

Investigating monumental social space in Late Bronze Age Cyprus: an integrative approach

Abstract

The Late Bronze Age on Cyprus (c. 1650–1100 BCE) saw the appearance of monumental buildings that came to play an important role in changing patterns of social interaction and reproduction. Although these buildings often shared similarities in overall plan and the use of common design elements, I argue that the process of placemaking resulted in considerable variation in both their spatial configuration and the design of contexts for particular social interactions. Through its design and use in daily practice and social occasions, each monumental building developed its own biography and sense of place, ensuring that the experiences of its occupants and visitors were, in many ways, unique. I investigate this through a comparative study of two court-centred buildings, Building X from Kalavassos-Ayios Dhimitrios and Building II from Alassa-Paliotaverna. I apply an integrative approach that acknowledges the agency of both builder and building, combining access analysis with an examination of how built environments encode and nonverbally communicate meanings to those who used them.

1 Introduction

In contrast to its better-known neighbours in the eastern Mediterranean and Near East, the island of Cyprus is remarkable for the late development of many of the traditional hallmarks of state-level “civilization”. It was only during the transition to the Late Bronze Age (LBA or Late Cypriot [LC] period, c. 1650–1100 BCE) that we see the widespread emergence of institutionalized social hierarchies, specialized systems of production and exchange, and international relations. At the same time, Cyprus witnessed the appearance of monumental buildings and new types of domestic and funerary architecture, followed soon after by the first cities. While these changes to the island’s built environment are typically seen as by-products of demographic and politico-economic processes, I have argued, rather, that they represent acts of placemaking and played an active and vital role in the profound social transformations of the LC period (cf. Fisher 2013, in press). In particular, elites erected monumental buildings that became not only indelible landmarks, but also the primary arenas in which LC sociopolitical dynamics were enacted (Fisher 2009a).

Under the long-established influence of traditional art-historical perspectives, studies of Cypriot monumental buildings have tended to be descriptive, often focusing on their stylistic elements (usually as a means of attributing foreign influences) and technical aspects of their construction. Influenced by processual approaches in archaeology, the late 1980s and early 1990s brought attempts to see these buildings (and settlements more generally) from a functionalist perspective, emphasizing their role in local and regional systems of production and exchange. More recently, however, some scholars have adopted agent-

centred approaches that recognize the role of the LC built environment in social reproduction (Bolger 2003; Knapp 2008; 2009; Manning 1998; Smith 2009). Knapp (2008, p. 211–249) certainly goes the furthest in this direction, acknowledging how the performances and experiences that occurred in monumental structures helped LC people to make sense of their world. Nevertheless, these accounts do not address how monumental buildings structure movement and influence behavior through the design and elaboration of particular contexts for specific types of social interaction. A further issue with many recent accounts of LC architecture is an emphasis on the standardization of architectural forms as one of its defining traits (e.g. Bolger 2003, p. 43, 49; Knapp 2008, p. 209; Wright 1992, p. 211: “II-shaped” buildings; cf. Negbi 2005).

In spite of superficial similarities in overall plan and the use of common elements such as ashlar (cut stone) masonry, I argue that the process of placemaking resulted in considerable variation in both spatial configuration and the design of contexts for particular social interactions among LC monumental buildings – even among buildings regarded as being of the same type. Through its design and use in daily practice and ritual occasion, each monumental building developed its own biography and sense of place, ensuring that the experiences of its occupants and visitors were, in many ways, unique. I investigate this dynamic using an integrative approach that combines the topological emphasis of access analysis with a focus on how built environments encode and nonverbally communicate meanings to users.

I begin by outlining the theoretical underpinnings and methods of this integrative approach before applying it to an analysis of social space in two court-centred monumental buildings from the island’s LC IIC–IIIA urban *floruit* (c. 1340–1100 BCE): Building X at Kalavassos-Ayios Dhimitrios and Building II at Alassa-Paliotaverna.

2 An integrative approach

I take an approach to analyzing social space that acknowledges the agency of both people and the built environments they construct and inhabit. This approach takes a cue from Giddens (1984) and related social theorists, who argue that it is through practice, or the routinized actions of knowledgeable agents, that the structural properties of societies are produced and, at the same time, reproduced or transformed. As the primary contexts in which practice is enacted, built environments are both product and producer of social life. I see the design, construction and use of these contexts as acts of placemaking. This implies a distinction between space and place, something now widely accepted across the social sciences (Feld and Basso 1996; Low and Lawrence-Zúñiga 2003; Preucel and Meskell 2004; Tuan 1977). While space generally refers to the static, physical setting in which everything occurs, *place* is the dynamic, socially-constructed and meaningful context of human action and experience. But how do places influence social action and interaction?

In their landmark review of built environment studies, Lawrence and Low (1990, p. 482–491) argued the need for approaches that integrate the social production of built form and its impact on social action with insights gained from environmental psychology and symbolic approaches that emphasize the role of built form in the communication of meaning. I have developed such an integrative approach by combining the topological emphasis of access analysis with a focus on how built environments transmit meanings through nonverbal communication. Its aim is to determine the types of social interaction that might take place in particular contexts, thereby fleshing out and re-populating past built environments. I have discussed this approach in detail elsewhere (Fisher 2007, chapters 4–5; 2009b) and provide only a brief summary here.

Social interaction requires the co-presence of individuals (Giddens 1984, p. 64–73; Goffman 1963, p. 17–18). In recognizing different types of interaction, Erving Goffman (1963, p. 18–24) distinguished between transitory *gatherings* in which two or more individuals are momentarily in one another's presence, and *social occasions*, which are undertakings or events that also involve co-present individuals, but which are bounded in time and space and often facilitated by fixed equipment. Occasions range from some of the more routine aspects of daily life (e.g. the regular preparation and consumption of a meal), while others are more formally defined in terms of time, space and participants. In order to identify likely contexts for social occasions, it is necessary first to understand how a building structures movement and encounter among its occupants and between occupants and visitors. Access analysis, derived from space syntax, achieves this by determining how individual spaces are integrated into the overall spatial configuration (Hillier and Hanson 1984; Hillier, this volume). It involves translating a building into a graph in which each room or space is represented as a circle, with direct access between rooms represented as lines linking the circles together. The spaces can be 'justified' by lining them up in levels according to their depth from the point of origin, resulting in a j-graph (e.g. see fig. 4). From this, one can measure *integration*, or how accessible each space is from any other point in the structure; *control*, or the degree of control a space exercises over its immediate neighbours; and *depth*, or how many spaces one would move through to arrive at another space, usually from outside the building (cf. Hillier and Hanson 1984, p. 143–175).¹ Access analysis allows us to

1 Integration is expressed here as *relative asymmetry* (RA), a measure of how accessible a space is from any other space in the structure. To calculate it, one must first calculate *mean depth* (MD), which measures how deep the space is, relative to the other spaces in the building: $MD = \frac{\text{cumulative depth of each space}}{p-1}$, where p is the number of points in the system (see Hillier this volume). Then, $RA = \frac{2(MD-1)}{k-2}$, where k is the number of spaces in the system. RA values are standardized to provide a value between 0 and 1, with a higher score indicating less accessibility or integration. They are then converted to *real relative asymmetry* (RRA) values by dividing them by their D-value (cf. Hillier and Hanson 1984, table 3) in order to allow comparisons between systems with different numbers of spaces. RRA scores can be classified as high, medium, or low by dividing a ranked set into thirds, while keeping equal RRA scores within the same category (Note that in some recent applications of space syntax, integration is measured as the reciprocal of RRA). Control is expressed as a *control value* (CV), the degree of control a space exercises over its immediate neighbours. Each space in the building is assigned a value of 1, which is

see pathways movement through a structure, providing insight into potential locations for interaction between inhabitants and visitors. Unfortunately, however, the topological emphasis of this method obscures or ignores elements of built environment, including everything from the size and shape of a room, to its contents and décor, that encode and communicate meanings that can profoundly influence human behavior (Bechtel 1997; Hall 1966; Stokols and Altman 1987; cf. Fisher 2007, chapter 3 for a summary).

Amos Rapoport's (1990) nonverbal communication approach provides a comprehensive framework for examining this phenomenon. It is based on the premise that built forms are created to provide cues to users that inform them of proper or expected behavior (fig. 1). These meanings are encoded in fixed-feature elements such as walls and floors, semifixed-feature elements such as furnishings and other artifacts, and nonfixed-feature elements including the physical and verbal expressions of the building's occupants and users. They are then communicated to the users of a space, potentially influencing their actions and interactions. Redundancy in meanings across these elements increases the likelihood that the message will be properly understood, although it by no means guarantees either comprehension or compliance. In order to investigate this phenomenon, I recorded the size and relative convexity ('squareness') for each space in the buildings examined below, as well as the locations and characteristics of various features and artifacts, such as masonry, doorways, hearths, wells and benches. To this we can add insights gained from Hall's (1966) research on *proxemics*, the study of people's use of space as an aspect of culture (table 1). It is especially useful in illuminating the relationship between interpersonal spacing and human sensory perception during social interaction and can suggest a range of distances at which certain types of social interaction might take place (cf. Wheatley, this volume). Taken together, the syntactic and architectural properties of each space allow one to determine its potential to host social interaction and whether that interaction would more likely be public-inclusive or private-exclusive in nature (table 2).

While many senses are engaged in wayfinding and the perception of cues during interaction, vision is perhaps the easiest to assess in many archaeological contexts (cf. Wheatley, this volume, for a full discussion of vision and its relationship with other senses). We can begin to capture something of the visual experience of significant spaces or movement through built space using the concept of the *isovist*, defined as the set of all points visible from a particular vantage point in space (Benedikt 1979, p. 47). Given the limitations of representing a three-dimensional phenomenon in two dimensions, these appear as polygons. It is possible to increase the analytical power of an isovist by coding it with a series of concentric circles representing Hall's proxemic thresholds (e.g. see fig. 8). The isovist can also

equally divided among each of the neighbouring spaces to which it has direct access. These are then totaled for each space, and the higher the number, the more control the space exerts over adjoining spaces. Control values can also be ranked, with values of 1.0 or less being "low", while values > 1.0 but = 2.0 are "medium", and those > 2.0 are "high".

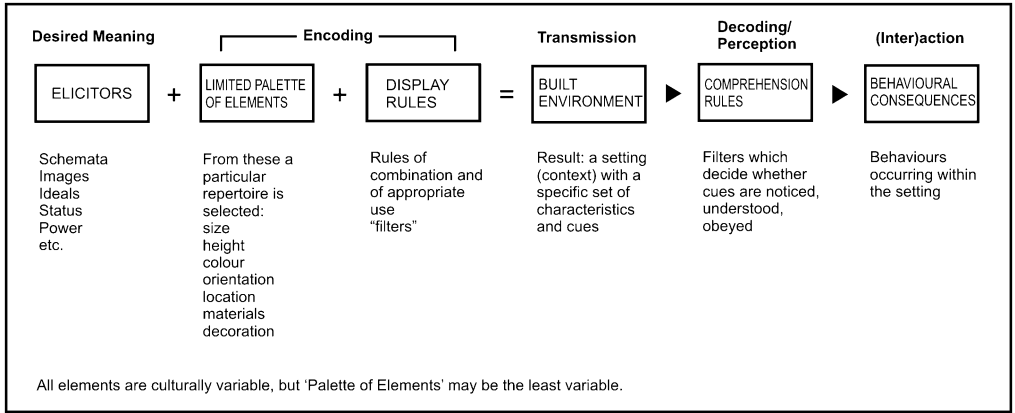


Figure 1 | A nonverbal communication approach to the built environment (adapted from Rapoport, p. 199, fig. 17).

Table 1 | Proxemic distances and corresponding effects on perception (based on Hall 1966, p. 116–129).

Proxemic Threshold	Intimate	Personal	Social (Near Phase)	Social (Far Phase)	Public (Near Phase)	Public (Far Phase)
Distance	0–0.45 m	>0.45–1.2 m	>1.2–2.15 m	>2.15–3.65 m	>3.65–7.6 m	>7.6 m
Touch	Can touch easily; accidental contact is possible	Can reach out and grasp extremity at near phase; cannot touch beyond c. 0.75 m	2 people can pass an object back and forth by both stretching (up to c. 3 m).			
Oral/Aural	Soft voice; intimate style Conventional modified voice; casual or consultive style		Loud voice used when speaking to group Full public-speaking voice; frozen style			
Detailed Vision (Foveal)	Details of eyes, pores on face, finest hairs visible; vision can be distorted or blurred	Details of face clearly visible	Can see head hair clearly; wear on clothing apparent	Fine lines of face fade; lip movement seen clearly	Eye colour not discernable; smile vs. scowl visible	Difficult to see eyes or subtle expressions
60° Scanning Vision	1/3 of face; some distortion	Takes in upper body	Upper body and gestures	Whole seated body visible Whole body has space around it in viewshed; postural communication becomes important		
200° Peripheral Vision	Head against background visible	Head and shoulders visible	Whole body visible	Other people seen if present Other people become important in vision		

Table 2 | Architectural and syntactic correlates of public-inclusive and private-exclusive social interactions.

“PUBLIC” – INCLUSIVE OCCASIONS • Medium to high CV • Low RRA • High convexity score (>0.6) and area >12 m² (space will be large and tend toward square) • Generally low depth measure (i.e. space is shallow or close to exterior), but if depth measure is high, the space will likely be on a major axial route • Space is more likely to contain important fixed- or semifixed-feature elements (e.g., ashlar masonry; formal hearths, etc.) • Likely to have wider doorways “PRIVATE” – EXCLUSIVE OCCASIONS • Low CV (space is less subject to intrusion) • Medium-High RRA (space is not easily accessible/not well integrated) • Generally high convexity, although size is not an important factor • Likely to have high depth measure • Likely to have more narrow doorways
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be expanded to include all the points visible from a particular space, or what I call an *isovist field* (e.g. see fig. 3; cf. Batty 2001; Benedikt 1979). It can also be modified to include only a subset of points, or *viewshed*, which indicates what is visible from the perspective of the viewer facing a particular direction (cf. Fisher 2009a, p. 448–51; e.g. cf. fig. 5). Recent advances in 3D modeling and visualization hold the promise of significantly advancing this kind of approach and our ability to understand how people perceived and experienced past built environments (e.g. Paliou et al. 2011; Paliou, this volume; Papadopoulos and Earl, this volume).

The integrative approach outlined here provides a means of investigating the materiality of past built environments, allowing significant insights into the relationship between people and the places in which they lived, as well as the wider social implications of this relationship. The dynamics of this relationship were enacted at multiple spatial scales, from the body itself, through individual buildings and their constituent parts, to various levels of community. In what follows I will apply the integrative approach to two ostensibly similar monumental buildings from the island’s Late Bronze Age.

3 A tale of two buildings

This period culminated in what some scholars see as the emergence of state-level socio-political organization on the island (cf. Knapp 2008, p. 144–159 for a full discussion). Whether this took the form of a centralized, island-wide polity or a series of regional polities (or vacillated between these forms), it is clear that emerging inequalities gave way to social hierarchies as elites institutionalized their power through intensified control over increasingly centralized systems of production and exchange, legitimized through ideological means (Knapp 1988). At the same time, society became increasingly heterarchical as various collectivities emerged in the context of new social, economic and political networks and opportunities (Keswani 1996; 2004, p. 154–57). New urban environments were both product and producer of these transformations. The earliest cities were founded during a formative “Proto-urban” phase (Middle Cypriot [MC] III–Late Cypriot I; c. 1750–1450 BCE), which also saw the construction of the first monumental buildings – a series of forts, which appear in the northern and eastern parts of the island (cf. Fortin 1981).

This was followed by a fully-urban phase during the 14th through early 12th centuries BCE (LC II–IIIA periods) that witnessed the (re)construction, ‘urbanization’ and monumentalisation of a number of settlements. If the admittedly limited exposures at sites such as Enkomi and Kalavassos-Ayios Dhimitrios are any indication, the design and construction of the new urban centres involved the architectural definition of the majority of space within the urban areas. New monumental buildings, often built at least partially of ashlar masonry, were an integral part of these new urban landscapes and potent materializations of elite power and control over human and material resources. In the fully-urban phase of the Late Bronze Age, these buildings came to replace the funerary realm as the primary venues in which social dynamics were enacted. Whatever other practical and symbolic functions they may have had, I have argued that the capacity to provide appropriate contexts for social interactions that could emphasize or downplay social distance was, ultimately, their main purpose (Fisher 2009a).

The Ashlar Building at Maroni-Vournes, Building X at Kalavassos-Ayios Dhimitrios, and Building II at Alassa-Palioaverna were all built during this fully-urban period. Each has been described as the administrative centre or focus of power for both its site and the wider region (Cadogan 1996, p. 18; Hadjisavvas 2000, p. 396; South 1992, p. 195). These buildings share a number of general similarities suitable for this role, including large size, the extensive use of ashlar construction; location within a distinct administrative or elite sector of their respective sites; a layout based on units or wings arranged around a large central hall or court; and the provision of large-scale production facilities (at least at Maroni and Kalavassos), monumental storage facilities, and spaces suitable for public-inclusive social interactions up through the far phase of public distance as well as private-exclusive interactions. Hadjisavvas (2000, p. 388) has suggested that, with these shared characteristics, the three buildings could justify a “special classification”. In the following, I will limit my dis-

cussion to the two buildings that share the most formal similarity – those at Kalavassos and Alassa.

In spite of this general formal similarity, I will show how each building incorporated architectural elements in distinct ways, materializing different approaches to the expression of monumentality and the control of movement and occupant-visitor interaction. Not only would users have experienced each building differently, but each structure developed a unique biography through its construction and use. It is important to note that neither of these buildings has been fully published. Much of the following is based on various preliminary reports and my own observations from site visits.

4 Building X at Kalavassos-Ayios Dhimitrios

The site of Kalavassos-Ayios *Dhimitrios* is located in south-central Cyprus in the Vasilikos River valley about 3.5 km from the Mediterranean coast. Excavations there, directed by Alison South, were initiated in 1979 in advance of the construction of the new Nicosia-Limassol highway, which cuts through the centre of the site (South et al. 1989, fig. 2). This work continued until 1996, revealing an important urban centre that reached its zenith during the LC IIC period (c. 1340–1190 BCE). Excavations in several areas of the 11.5 ha site recovered the remains of various buildings and roads that are largely oriented to the north-west, indicating that much of the city was laid out on a preconceived plan (South 1996, p. 41; Wright 1992, p. 115).

Located in the north-eastern “administrative” area, Building X is by far the largest and most elaborate building yet found at the site (fig. 2). Sometime in the mid-LC IIC, it was reconstructed (I would say monumentalized) with the addition of various types of ashlar masonry (South 1997, p. 173). It is a multifunctional complex, with evidence for economic production, storage and administration on the first floor, as well as a now-missing upper floor that may have been residential space. It lies at the end of the city’s main north-south road, which widens as it approaches the building, taking on something of the appearance of a processional way. Not coincidentally, a series of elite chamber tombs, some of which were still in use during Building X’s occupation, were found in the road as it comes to an end between Buildings XII and XV (South 2000). Looking northward, their backdrop is the southwest corner of Building X, which has the most elaborate form of ashlar masonry, a shell-wall consisting of a plinth of long rectangular blocks with drafted margins, surmounted by an orthostat of taller blocks, also with drafted margins. This, in turn, would have been topped by a superstructure of plastered mudbrick (South 1984, p. 19).

The core of the building is square (30.5 × 30.5 m) and is conceived on a tripartite plan with three parallel sectors along the front. An additional sector or annex runs transversely across the north end, bringing the total north-south length to 35–37 m. The main entrance is from the south, leading through a vestibule (Room 154) into a large central court (Room

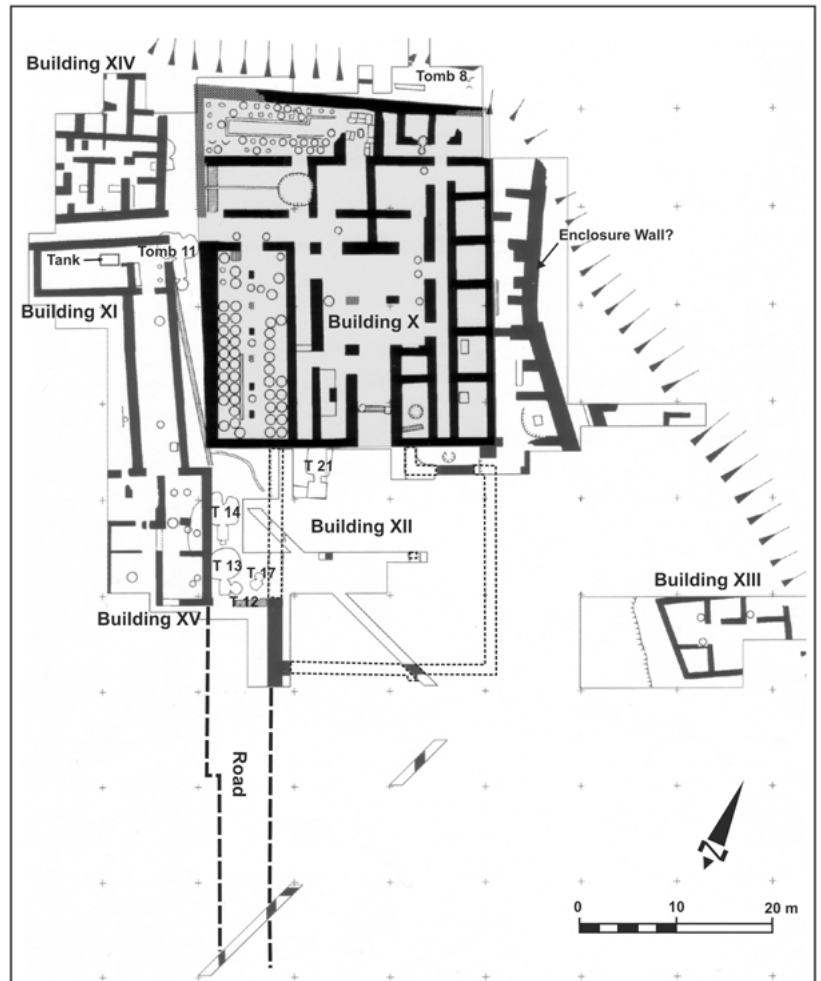


Figure 2 | Kalavassos-Ayios Dhimitrios, schematic plan of Northeast Area. Possible outline of Building XII shown based on robber's trenches (modified from plan provided by A. South).

157). The central unit and its associated rooms are flanked by long hallways that provided access on the east to a series of small rooms and, on the west, a massive storeroom (discussed further below). In the northwest corner of the building were facilities for the production and storage of olive oil. In the detailed plan provided (fig. 3), I have indicated doorways to each of the rooms along the east of Hallway 158. While the doorways are not preserved, it is unlikely that the hallway would have run nearly the entire length of the building if not to provide access to these rooms, with the doorway preserved in the west wall of Room 171 providing a precedent for this arrangement.

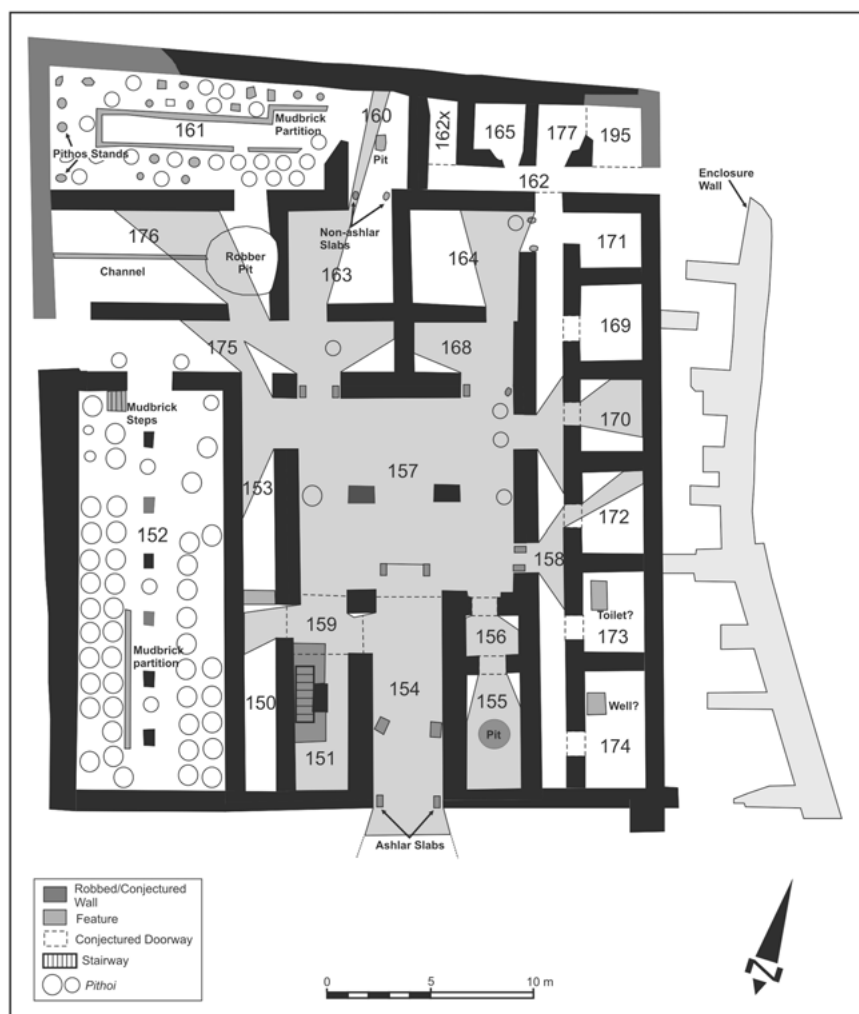


Figure 3 | Kalavassos-Ayios Dhimitrios, Building X schematic plan showing isovist field from central court (drawn by author based on schematic plan provided by A. South).

Syntactically, Building X is quite shallow; no room is more than three levels deep from the carrier, and someone entering from the outside is never more than one level away from a space that controls access to several other spaces (e.g. Rooms 157, 162, 158 and 175 [fig. 4]). Indeed, nearly every room in the building is directly accessible from one of the primary access spaces: the central court, Hallways 162 and 158 in the east, and Hallway 175 in the northwest. It is clear that Building X was purposefully designed to facilitate the circulation of traffic throughout its ground floor.

Not surprisingly, the central court would have played an important role in structuring daily practice and is well suited to hosting public-inclusive social interactions. It is the most

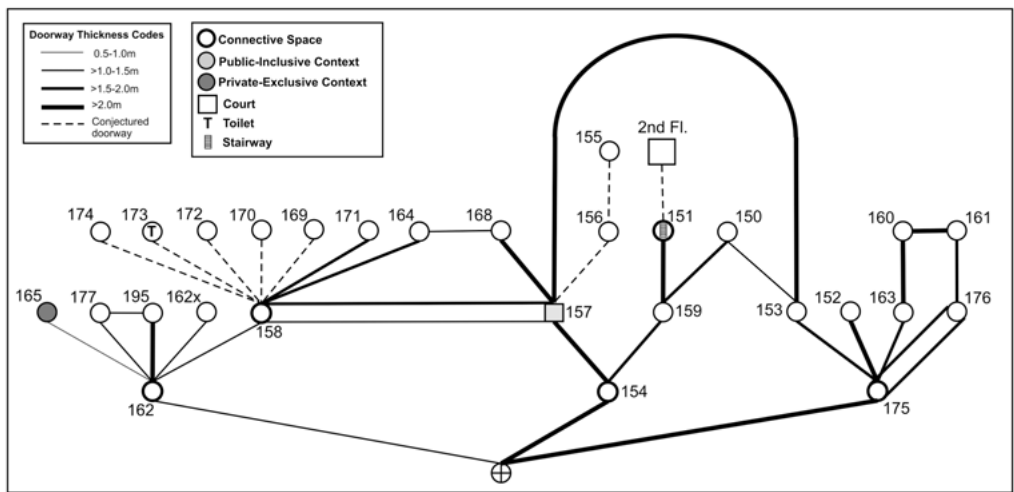


Figure 4 | Kalavassos-Ayios Dhimitrios, Building X access graph (j-graph).

integrated space in the building (RRA score of 0.52), has a medium control value (1.78) and is on the axial route from the building's main entrance (table 3). Covering an area of 97.5 m², it is the second largest room in the building and is nearly square, having a relative convexity measure of 0.87. The central court has an extensive isovist field that penetrates into several of the surrounding parts of sections of the building (fig. 3). In terms of fixed- and semifixed-feature elements, the walls of this room, at least on the north, east and west sides were likely faced with ashlar blocks, although smaller and less elaborate than those along the building's west wall. Currently, however, only a few such blocks remain *in situ*. The pebble floor is of a type normally found in outdoor spaces elsewhere in the city, leading South (1984, p. 22) to suggest that the court was an open area. A large ashlar block was set into the floor of the east part of the court, while a large pit with ashlar fragments located in the same position on the west side of the court undoubtedly held an identical block. These blocks were likely bases for columns that formed a portico, in which one half of the court (or the east and west sides) may have been covered by a roof.

The main entry to Building X was through an impressive vestibule or entry hall (Room 154), although it is unclear precisely how this articulated with Building XII, a partially-excavated structure immediately south of Building X (South 1991, p. 136–7). Building XII appears to have been a pillared hall or court of ashlar construction, although much of the masonry was robbed-out in antiquity. Wall trenches where ashlar blocks probably stood appear to adjoin the south wall of Building X, suggesting that one may have had to enter Room 154 through Building XII. In any case, the elaborate entry hall to Building X was characterized by pairs of inset ashlar blocks that marked the entry and the mid-point of the room. While South (1984, p. 20–21) suggests that these blocks might have supported a stone or wooden threshold slab, it is more likely, given the underlying foundation layer of

Table 3 | Kalavassos-Ayios *Dhimitrios*, Building X ranking of key syntactic and architectural properties. Darker shaded cells indicate private-exclusive spaces; lighter shaded cells indicate public-inclusive spaces.

CV Rank			RRA Rank			Depth Rank	
Room	CV		Room	RRA		Room	Depth
169	0,1111	low	157	0,5171	low	154	1
170	0,1111	low	158	0,5579	low	162	1
171	0,1111	low	154	0,5715	low	175	1
172	0,1111	low	162	0,5852	low	152	2
173	0,1111	low	Carrier	0,5852	low	153	2
174	0,1111	low	153	0,6532	low	157	2
165	0,1667	low	175	0,7212	low	158	2
162x	0,1667	low	156	0,8709	low	159	2
152	0,2000	low	159	0,9117	low	163	2
155	0,5000	low	164	0,9117	low	165	2
2nd Floor	0,5000	low	168	0,9117	low	176	2
164	0,6111	low	150	0,9390	medium	177	2
150	0,6667	low	169	0,9390	medium	195	2
177	0,6667	low	170	0,9390	medium	162x	2
195	0,6667	low	171	0,9390	medium	150	3
163	0,7000	low	172	0,9390	medium	151	3
168	0,7000	low	173	0,9390	medium	156	3
176	0,7000	low	174	0,9390	medium	160	3
Carrier	0,7000	low	177	0,9526	medium	161	3
154	0,8667	low	195	0,9526	medium	164	3
153	0,9000	low	165	0,9662	high	168	3
160	1,0000	low	162x	0,9662	high	169	3
161	1,0000	low	163	1,0614	high	170	3
156	1,2000	medium	176	1,0614	high	171	3
151	1,3333	medium	152	1,1022	high	172	3
159	1,3333	medium	155	1,2519	high	173	3
157	1,7778	medium	151	1,2655	high	174	3
175	2,6667	high	160	1,4016	high	155	4
162	3,4444	high	161	1,4016	high	2nd Floor	4
158	6,8667	high	2nd Floor	1,6466	high	Carrier	na

Relative Convexity Rank			Total Door Width Rank		Mean Door Width	
Room	Area m2	Rel.Conv.	Room	Total Width	Room	Mean Width
158	36,82	0,05	165	1,00	165	1,00
162	13,38	0,11	162x	1,20	162x	1,20
175	39,72	0,15	171	1,60	177	1,23
153	16,64	0,15	177	2,45	162	1,37
150	14,72	0,17	152	2,50	150	1,55
154	33,64	0,31	151	3,00	171	1,60
152	135,45	0,36	150	3,10	158	1,61
162x	3,84	0,38	164	3,40	164	1,70
161	67,58	0,38	195	3,45	195	1,73
176	46,64	0,42	168	3,85	153	1,77
151	20,36	0,43	161	3,90	176	1,85
174	16,52	0,47	163	3,95	168	1,93
168	12,50	0,48	160	4,20	161	1,95
155	16,24	0,48	153	5,30	163	1,98
160	14,01	0,62	176	5,55	175	2,01
156	4,95	0,65	159	6,55	160	2,10
159	9,50	0,66	Carrier	6,90	157	2,15
172	11,20	0,70	158	8,05	159	2,18
169	10,08	0,78	154	8,15	Carrier	2,30
173	10,08	0,78	162	8,20	152	2,50
164	22,79	0,81	157	10,75	154	2,72
170	9,66	0,81	175	12,05	151	3,00
157	97,52	0,87	155	?	155	?
163	22,50	0,90	156	?	156	?
165	5,63	0,90	169	?	169	?
195	4,40	0,91	170	?	170	?
171	7,84	1,00	172	?	172	?
177	4,20	1,00	173	?	173	?
2nd Floor	na	na	174	?	174	?
Carrier	na	na	2nd Floor	?	2nd Floor	?

rubble, that these blocks were meant to be visible and that they were actually the terminals of some kind of wooden (or perhaps even ashlar) threshold. The north end of the entry hall was further distinguished by steps leading up to the slightly higher elevation of the court, and this transition was also marked by a pair of smaller ashlar slabs. A line of charcoal ran between the two slabs (South, 1984, p. 21), suggesting that they were ends of what may have been another wooden threshold. These thresholds clearly marked the significance of movement into (or out of) the court. They also served as nonverbal cues that funneled both the movement and viewsheds of visitors toward the court, gradually revealing this impressive monumental space as one moved forward (fig. 5). The entry hall likely served as a liminal space between the commonly accessible space of the outside of the building (or, possibly, Building XII) and the ideologically-charged space of the elaborate central court – the physical and symbolic heart of the building. It is significant that similar sets of ashlar blocks flanked other doorways into the court, including the south entry on the eastern wall and the east and west entries along the northern wall. The central hall was clearly a space within which gatherings would have occurred in the course of daily practice, but there is some circumstantial evidence for its use in important public-inclusive occasions.

In nearby Room 173, which was paved with irregular, uncut stones, a deep, rectangular shaft was discovered that may have been a latrine (cf. South 2008, fig. LXIIa). Within its fill was a deposit that contained, in addition to numerous botanical remains, 4.5 kg of animal bones, including large numbers of meat-bearing joints of sheep and goats, single bones from a pig and a cattle- or equid-sized creature, birds, fish and rodents (South 2008, p. 311). Associated ceramic remains consist of at least 85 vessels with Mycenaean vessels and local Mycenaean imitations comprising at least 62 % of the assemblage, and the imports making up about 75 % of that amount (South and Russell 1993, p. 306). Open forms such as cups and shallow bowls were predominant in the assemblage. While a few vessels are complete, most are broken but easily restorable (with joins being found at distinctly different depths), suggesting that the material was deposited over a short period of time (South 1988, p. 228). I suggest that this deposit represents the remains of a feasting event that likely took place in the central court and that the vessels may have been broken in an act of conspicuous consumption that must have ended the occasion (cf. South 2008, p. 312). The role of feasting in the negotiation of social relations and development of power is well established (e.g. Bray 2003; Dietler and Hayden 2001; Wright 2004), and it is clear that it was an integral part of the social lives of LC elites (Fisher 2009a; Steel 2004).

The central court provided a suitably impressive context for such an event, during which as many as 180 seated guests could participate.² The size of this space would have

2 Room capacity is a function of its area, and I calculate maximum occupancy based on modern architectural standards for density of people seated on benches or chairs (1.9 persons/m²) and standing in a group situation of “normal spacing” (3.4 persons/m²) (Neufert and Neufert 2000, p. 16–17; cf. Fisher 2007a, p. 101–102). The maximum seated capacity is 185 persons, but allowance is made for the presence of the large columns.

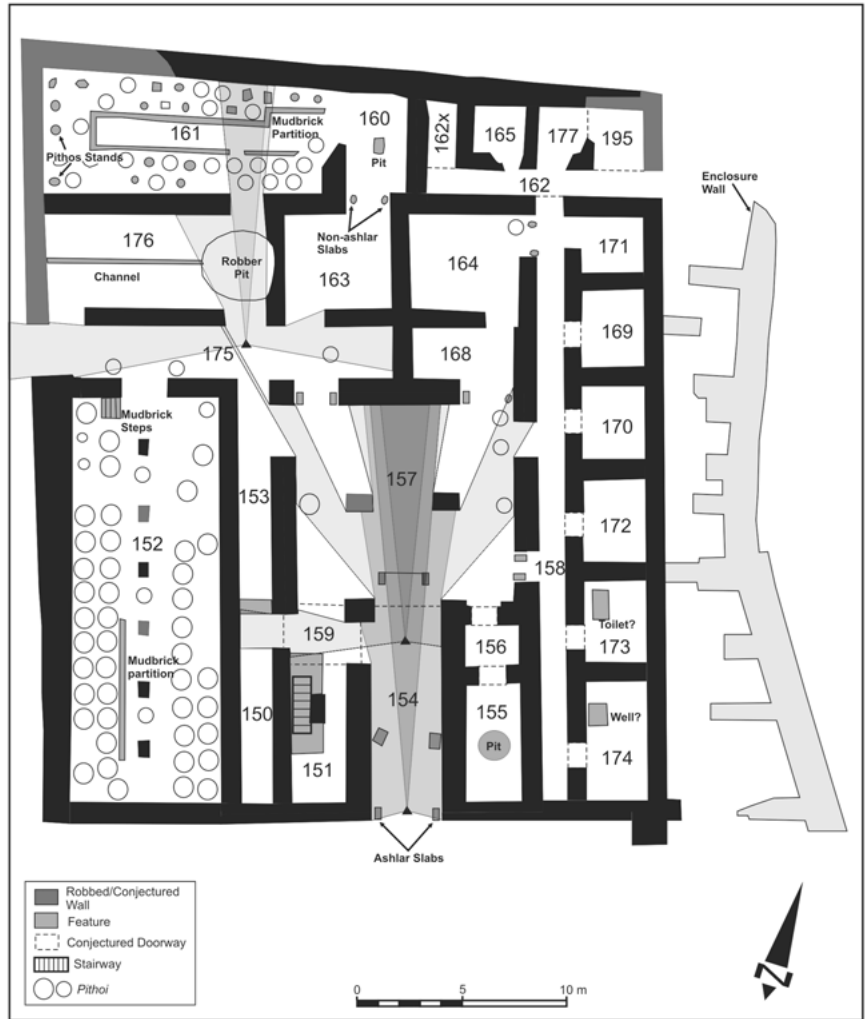


Figure 5 | Kalavassos-Ayios *Dhimitrios*, Building X schematic plan showing viewsheds from two points in Room 154 as one moves toward the central court; and from Room 175 though to Room 161.

permitted interactions up to the far phase of public distance. Interestingly, the central court is the only space in the building with the characteristics suitable for public-inclusion occasions. Adjoining rooms with lower control values, such as Rooms 164 and 168 to the north or 156 and 155 to the south, might have been employed during these occasions if contexts were needed for interactions that required more exclusivity and less chance of interruption. While there is no direct evidence for food preparation within the building, South (1988, p. 227) suggests that the space between the east wall of Building X and the enclosure wall, with its pebble floors and drains, might have served as kitchen space.

In addition to the social occasions held within the central court, I would argue that some visitors were also expected to see Room 152 – the Pithos Hall. This monumental space was an immense rectangular hall that occupied the entire southwest corner of the building. It is the largest room in Building X (135 m²) and, as noted above, has the most elaborate type of ashlar masonry along its west wall. The south wall, which was robbed of its ashlar facing, was probably similarly constructed, while the remaining walls were constructed with well-built rubble socles (South 1984, p. 22). Six monolithic ashlar columns that were a minimum of 2.5 m high (only four of which are partly extant) were aligned on the longitudinal axis of the room and supported its roof.

While architecturally impressive, the most striking feature of this hall was its contents. It was filled with over 50 massive *pithoi* (ceramic storage jars), most standing in rows running the length of the hall, while six others were sunk into the ground between the columns and in the northeast corner, with their rims at floor level. These vessels were typically ovoid or piriform in shape, ranging from 1.5–2.0 m in height with rim diameters of 0.50–0.68 m (Keswani 1989, p. 17–18). Most of the pithoi stood on regularly-spaced flat stones, their bases still found *in situ* (South 1984, p. 19). They had a combined capacity of c. 33,500 litres and gas-chromatography analysis indicates that many (if not all) of them contained olive oil (South 1989, p. 321). The single entrance to the Pithos Hall results in the room being poorly integrated into the overall plan, making it clear that control over access to this room and its valuable contents was a priority.

The view into the Pithos Hall from this entrance in the north wall (from Hall 175) would have been an impressive one, enhanced by the symmetry of the room and arrangement of the ashlar columns and rows of pithoi along the hall's longitudinal axis. In describing this sort of arrangement, Keswani (1989, p. 16–17) notes that, “when intact, each individual vessel would have been extremely imposing in appearance; grouped together, they must have conveyed a tremendous impression of agricultural wealth.” I suggest that these “mega-pithoi” (Keswani 1989, p. 17) were monumental objects in their own right and symbolic not only of the wealth represented by their contents, but also of the highly skilled labor required to produce them and the ability of Building X's occupants to control such labour (or at least procure its products). Contemporary ethnographic studies indicate that these hand-made vessels were likely products of a highly specialized craft based on the inter-generational transmission of traditional skills (Keswani 1989, p. 17). Their immense size and weight (especially once full) meant that they were probably rarely, if ever, moved, lending them a sort of permanence that was hardly less than that embodied by the massive ashlar blocks and columns. The few large pithoi placed in the central court (whatever their contents, if any) carried this iconic function into a highly visible space, serving as a constant reminder of the economic power of Building X's occupants. These pithoi were placed so as to be within the viewshed of someone about to enter the central court from Room 154 (cf. fig. 5). It is not surprising that two pithoi (although smaller than the largest examples) also flanked the doorway to the Pithos Hall itself, rendering this

entrance clearly visible to anyone in Hallway 175, while also symbolizing the Pithos Hall's valuable contents. I would go so far as to say that the "mega-pithoi" were an important expression of LC elite identity.

The adjoining production and storage facilities in the northeast corner of the building were also impressive. Room 176, across Hall 175 from the Pithos Hall, appears to have been used for the production of olive oil. It is probable that the large robber pit at the east of this room was occupied by a massive stone collection/settling tank, similar to that found set into the floor of Room 185 in nearby Building XI (South 1992, p. 137–139; 1997, p. 154). Using the tank in Building XI as an analogy, it is likely that the Room 176 tank was carved from a single block of calcareous sandstone (of the same type used for the most the building's ashlar masonry) weighing some 2.6 tons and with a capacity in the 2000 litre range (South 1992, p. 137; 1996, p. 43). Gas chromatography analysis of the Building XI tank shows that it contained olive oil (Keswani 1992, p. 141–144). Adjoining this room on the north was another storage hall, somewhat less grand than the Pithos Hall, but nevertheless remarkable. It contained an estimated 46–50 pithoi, mostly of smaller size than those in the Pithos Hall (Keswani 1989, p. 15–16; South 1991, p. 132). Like the Pithos Hall, the low control value (1.0) and high RRA score (1.40) of this room suggest a concern for the security of its contents.

It is notable that Rooms 176 and 161 were separated by an elaborate ashlar wall (similar to that along the west side of the Pithos Hall) that had a doorway at its east end. It is also significant that this doorway is aligned with the east doorway along the south wall. Given the location of the tank and the fact that pithoi blocked direct access from Room 176 into Room 161, it is highly unlikely that these doorways were meant to facilitate movement from Hall 175 through to Room 161. I would argue instead that these doorways were aligned so as to permit a viewshed from the south doorway looking northward that took in the tank as well as a portion of four rows of the large pithoi framed by the ashlar masonry (cf. fig. 5).

Given its singular size, monumental construction and finds of five clay cylinders inscribed with Cypro-Minoan characters (cf. Porada 1989, p. 33–37; Masson 1989, p. 38–40), it is clear that Building X was the administrative centre of Kalavassos-*Ayios Dhimitrios*. The facilities in the western part of Building X suggest that it was designed in part to allow the production and storage of olive oil. More importantly, however, the fixed- and semifixed-feature elements of these spaces were purposefully created to provide visitors, as well as those who worked in the facilities, with an indelible reminder of the power of Building X's occupants. This dynamic was also materialized in the syntactic and architectural properties of the main entrance and the central court. The court played an essential role in structuring daily practice within the building, while sometimes hosting important public-inclusive social occasions such as ceremonial feasting that also brought together occupants and visitors. A plan based around a central court is but one of several common features which Building X shared with the slightly larger Building II from Alassa-*Paliotaverna*. Yet, in spite of some general similarities in these aspects, a detailed spatial analysis of Build-

ing II reveals important differences that speak to the somewhat different intentions of its builders.

5 Building II at Alassa-Paliotaverna

The site of Alassa is located in south-western Cyprus about 10 km north of Episkopi (ancient Kourion) and is situated in a triangle of land bordered by the Kouris River on the west, the Limnatis River on the east and the foothills of the Troodos Mountains on the north (Hadjisavvas 1986, fig. 1). In response to the threat of flooding from the construction of the Kouris Dam, the Department of Antiquities undertook a survey in the area in 1983 (Hadjisavvas 1986, p. 63). The resulting investigations revealed a LC site that extended across the *Paliotaverna* and *Pano Mandilaris* localities, an area of around 12.5 ha (Knapp 1997, table 2; cf. Hadjisavvas 2000, p. 393, who estimates the site size at 50 ha). Excavations during the 1990s at *Paliotaverna*, the upper part of the settlement, revealed a group of three large buildings, two of which were built wholly or partially of ashlar masonry (Hadjisavvas 1994). Two monumental buildings were built on the same orientation, separated by a 4.3 m wide street (fig. 6). Building I was severely damaged by ploughing (Hadjisavvas 1994, p. 107), but appears to have been a rectangular columned hall. Immediately to the north (upslope), across the street, excavators recovered a massive building constructed entirely of ashlar masonry. Building II is a square, Π -shaped building, measuring 37.7 m per side, and designed around a large central court open on its east end. It is clear that a major leveling operation took place in order to prepare the site for the construction of this edifice, including the excavation of the upper slope of the hill and the elevation of the lower slope (Hadjisavvas 2003a, p. 434). A smaller (ca. 25 × 16 m) three-room building on a different orientation, known as Building III, was excavated about 20 m to the east. Finds of pithos sherds and a wine press suggest that this may have been a production and storage annex to Building II (Hadjisavvas 2001a; Steel 2003–2004, p. 96–97).

Building II is the largest and most architecturally elaborate building yet found from the LCII–IIIA period. Nearly all the masonry is of the most elaborate form of ashlar construction with a plinth (built as a shell around a rubble core) surmounted by a wall of large orthostats (also of shell construction), both of which had blocks decorated with drafted margins. This was topped by a mudbrick superstructure, and traces of red pigment were noted on some examples (Hadjisavvas 2003a, p. 434). Many of the plinth blocks and some of the orthostats (particularly on the outer walls) also retained their lifting bosses as decorative elements. Hadjisavvas (2003a, p. 436) argues that its original construction dates to the LC IIC (specifically the 14th century BCE) and that, near the end of the LC IIC or early LC IIIA, the North Wing storage hall was added and the South Wing was remodeled. A Medieval period re-occupation of the West Wing and part of the central court has rendered identification of the function of rooms in that part of the building “impossible”, although it is clear that the

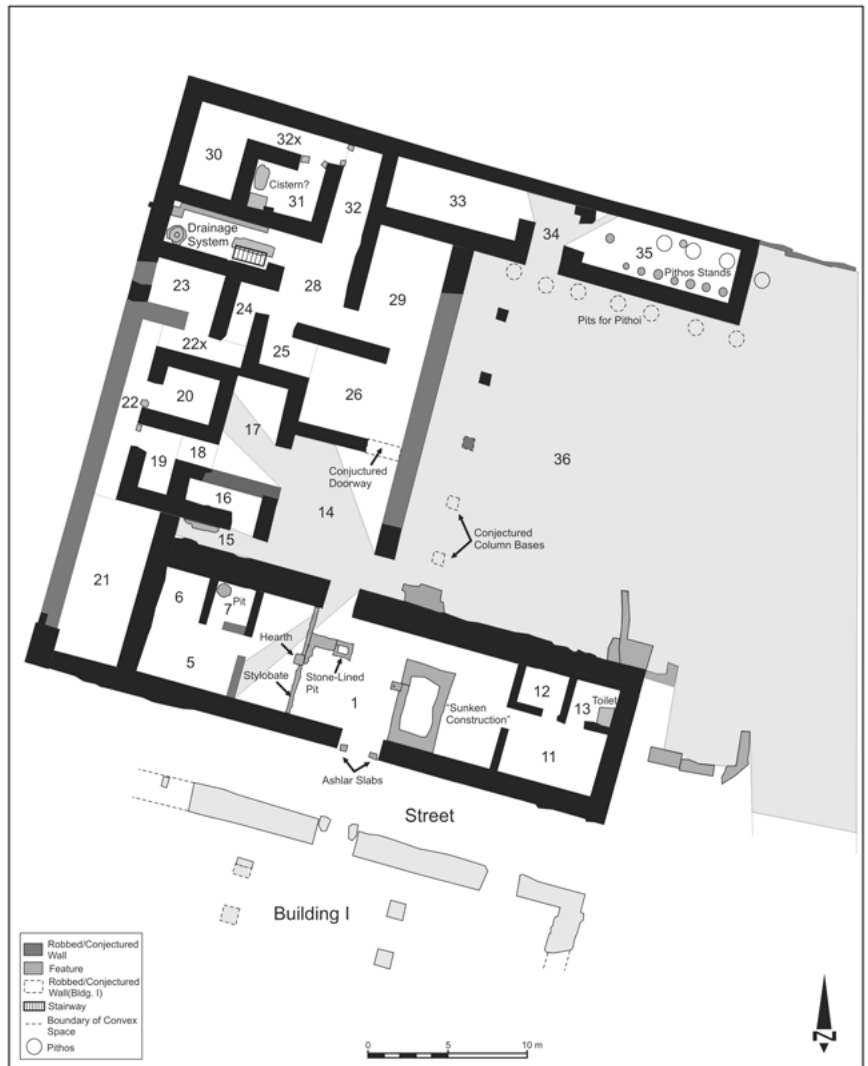


Figure 6 | Alassa-Palio taverna, Building II schematic plan showing the isovist field from the central court (Room 36). The southern extent of the isovist field beyond Building II is unclear (drawn by author based on Hadjisavvas 2003b, fig. 4).

northwest part of the building housed a sophisticated drainage system (Hadjisavvas 2003a, p. 434–435). The South Wing, after the late LC IIC or LC IIIA renovation, had a symmetrical interior structure with a large central hall and smaller rooms at the east and west ends. The walls of Building II were certainly large enough to support at least one additional story (probably the living quarters; cf. Hadjisavvas 2000, p. 396), and it is likely that there was a stairway and possible lightwell in Room 27 (Hadjisavvas and Hadjisavva 1997, p. 146).

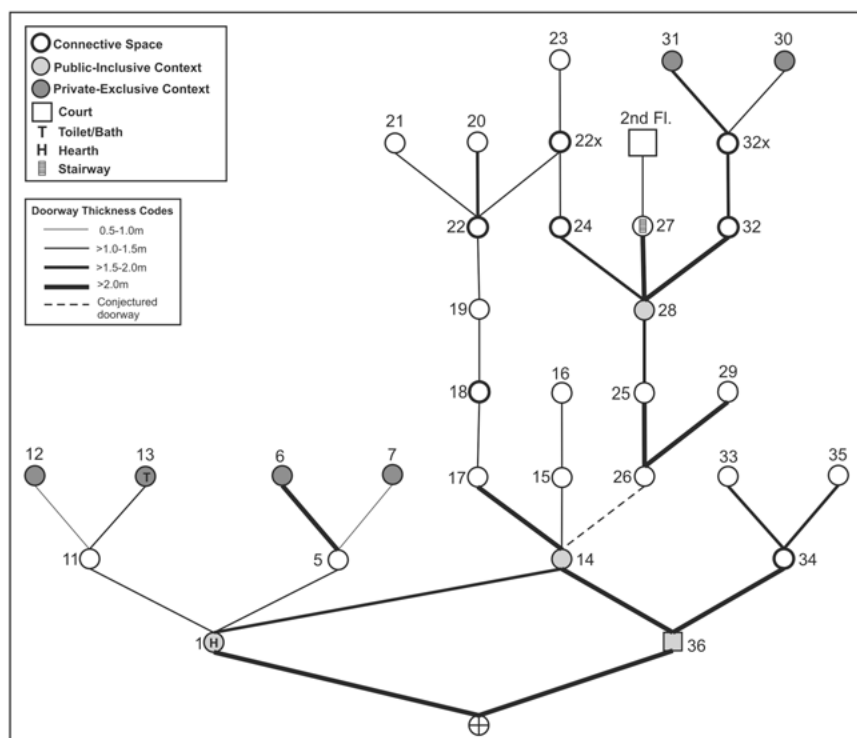


Figure 7 | Alassa-*Paliotaverna*, Building II access graph (j-graph).

The access graph (fig. 7) indicates that the various wings of Building II are not well integrated. The West Wing, which contains most of the rooms in the building, is quite deep, with three rooms at a depth of 8 from the carrier (table 4). In addition, there are only two circulation rings in the whole building, one entirely within the West Wing and one that links the central court with the west and south wings. Both of these rings link up at Room 14, which is also a space of convergence for the two axial paths that penetrate into the building from the carrier. One could enter Building II either at the South Wing, off the street, or through the east side of the central court, which appears to have been largely open.

While it is uncertain whether the east opening of the court (Room 36) was intended as the main entrance to Building II, it would have provided a most impressive viewshed for those approaching the building from that direction. The nature of the space in front of the court (i.e., immediately to the east) is not discussed in the published reports, although a small scale plan of the excavation area suggests that this would have been a relatively open space (Hadjisavvas 2003a, fig. 2). Some effort was made to enclose it on the north with a line of ashlar blocks, some with drafted margins, that continues eastward for a few metres along the bedrock cut just north of Building II's north façade. There is also what may have

been a wall at the south end of this “forecourt” projecting some 5 m perpendicular from the centre of the east wall of the south wing.

The court itself is by far the largest space in the building (399 m²), and indeed the largest space of any building from this period on Cyprus. The impressiveness of this monumental space was enhanced by a portico that ran along at least part of its west wall. Two massive ashlar blocks were set into the floor, aligned along the west end of the court, probably serving as column bases. A third was likely robbed from a pit located to the south along this same line and at the same interval of spacing, and it is likely that two other similar, but now missing, blocks on the same alignment would have completed the portico. The court had the architectural and syntactic characteristics suitable for public-inclusive social occasions and could have accommodated a maximum of 758–1356 people, depending on whether they were seated or standing and not including the space of the “forecourt” to the east. This space would permit interactions through to the far phase of public distance. Given the sheer monumentality of this space, one might expect that it served as a venue for occasions in which large groups of people might witness some form of performance or ritual that may have been theatrical in nature. As Hall (1966, p. 125) notes, voice and movement must be amplified or exaggerated to be perceived at such public distances. Compared with the central court in Building X at Kalavassos, Alassa’s court was poorly integrated into the overall plan (1.07 RRA compared with 0.51 for Building X; cf. table 4). In addition, the isovist field from Building II’s central court does not penetrate very deeply into the adjoining parts of the building or cover much area beyond the court itself (fig. 6).

Unfortunately, the published materials offer little to shed light on the use of the space, except perhaps the pithoi that were reportedly found in various pits in the courtyard (Hadjisavvas 2003a, p. 435). Given their role as containers for produce (solid or liquid), one might suggest that the distribution of such foodstuffs, perhaps in a feasting context, took place on these public-inclusive occasions. It is possible that up to seven of the large pithoi may have lined the northern part of the court, partially sunken into the series of pits along the north wall. As I argued above for the central court in Building X at Kalavassos, these monumental storage containers were important expressions of elite identity (whether or not they actually contained anything) and their presence in a highly visible space like the central court, backgrounded by impressive ashlar masonry, served as a reminder of the economic power of Building II’s occupants. Some examples from Alassa had the added feature of a clay band impressed with scenes of hunting/combat or sitting griffons (Hadjisavvas 2001b, p. 213). This band was made of fine clay that was much lighter in color than the pithos itself and, although the details of the impression may not have been clear beyond a few metres away, the band itself would have been visible at a considerable distance. This would be an important consideration in such a large space, which probably held public-inclusive social occasions.

The pithoi lining the court’s north wall were also representative of the larger number of pithoi stored on the other side of that wall in Rooms 35 and 33. The remains of at least

Table 4 | *Alassa-Palioaverna*, Building II ranking of key syntactic and architectural properties. Darker shaded cells indicate private-exclusive spaces; lighter shaded cells indicate public-inclusive spaces.

CV Rank			RRA Rank			Depth Rank	
Room	CV		Room	RRA		Room	Depth
20	0,2500	low	14	0,8004	low	1	1
21	0,2500	low	26	0,8906	low	36	1
6	0,3333	low	25	0,9583	low	5	2
7	0,3333	low	1	1,0033	low	11	2
12	0,3333	low	17	1,0033	low	14	2
13	0,3333	low	28	1,0259	low	34	2
23	0,3333	low	36	1,0710	low	6	3
29	0,3333	low	15	1,1386	low	7	3
30	0,3333	low	18	1,2063	low	12	3
31	0,3333	low	24	1,2288	low	13	3
33	0,3333	low	29	1,2513	low	15	3
35	0,3333	low	19	1,2739	medium	17	3
16	0,5000	low	5	1,3190	medium	26	3
2nd Fl.	0,5000	low	11	1,3190	medium	33	3
24	0,5833	low	32	1,3190	medium	35	3
25	0,5833	low	22	1,3416	medium	16	4
32	0,5833	low	27	1,3641	medium	18	4
Carrier	0,5833	low	34	1,3866	medium	25	4
17	0,7000	low	22x	1,4317	medium	29	4
19	0,7500	low	16	1,4994	medium	19	5
18	1,0000	low	Carrier	1,5975	medium	28	5
36	1,0333	medium	32x	1,6346	medium	22	6
15	1,2000	medium	6	1,6798	high	24	6
27	1,2500	medium	7	1,6798	high	27	6
1	1,3667	medium	12	1,6798	high	32	6
26	1,7000	medium	13	1,6798	high	20	7
22x	1,7500	medium	20	1,7023	high	21	7
14	1,9167	medium	21	1,7023	high	22x	7
28	2,0000	medium	2nd Fl.	1,7249	high	2nd Fl.	7
5	2,2500	high	33	1,7474	high	32x	7
11	2,2500	high	35	1,7474	high	23	8
34	2,3333	high	23	1,7925	high	30	8
32x	2,5000	high	30	1,9954	high	31	8
22	2,8333	high	31	1,9954	high	Carrier	na

Relative Convexity Rank			Total Door Width Rank		Mean Door Width Rank	
Room	Area (m2)	Rel.Conv.	Room	Total Width	Room	M Width
22	13,20	0,11	5	0,95	5	0,95
15	3,68	0,17	7	0,95	7	0,95
22x	6,78	0,21	12	0,95	12	0,95
32x	8,68	0,23	13	1,05	13	1,05
24	6,24	0,23	21	1,25	11	1,07
16	5,52	0,26	16	1,30	15	1,23
27	15,40	0,31	30	1,40	19	1,25
35	30,87	0,32	23	1,50	21	1,25
32	12,40	0,32	20	1,55	22	1,28
33	27,72	0,36	31	1,55	16	1,30
21	37,50	0,38	35	1,60	22x	1,32
1	119,70	0,41	33	1,70	18	1,40
19	6,30	0,49	27	2,00	30	1,40
18	3,24	0,56	15	2,45	24	1,43
17	19,89	0,58	19	2,50	23	1,50
23	12,42	0,59	29	2,75	32x	1,53
34	12,15	0,60	18	2,80	20	1,55
30	18,59	0,60	24	2,85	31	1,55
26	30,10	0,61	11	3,20	35	1,60
25	6,46	0,65	17	3,70	33	1,70
29	35,41	0,66	25	3,70	34	1,80
5	21,95	0,68	32	3,80	28	1,84
11	22,43	0,68	22x	3,95	17	1,85
31	12,00	0,75	32x	4,60	25	1,85
20	10,08	0,78	26	4,85	1	1,88
36	398,72	0,79	22	5,10	32	1,90
28	20,00	0,80	34	5,40	14	1,94
14	60,20	0,81	1	5,65	27	2,00
12	5,85	0,87	28	7,35	26	2,43
13	5,98	0,88	14	7,75	29	2,75
7	5,41	0,98	Carrier	22,65	36	8,20
6	7,84	1,00	36	24,60	Carrier	11,33
2nd Fl.	na	na	6	?	6	?
Carrier	na	na	2nd Fl.	?	2nd Fl.	?

16 large pithoi were found in these rooms on stone stands or in circular depressions in the floor (Hadjisavvas 2003a, p. 434). The North Wing was essentially a monumental storage hall but, in contrast to the Pithos Hall from Building X, it was longer, more narrow, and subdivided into two rooms entered from a paved central hallway (Room 34) that provided access to the main court. It was also much smaller than Building X's Pithos Hall, although one should bear in mind that the space between the bedrock cut and the north façade was also used for storage, as well as Building III (Hadjisavvas 2001b, p. 62). The width of the doorway (2.1 m) makes the presence of a door less likely, suggesting that this hallway was meant to be visible from the court. The interior doorways of the north wing are much narrower (1.6–1.7 m wide), but would still have allowed for the placement or removal of the large pithoi.

As noted above, there appears to have been a deliberate effort to isolate the central court from the rest of the building; especially from the South Wing. The main entrance to the South Wing was off the street between Buildings I and II and was centrally placed along its south wall. At 2.65 m wide, this entrance was much wider than the typical doorway in Building II (mean width of 1.62 m) and was flanked by two square ashlar slabs embedded in the floor. The slabs are reminiscent of those employed in Building X at Kalavassos to mark the entries or boundaries of particularly important spaces. It is no coincidence that the single largest ashlar block in the building (nearly 5 m long) was placed where it would be clearly visible, along the south façade, with its east end forming the west door jamb.

This doorway provided access to Room 1, which is the largest interior space in Building II (120 m²). It contains a number of distinctive fixed-feature elements including a monumental hearth. This is a large square block (0.65 m per side) surrounded by mud-bricks on three sides, leaving the east side open (Hadjisavvas and Hadjisavva 1997, p. 145). It was built into the centre of a narrow (0.3 m wide) stylobate of ashlar blocks that ran along the building's north-south axis between the north and south walls of the room. A number of fragments of slender semi-circular ashlar pillars with drafted margins were found in association with this feature, some with traces of mortises cut on their flat backs indicating attachment to the wall, probably at each end of the stylobate (Hadjisavvas 1994, p. 110). Other pillars may have been freestanding on the stylobate (Hadjisavvas and Hadjisavva 1997, p. 145). A perpendicular line of narrow ashlar blocks embedded in the floor ran eastward from the stylobate, ending in a small (c. 70 × 40 cm), but deep rectangular pit, the top of which was outlined with ashlar masonry. The function of this feature is unclear, although it may have been used to receive libations (e.g. Davis 2008; Hägg 1990).

The other significant feature in the room is a large "sunken rectangular construction" just to the east of the entry, measuring 3.25 × 5.25 m. This feature was stone-lined and extended down 1.86 m to bedrock. Nothing was found in its excavation to suggest the function of this feature, although the excavator suggests that the nearest parallels are the *kouloures* of the Minoan palaces (Hadjisavvas and Hadjisavva 1997, p. 145). This seems unlikely, however, given that the *kouloures* are centuries earlier, circular, and not typically

found within the palace buildings themselves. A much closer parallel would seem to be the LC IIB Basin Building from Maroni-Vournes (cf. Cadogan 1986, p. 40–42). If this feature did hold water, it would have made for a more impressive display of control over this valuable resource than a mere well, and could have been used for ritual purposes.

Room 1 has a highly symmetrical design, with the stylobate and rectangular pit on the west side providing a mirror image to the space taken up by the sunken rectangular feature to the east. In addition, both installations are equidistant from the room's end walls. Only the entry to Room 14 in the north wall is not placed symmetrically, although it is apparent that the occupants of Building II did not wish the occasions in Room 1 to be directly accessible or visible to the “public” space of the central court. Only a narrow view into Room 1 is possible from the court, and one would have to be standing in the doorway between the court and Room 14 to take advantage of it (fig. 6). Given its size and formality, as well as the presence of several unique architectural features, it is clear that Room 1 played a very important role in social interactions within Building II. It is also evident that the largest (and therefore most impressive) ashlar blocks in the south wing were used on the interior faces of the north and south walls and the exterior face of the south wall of Room 1. The syntactic properties of Room 1, including a low RRA score (1.00) and a medium control value (1.37), suggest its potential use for public-inclusive social interactions. The somewhat low relative convexity score (0.41) is offset by the room's large width and does not diminish its capacity to host public-inclusive occasions.

The nature of these social occasions can only be guessed at from the available data, although, given the nature of its fixed-feature elements, it is tempting to suggest a ritual-ceremonial function for this space. Hadjisavvas (1996, p. 32) suggests that the South Wing was a “cult place”, given the central hearth flanked by pilasters and the find of a bathtub in Room 13. Neither of these features, however, is definitively cultic in nature. The presence of a formal central hearth could suggest that Room 1 played host to feasting events, as proposed for broadly similar hearth-rooms at Enkomi and other sites (Fisher 2009a). I have discussed elsewhere the ideological importance of formal/monumental hearths as symbolizing control over fire as an element of transformation (Fisher 2008, p. 96–97). The hearth was likely the (a?) focal point of interactions in Room 1 and is set in a unique and particularly elaborate context that would have influenced the nature of interactions in and around it. The presence of the stylobate and columns suggests that the primary interaction took place in front of it (i.e. to the east) or at least that the majority of participants were meant to occupy the area between the stylobate and the large sunken feature. While Room 1 could hold a maximum of 227 to 407 people (depending on whether seated or standing and not modified for the area occupied by the large sunken feature), the area between the stylobate and the large sunken feature (c. 6.5×7 m) could have accommodated a maximum of only about 87 to 155 people, suggesting more exclusive social occasions than those held in the central court. This smaller space could accommodate social interactions up to the near phase of public distance. It is interesting, however, that the distance from the hearth to the

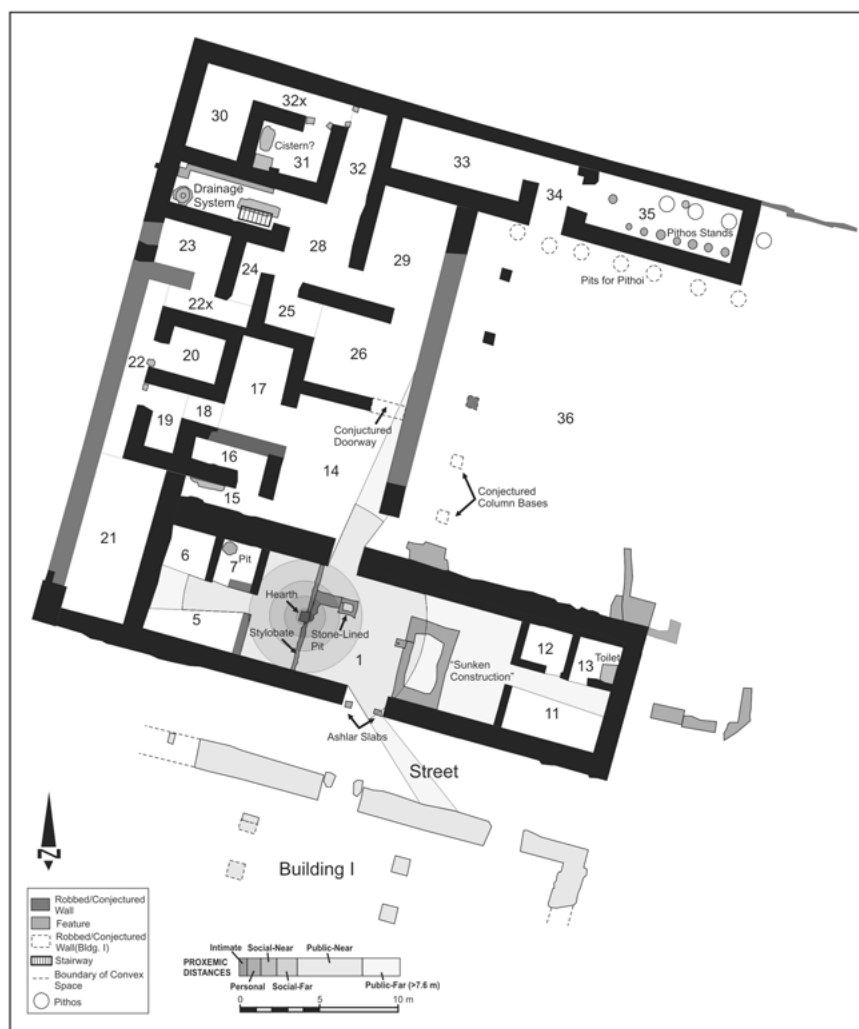


Figure 8 | Alassa-Palioaverna, Building II schematic plan with isovist centred on Room 1 hearth, coded for proxemic distances.

north, south and west walls of the room, and out to the eastern edge of the small rectangular pit, coincides quite closely with the limit of the social proxemic threshold (table 1), suggesting scope for a more personal level of interaction within that area (fig. 8). It is also possible that only certain (probably higher-status) actors were permitted to occupy the space to the west of the stylobate ("behind" the hearth). In such a case, the stylobate and the slender columns it supported created a physical and, probably, social barrier that still allowed these individuals and their various forms verbal and nonverbal communication (gestures, clothing, personal adornment, etc.) to be perceived by the other participants.

It is unclear if all the architectural features of Room 1 were employed during the same ceremonial occasions, or if they were used in temporally discrete events. Nearly identical sets of smaller rooms at either end of the South Wing could have been used as ancillary spaces during these occasions or could have been appropriate contexts for separate private-exclusive occasions. Given that the entrance to Building I across the street is the same size as, and directly aligned with, the main entrance to Room 1, and is similarly flanked by two stone slabs, I suggest that this hall might have sometimes been used during social occasions associated with those taking place in Room 1.

6 Discussion

Broad similarities in form and material among the two buildings discussed here suggest the existence of common cultural ideas regarding the materialization of monumentality and the “proper” form that a LC monumental building should have. We might see this as an underlying “genotype” (Hillier and Hanson 1984; Hillier 1996) or in terms of the structural properties of social systems that, according to Giddens (1984, p. 17), make it possible for similar social practices to exist across various spans of space and time and which give systemic form to these practices. This is manifested in Rapoport’s culturally contingent “limited palette of elements” and “display rules”, which are combined in the creation of built environments (fig. 1). While these elements are a key part of placemaking, I would argue that, in terms of creating a place laden with meaning, sensory experience and memory, it is also necessary to take into account the idiosyncratic aspects of a building’s fixed-, semifixed-, and nonfixed-feature elements. Generalizations about these buildings as a type overlook important differences that affect how people experienced them and are referenced in the formation of group and individual identities.

The process of constructing one of these buildings undoubtedly involved decisions made by a number of stakeholders, including the “rulers” themselves (whether they exercised power locally or otherwise), designers, bureaucrats, and various craftspeople and laborers, while taking into account available material and human resources and whether or not there was pre-existing architecture that had to be incorporated in some way (Fisher 2009a, p. 189, 198; Locock 1994, p. 5; Markus 1993, p. 23; cf. Letesson’s discussion of building vs. architecture, this volume). Yet, as Rapoport (1990, p. 15–16, 21) argues regarding a building’s meaning, it is the occupants’ and users’ meanings that are most significant, and these are generated in part through *personalization* as these people take possession of a place and complete or change it. Personalization is therefore a form of territorial marking by the owners or occupants of a space that encodes messages regarding their identity (Brown 1987, p. 519–521). We might see these buildings, or at least particular parts of them, as the *primary territories* of the main occupants – spaces that were used by them on a relatively permanent basis and central to their day-to-day lives (Altman 1975,

p. III–II4). Such spaces tend to have markers more closely reflective of the central values and personal qualities of the occupants (Brown 1987). In this way, individual monumental buildings were “phenotypes” – the heterogeneous physical expressions of an underlying genotype (Hillier and Hanson 1984; Hillier 1996; Letesson, this volume; van Nes, this volume).

Manifestations of these processes include significant differences in overall spatial configuration and the arrangement of spaces for public-inclusive interactions between the two buildings. While Building X at Kalavassos exhibits a highly integrated plan, Building II’s configuration is poorly integrated, with distinct wings that are not easily accessible from one another. Both buildings have multiple large halls or courts suitable for public-inclusive social occasions, with adjoining spaces suited for more private-exclusive interactions, although the arrangement of these spaces varies considerably. The central court in Building X is fully enclosed and has a ceremonial entry hall and yet plays a significant role in structuring movement and interaction in the building. The much larger central court of Building II at Alassa is completely open on one end, while being poorly integrated with the rest of the building. As suggested above, this immense space was likely intended for large-scale public-inclusive occasions that would have involved a broader constituency of LC society. It could have been what Altman (1975, p. II4–II8) refers to as a *secondary territory*, accessible to a wider range of users, although regular occupants often exert some degree of control over who can enter the space and their expected behavior (cf. Lawrence’s [1990] discussion of “collective” spaces). Room 1 in Building II likely held higher-level and more controlled public-inclusive occasions, while the pillared hall of Building I across the street may have had a similar function for yet another level of guest or particular type of interaction. Building XII at Kalavassos, which may have directly adjoined the front of Building X, and also appears to have been a large pillared hall, could have fulfilled a similar role, playing host to a more inclusive group of visitors who might not have been invited to occasions held in the central court. This “filtering” or classification of visitors through the provision of multiple venues for public-inclusive occasions is a feature of most LC monumental buildings, although it was manifested differently in each case (Fisher 2007; 2009b).

In terms of the placement of fixed-feature elements, I would also draw attention to differences in the use of ashlar masonry between buildings. I have argued elsewhere that types of ashlar masonry with greater degrees of elaboration tended to be employed in highly visible contexts or those in which important public-inclusive occasions might have taken place (Fisher 2009a). Ashlar masonry represented more than just elite control over material and human resources, symbolizing the seeming permanence of the inequalities that restricted its use. By the time the buildings at Kalavassos and Alassa were constructed, ashlar masonry had become an important part of the identities of urban elites. Building II is built almost entirely of the most elaborate type of ashlar masonry, with a plinth of large blocks topped by a course of orthostat blocks (all with drafted margins). By contrast, this type of masonry is used more strategically in Building X, particularly for the south and west

walls of the Pithos Hall. Less elaborate types of ashlar masonry were used in Building X's central court. Ashlar masonry was not only used for walls, but also for other fixed-feature elements that were unique to each building, including the columns in the Pithos Hall of Building X and the monumental hearth and stylobate of Room 1 in Building II.

Some of these idiosyncrasies were undoubtedly due in part to the economic and human resources available to the owners and designers of each building and the practical needs of accommodating differing social interactions and economic activities. I would argue, however, that they are also due to personalization and the desire on the part of ruling elites to create a highly *imageable* monument (cf. Lynch 1960, p. 9) that did not simply materialize their power, but could play a central role in forging a distinct identity at the personal, group and wider community levels. It is clear that, in spite of overarching cultural similarities, there was wide scope for variation in monumental placemaking regarding the "display rules" by which Rapoport's "palette of elements" could be combined (fig. 1). On the one hand, therefore, common design elements among these buildings provided cues ensuring that people were aware of expected behavior in particular settings (although whether or not they chose to act accordingly is another matter). On the other hand, decision-making by various stakeholders regarding spatial configuration and room form, construction and renovation materials and methods, and the placement of permanent features and mobile furnishings, ensured that occupants and visitors would have experienced each of these monuments quite differently (cf. also Barrett 2001; Hendon 2003, p. 278–9; Isbell 2000, p. 258; Rodman 1992). The nonfixed-feature elements of the buildings' occupants and users, including their shifting spatial relations (Hall's proxemics), bodily movements, nonverbal expressions such as clothing, body modification and adornment, and emotive state also contributed to this difference.

It is the experience of these fixed-, semifixed- and nonfixed-feature elements in the course of daily practice and periodic social occasions that forms the basis of distinct individual and group identities. It is also what created a *sense of place* among those who lived in, visited or otherwise used these monumental buildings. Lynch (1981, p. 131–132) defines this as 'the extent to which a person can recognize or recall a place as being distinct from other places – as having a vivid, or unique, or at least a particular, character of its own'. This highlights the recursive relationship between people and place, which Basso (1996) refers to as *inter-animation*. As places animate the ideas or feelings of the people who interact with them, these same ideas and feelings animate the places on which people have focused attention. The unique material and (micro)historical circumstances within which each building was created meant that, like other human and material actors, it had (and continues to have) a unique biography (Kopytoff 1986) or "life-history" constituted in the meanings accumulated over the duration of its existence, as well as the memories of it held by its human occupants (Düring 2005; Hendon 2003, p. 276; Pred 1990; Tringham 1995).

On one level, the monumental buildings of LBA Cyprus are symbols of conspicuous consumption, marking the efforts of emergent and established elites to demonstrate their

control over human and material resources (Trigger 1990). As I have tried to demonstrate, however, this only tells part of the story of the vital role these buildings played in the transformation of LC society. Rather, it was through the dynamic interplay of symbolically-laden architectural elements, furnishings and artifacts in the context of daily practice and ritual performance that monumental spaces were imbued with meaning. I have tried to show how we might start to investigate this process using an integrative approach that acknowledges the agency of those who created and used LC monumental buildings and the agency of the buildings themselves. Indeed, these places were active participants in the actions and occasions through which power and identity were negotiated and materialized, and social lives were (re)produced.

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