxeke, a complex Initial period site in Peru. *Journal of Field Archaeology* 13: 381–401.
- Pozorski, S., and Pozorski, T. (2002). The Sechin Alto complex and its place within Casma Valley Initial period development. In Isbell, W. H., and Silverman, H. (eds.), *Andean Archaeology 1: Variations in Sociopolitical Organization*, Kluwer Academic/Plenum Press, New York, pp. 21–52.
- Ramirez, S. (1990). The Inca conquest of the north coast: A historian's view. In Moseley, M., and Cordy-Collins, A. (eds.), *The Northern Dynasties: Kingship and Statecraft in Chimor*, Dumbarton Oaks, Washington, DC, pp. 507–538.
- Ramirez-Horton, S. (1981). La organización económica de la costa norte: un análisis preliminar del período prehispánico tardío. In Castelli, A., Koth de Parades, M., and Mould de Pease, M. (eds.), *Etnohistoria y antropología andina*, Instituto de Estudios Peruanos, Lima, pp. 281–297.
- Rapoport, A. (1969). *House Form and Culture*, Prentice Hall, Englewood Cliffs, NJ.
- Rapoport, A. (1990). *The Meaning of the Built Environment*, Sage Publications, Beverly Hills, CA.
- Rice, D. (1993). Late Intermediate period domestic architecture and residential organization at La Yaral. In Aldenderfer, M. S. (ed.), *Domestic Architecture, Ethnicity and Complementarity in the South-Central Andes*, University of Iowa Press, Iowa City, pp. 66–82.
- Rice, D., Stanish, C., and Scarr, P. (eds.) (1989). *Ecology, Settlement, and History in the Osmore Drainage, Peru*, BAR International Series 545 Archaeopress, Oxford.

Rice, P. (1996). The archaeology of wine: The wine and brandy haciendas of Moquegua, Peru. *Journal of Field Archaeology* 23: 187–204.

Rivera-Casanovas, C. (2003). Ch'iji Jawira: A case of ceramic specialization in the Tiwanaku urban periphery. In Kolata, A. (ed.), *Tiwanaku and Its Hinterland: Archaeology and Paleoecology of an Andean Civilization, Volume 2, Urban and Rural Archaeology*, Smithsonian Institution Press, Washington, DC, pp. 296–315.

Rivolta, M. C. (2007). Las categorías de poblados en la región Omaguaca: una visión desde la organización social. In Nielsen, A. E., Rivolta, M. C., Seldes, V., Vásquez, M. M., and Mercolli, P. H. (eds.), *Procesos sociales prehispánicos en el sur andino: la vivienda, la comunidad y el territorio*, Editorial Brujas, Córdoba, Argentina, pp. 143–162.

Rostain, S. (2006). Etnoarqueología de las casas Huapula y Jíbaro. *Bulletin de l'Institut Français d'Etudes Andines* 35: 337–346.

Rostworowski de Diez Canseco, M. (1970). Mercaderes del valle de Chíncha en la época prehispánica: un documento y unos comentarios. *Revista Española de Antropología Americana* (Madrid) 5: 135–178.

Rostworowski de Diez Canseco, M. (1975). Pescadores, artesanos, y mercaderes costeros en el Perú prehispánico. *Revista del Museo Nacional* (Lima) 41: 311–349.

Rostworowski de Diez Canseco, M. (1977). Coastal fisherman, merchants, and artisans in Prehispanic Peru. In Benson, P. (ed.), *The Sea in the Pre-Columbian World*, *Dumbarton Oaks*, Washington, DC, pp. 167–186.

Rostworowski de Diez Canseco, M. (1990). Ethnohistorical considerations about Chimor. In Moseley, M., and Cordy-Collins, A. (eds.), *The Northern Dynasties: Kingship and Statecraft in Chimor*, *Dumbarton Oaks*, Washington, DC, pp. 447–460.

Rostworowski de Diez Canseco, M., Murra, J. (1960). Succession coöption to kingship, and royal incest among the Inca. *Southwestern Journal of Anthropology* 16: 417–426.

Rowe, J. H. (1946). Inca culture at the time of the Spanish conquest. In Steward, J. H. (ed.), *The Andean Civilizations, Handbook of South American Indians, Vol. 2*, Bureau of American Ethnology Bulletin 143, Smithsonian Institution, Washington, DC, pp.183–330.

Russell, G. S., and Jackson, M. (2001). Political economy and patronage at Cerro Mayal, Peru. In Pillsbury, J. (ed.), *Moche Art and Archaeology in Ancient Peru*, Center for the Advanced Study of the Visual Arts, National Gallery of Art, Washington, DC, pp. 159–176.

Salomon, F. (1985). The dynamic potential of the complementarity concept. In Masuda, S., Shimada, I., and Morris, C. (eds.), *Andean Ecology and Civilization: An Interdisciplinary*

Perspective on Andean Ecological Complementarity, University of Tokyo Press, Tokyo, pp. 511–532.

Sandweiss, D. (1992). The Archaeology of Chincha Fisherman: Specialization and Status in Inka Peru, Bulletin No. 29, Carnegie Museum of Natural History, Pittsburgh, PA.

Santley, R. S. (1993). Late Formative period society at Loma Torremote: A consideration of the redistribution vs. the great provider models as a basis for the emergence of complexity in the Basin of Mexico. In Santley, R. S., and Hirth, K. G. (eds.), *Prehispanic Domestic Units in Western Mesoamerica: Studies of the Household, Compound, and Residence*, CRC Press, Boca Raton, FL, pp. 67–86.

Sarmiento de Gamboa, P. (2007 [1572]). *The History of the Incas*, trans. and ed. by B. S. Bauer and V. Smith, University of Texas Press, Austin.

Schiffer, M. (1985). Is there a “Pompeii premise” in archaeology? *Journal of Anthropological Research* 41: 18–41.

Schreiber, K. J. (1992). Wari Imperialism in Middle Horizon Peru, *Anthropological Papers* No. 87, Museum of Anthropology, University of Michigan, Ann Arbor.

Schreiber, K. J., and Lancho Rojas, J. (1995). The puquios of Nasca. *Latin American Antiquity* 6: 229–254.

Shady Solís, R., Haas, J., and Creamer, W. (2001). Dating Caral, a preceramic site in the Supe Valley on the central coast of Peru. *Science* 292: 723–726.

Shimada, I. (1978). Economy of a prehistoric urban context: Commodity and labor flow at Moche V Pampa Grande, Peru. *American Antiquity* 43: 569–592.

Shimada, I. (1982). Horizontal archipelago and coast-highland interaction in north Peru: Archaeological models. In Millones, L., and Tomeada, H. (eds.), *El hombre y su ambiente en los Andes centrales*, National Museum of Ethnology, Suita, Japan, pp. 185–257.

Shimada, I. (1986). Batan Grande and cosmological unity in the Andes. In Matos, R., Turpin, S., and Eling, Jr., H. (eds.), *Andean Archaeology: Papers in Memory of Clifford Evans*, Monograph 27, Institute of Archaeology, University of California Press, Los Angeles, pp. 163–188.

Shimada, I. (1994). *Pampa Grande and the Mochica Culture*, University of Texas Press, Austin.

Shimada, I. (2001). Late Moche craft production: A first approximation. In Pillsbury, J. (ed.), *Moche Art and Archaeology in Ancient Peru*, Center for the Advanced Study of the Visual Arts, National Gallery of Art, Washington, DC, pp. 177–206.

Shimada, M., and Shimada, I. (1985). Prehistoric llama breeding and herding on the north coast of Peru. *American Antiquity* 50: 3–26.

Sikkink, L. (2001). Ethnoarchaeology and contemporary domestic economy in the Mantaro Valley. In D'Altroy, T., and Hastorf, C. (eds.), *Empire and Domestic Economy*, Kluwer Academic Press, New York, pp. 97–113.

Smith, A., and David, N. (1995). The production of space and the house of Xidi Sukur. *Current Anthropology* 36: 441–471.

Spencer-Wood, S. M. (1999). The world their household: Changing meanings of the domestic sphere in the nineteenth century. In Allison, P. (ed.), *The Archaeology of Household Activities*, Routledge, New York, pp. 162–189.

Stahl, P. W., and Zeidler, J. A. (1990). Differential bone-refuse accumulation in food-preparation and traffic areas on an early Ecuadorian house floor. *Latin American Antiquity* 1: 150–169.

Stanish, C. (1989). Household archaeology: Testing models of zonal complementarity in the south central Andes. *American Anthropologist* 91: 7–24.

Stanish, C. (1992). *Ancient Andean Political Economy*, University of Texas Press, Austin.

Stanish, C. (1994). The hydraulic hypothesis revisited: A theoretical perspective on Lake Titicaca Basin raised field agriculture. *Latin American Antiquity* 5: 312–332.

Stanish, C. (2003). *Ancient Titicaca: The Evolution of Complex Society in Southern Peru and Northern Bolivia*, University of California Press, Berkeley.

Stothert, K. E. (1985). The preceramic Las Vegas culture of coastal Ecuador. *American Antiquity* 50: 613–637.

Sutter, R. C. (2000). Prehistoric genetic and culture change: A bioarchaeological search for Pre-Inka altiplano colonies in the coastal valleys of Moquegua, Peru, and Azapa, Chile. *Latin American Antiquity* 11: 43–70.

Tartusi, M. R., and Núñez Regueiro, V. A. (2001). Fenómenos cúlticos tempranos en la subregión Valliserrana. In Berberían, E. E., and Nielsen, A. E. (eds.), *Historia Argentina prehispanica*, tomo 1, Editorial Brujas, Córdoba, Argentina.

Tooker, E. (1978). The League of the Iroquois: Its history, politics, and ritual. In Trigger, B. (ed.), *Northeast, Handbook of North American Indians*, Vol. 13, Smithsonian Institution, Washington, DC, pp. 418–441.

Topic, J. (1977). *The Lower Class at Chan Chan: A Quantitative Approach*, Ph.D. dissertation, Department of Anthropology, Harvard University, Cambridge, MA.

Topic, J. (1982). Lower-class social economic organization at Chan Chan. In Moseley, M., and Day, K. (eds.), *Chan Chan: Andean Desert City*, University of New Mexico Press, Albuquerque, pp. 145–175.

Topic, J. (1990). Craft production in the kingdom of Chimor. In Moseley, M., and Cordy-Collins, A. (eds.), *The Northern Dynasties: Kingship and Statecraft in Chimor*, Dumbarton Oaks, Washington, DC, pp. 145–176.

Topic, J. (1991). Huari and Huamachuco. In Isbell, W., and McEwan, G. (eds.), *Huari Administrative Structure: Prehistoric Monumental Architecture and State Government*, Dumbarton Oaks, Washington, DC, pp. 141–164.

Topic, J., and Topic, T. (2001). Hacia la comprensión del fenómeno Huari: una perspectiva norteña. In Kaulicke, P., and Isbell, W. H. (eds.), *Huari y Tiwanaku: modelos vs. evidencias*, *Boletín de Arqueología*, No. 4, PUCP, Lima, pp. 181–190.

Topic, T. (1977). *Excavations at Moche*, Ph.D. dissertation, Department of Anthropology, Harvard University, Cambridge, MA.

Tringham, R. (1991). Households with faces: The challenge of gender in prehistoric architectural remains. In Gero, J., and Conkey, M. (eds.), *Engendering Archaeology: Women and Prehistory*, Blackwell, Oxford, pp. 93–131.

Uceda, S. (2001). Investigations at Huaca de la Luna, Moche Valley: An example of Moche religious architecture. In Pillsbury, J. (ed.), *Moche Art and Archaeology in Ancient Peru*, Center for the Advanced Study of the Visual Arts, National Gallery of Art, Washington, DC, pp. 47–68.

Uceda, S., and Armas, J. (1998). An urban pottery workshop at the site of Moche, north coast of Peru. In Shimada, I. (ed.), *Andean Ceramics: Technology, Organization, and Approaches*, Museum Applied Science Center for Archeology, University of Pennsylvania Museum of Archaeology and Anthropology, Philadelphia.

Uceda, S., and Mujica, E. (eds.) (1994). *Moche: propuestas y perspectivas*, Universidad Nacional de La Libertad, Trujillo, Lima.

Uceda, S., and Mujica, E. (eds.) (2003). *Moche: hacia el final del milenio, actas del segundo coloquio sobre la cultura Moche (Trujillo, 1 al 7 de Agosto de 1999)*, 2 Volumes, Universidad Nacional de Trujillo y Pontificia Universidad Católica del Perú, Lima.

Uceda S., and Tufinio, M. (2003). El complejo arquitectónico religioso Moche de Huaca de la Luna: una aproximación a su dinámica ocupacional. In Uceda, S., and Mujica, E. (eds.), *Moche: hacia el final del milenio, actas del segundo coloquio sobre la cultura Moche (Trujillo, 1 al 7 de Agosto de 1999)*, Universidad Nacional de Trujillo y Pontificia Universidad Católica del Perú, Lima, pp. 179–228.

- Uceda, S., Mujica, E., and Morales, R. (1997). *Investigaciones en la Huaca de la Luna 1995*, Facultad de Ciencias Sociales, Universidad Nacional de La Libertad, Trujillo, Peru.
- Uceda, S., Mujica, E., and Morales, R. (1998). *Investigaciones en la Huaca de la Luna 1996*, Facultad de Ciencias Sociales, Universidad Nacional de La Libertad, Trujillo, Peru.
- Uhle, M. (1991 [1903]). *Pachacamac: A Reprint of the 1903 edition*, Monograph 62, University Museum of Archaeology and Anthropology, University of Pennsylvania, Philadelphia.
- Van Buren, M. (1996). Rethinking the vertical archipelago: Ethnicity, exchange, and history in the south central Andes. *American Anthropologist* 98: 338–351.
- Van Gijseghem, H. (2001). Household and family at Moche, Peru: An analysis of building and residence patterns in a prehistoric urban center. *Latin American Antiquity* 12: 257–273.
- Van Vleet, K. E. (2008). *Performing Kinships: Narrative, Gender, and the Intimacies of Power in the Andes*, University of Texas Press, Austin.
- Vaquer, J. M. (2007). De vuelta a la casa: algunas consideraciones sobre el espacio doméstico desde la arqueología de la práctica. In Nielsen, A. E., Rivolta, M. C., Seldes, V., Vásquez, M. M., and Mercolli, P. H. (eds.), *Procesos sociales prehispánicos en el sur andino: la vivienda, la comunidad y el territorio*, Editorial Brujas, Córdoba, Argentina, pp. 11–36.
- Vaughn, K. (2004). Households, crafts, and feasting in the ancient Andes: The village context of early Nasca craft consumption. *Latin American Antiquity* 15: 61–88.
- Vaughn, K. (2005). Household approaches to ethnicity on the south coast of Peru: The domestic architecture of early Nasca society. In Reycraft, R. M. (ed.), *Us and Them: Archaeology and Ethnicity in the Andes*, Monograph 53, Cotsen Institute of Archaeology, University of California Press, Los Angeles, pp. 86–103.
- Vaughn, K., and Neff, H. (2000). Moving beyond iconography: Neutron activation analysis of ceramics from Marcaya, Peru, an Early Nasca domestic site. *Journal of Field Archaeology* 27: 75–90.
- Verano, J. W., Uceda, S., Chapdelaine, C., Tello, R., Parades, M. I., and Pimentel, V. (1999). Modified human skulls from the urban sector of the pyramids of Moche, northern Peru. *Latin American Antiquity* 10: 59–70.
- Webster, D. (1985). Surplus, labor, and stress in Late Classic Maya society. *Journal of Anthropological Research* 41: 375–399.
- Weismantel, M. (1988). *Food, Gender, and Poverty in the Ecuadorian Andes*, University of Pennsylvania Press, Philadelphia.

- Weismantel, M. (1989). Making breakfast and raising babies: The Zumbagua household as constituted process. In Wilk, R. R. (ed.), *The Household Economy: Reconsidering the Domestic Mode of Production*, Westview Press, Boulder, CO, pp. 55–72.
- Wernke, S. A. (2007). Negotiating community and landscape in the Peruvian Andes: A transconquest view. *American Anthropologist* 109: 130–152.
- West, M. (1970). Community settlement patterns at Chan Chan, Peru. *American Antiquity* 35: 74–86.
- Wiessner, P. (1989). Style and changing relations between the individual and society. In Hodder, I. (ed.), *The Meaning of Things: Material Culture and Symbolic Expression*, Unwin Hyman (One World Archaeology), London, pp. 56–63.
- Wilk, R. R. (1983). Little house in the jungle: The causes of variation in house size among modern Kekchi Maya. *Journal of Anthropological Research* 2: 99–116.
- Wilk, R. R. (1991). *Household Ecology: Economic Change and Domestic Life among the Kekchi Maya in Belize*, University of Arizona Press, Tuscon.
- Wilk, R. R., and Rathje, W. (1982). Household archaeology. *The American Behavioral Scientist* 25: 617–639.
- Williams, P. R. (2001). Cerro Baúl: A Wari center on the Tiwanaku frontier. *Latin American Antiquity* 12: 67–83.
- Williams, P. R., and Nash, D. J. (2002). Imperial interaction in the Andes: Wari and Tiwanaku at Cerro Baúl. In Isbell, W. H., and Silverman, H. (eds.), *Andean Archaeology 1*, Plenum, New York, pp. 243–266.
- Williams, P. R., and Nash, D. (2006). Sighting the apu: A GIS analysis of Wari imperialism and the worship of mountain peaks. *World Archaeology* 38: 455–468.
- Williams, P. R., Nash, D. J., Glowacki, M., Speakman, R., Neff, H., Glascock, M., Ruales, M., and Clark, J. (2003). Using INAA to assess Wari ceramic production and exchange on the Tiwanaku frontier. Paper presented at the 51st International Congress of Americanists, Santiago, Chile.
- Yanagisako, S. J. (1979). Family and household: The analysis of domestic group. *Annual Review of Anthropology* 8: 161–205.
- Yoffee, N. (2005). *Myths of the Archaic State: Evolution of the Earliest Cities, States, and Civilizations*. Cambridge University Press, Cambridge.

Zeidler, J. A. (1983). La etnoarqueología de una vivienda Achuar y sus implicaciones arqueológicas. *Miscelánea Antropológica Ecuatoriana* 3: 155–193.

Zuidema, R. T. (1977). The Inca kinship system: A new theoretical view. In Bolton, R., and Mayer, E. (eds.), *Andean Kinship and Marriage*, Special Publication No. 7, American Anthropological Association, Washington, DC, pp. 240–281.

Zuidema, R. T. (1990). *Inca Civilization in Cuzco*, University of Texas Press, Austin.

Bibliography of recent literature

Arriaza, B. (1995). *Beyond Death, The Chinchorro Mummies of Ancient Chile*, Smithsonian Institution Press, Washington, DC.

Aldenderfer, M. S. (1989). The Archaic period in the south-central Andes. *Journal of World Prehistory* 3: 117–158.

Anders, M. (1991). Structure and function at the planned site of Azangaro: Cautionary notes for the model of Huari as a centralized secular state. In Isbell, W. H., and McEwan, G. (eds.), *Huari Administrative Structure: Prehistoric Monumental Architecture and State Government*, Dumbarton Oaks, Washington, DC, pp. 167–197.

Cavallaro, R. (1991). *Large-Site Methodology: Architectural Analysis and Dual Organization in the Andes*, Occasional Papers No. 5, Department of Anthropology, University of Calgary, Calgary, Alberta, Canada.

Christie, J. (2006). Houses of political power among the ancient Maya and Inka. In Christie, J., and Sarro, P. (eds.), *Palaces and Power in the Americas: From Peru to the Northwest Coast*, University of Texas Press, Austin, pp. 353–396.

Cook, A. G., and Benco, N. L. (2001). Vasijas para la fiesta y la fama: producción artesanal en un centro urbano Huari. In Kaulicke, P., and Isbell, W.H. (eds.), *Huari y Tiwanaku: modelos vs. evidencias*, *Boletín de Arqueología* No. 4, PUCP, Lima, pp. 489–504.

Couture, N. C. (2003). Ritual, monumentalism, and residence at Mollo Kontu, Tiwanaku. In Kolata, A. (ed.), *Tiwanaku and Its Hinterland: Archaeology and Paleoecology of an Andean Civilization*, Volume 2, *Urban and Rural Archaeology*, Smithsonian Institution Press, Washington, DC, pp. 202–225.

D'Altroy, T. N., Lorandi, A. M., Williams, V. I., Hastorf, C. A., DeMarrais, E., Calderari, M., and Hagstrum, M. (2000). Inka imperial rule in the valle Calchaquí, Argentina. *Journal of Field Archaeology* 27: 1–26.

- De la Vega, E. (2005). Excavations at Sillumocco-Huaquina. In Stanish, C., Cohen, A. B., and Aldenderfer, M. S. (eds.), *Advances in Titicaca Basin Archaeology-1*, Cotsen Institute of Archaeology, University of California Press, Los Angeles, pp. 115–134.
- Donnan, C. (1986). The Huaca I Complex. In Donnan, C., and Cock, G. (eds.), *The Pacatnamú Papers*, Museum of Culture History, University of California Press, Los Angeles, pp. 63–84.
- Eeckhout, P. (1999). Pirámide con rampa no. 3, Pachacamac: nuevos datos, nuevas perspectivas. *Bulletin de l'Institut Français d'Etudes Andines* 28: 169–214.
- Engel, F. (1976). *An Ancient World Preserved: Relics and Records of Prehistory in the Andes*, trans. by R. K. Gordon, Crown Publishers, New York.
- Escalante, J. (2003). Residential architecture in La K'araña. In Kolata, A. (ed.), *Tiwanaku and Its Hinterland: Archaeology and Paleoecology of an Andean Civilization, Volume 2, Urban and Rural Archaeology*, Smithsonian Institution Press, Washington, DC, pp. 316–326.
- Gambier, M. (1998). *Arqueología de la Sierra de San Luís*, Instituto de Investigaciones Arqueológicas y Museo, Facultad de Filosofía, Humanidades y Artes, Universidad Nacional de San Juan, San Juan, Argentina.
- Grosboll, S. (1993). ...And he said in the time of the Ynga, they paid tribute and served the Ynga. In Malpass, M. (ed.), *Provincial Inca: Archaeological and Ethnohistorical Assessment of the Impact of the Inca State*, University of Iowa Press, Iowa City, pp. 44–76.
- Guinea, M. (2006). Un sistema de producción artesanal de cuentas de concha en un contexto doméstico manteño: Japoto (provincial de Manabí, Ecuador). *Bulletin de l'Institut Français d'Etudes Andines* 35: 299–312.
- Hastorf, C. A. (1990). The effect of the Inka state on Sausa agricultural production and crop consumption. *American Antiquity* 55: 262–290.
- Hastorf, C. A. (1993). *Agriculture and the Onset of Political Inequality before the Inka*, Cambridge University Press, Cambridge.
- Hastorf, C. A., and DeNiro, M. J. (1985). Reconstruction of prehistoric plant production and cooking practices by a new isotopic method. *Nature* 315: 489–491.
- Hastorf, C. A., and Johannessen, S. (1993). Pre-Hispanic political change and the role of maize in the central Andes of Peru. *American Anthropologist* 95: 115–138.
- Isbell, W. H. (1991). Huari administration and the orthogonal cellular horizon. In Isbell, W. H., and McEwan, G. (eds.), *Huari Administrative Structure: Prehistoric Monumental Architecture and State Government*, *Dumbarton Oaks*, Washington, DC, pp. 293–316.

- Kuznar, L. A. (1995). *Awatimarka: The Ethnoarchaeology of an Andean Herding Community*, Harcourt Brace College Publishers, Fort Worth, TX.
- Levalleé, D. (1973). Estructura y organización del habitat en los Andes centrales durante el periodo Intermedio Tardío. *Revista Del Museo Nacional* 39: 91–116.
- Llagostera, A. (1989). Caza y pesca marítima (9,000 a 1,000 a.C.). In Hidalgo, J., Schiappacasse, V., Niemeyer, H., Aldunate, C., and Solimano, I. (eds.), *Prehistoria*, Andres Bello, Santiago, Chile, pp. 57–79.
- Mackey, C. (2006). Elite residence at Farfan: A comparison of the Chimú and Inka occupations. In Christie, J., and Sarro, P. (eds.), *Palaces and Power in the Americas: From Peru to the Northwest Coast*, University of Texas Press, Austin, pp. 313–352.
- Mackey, C., and Klymyshyn, A. (1990). The southern frontier of the Chimu empire. In Moseley, M., and Cordy-Collins, A. (eds.), *The Northern Dynasties: Kinship and Statecraft in Chimor*, *Dumbarton Oaks*, Washington, DC, pp. 195–226.
- Makowski, K., and Vega Centeno A., M. (2004). Estilos regionales en la costa central en el Horizonte Tardío: una aproximación desde el valle del Lurín. *Bulletin de l'Institut Français d'Estudes Andines* 33: 681–714.
- Manzanilla, L. (1992). *Akapana: una pirámide en el centro del mundo*, Instituto de Investigaciones Antropológicas, Universidad Nacional Autónoma de México, Mexico City.
- Marcus, J. (1987). Late Intermediate Occupation at Cerro Azul, Perú: A Preliminary Report, Technical Report 20, Museum of Anthropology, University of Michigan, Ann Arbor.
- Moore, J. (1985). *Household Economics and Political Integration: The Lower Classes of the Chimu Empire*, Ph.D. dissertation, Department of Anthropology, University of California, Santa Barbara.
- Moore, J. D. (2006). Copper metallurgy in a prehistoric household, Casma Valley, Peru. *Ñawpa Pacha* 28: 141–150.
- Muñoz, I. (2004). Estrategias de organización prehispánicas en Azapa: el impacto de la agricultura en un valle del desierto costero del pacífico, Ediciones Universidad de Tarapaca, Arica, Chile.
- Muñoz, I. (2004). Ocupación del espacio doméstico y áreas de actividad generadas en el asentamiento prehispánico de San Lorenzo. *Diálogo Andino* 24: 53–98.
- Muñoz, I., and Chacama, J. (1982). Investigaciones arqueológicas en las poblaciones precerámicas de la costa de Arica. Documento de Trabajo 2: 3–97, Universidad de Tarapacá, Arica.

- Muñoz, I., and Chacama, J. (1993). Patrón de asentamiento y cronología de Acha-2. In Muñoz, I., Arriaza, B., and Aufderheide, A. (eds.), *Acha-2 y los orígenes del poblamiento humano en Arica*, Universidad de Tarapacá, Arica, Chile, pp. 21–46.
- Núñez, L. (1989). Hacia la producción de alimentos y la vida sedentaria (5,000 a.C. a 900 d.C.). In Hidalgo, J., Schiappacasse, V., Niemeyer, H., Aldunate, C., and Solimano, I. (eds.), *Culturas de Chile: prehistoria*, Editorial Andres Bello, Santiago, Chile, pp. 81–105.
- Núñez, L., Zlatar, V., and Núñez, P. (1975). Caleta Huelén-42: una aldea temprana en el norte de Chile. *Hombre y Cultura* 2: 67–103.
- Ochatoma, P. J., and Cabrera, R. M. (2001). *Poblados rurales Huari: una visión desde Aqo Wayqo*, Universidad Nacional de San Cristobal de Huamanga, Facultad de Ciencias Sociales, CANO, Lima.
- Pozorski, S., and Pozorski, T. (1987). *Early Settlement and Subsistence in the Casma Valley, Peru*, University of Iowa Press, Iowa City.
- Quilter, J. (1989). *Life and Death at Paloma: Society and Mortuary Practices in a Preceramic Peruvian Village*, University of Iowa Press, Iowa City.
- Rosas Rintel, M. (2007). Nuevas perspectivas acerca del colapso Moche en el bajo Jaquetepeque: resultados preliminares de la segunda campaña de investigación del proyecto arqueológico Cerro Chepén. *Bulletin de l'Institut Français d'Études Andines* 36: 221–240.
- Schwarz, F. A., and Raymond, J. S. (1996). Formative settlement patterns in the Valdivia Valley, SW coastal Ecuador. *Journal of Field Archaeology* 23: 205–224.
- Sikkink, L. L. (1988). Traditional crop-processing in central Andean households: An ethnoarchaeological perspective. In Vitzhum, V. J. (ed.), *Multidisciplinary Studies in Andean Anthropology*, Michigan Discussions in Anthropology 8, Museum of Anthropology, University of Michigan, Ann Arbor, pp. 65–87.
- Topic, T. (1982). The Early Intermediate period and its legacy. In Moseley, M., and Day, K. (eds.), *Chan Chan: Andean Desert City*, University of New Mexico Press, Albuquerque, pp. 255–284.
- Villacorta O., L. F. (2004). Los palacios en la costa central durante los periodos tardíos: de Pachacamac al Inca. *Bulletin de l'Institut Français d'Études Andines* 33: 539–570.
- Willey, G. (1953). *Prehistoric Settlement Patterns in the Virú Valley, Peru*, Bulletin 155, Bureau of American Ethnology, U.S. Government Printing Office, Washington, DC.