
Fortifications as Warfare Culture: the Hilltop Centre of Yayno (Ancash, Peru), AD 400–800

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This article evaluates defensive works at the ancient hilltop centre of Yayno, Pomabamba, north highlands, Peru. Survey, mapping and sampling excavations show that its primary occupation dates to cal. AD 400–800, by groups of the Recuay tradition. At the centre of a network articulating small nearby farming villages, Yayno features an impressive series of natural and built defensive strategies. These worked in concert to protect the community from outsiders and keep internal groups physically segregated. The fortifications are discussed in relation to local political organization and a martial aesthetic in northern Peru during the period. Recuay elite identity and monumentalism arose out of local corporate traditions of hilltop dwelling and defence. Although such traditions are now largely absent in contemporary patterns of settlement, an archaeology of warfare at Yayno has repercussions for local understandings of the past.

By now, it is axiomatic, albeit still highly provocative, to assert that armed conflict contributed significantly to shaping the cultures of many past and present human societies (Keeley 1996; LeBlanc 2003). Quite rightly, it remains a sensitive topic for living descendants of groups and source communities, whose past and histories are characterized as warlike or their cultures under scrutiny as having related practices such as torture, headtaking and cannibalism. The question of de-pacifying the past is not without implications, especially in regions where contemporary groups and cultures have deep historical roots, or where outside commentary can become entangled with recent, and perhaps painful and locally contentious, episodes of political violence and instability. The issue is complicated still by a diversity of sentiment: sometimes a predatory disposition or history is also acknowledged by contemporary groups, even *de rigueur* or celebrated (e.g. Taylor 2007; Viveiros de Castro 1992).

It is sometimes not enough then for scholars simply to identify warfare or armed conflict, and its various indicators, in the archaeological record. Quite often, more may be at stake. The criteria used to discern warfare need to be contextualized as fully as possible in the local circumstance. Archaeologists can

promote recognition and judicious understandings of warfare culture by describing the logic and historical place of its practice.

This article examines the defensive works at Yayno, a fortified centre in Peru's north-central highlands, Department of Ancash (Fig. 1). It was very likely the seat of a powerful chiefly society in the Recuay tradition, cal. AD 1–700.¹ Three main patterns can be detailed: the development of a community-level defensive system, a spatial organization based on large walled compounds, and multiple lines of defence. As a place for everyday life, Yayno's great emphasis on protected spaces helped safeguard residents from outsiders but also segregated internal groups from each other. In addition, fortifications inspired monumental constructions at Yayno. As expressions of elite ideology and heavily entangled with social life, fortified hilltop communities came to have a dominant presence in Recuay culture. They also remain sites for scholarly and local contestation today.

Engaging warfare

Over the last several decades, the reluctance on the part of archaeologists to study warfare, decried by

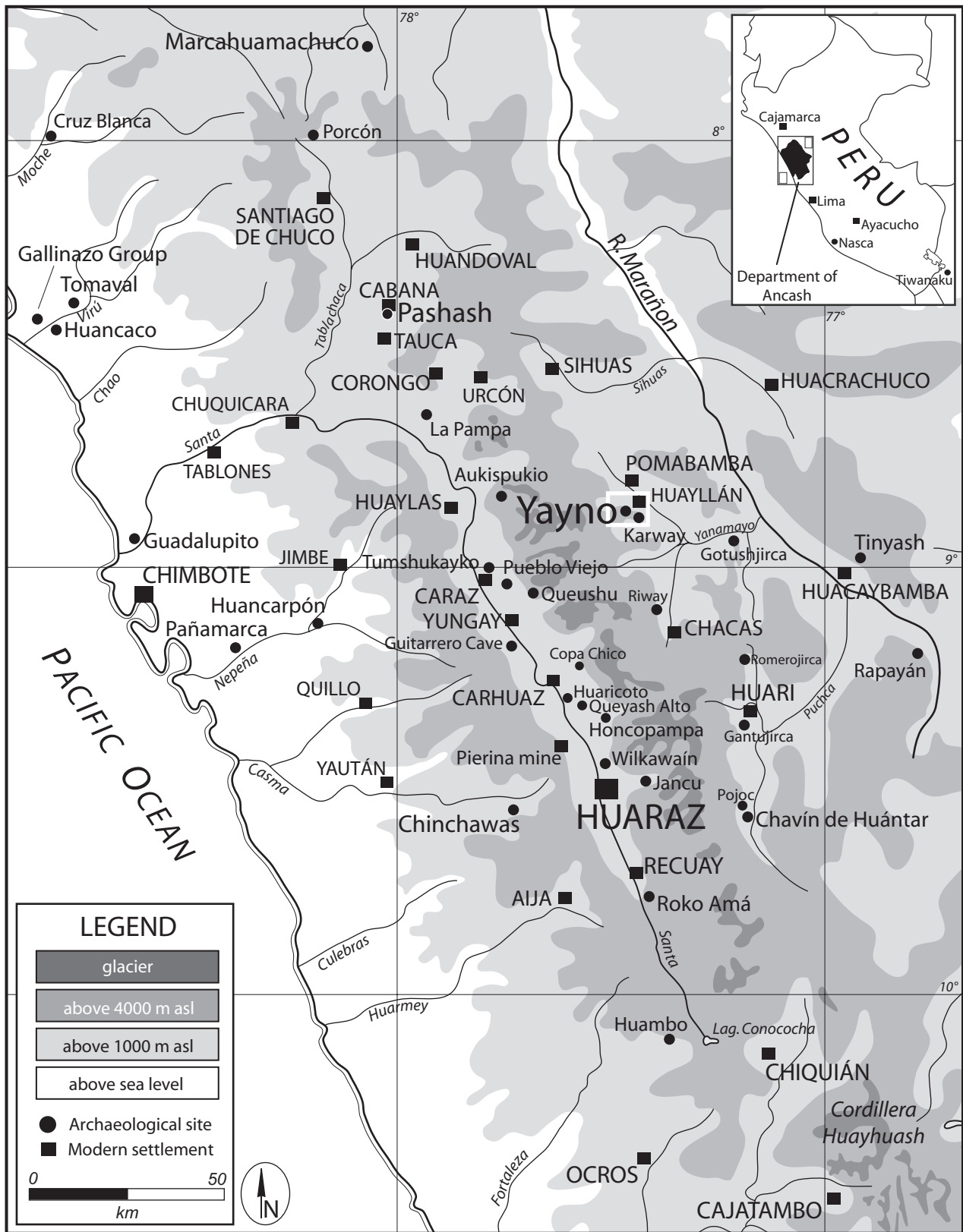


Figure 1. Map of northern Peru, showing the location of Yayno, Ancash department and sites mentioned in the text. Inset (white) shows location, detailed in Figure 2.

Keeley (1996, vii) as ‘pacifying the past’ and then by LeBlanc (2003, xiii) as a ‘scholarly resistance’, has been replaced by a furore resulting in a heaving literature, global coverage and refined methods to identify and theorize past conflict. Suffice it to say that warfare, taken here as violent conflict between competing political communities, is the subject of extraordinary renewed interest (e.g. Arkush & Allen 2006; Brown & Stanton 2003; Carman & Harding 1999; Eeckhout & Le Fort 2005; Guilaine & Zammit 2005; Parker Pearson & Thorpe 2005; Pollard & Banks 2007; Raaflaub & Rosenstein 1999). A diversity of approaches helps to match the ubiquity and variability of evidence in the world archaeological record.

Various subdisciplines of archaeology help identify warfare and its effects on past societies and cultures. The most reliable proxies for warfare — always much desired, but lamented as rare — are the traces of combat and associated outcomes of warfare (e.g. corpses, weapons use, battlefields, destructive episodes). The latter might include patterns such as burning, raiding and rapid abandonment of sites due to conflict and threat of imminent loss (e.g. Inomata 2008). Study of human skeletal material may identify indicators of violent lives and deaths. This is fast becoming one of the most active lines of archaeological enquiry of the Central Andes. Not only can combat injuries be documented; practices, such as trophy-taking, killing strokes, patterns of fighting, and health profiles and body modification of warriors can also be discerned (e.g. Kellner 2006; Knudson *et al.* 2009; Tung 2007; 2008; Verano 2001; 2008). These findings are consistent with patterns of conflict in many world cultures, archaeologically and ethnographically.

Research also examines the material culture of war, those tangible elements made for the purpose of use and display during violent conflict and associated practices. First, there is the gear of combat and warfare, such as weaponry, dress and accoutrements (e.g. Anawalt 1981; Feest 1980; Mayer 1998; Quilter 2008). For many societies, military weapons and clothing (e.g. armour, uniforms, accoutrements) rank among the most technologically advanced and costly of the culture; made to be effective, they are to outperform others in the field of combat and in public display.

Archaeologists often rely on the military characteristics of sites and settlement systems to identify past warfare. Its effect on patterns of settlement can be decisive, resulting in defensive sites of different types, an agglutination in community plans and settlements, the formation of buffer zones, and a range of strategic features, such as palisades, moats, etc. Engineering of fortifications, analysis of tactics and superior

technology are at the core of such studies — a kind of military pre-history (e.g. Arkush & Stanish 2005; Demarest *et al.* 1997; Redmond 1994; Rice & LeBlanc 2001; Webster 2000).

The imagery of war has been significant, especially in relation to the production and reception of ancient artworks (e.g. Arnold & Hastorf 2008; Donnan 2004; King & Feest 2007; Miller & Martin 2004). This literature often attends to the aftermath and memory practice of war. Captive enemies are humiliated, tortured and killed, frequently in conventionalized ways that enhance the prestige and vitality of the captor, victors and triumphant group (also Richter 1992). Related studies examine the public spectacle of violence and the aggrandizement of theocratic authority in urban centres (e.g. Carrasco 1999; Sugiyama 2005; Swenson 2003). Here the violence is taken as staged, largely ideological and a fundamental dimension of urban political economies. Other scholars have focused on artworks created *during* the course of war by combatants and firsthand observers (Saunders 2003). These products are of importance in studies documenting the combat experience and its materiality. Archaeological data can complement and act as a check of the historical record.

For this article, the common point of these diverse approaches is that warfare constitutes one of the major fields of cultural production in many, if not most, societies. It is paradoxical that warfare can be characterized as a destructive activity — often embroiled in the rise and collapse of civilizations — as well as the basis for creativity and cultural commitment. This obtains both from the perspective of labour investment and technology, where societies produce things for war, and also the enormous symbolic loading in warfare culture and practice. While the former is well-examined in the archaeological literature, the latter is much less so. This is because much warfare is embodied (action, gestures, etiquette), ephemeral (narratives, songs, dreams), and highly localized (memory, performance, subject–subject relations) that are, more often than not, invisible to dirt archaeology. The cognizing of warfare and its cultural interventions, so rich in the ethnographic literature, has played a much less central role in archaeological perspectives.

Warfare in the Central Andes: background and debates

For the Central Andes, warfare remains a key determinant in the rise and change of complex societies (Arkush 2008; Billman 1997; Earle 1997; Haas *et al.* 1987; Wilson 1987). Much of this literature emerges

out of regional settlement pattern studies, and is oriented toward economic and environmental variables in shaping local adaptations, following influential evolutionary models for native South America (Carneiro 1970; Steward & Faron 1959). Defensive works serve as proxies of intergroup violence, charting how settlements become increasingly partial to strategic locations and more heavily fortified. Such patterns are often taken as adaptive responses to a socio-political climate of intensifying conflict, usually over scarce resources and growing populations. The analyses proceed largely on a functional, efficiency-centric logic: that fortifications are unnecessary if there is no war or threat.

Scholars highlight two principal time periods in Andean chronology (Lanning 1967; Rowe & Menzel 1967) for intensified conflict within and between regional cultures: the Early Intermediate Period, *c.* AD 1–700 (and associated terminal Early Horizon, the last centuries BC), and the Late Intermediate Period, *c.* AD 1000–1450. These are periods when settlement patterns show surges in fortifications and defensive sites (e.g. Arkush 2008; Covey 2008; Haas *et al.* 1987). The periods are crucial because they were times immediately following the collapse of major Andean civilizations, namely Chavín and Wari respectively, suggesting that increasing militarism resulted, at least in part, from the decline/withdrawal of large-scale, integrative social systems.

Over the last decade, perhaps the most heated debate in Andean archaeology concerns the degree to which warfare might be said to be more ‘ritual’ than ‘secular’. Specifically, scholars weigh the extent to which the warfare consisted of small-scale encounters based on captive-taking, elite prerogatives and community cohesion, in contrast to conflicts with pitched battles, destructive outcomes and heavy casualties. In part these derive from questions of intent and scale that fuel the stubborn definitions of warfare (e.g. true, real, ritual, tribal, primitive, territorial, etc.). The terms spark disagreement for other world contexts (e.g. Carman & Harding 1999; Halsall 1989; Keeley 1996), in large part because they are unwieldy to characterize the variability of major regional traditions, long stretches of time, and causation. They are also very difficult to operationalize archaeologically.

At the crux of the Andean debate is the well-known Moche culture of coastal Peru. Given persuasive position papers (Arkush & Stanish 2005; Topic & Topic 1997a,b), I need not go into depth here (also Bourget 2001, 92–4; Lau 2004a, 164–5; Quilter 2002, 169–72; Verano 2001). Of more relevance for this review is that the exchange is exemplary of the polar-

ized epistemologies for commenting on warfare, and doing an archaeology of warfare more generally. For example, there are those who rely on Moche period settlement patterns and associated pottery distributions (Billman 1997; Daggett 1987; Wilson 1987). These data have long reinforced the perception of Moche as a predatory state that expanded through military conquest (Carneiro 1970; Larco Hoyle 1938; Lumbreras 1980; Topic 1982; Willey 1953).

Others rely on the imagery of war, and make interpretations about the insularity of social practices and ceremonial essence of Moche combat depictions (Bourget 2001; Donnan 2004; Hocquenghem 1978). Ethnographic comparisons are made in reference to historically known Andean groups, who stage ‘ritual’ fights for community integration and defusement of tensions (Donnan 1997; Topic & Topic 1997a).

Even for the same data sets, there are differences in opinion, such as the intended function of defensive features and fortified centres (Arkush & Stanish 2005, 7ff.; cf. Topic & Topic 1987, 49–50; 1997a, 568–71). Questions linger about the degree to which the combat imagery, usually depicting one-on-one fights, portrays gladiatorial-like contests or whether they are a shorthand for larger-scale battles or reenactments of mytho-historical events. There is also no consensus about the cultural origins of the enemies and captives (Donnan 2004; Lau 2004a; Quilter 2002; Schuler-Schömig 1979; Verano 2001). Studies describe the prominence of sacrificial ceremony and the handling of bodies (e.g. Hill 2003; Verano 2001; 2008), but the source areas for the victims, captives and putative conflict remain contested (Shimada *et al.* 2008; Sutter & Cortez 2005). What are the best indicators of intergroup conflict? How are the different lines of evidence reconciled? How should ethnographic analogy be used? At the same time that these are still contentious questions, the approaches deemed appropriate to address them also stand as highly contested territory.

Not enough attention has been given to the making or cognizing of defensive architecture, or theorization about lifeways in a fortified centre. What was social life like in a fortified community, and how was it organized? Are hilltop locations due to need or predilection? How do groups construct identity or, perhaps more important, alterity, through fortifications? These questions have no ready responses, if only because our data sets are, at present, either too incomplete or ill-suited to address them.

Historical and ethnographic comparison is crucial, but the literature is uneven. In addition to early accounts of the Central Andes, particularly Peru’s north highlands (see below), valuable historical

accounts of northern Andean chiefdoms are available (e.g. Redmond 1994; Salomon 1986; Villamarín & Villamarín 1999; Trimbom 1949). There are important resemblances in the character of settlement and defensive works, political organization, weaponry and techniques of combat. Some accounts elucidate different reasons for conflict. Land-use rights, long-standing feuding and place-based territoriality — often reinforced by mythic traditions — polarized different political factions (e.g. Itier 2004; Rostworowski 1988; Salomon & Urioste 1991).

Modern communities in the Central Andes share few if any of the typical defensive features of prehispanic sites. The predominant pattern today consists of valley-floor towns, and small clusters of houses and dispersed farmsteads near fields. This is not surprising since colonial-era resettlement policies forced the abandonment of hilltops and high-altitude zones to swell Spanish-style towns in valley floors that could be more easily administered and Christianized. The old settlements — commonly a *'pueblo viejo'* (old town) or *'markajirca'* (hilltop village) — essentially became ghost towns, cemeteries and furtive ceremonial centres. Continued nation-building reinforced these demographic changes by the establishment of state provinces and their networks of capitals, markets, churches and policing.

In my experience, Ancashinos rarely perceive rocky hilltops now as places to inhabit or work. Rather, they are places to visit, congregate and venerate. High-altitude ruins, for some, are understood as places of forebears and last refuges for groups that succumbed to cataclysm (Walter 2006, 183). Hilltops have become less crucial as places for habitation and fortification for managing everyday social relations. Inasmuch as this contrast underwrites scholarly accounts of a more warlike past, there is also a disconnect on the part of local communities with the character of this past.

Lowland South America provides illuminating, but under-utilized, sources of comparison describing how Amerindian groups conceptualize warfare practices (e.g. Carneiro da Cunha & Vivieros de Castro 1987; Descola 1993; 2001; Fausto 2000; 2007; Vilaça 2002; Viveiros de Castro 1992). This diverse literature finds a commonplace in stressing the role and desires of humans in perpetual, ambivalent struggles with other beings (human and non-human) and their communities. While acknowledging the role that modern nation-states had in intensifying tribal conflict (Ferguson & Whitehead 2000), this record is germane here because it theorizes warfare explicitly as a form of conventionalized sociality within and between

communities, based on killing and predation.² As in any form of exchange, warfare builds relations and persons just as it denies or nullifies them. But this process is predicated on a wide network of relations, internal and external to the group.

The general Yayno research examines how fortified hilltop settlements, at different scales and political reach, shape cultural activities and belief systems among ancient highland groups. This article first details the range of defensive works at the site. I then argue that defensive architecture need not be only for defensive functions. Rather, the architecture served in the context of social differentiation, local monumentalism and political display. By emphasizing the culture of defence and containment, and a martial aesthetic in general, some corporate groups consolidated their political authority. These were basic to Recuay *warriorhood*, which I consider here as the quality and process of making warrior persons. The early development of fortified hilltop towns during Recuay times is significant because it became a regular strategy for highland groups throughout later prehistory in the central Andean highlands (e.g. Arkush 2006; 2008; Covey 2008; Kauffmann Doig 2002). Also, monumental defences re-emerged later as a prominent dimension of Inka statecraft (Hyslop 1990).

The Early Intermediate Period (AD 1–700) and Recuay culture

Recuay developed as part of the great florescence of regional cultures during the Early Intermediate Period. Following the decline of Chavín civilization, the Central Andes splintered into a number of areas identified by highly distinctive corporate art styles, often attributed to competing regional polities or ethnic groups (Donnan 1992; Makowski 2004; Moseley 1992; Schaedel 1985; Silverman & Proulx 2002). In addition to the rise of settlements with dense urban plans and monumental complexes, there were major technological innovations in food production and manufacture of prestige goods, and great social differentiation reflected in burial practices. Many of the new patterns have been associated with the emergence of territorial states (Patterson *et al.* 1982; Shimada 1999; Wilson 1988).

The Recuay occupied a large swath of northern Peru roughly contiguous with the modern boundaries of Ancash department (Fig. 1). Recuay's distribution bordered many neighbouring cultures, most notably highland groups to the north (Huamachuco and Cajamarca), and coastal peoples to the west (Moche, Gallinazo and Lima). Later, intensive forms of interaction with the Wari state developed (Burger *et al.* 2006;

Lau 2004a; 2005; 2006; Makowski & Rucabado Y. 2000; Proulx 1982; Reichert 1982).

Yayno was one of the regional centres in the Recuay world, which included Huaraz, Caraz, Aija (Tello 1929) and Pashash (Grieder 1978). Based in vital production areas, these centres were very likely the seats of large, multi-village polities, probably similar to lordships described in early colonial accounts of the region (e.g. Cook 1977; Espinoza Soriano 1978). Recuay groups shared commonalities in the production of elite art, funerary practices and settlement patterns. Social differentiation is evidenced through correlates for ranking: monumental architecture, tiered settlement patterns and unequal access to wealth. Also, several high-status burials are known (Grieder 1978; Wegner 1988). Finally, much of the imagery and mortuary ceremony in Recuay culture celebrated elite practices and leadership authority (e.g. Gero 1999; Lau 2002).

Recuay culture is especially recognized for its funerary architecture (Bennett 1944; Grieder 1978; Lau 2000; Orsini 2007; Tello 1929). Previous studies have also described special walled enclosures, usually on hilltop settlements, dedicated to public gatherings. Festive hospitality appears to have been crucial for the political strategies of incipient elites (Gero 1992), likely associated with ancestor veneration (Lau 2002). Recuay sites, both large and small, often feature discrete nearby mortuary sectors, suggesting a common desire to articulate living and ancestral populations.

Residential patterns are not well-known (Lau 2002, fig. 2; Lumbreras 1974, inset plan; also Isbell 1991, fig. 5; Terada 1979). Domestic layouts appear to stress flexible, modular forms, mainly of rectangular form with small interior chambers. Buildings were joined sometimes, or shared walls, but each contained a main room that connected to an open, unroofed area and storage room. Much of the space was dedicated to food preparation and other domestic activities. Such buildings were likely the residences of small households or nuclear families. Later in the Recuay tradition (c. AD 500), centres such as Yayno show more discrete clusters and completely walled-off compounds developed, suggesting multiple and sometimes larger corporate collectivities, as well as greater physical insularity between them (Lau 2010).

Recuay groups favoured high-altitude zones for agriculture and herding purposes. Sites were located directly in the belts of land, roughly 3000–4000 m asl, where agriculture is viable, while still having good access to grazing lands above 4000 m asl. During the mid–late Early Intermediate Period, some villages flourished through the intensification of

camelid-based economies (Lau 2007). Early Spanish testimonies observed that herd wealth represented one of the main bases of authority for local Ancash lords, along with land and labour obligations (Cook 1977; Espinoza Soriano 1978; Varón Gabai 1980). Ancash polities also had the reputation of being extremely bellicose (Espinoza Soriano 1964, 12–13).

The Early Intermediate Period in Ancash was marked by the proliferation of defensible hilltop villages (Amat 1976; Astuhumán & Espinoza 2006; Herrera *et al.* 2006; Ibarra 2003; Proulx 1982). Though hilltop villages existed before (e.g. Burger 1982), important Early Horizon settlements also occupied lower-lying terraces and river banks, such as Huaricoto, Pomakayán, Tumshukayko and Chavín de Huántar itself. In contrast, the wide majority of known Recuay residential sites are located on high, protected locations (Table 1). Many also have clear fortifications. Fortified settlements surged in importance throughout the North Highlands more generally (Beckwith 1990; Julien 1988; McCown 1945; Pérez Calderón 1988; 1994; Topic & Topic 2001; Topic & Topic 1982). These became widespread in the last centuries BC, suggesting unstable socio-political conditions after the demise of Chavín.

Overall, Recuay-tradition sites show little formal settlement planning. The most notable commonality was their defensive orientation, especially location in defensible, high places across diverse environmental zones. Crucially, hilltop settlements occur at widely different scales, from hamlets and villages to major centres. Also, they served multiple purposes: ritual and political ends, production, defence and trade. What makes the Recuay hilltop settlement valuable for comparative purposes is the long duration and variability of its successful adaptation and use.

Research at Yayno

The great Peruvian archaeologist Julio C. Tello brought widespread recognition to Yayno in 1929. His project was to build a new interpretation about the origins of Peruvian civilization based on highland developments (Burger 2009). Partnered with Chavín, Yayno and other sites in Ancash were taken as evidence of autochthonous civilization. Drawings and photographs of Yayno's monumental buildings helped characterize the grandeur of pre-Inka 'megalithic villages' (Tello 1929, 29–36, figs. 7–8).

Yayno remains the best-known ruin in the province of Pomabamba (Ancash, Peru), yet has seen almost no further study. Brief descriptions are known which inspect the architecture and explore possible

Table 1. Summary of location, size and defensive features of previously studied Recuay-tradition sites.

Site	Ancash region	Ceramic phase	Est. max. size (ha)	Elevation (m asl)	Primary function	Location	Defensive features
Ancosh Punta	Jangas	Ancosh	1.5	4190	Residential	Ridgetop	Perimeter walls
Antajirca	Huaraz	n/a	(2)	3100	Funerary	Ridgetop	-
Aukispukio	Huaylas	n/a	n/a	4400	Residential-funerary	Ridgetop	Perimeter walls and site partitions
Balcón de Judas	Huaraz	n/a	1	3000	Residential	Ridgetop	-
Chagastunán	Chacas	n/a	4.5	3820	Residential-funerary	Ridgetop	Perimeter walls, enclosures
Chinchawas	Pira	Kayán	1	3850	Residential-funerary	Ridgetop	Perimeter walls, chambered walls (funerary area in adjacent sloping terrace)
Chunchunpunta	Aija	n/a	(4)	3500	-	Ridgetop	-
Gekosh	Ticapampa	n/a	(4)	3620	Funerary	Ridgetop	-
Huancarpón	Nepeña	Recuay	15	700	Residential-ceremonial	Ridgetop	Walled sections
Pashash	Cabana	Pashash Recuay	15	3150	Residential-funerary	Hilltop	Wall partitions, terrace walls/blocks, parapets
Pinchay-Riway	Chacas	n/a	2+	4000	Residential-funerary	Ridgetop	Perimeter wall, enclosures
Pueblo Viejo	Caraz	n/a	30	3450	Residential-funerary	Ridgetop	Perimeter walls; funerary area in adjacent sloping terrace
Queyash Alto	Marcará	Huarás	2	2700	Residential-ceremonial	Ridgetop	Walled enclosures
Roko Amá	Katak	n/a	(5)	3650	Funerary	Ridgetop	-
Tinyash	Huacaybamba	n/a	(40)	4100	Residential-funerary	Hilltop	Perimeter walls, enclosures
Yayno	Pomabamba	Rayo	25–105	4150	Residential	Hilltop	Perimeter walls, trench system, enclosures

cultural affiliations (Bartle 1981, pl. 8; Kauffmann Doig 2002, 487–8; Raimondi 1873, 181–5; Ravines 2005; Reichlen 1961; Soriano Infante 1947, 12). Donato Apolín (2004a,b), a retired schoolteacher and historian, produced a sketch map and reconstruction drawings of the monumental sector through aerial photos and site visits.

Since 2005, the Proyecto Arqueológico Yayno has been investigating the relationships between monumental buildings, fortifications and chiefly societies in northern Peru (Lau 2010; Lau & Ramón 2007). The work has included site mapping (2005–8), sampling excavations at the Yayno site (2006–7), and surface reconnaissance (2006–8), covering high-altitude zones within 5 km of Yayno. Initial studies of the architecture, ceramics, faunal materials, carbon samples, and small finds have been completed, although more detailed analyses are to follow.

The pottery assemblage ($n = 35,400$ sherds to date) was classified according to broad paste categories (coarse, medium, fine grades), and constituent wares based on paste type, shape and surface treatment. The pottery indicates a range of intensive cooking, serving and consumption activities spread widely across the site. At least three fancy substyles

can be segregated, associated with mid–late phases of the Recuay tradition (Lau 2004b). There are no earlier styles, such as Chavín or Huarás, and only trace amounts of pottery related to the later periods. All ten radiocarbon ages complement the stylistic evidence, dating Yayno's main occupation from about cal. AD 400 to 800 (Table 2).

Hitherto, Yayno had been considered a citadel, political capital, empty ceremonial centre and cemetery (see Apolín 2004b; Kauffmann Doig 2002, 487–8; Tello 1929, 29–31). Various buildings have also been described as tombs, storage silos, observatories, prisons and convents. Our work now verifies that it was basically a fortified town with a dense residential component. Thus far, no evidence of Recuay tombs, burials or human remains has been encountered at Yayno. In researching its spatial arrangement, the fieldwork recognized a remarkable range of defensive strategies.

Location and site

Yayno overlooks a fertile region at the confluence of the Río Pomabamba and Río Lucma (Fig. 2). The rivers drain meltwater from the eastern Cordillera Blanca into one of the principal headwaters of the Amazon,

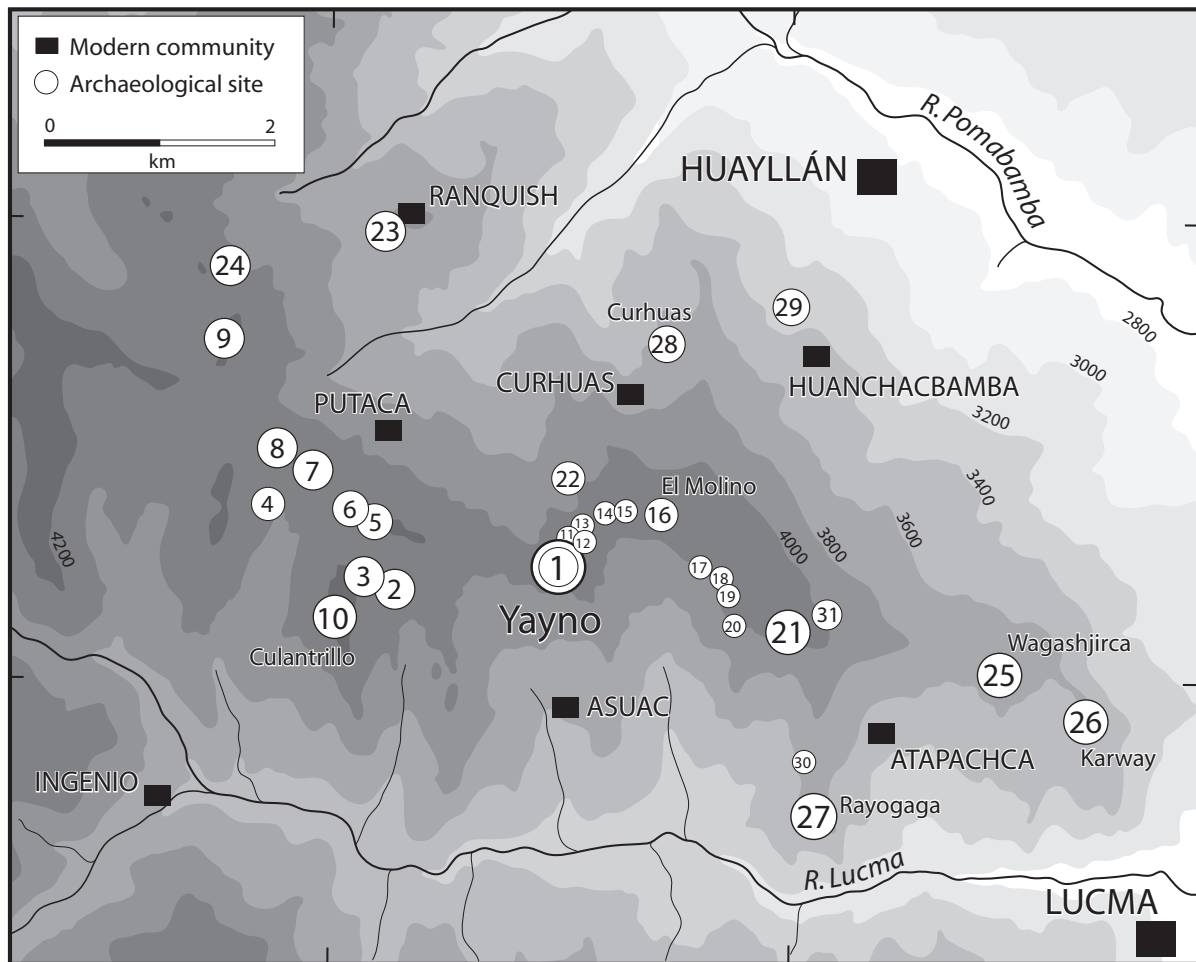


Figure 2. Map of southwestern Pomabamba province, showing location of Yayno and surrounding sites. Yayno is perched atop a high ridgetop descending from the Cordillera Blanca to the east. (Adapted from Carta Nacional, Pomabamba quad 1:100,000, 1983.)

Table 2. Summary of radiocarbon ages and associated contexts from Yayno (all samples on charred plant material).

Lab ID no.	C14 date (cal. BP)	2-sigma (cal. AD)	1-sigma (cal. AD)	Operation & level	Site location	Deposit context
AA-74404	1556±33	423–574	434–545	OP8G	Open terrace area, southeast of c21	Phase 1, drain construction
AA-74401	1524±29	433–604	465–595	OP3J	Quadrangular compound c40, southwest corner room	Pre-Phase 1, Phase 1, Floor
AA-74402	1508±33	435–636	537–604	OP4I	Circular compound c42, west room, low platform/banqueta	Phase 1, Early
AA-74400	1473±33	542–646	563–622	OP1I	Terrace room complex t1, room	Floor, Phase 1
AA-74403	1447±33	558–654	593–645	OP7G	Open terrace area, south of c40	Phase 1, fill
Beta-225517	1330±40	640–770	660–690	OP14E	Circular compound c20; courtyard, west side	Phase 2/3, floor
Beta-269995	1330±40	640–770	660–690	OP5H	Quadrangular compound c24, northern room	Fill
Beta-225518	1290±50	650–870	668–771	OP11F	Quadrangular compound c45; courtyard southwest corner	Phase 2/3, refuse
Beta-269996	1280±40	660–810	670–770	OP9F	Circular compound c29, southern room	Fill, Phase 2/3
Beta-269994	1190±40	710–960	780–890	OP3E	Quadrangular compound c40, southwest corner room	Phase 2/3, ashey lense, terminal occupation

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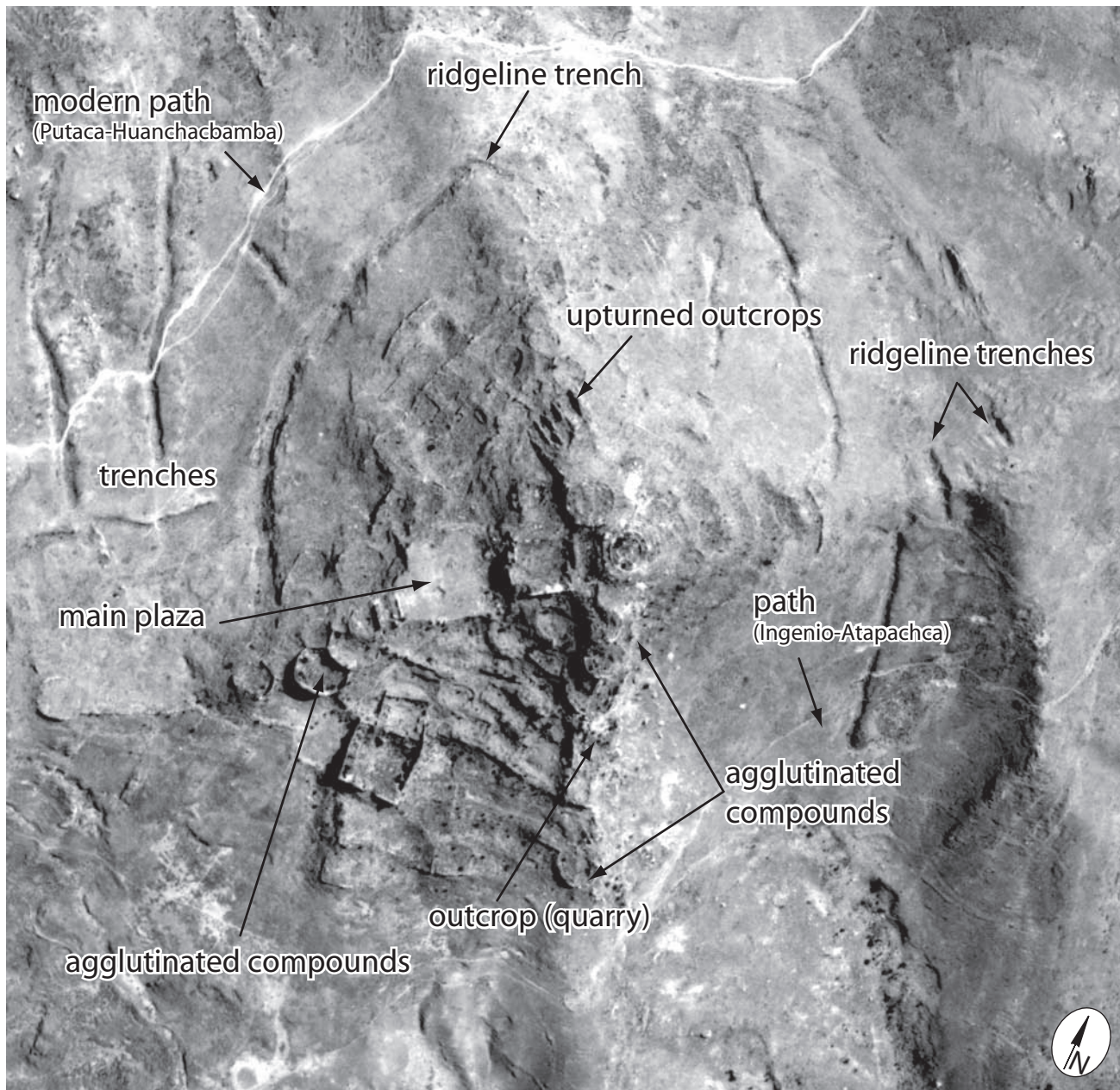


Figure 3. Aerial photograph, showing trench system and monumental sector of Yayno (taken 2 Jul 1972, Servicio Aerofotográfico Nacional, Lima, Peru).

the Río Marañon. Measuring some 25 ha at its core, and over 105 ha when including associated surface scatters and constructions, Yayno is the largest known Recuay site. Its relatively good state of preservation can be attributed to its remoteness from modern settlements. Located atop a low mountain at 4150 m asl, about 200 m above the current limits of agriculture, it is visited only seldomly. The closest major town is Pomabamba, four to five hours away by foot; the closest car road is two hours away.

Collapsed stone buildings litter the surface of the site. Most buildings were agglutinated (Fig. 3). Yayno's characteristic forms are stepped terrace areas and large high-walled compounds. There are stairways, some paved with flagstones, that connect significant buildings and spaces in the monumental sector, including the main plaza, the largest open space at Yayno, c. 55 × 45 m (Fig. 4). Some buildings were fitted with elaborate canals and drainage works, probably to collect water for residential use and draw

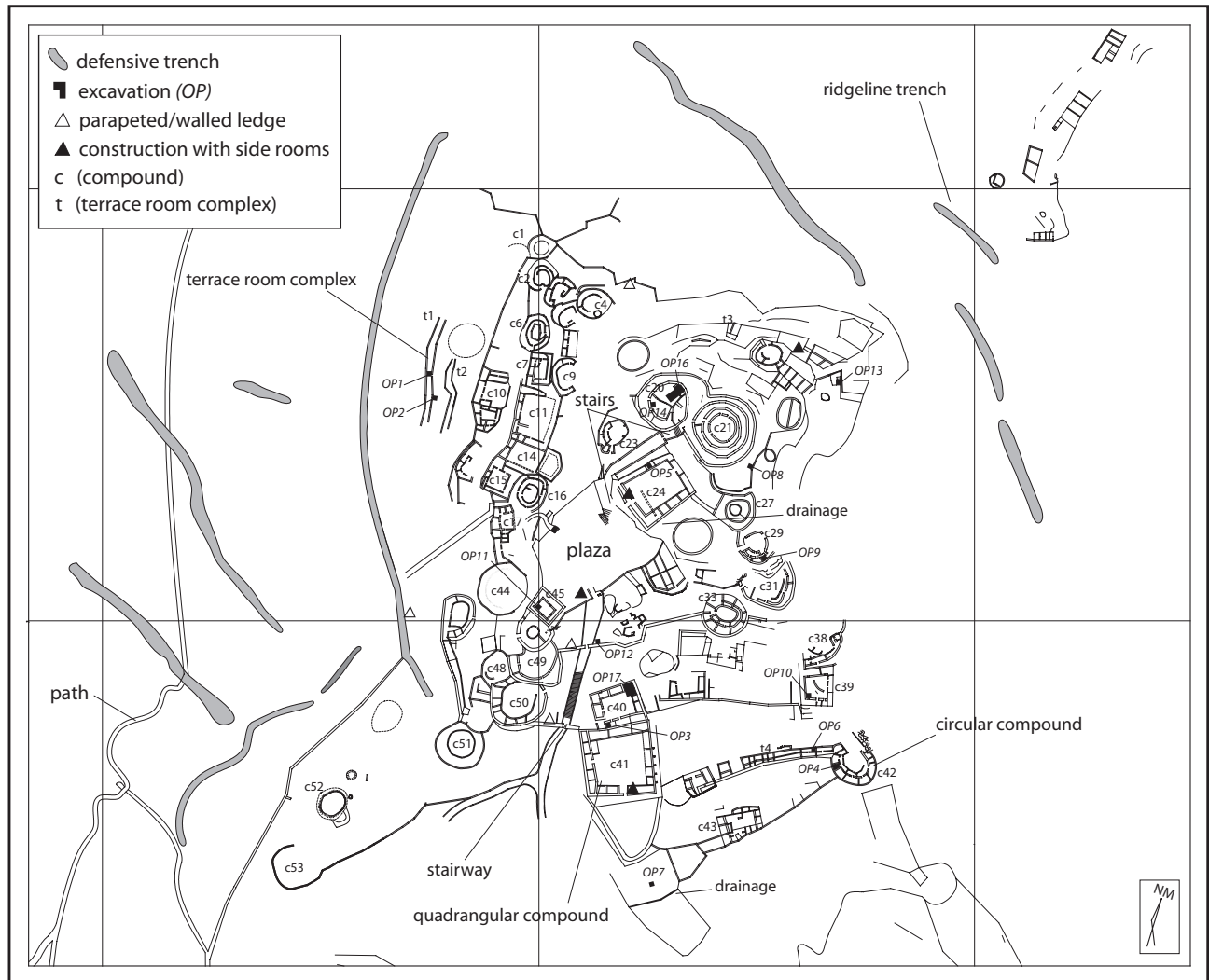


Figure 4. Planimetric map of the main sector of Yayno locating the major buildings and defensive works discussed in text. Deep trenches protect the western flanks of the mountaintop, while there are steep cliffs to the east. (Grid block = 200 × 200 m).

wet-season rains away from buildings. Outside the main sector, especially to the north, are less dense and elaborate remains, including isolated dwellings, corals and expediently-made round buildings, perhaps for storage. Steep cliffs protect the northwestern and eastern sides.

The high position commanded simultaneous vantage of pockets of near-side lands. Yayno is at the primary crossroads (footpaths) for the inhabitants of dispersed farmstead communities (Asuac, Putaca, Curhuas, Huanchacamba and Atapachca), who work these lands now. Three of these communities can be monitored directly from Yayno's summit.

Our surface survey indicates that Yayno networked a series of smaller, peripheral communities

near the modern villages. Owing to its high location, there is limited agricultural land directly around Yayno. But within a 5 km radius, over 30 sites exist in its general vicinity. Fourteen show coeval ceramics and building and/or masonry styles. In particular, there are a number of sizeable villages (Fig. 2, sites PAY-10, 25, 26, 27, 28 and perhaps 23), 2–4 ha in size, all within a two-hour walk. These are lower down in elevation adjacent to arable lands. The villages themselves are situated on ridgetops and are protected by perimeter walls and other defensive measures. Together, the ring of fortified villages may have helped buffer Yayno from aggressor groups (see Arkush 2008, 348; Redmond 1994, 29; Stanish 2003, 219–20). Beyond sheer size, Yayno was likely paramount in this cluster owing



Figure 5. Southwest approach to Yayno, showing the trenches protecting the lower margins of the settlement. The entire summit contains densely agglutinated architecture, but the tallest constructions can be seen to the right (south). From the south's main entrance, a processional way leads the visitor through a series of monumental compounds, gateways and a large plaza up to the top of the site, crowned by a circular 'tower' enclosure.

to its centrality and summit location in the system of settlements and paths, the quantity of fine pottery (surficial) compared to coeval villages, and the scale and quality of monumental architecture and extensive fortifications.

Trench systems

Yayno's most distinctive defensive works consist of a system of trenches, which protected vulnerable margins of the main sector. Elaborate stretches defended the northern and western approaches, in particular. From afar, these features are both visually distinctive and formidable, forming arc-like rings around the mountaintop; they can be discerned a good distance away (e.g. for example, standing from Pomabamba's plaza, c. 8 km away) (Fig. 5).

The system exploited the natural rock fractures and erosional channels of the hilltop. Many trenches have been widened and deepened to a 'V'-profile, measuring up to 5 m across. The inner bank, probably raised by excavated dirt, may measure up to 5–6 m tall, while the outer may rise 2–3 m. The southwestern margins also feature three successive trenches, at roughly

25 m intervals. The longest girdles the western flank of the mountain for approximately 300 m. Added protection was afforded by constructing walls atop sections of the inner bank, providing a type of parapet (Fig. 6).

The trench system included two deep ditches which cut across ridgelines (northeast and northwest site margins). These ditches may have served to slow any upward advance, or push any attackers to the steeper lateral ends. Keeping attackers in or near the trenches may have also facilitated retaliating volleys, especially with projectiles from above. Defensive dry moats were not uncommon in the middle and upper valleys of the Andes' Pacific flanks; they seal off a protected area by cutting off access via the ridgeline (e.g. Proulx 1985, 165–8; Topic & Topic 1987, 48; Wilson 1988, 165–7, 186; see also Parsons *et al.* 2000).

Residential constructions: compounds and terrace complexes

Yayno's layout consists largely of residential buildings, with three main forms: terrace complexes, circular compounds and quadrangular compounds (Table 3). This article focuses on their defensive characteristics.

Table 3. Summary of residential constructions at Yayno, showing variability in size and locations of high-quality stonemasonry.

Const. ID	Residential type	Max. dim. (m)	Est. area (sq. m)	Fancy stonework (category 3)	Const. ID	Residential type	Max. dim. (m)	Est. area (sq. m)	Fancy stonework (category 3)
t1	Terrace room complex	unknown	unknown	N	c25	Circular compound	16	201	N
t2	Terrace room complex	unknown	unknown	N	c26	Circular compound	-	-	-
t3	Terrace room complex	c. 74	unknown	N	c27	Circular compound	17	226.9	N
t4	Terrace room complex	c. 70	292.5	N	c28	Circular compound	20	314	-
c1	Circular compound	13	132.7	-	c29	Circular compound	18	254.3	Y
c2	Circular compound	14	153.9	N	c30	Circular compound	23	415.3	-
c3	Circular compound	16	201	N	c31	Circular compound	26	530.7	Y
c4	Circular compound	16	201	N	c32	Indeterminate	-	-	-
c5	Circular compound	12	113	N	c33	Circular compound	22	379.9	N
c6	Circular compound	17	226.9	N	c34	Circular compound	-	-	-
c7	Quadrangular compound	15 × 12	180	N	c35	Quadrangular compound	15 × 12	180	N
c8	Quadrangular compound	12 × 8	96	N	c36	Quadrangular compound	17 × 14	238	N
c9	Circular compound	19	283.4	N	c37	Quadrangular compound	23 × 14	322	N
c10	Quadrangular compound	17.5 × 16	280	N	c38	Circular compound	22	379.9	N
c11	Quadrangular compound	26 × 19.5	507	N	c39	Quadrangular compound	20 × 16	320	Y
c12	Quadrangular compound	13 × 12	156	N	c40	Quadrangular compound	24 × 19.2	460.8	Y
c13	Circular compound	19	283.4	N	c41	Quadrangular compound	37 × 34.2	1265.4	Y
c14	Quadrangular compound	18 × 14	252	N	c42	Circular compound	21	346.2	Y
c15	Quadrangular compound	15 × 15	225	N	c43	Quadrangular compound	20 × 15	300	N
c16	Circular compound	19	283.4	N	c44	Circular compound	24	452.2	N
c17	Quadrangular compound	18 × 12	216	N	c45	Quadrangular compound	13 × 12	156	Y
c18	Circular compound	16	201	-	c46	Circular compound	21	346.2	N
c19	Circular compound	20	314	-	c47	Circular compound	17	226.9	-
c20	Circular compound	24	452.2	Y	c48	Circular compound	16	201	N
c21	Circular compound	27	572.3	Y	c49	Circular compound	24	452.2	Y
c22	Circular compound	16.5	213.7	N	c50	Circular compound	26	530.7	Y
c23	Circular compound	17	226.9	N	c51	Circular compound	23	415.3	-
c24	Quadrangular compound	31.5 × 30.4	957.6	Y	c52	Circular compound	-	-	-
					c53	Circular compound	-	-	-

Table 4. Summary of contents recovered from excavation units at Yayno, according to architectural context.

	Monumental sector		Lower/marginal sectors		Total
	Circular compounds	Quadrangular compounds	Terrace complexes	Other locales	
Approx. area excavated (sq m.)	49	46	12	12	119
Slingstones/riverstones	17	27	5	1	50
Club/axe heads	1	3			4
Ground stone tools	10	28	5	2	45
Chipped stone tools	14	23	1		38
Metal items	1	6			7
Ceramic spindle whorls	13	6	2		21
Stone spindle whorls	9	1			10
Stone carving fragments	4				4
Camelid figurines (clay)	2	1			3
Pottery (finewares)	4846	2861	760	905	9372
Pottery (all)	21,811	9272	1984	2351	35,418

The circular compound is the most common form, with more than 30 examples (Fig. 7). Roughly circular in plan, some survive up to 12 m high and feature concentric walls. They range from about 12 to 27 m in diameter. In many examples, short radial walls partition the outermost spaces into small, arc-shaped rooms, surrounding an interior courtyard space (also Beckwith 1990; Herrera 2005; Ibarra 2003; Loten 1987; Murga Cruz 1983; Terada 1979). The rooms vary in size, but measure around 1.5 to 2 m wide and up to 3 to 4 m long. Stone footings for walls and projecting stones, for attaching wooden supports, indicate upper floors of rooms; none has survived to original height. The courtyard is usually open, but many show additional constructions which partition the interior space further.

Entry into the circular compounds was very difficult. Few doorways and windows have been identified on the exterior walls. Only a few compounds have discernible ground-floor entrances. In contrast, doorways are very common in the interior spaces, leading from room to the shared courtyard space and from room to room, at least at ground level (Fig. 8). It is possible that doorways were located higher up on outer walls which no longer survive. The lintels of external doorways, it appears, were common weak spots in the stonework.³ Ladders and stairs of perishable material almost certainly facilitated access and movements to upper levels.

The quadrangular compounds are Yayno's most elaborate buildings. Formally, they are highly standardized; and the two main examples (c24, c40) are Yayno's largest single constructions with the finest masonry (Fig. 9). Compound c41 is the largest (34 × 37 m) and features a groundplan of 16 chambers, with outer walls that stand over 11 m high. There are smaller examples (e.g. c45), which nevertheless are built to high standard. Like the circular compounds, these were multistory, apartment-like buildings with high walls that enclosed a courtyard space. Some quadrangular compounds have a prominent, centrally-located outer wall entrance. Also, doors are also found mainly from the room compartments to the courtyard; there are few room to room connections at ground level.

Test excavations in the interior rooms show a comparable range of domestic activities, including food preparation and consumption, spinning fibre and discard of domestic refuse. The high walls almost certainly provided shelter from winds and rain. But their height and lack of windows and doorways also reveal a concern for security and privacy, even within the confines of settlement-wide defences.

Terrace room complexes form the final category of residential building. These long, single-story buildings are partitioned into small rooms, each about 1.5 m wide and about 3 m long. One of the four identified complexes, t4, features parallel rows of rooms and measures about 70 m long. Their walls, compared to the large compounds, use simple stonemasonry and are not as thick or as well built. The terrace complexes appear to link specific compounds, such as c42–c41 and c46–c51, walling off long, open spaces. The exterior façade therefore doubled as long, continuous sections of perimeter wall.

The terrace complexes were probably quarters for lower-status groups at Yayno. Test quadrats (OP1, 2, 6) have found domestic refuse, grinding stones and other tools, and hearths. Notwithstanding fine ceramics, prestige items are largely absent in these locales, suggesting less intensive occupation and/or residents with limited means (Table 4). Also, compared to the well-built compounds, the complexes do not show much elaboration (e.g. niches, drainage) or quality of construction. Their placement near the outer margins of the monumental sector might also be seen as a defensive strategy.

Walls and stonework

Unlike many Recuay tradition sites (e.g. Ponte 2001, 224) and those in other highland regions (Arkush 2008; D'Altroy & Hastorf 2001; Parsons *et al.* 2000), Yayno does not feature a complete, circumferential perimeter wall. The steep dropoffs, tall edifices and other built and natural defensive features perhaps obviated its need.

Walling off areas, nevertheless, was a common tactic, especially in vulnerable zones. Where practicable, walls were built to limit access, always to more central upslope areas. Sections of walls connected several constructions (often dwellings, terrace walls, etc.) and outcrops, resulting in a long wallfront that faces downhill. Transverse walls also blocked natural gaps between the eroding sides of upturned bedrock.

The mapping identified several cases of parapeted walls. One protected either side of the primary stairway that leads into the core monumental sector, the main plaza. The other featured on a lookout near the northwest perimeter wall. These are walls with narrow standing positions, about 50 cm wide, along the inner portion; they extend some 8–10 m. One excavation (OP12) at the base of a parapeted wall determined that the standing level was roughly 1.2 m above the surrounding floor, with the parapet segment surviving to 1.3–1.4 m above. The parapets provided higher positions to defend and keep watch.

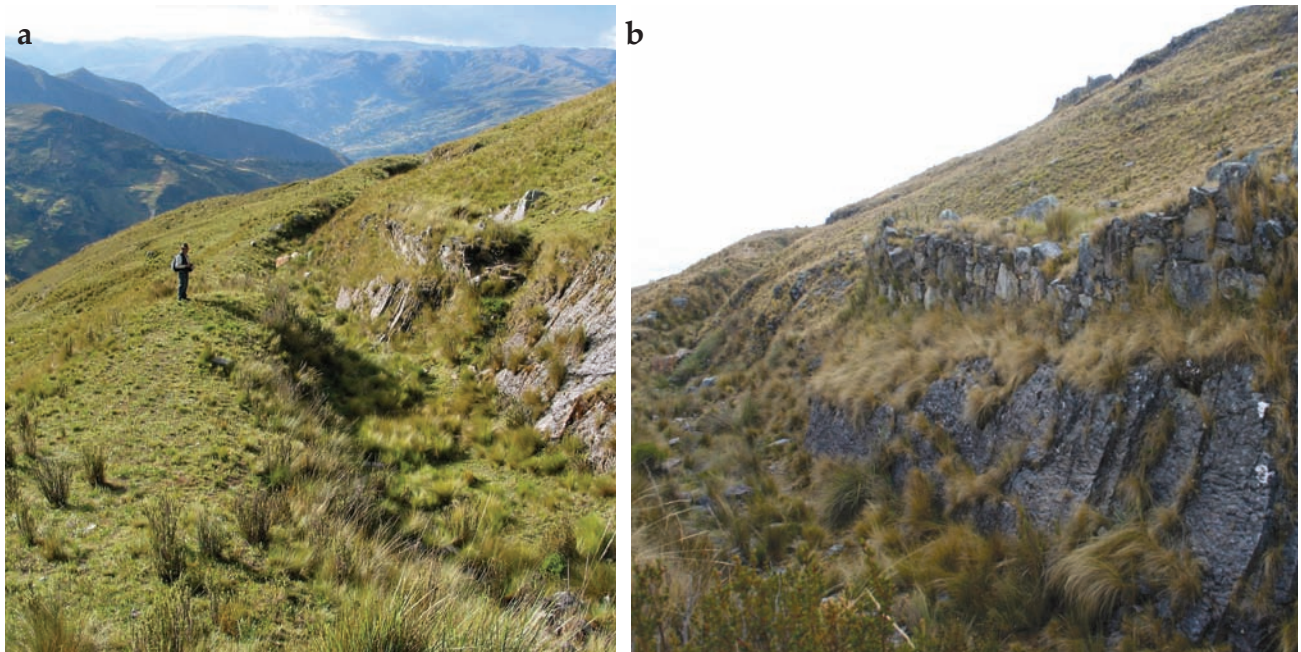


Figure 6. Defensive trenches at Yayno. Most of the trenches exploit natural fractures and erosional channels in the local bedrock. The longest (A) spans some 300 metres, and descends around the western portion of the site. The detail (B) shows a segment of wall built atop the inner bank of the trench.



Figure 7. Circular compound c50, view from southeast. These windowless residential complexes featured an outer ring of rooms rising multiple stories and a central courtyard. The interiors appear to have been the foci of social life for different Recuaya groups. Note the platform at the base of the building, and also the gateway at the lower right.

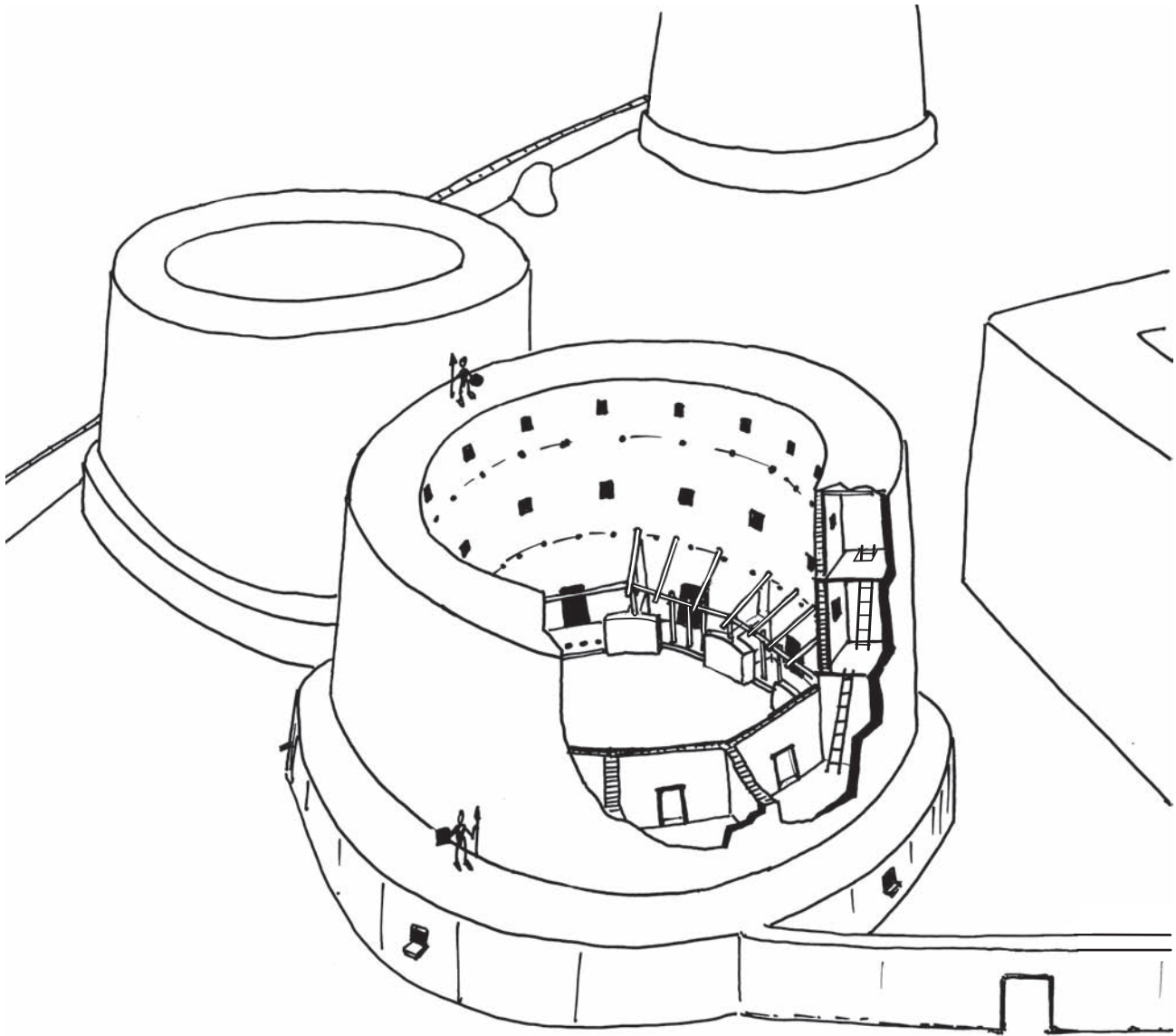


Figure 8. Reconstruction of large circular compound and other constructions. Compounds were built directly up against each other or were connected by walls in order to afford greater protection.

Some have argued that parapeted walls are the only forms of walls that are unambiguously defensive (Topic & Topic 1987, 48–9). The basal platforms of some compounds may have also been used as defensible walkways. These are variable in dimension, but the case of c50 may be indicative: over 2 m high and projecting up to 1.5 m from the main building (Fig. 7).

The builders likely acquired stone blocks from local, nearby sources. Outcrops of light granitic rock occur within the monumental core, especially along the northwest and southeast ridges. The source for dark grey *caliza* limestones is as yet unclear. *Caliza* blocks feature white quartz streaks and shallow

grooves, on corners and lateral ends, presumably to grip rope to facilitate transport.

The stonework is distinctive, but is also highly variable across the site, a pattern also at other north highland centres (Loten 1987; Tschauer 2003). There are three general types: one using unsorted planar, angular stones of different size (Fig. 10); another type using large uprights, called *wankas*, fitted with small chinking stones (*pachillas*) (Fig. 6); and a third type, always finely made, in which rows of uprights are arranged in creative patterns, often set above basal, horizontal slabs (Figs. 7, 9). The heterogeneity in stonemasonry and residential architecture, more



Figure 9. *Quadrangular compound c41 (left), view from northeast. The construction rests on a basal platform; a corner can be seen at the middle left. The east façade features at least seven rows of large stones (wankas) set atop narrow, horizontal slabs. The effect is heightened by use of differently coloured granitic and limestone blocks. Directly abutting the building is another compound (c40), featuring a megalithic entranceway into the central courtyard.*

generally, indicates internal groups of different means and stylistic dispositions. Also, it suggests that Yayno was not constructed under a single program, design or group of workers.

Restrictive access

Partitioning and limiting access to different parts of the settlement were the principal desires of the Yayno's nucleated spatial organization. In general, the central areas and the topmost part of the site were the privileged zones. The protected, interior spaces satisfied different concerns: greater shelter, privacy and safety.

Access into the residential compounds was highly restrictive. Very few doorways have been recorded and those identified are fairly narrow, *c.* 40–70 cm across, and were sometimes indirect (e.g. c16), baffled (c23), or of rear-entry (c20, c42). Furthermore, at least two entrances lead directly into a narrow walled chamber (c23, c29), further limiting access and making intruders vulnerable (Terada 1979, fig. 45). The quadrangular compounds have larger entrances, but it is unlikely that they were left open. The jambs often

employed worked, rectangular blocks over 2 m tall, stood on end (Fig. 9). Side entry chambers existed, and may have served as checkpoints (Fig. 4).

Once inside the courtyards, much freer movements were possible. Most ground-floor rooms have a single doorway which led into the courtyard. These thresholds vary in position and size, most roughly 50–70 cm wide. Doors were probably constructed of perishable materials and moveable, which kept cold out and restricted access in and out.

Stairways facilitated movements, but were also for directing and monitoring traffic. To reach the main plaza, the main route was through a stepped processional way which passed through three monumental gateways, two of which were parapeted. The entry into the plaza also appears to have had side chambers. It is notable that major compounds lie on either side of the stairway. The access does not pass through them, but by them, suggesting that only the exteriors were for general viewing. From the plaza, another flight of stone steps allowed access to the topmost compounds.



Figure 10. North façade of the main plaza platform. The main plaza was constructed by building a tall platform, reaching over 12 m high. The talus of stones to the right may be the collapse of a staircase. In the background is quadrangular compound c45.

Strategic arrangements

Across the site, Yayno presents a series of parallel terrace areas and successive wallfronts. With a stepped, layer-cake profile, the constructions established multiple lines of defence. If one section or terrace should be overrun, defenders could retreat to higher ground. Thus the best-defended part of Yayno was also its most central and/or topmost, a customary strategy in the Andes and beyond (e.g. Arkush 2008, 347; Ghezzi 2006, 76; Julien 1988; Parsons *et al.* 2000, 107ff. (vol. 1)).

Many compounds were also conjoined to perimeter walls/terraces, in effect forming large bastions. Yayno's inhabitants connected circular enclosures along the steep ridgelines descending from the summit, most prominently on the southeastern and northwestern descents. These buildings (e.g.

c48–49–50–51; c27–29–31) were literally stacked on top of each other, with compounds successively built atop or very near the rear, higher portion of the lower structure. The strategic chaining served the dual purpose of reclaiming rocky prominences for dwellings and exploiting the height provided by existing walls, while sometimes bracing the tall, otherwise free-standing walls of the lower structures. With the walls standing 10 m high, attackers below would be vulnerable to simple projectile volleys. Also, such constructions helped prevent lateral movements and flanking attacks, and allowed residents to move easily to higher ground and another compound without needing to exit the complex. They also allowed for greater vision; an attacker, for example, could not approach or flee through the rear flanks.

Discussion

Given its informal spatial layout, Yayno seems to have developed through a process of aggregation, typical of Recuay settlements. A strategic location and a series of defences protected a central core, in and around which compounds were added successively. Through time, compounds filled in open spaces, extending outwards and downhill. The pottery and radiocarbon evidence (Table 2) indicate that the three residential forms were largely coeval, AD 400–800. Their respective collectives built and inhabited these constructions at the same time, some for nearly four centuries.

Privileged, protected centre

All the major constructions at Yayno are found within its defended core. It is surmised that its inhabitants had strong capacity to mobilize corporate labour. Sampling within the defended core suggests that they also had greater access to high-status goods.

For example, excavations indicate greater amounts of fine prestige items in central core areas. The monumental sector featured kaolinite and terracotta finewares in substantial quantities. The wide majority were small polychrome bowls, often with ring bases. Found in floor, discard and fill contexts in the monumental sector, the pottery appears to be associated with consumption and display activities by the residents of the compounds. Several pits in marginal areas and outside the defensive features (OP2, OP15) show very limited presence of fine pottery. Other rare objects (figurines, spindle whorls, metals, beads, stone sculpture) are associated almost exclusively with the compounds (Table 4). The outer system of defences probably marked boundaries between higher-status residents of the monumental core and lower-status groups along the margins of the settlement.

The excavations also recovered some evidence of possible weapons. Stone axeheads, with grooves for hafting to a wooden handle, were found in several of the compounds (c20, c40) (Fig. 11c). Two were recovered near a hearth and other domestic materials in a room chamber. Although Yayno today is without tree cover, the axes may have been to collect wood from lower elevations.⁴ They may have also seen duty as weapons. One half fragment of a star-shaped macehead (Fig. 11a) was also recovered in a residential building (c40). The macehead was partly perforated and was probably broken as it was being made in the building, and then discarded.

No projectile points have been found, but countless stones of different shapes and dimensions can be found on site. Also, river-rolled and modified

stones were brought up to Yayno (Table 4). Fifty were recorded during excavations. Some of these were small polishers; others were slingstones, some ground down to a round shape (Fig. 11b). Almost all of the stones are associated with excavations in the interior spaces of the residential compounds ($n = 44$) and terrace complexes ($n = 5$). That potential weapons may have been stored and made in residential contexts suggests that the residents sometimes participated in the defence of their compounds and the settlement, more broadly.

Defensive works: variability and implications

In general, Recuay defences were fairly modest, resourceful solutions to widespread and persistent concerns against outside threats. Most groups relied on high locations, expedient walls, and protective terrain (e.g. steep slopes, ridgetops and quebradas). Yayno's residents, in contrast, committed major corporate efforts to defensive works. The trenches and fine walls show elaboration that far exceeded any strictly practical function. Even the siting of Yayno highlighted its defensive qualities. The mountaintop setting, ringed with trenches and tall vertical outcrops, and crowned by a tall tower of three concentric walls (Tello 1929, 32), may have exploited an ideal of a protected central place. It is no coincidence that its mountaintop perch and trench system are highly visible from afar.

Notably, the villages around Yayno show similar building features. For instance, some of the villages have circular compounds (PAY-22, 25, 27, 28); quadrangular compounds are rarer (PAY-26, 27). Certain buildings in the villages, perhaps of high-status factions, also feature the distinctive masonry style exemplified at Yayno, but usually of poorer-quality workmanship, using smaller and less well-selected stones. Finally, some of the villages show use of large caliza boulders featuring lateral grooves, indicating shared quarrying and transport techniques, and perhaps even common rock sources. All the villages, it should be noted, are considerably smaller than Yayno and feature coeval pottery.

Given its centrality and scale in the local settlement network, Yayno was very likely the political hub. The villagers of allied settlements may have also used it as a refuge during times of conflict. The constructions indicate groups capable of mobilizing large sources of labour for defensive ends. It seems reasonable to suggest that Yayno's settlement-wide defences (perimeter walls, trenching systems) were the responsibility of this wider community, while the compounds can be attributed to the efforts of smaller

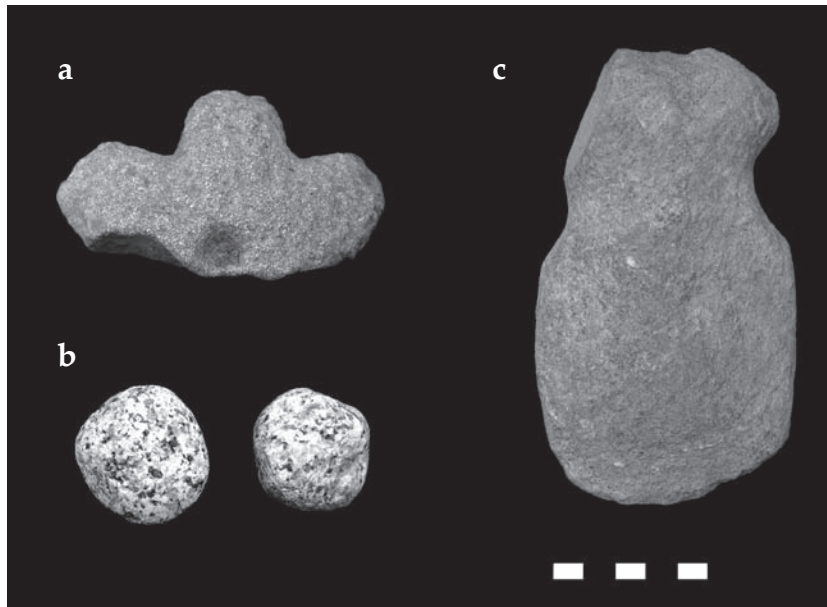


Figure 11. Ground stone objects from Yayno, possible weapons: a) a broken, partly perforated macehead; b) slingstones; c) an axehead.

constituencies, perhaps kin groups, extended families and/or house collectives.

It should be reiterated that within Yayno's core zone, there is substantial architectural variability. In addition to their general form (e.g. circular, quadrangular), some buildings show the capacity of their builders and inhabitants to devote more resources to larger and higher quality construction within their formal groups. Size and the presence of very fancy stonemasonry, in particular, suggest a range of residential collectives of different sizes and means (Table 3). The quadrangular compounds feature, in general, the most elaborate stonemasonry and higher-quality construction. In contrast, the circular compounds are the most numerous and show greater variability in quality. None of the small circular compounds features very fancy construction. Other architectural features perform as helpful criteria for distinguishing the sector's higher and lower status buildings: use of basal platforms, presence of elaborate drainage, location to certain features (summit, other buildings and staircase), and interlocking fill.⁵ Just as important, restricted access between compounds, high walls and scarcity of ground-floor doorways signal a significant degree of physical segregation between the compounds.

At the same time that Yayno's layout evidences a shared, common defence against hostile outsiders, the architecture also reveals a closed disposition which may have been to buffer rival collectives or factions

within the community. The data follow a general pattern of monumentalism in early complex societies, where '[f]ortresses, city walls, and enclosures around public buildings indicate a concern with defence that was already present in tribal societies, but which in the early civilizations was directed increasingly against potential internal as well as external enemies' (Trigger 1990, 121). Within the Recuay heartland, internecine conflict was likely a key factor that conditioned the spatial organization of regional centres and their networks.

The emergence of walled compounds, as defensible residential units, across Ancash can be further discussed in this light. It is unlikely that they are intrusive forms, for little data indicate foreign incursions or conquest. Also, the age ranges of these structures are sufficiently protracted that the patterns cannot be explained by a single event or horizon (e.g. Wari state expansion). One likely variable may have been a milieu of competition, both widespread and of long duration, between regional communities. Another was the growth and differentiation of internal factions.

Yayno's spatial organization is consonant with evidence of greater competition during Recuay times. This is perhaps made most apparent in the great proliferation of fortified sites during the Early Intermediate Period. Yayno, itself heavily fortified, sits at the centre of a cluster of fortified villages. By around AD 400, across Ancash, settlement nucleation intensified to a point where groups began to close off formerly



Figure 12. South approach, showing impressive, standing façades of compounds c50 (circular) and c41 (quadrangular). Defensive walls connected the buildings. Variability in compound size and elaboration suggests residential collectives of different means and standing.

independent dwellings, forming room clusters and walled compounds. Weapons are not uncommon at such sites. Recuay artworks, discussed below, provide another line of evidence. Martial imagery appeared occasionally in earlier periods, but was minor to other themes (e.g. mythical zoomorphic beings, fertility, shamanism). In Recuay, martial imagery became crucial, with unprecedented diversity of representation and distribution of occurrence.

Architecture and the Recuay martial aesthetic

The fortifications at Yayno were much more than mere defences. And warfare seems to have been more than just an ancillary or periodic ceremonial activity during Recuay times. Hilltop settlements, I contend, were key loci for socioeconomic life. Living in a fortified community clearly shaped local culture and thought. Most noticeably, the valorization of defensive architecture led to its own aesthetic.

Yayno's architecture, especially the stonemasonry, is overbuilt, if they were only for defensive purposes. And the fortified forms would be unnecessary if they were only ceremonial in function. The builders invested in the materiality of defences, with

its impregnable, monumental walls, sloping batter and fine stonemasonry arrangements of massive stones of different colours and sizes. The tremendous height of the buildings, enhanced through use of basal platforms, demonstrated the skill of local masons and high status of their sponsors and denizens. Highly elaborate exterior surfaces in Recuay culture helped to distinguish the major classes of elite material culture – buildings, ceramics, stone sculpture and textiles.

It should be mentioned that all of Yayno is defended by a combination of trenches and cliffs except for its southern approach, which is also the least steep. Here the builders constructed the tallest and most imposing extant buildings, with a succession of four to five walled terraces and monumental gateways. Tello (1929, 29–31) first recognized this grand but humbling access into the fortified centre (Fig. 12).

Recuay hilltop architecture appears to have communicated the common strength of the community. Despite their great sociopolitical and cultural differences, a similar ethos prevailed in many Old World fortified centres (e.g. Iron Age hillforts, medieval castle communities, Helladic citadels), where a strongly defended centre signalled a prosperous and



Figure 13. Fancy Recuay polychrome vessel, showing architectural representation of fortified enclosure. The construction is defended by watchposts, ledges and a series of warriors, each carrying a shield and club. (Courtesy of Museo Nacional de Arqueología, Antropología e Historia, Lima.)

vital community; they were also overt expressions of the sovereignty of local leadership in the context of intense political competition (e.g. Armit 2007; Wheatley 2004; Wright 2006). Recuay monumental fortifications, I would contend, were also bound up with identity of compound-based collectivities. The impulse to build elaborate architecture, as reflected at Yayno, derived from defensive and residential traditions. This would represent a major break from its precursor in Ancash, the Chavín civilization, and from coeval cultures of the coast, where most public works were religious in scope and dedicated to the cult imagery and rites of major divinities and their earthly representatives.

The intense attention to warfare extended to elite ceramic production, for Recuay potters sometimes depicted fortified, guarded constructions on their finest vessels (Fig. 13). The vessels were almost certainly for funerary contexts, and probably carried liquids used for libations and ritual offerings (Carrión



Figure 14. Recuay-style carved stone, perhaps an architectural representation or, more likely, a gaming board (see Smith 1977). Found throughout the Recuay heartland, usually from elite funerary contexts, these stones employ the hilltop settlement form as a prototype. This example from the Pomabamba region employs the standard arrangement; it pairs two elevated areas (here divided in three 'terraces'), two series of seven small outer compartments, and three central compartments. Players may have considered the game play like a contest between two centres. (Courtesy of the Sociedad de Artesanos, Pomabamba.)

Cachot 1955). No such vessels have yet been found at Yayno, but coeval kaolinite finewares, some with modelling are abundant at Yayno (c. 30 per cent entire assemblage). Warrior figures, often with weapons and shields, stand atop or inside walls, in a quadrangular or circular-shaped complex (e.g. Campana 2000, 88; Lumbreras 1980, 365; Ravines 2000, 88; Orsini 2007, 75). The walls are topped with crenellations, perhaps defensive battlements. One fort representation features a large rectangular enclosure. Warrior-sentries patrol parapeted walls with watchposts. In general form, the elaborately modelled vessels are not dissimilar to the high walled compounds and fortifications found at Yayno.

The Recuay also carved intriguing stone blocks, often taken as gaming boards or architectural models. They are found in or associated with Recuay sites throughout highland Ancash, usually funerary contexts (Grieder 1978, 110; Smith 1977; Wegner 2000, 14); at least one example (Fig. 14) is known from the

Pomabamba region. They show symmetrical layouts and equal numbers of features on either side. Notably, they often show two elevated areas, often stepped, which refer to paired, perhaps opposing, hilltop mounds or centres. A series of compartments around the raised portions may be modelled on plazas and walled enclosures. In his discussion of them as gaming boards, Smith (1977, 119–20) compared the game to Aztec *patolli* and called the elevated compartments the ‘home’ areas and the central compartments the ‘zone of conflict.’

Recuay settlements and imagery, more broadly, stress a common structural distinction between interior and exterior domains. Many Amerindian societies contrast a controlled, orderly inside, the province of the family, culture and community against an outside world, which is ambiguous and dangerous. The latter is of unfamiliar beings and uncertainty, yet rife with resources (game, prey, enemies, affines, prestige objects, etc.) which can be taken, by force, and internalized (e.g. Descola 1993; 2005; Fausto 2000; Viveiros de Castro 1992). Recuay architectural forms, settlements and ceramic imagery expressed a strong desire to enclose and control spaces. In doing so, they protected special places and their contents, while keeping ambivalent others at bay.

Warriorhood and leadership ideologies during the first millennium AD

Recuay culture emerged within the highly competitive geopolitical milieu of northern Peru during the Early Intermediate Period. It flourished when warriorhood emerged, more generally, as a critical form of cultural production (Donnan 2004; Makowski 2004; Proulx 2006).

The imagery of Recuay ceramics and stone sculpture consistently portrays figures with warrior attributes. Diagnostic features include weapons such as the mace, club, spear and shield. Warriors also wear a range of headgear, which probably denote a form of military rank and achievement, perhaps of warriors who have killed or captured enemies (Métraux 1949). Trophy heads were also prominent emblems of success in warfare — adorning headdresses or held in the hand, attached in small bags, or used as pectorals (Lau 2004a; Makowski & Rucabado Y. 2000; Orsini 2007; Schaedel 1948). Regardless of whether these were *bona fide* warriors or idealized representations, warrior status was wholly valorized in the ancient Recuay world.

Northern Peruvian cultures shared commonalities in the thinking and doing of warfare. For example, Moche artists showed the defeat and disabling of enemies in the same way as the Recuay

(and many other cultures), by grasping a frontal tuft of their hair (Lau 2004a). The imagery also privileged face to face contests, where clubs and shields were preferred over long-distance weaponry and fighting methods. Another connection concerns the elaborate accoutrements and equipment of warriors, including trophy elements (Benson 1984; Disselhoff 1956; Schuler-Schömig 1979; 1981; Woloszyn 2008). These converging *styles* of representing warriors, warrior-elites and armed combat can be understood as belonging to a co-development of an ideological complex based on an idiom of warriors and military leadership.

There is also some indication that enemies were viewed as a kind of prey and that the activity of war was like a type of hunting, a notion in other South American cultures (Donnan 1997). Besides the physical work and its many parallels (masculinity, teamwork, skill, stealth, danger, violence to alters), both hunting and captive-taking combat emphasize the incorporation of outside beings and potencies, essential for socialization and embodied practices which produce proper adult males (Fausto 2000; Viveiros de Castro 1992). This helps to explain why male figures in Recuay art almost always take or were given the identities of warriors. Much imagery was keyed to clothing and headgear, which appropriate special elements from powerful others, specifically in the form of human and animal body parts. This may be precisely why Moche fineline scenes may have sometimes depicted intercultural conflict (Lau 2004a). Enemies, especially those with highland connections, probably embodied vital resources that were incorporable through violent capture and the spectacle of sacrifice. Such triumphs enhanced the authority of local lords.

The crucial point is that this complex grew prominent more or less coevally for neighbouring groups and became exemplified through their elite arts and practices (also Kristiansen 1999, 181). Recuay, along with Gallinazo, Moche and Vicús, shared a martial aesthetic by the third century AD. It seems that success in warfare and related practices (hunting and trophy-taking), constituted spaces for building the social capital of warriors and chiefly leaders. Warriorhood became overtly part of a gendered sociality during the early portion of the Early Intermediate Period in northern Peru.

It should be mentioned that there are more than a few cultural parallels between Gallinazo, Recuay, Moche and Vicús, despite the fact that each maintained its own traditions and stylistic integrity. A full description of their interaction in northern Peru is beyond this paper’s scope (see Kaulicke 1992;

Makowski 2008; Makowski *et al.* 1994; Makowski & Rucabado Y. 2000; Reichert 1982; Shimada 1994). While evidence of trade is very limited, there was strong consonance of forms, iconographies and technological styles, especially for high-status prestige and funerary items. No doubt the tenor and reasons of interaction changed greatly through time, but these cultures were sometimes in intensive contact and perhaps sporadically in conflict.

By the early centuries AD, a particular mode of authority intensified in the wake of Chavín's collapse. New political arrangements characterized the coast and adjacent highlands of northern Peru, with political power increasingly centralized. Earlier forms of ranking highlighted access to and knowledge about rare and finely made religious esoterica. The new patterns, expressed overtly by c. AD 300, emphasized descent and predation, and the competitive distinction of chiefly leaders and their respective collectives. Lordships began to fill in the political landscape in northern Peru, based on their command over house, community and warfare. By mid millennium, these dispositions shaped the development of major fortified centres such as Yayno.

The current data preclude clear definition of the maximum extent of major Recuay polities. A working hypothesis, based on a threefold reasoning, supposes that the systems centred on their immediate hinterlands (e.g. within a 5–7 km radius), with more restricted relationships beyond this zone. First, the different styles of material culture found at Yayno (ceramics, architecture) and Pashash (ceramics, sculpture) are very uncommon outside their core regions. Second, there are major topographic features that serve to some extent to limit extensive integration: large mountains, glaciers, quebradas and their river systems, and also considerable overland distance between the centres.

Lastly, Recuay centres do not seem to have participated much in interregional exchange during their florescence, c. AD 300–600. Research at both Yayno and Pashash have recovered very little evidence of long-distance trade. This contrasts with surprisingly abundant exotica at smaller communities located along transport routes, especially later in the Recuay tradition. Recuay's openness to and capacity to obtain trade goods were manifested principally late in the Early Intermediate Period (AD 600–700) into the Middle Horizon (Bennett 1944; Burger *et al.* 2006; Lau 2005; 2006).⁶ Some late Recuay groups obtained Moche figural ceramics with warfare associations (Lau 2004a, 178–9); later vessels found in Ancash also refer to (captive) warrior statuses of other societies, such as Wari (Ponte 2001, fig. 24). In short, although they were

important later, interregional trade relationships seem much less crucial for the emergence or prosperity of the major centres. The patterns reiterate the highly localized character of Recuay polities at their height.

Accounting for the emergence of Recuay social complexity requires much further research. More than likely, multiple factors were at play and there will be great variability synchronically and through time. This article draws attention to the importance of warfare and fortified communities in the character of Recuay lordships.

Interventions of a de-pacified Yayno

The Ancash past as understood and instrumentalized by the present is not well-studied (cf. Walter 2006). For Peruvians and foreigners alike, there is a puzzled astonishment over the great elaboration of ancient citadels, such as Yayno.

There are three main ways in which visitors actively engage with Yayno today. At the height of the rainy season in February, locals from Pomabamba, Huayllán and Asuac hike up to the site to celebrate Mama Canchi, a rock-outcrop image of the Virgen de Candelaria. Overnight drinking, dancing and offering vigils occur at foot of the image, located just outside the northern trench. More commonly, new but determined visitors hike up, inevitably gravitating toward the monumental façades. They identify with the ruins as those of a distant, marvellous past, seen largely as 'Inka'. Hence, folkloric groups today use Yayno's dramatic walls, built a millennium before the Inkas, as the backdrop for videoing Quechua dances and performances, such as the 'Death of Atahualpa [the Inka sovereign]'. The other prominent way, regrettably, concerns climbing and making graffiti on the walls. These painted inscriptions tag large stones with names, especially of visiting students in school groups and sometimes their instructors. Such activities recognize the walls as great achievements of a tangible yet ineffable prehispanic past, to be witnessed, cited and partly claimed.

These understandings of Yayno and an emerging scholarly knowledge about a more warlike prehistory need to be reconciled, sensitively, with recent organized conflict in the region — namely 1980s leftist guerrilla extremism and hard-line responses by the Peruvian government. Highland Ancash, especially around the area of the Río Marañón, had many affected areas. The terrorism had lingering effects until the 1990s across Peru, but the violence remains indelibly etched in the memories of those who experienced the *época de terrorismo*. Conversations with locals rarely avoid mention of this tumultuous time.

The roles that archaeologists play in shaping connections with the past cannot be underestimated, not least because archaeologists and the archaeological record participate in local histories. Many foreign and Peruvian archaeologists were forced out of highland Ancash in the 1980s because of the violence. Specialists were warned against visiting Yayno and other remote parts of the region.⁷ In the 1990s, my field project in another part of Ancash was visited sometimes at night by local armed militia, protecting farmsteads and property. Chavín de Huántar, of course, served as the backdrop for presidential proclamations of decisive victory over terrorism, exemplified by the military's quashing of the 1997 Japanese Embassy takeover bid, eponymously named Operación Chavín de Huántar.

If Yayno's position at a crossroads articulates surrounding villages in the past and present, it also remains a point of contention. Pomabamba and Piscobamba are two rival towns which have, since colonial times, fought over resources and territorial jurisdictions. Today, Pomabamba counts as a 'province', ranking above Piscobamba's 'district' status. The rivalry cascades to many domains (e.g. sport, genealogy, town festivals), but their relative position is important especially in the distribution of government resources and, increasingly over the last decade, mining proceeds. It also inverts prior colonial-era arrangements, when Piscobamba, an older settlement, was more populous and important in the region; indeed, Pomabamba had been considered an annex of Piscobamba (Márquez Zorilla 1965, 71; Ortega 1956, 69–84). It is relevant here because there exist accounts that Piscobambinos once dynamited Yayno's large circular compound (c50). Pomabambinos also blame vandalism and graffiti on the schools and residents of Piscobamba and communities within its jurisdiction (pers. comm. 2005–06, names withheld). Even if apocryphal, these comments serve to mark the importance of Yayno, an ancient fortified ruin, as a key site for contemporary contestation.

Antagonisms may take another form in the near future. The potential of Yayno as a site for tourism and heritage development is being actively researched by competing stakeholders in Pomabamba (Casa de la Cultura), Huayllán (a district town of Pomabamba, but closer to the site), and even as far away as Sihuas, Huaraz and Lima — all the while mediated by local and national government culture agencies and potential sponsors, such as mining outreach programmes. Even at this early stage, one can observe emerging tensions over the stewardship of Yayno and the rights to commodify it.

'De-pacifying' the past may therefore entangle contemporary understandings, the historical record and researcher practice. For different world regions, there is need to document multiple modes and histories of conflict to contextualize recent events and local engagements. This work emphasizes that knowledge production in archaeology, especially with the burgeoning effort to 'de-pacify the past', is not without contemporary consequences. Archaeologists can help develop frameworks to comprehend past conflict and violence (physical and symbolic), while intervening prudently with an eye toward the future.

Conclusion

Archaeological investigations at Yayno demonstrate elaborate defensive strategies and features at the seat of an important Recuay polity. The main building programs occurred around cal. AD 400–800. The establishment and building of Yayno stressed a large, protected area dedicated to residential compounds, multiple lines of defence, and vantage over nearby production zones. Where sectors did not possess natural protection, they were secured by more anthropogenic measures. The defences aimed to protect distinct collectivities, some of whom were probably rival corporate groups within the settlement. The data are consistent with the pattern that, by about AD 500, within the larger Recuay centres, some groups came to be more prosperous and ostentatious, even as they became increasingly segregated.

For Recuay culture, its important social transformations were precipitated by intensified encounters between regional groups, often with distinct material styles. The net effect was a great emphasis on the materiality of warfare. Large fortified centres in the highlands, such as Yayno, emerged at the same time that political power increasingly emphasized warrior-chiefs, as shown through art imagery. At the same time, internal conflict and unequal wealth are indicated by the form and contents of discrete residential compounds, some of which are monumental in scale. Elaborate buildings came to be regarded as extensions of and sources of distinction for local lords and their respective groups.

This article expands the study of ancient Andean fortified buildings. In addition to their military purposes, fortifications were the settings for structuring certain lifestyles. Fortified hilltop centres were not simply for the purpose of defence. They were places for social life and commentary, and no doubt formed locales in which many ancient groups were social-

ized. Defensive works can be highly elaborate and distinctive expressions of a society's commitment to warfare. They came to embody local value systems that reconciled warfare as a costly, yet necessary and prestigious activity. De-pacifying the past may require that archaeologists fill the spaces, implied in the ancient ruins of fortified settlements, with people. This is made more feasible if attention can be turned to the notion that warfare's destruction of people and things simultaneously produces persons and things.

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Notes

1. All ages and dates hereafter based on calibrated ages.
2. The emphasis on killing and predation forms a key difference from Andean ritual battles.
3. Elsewhere in the survey area (e.g. PAY-026), it has been observed that wooden beams were used to help span the lintel areas of thresholds. Their use (and subsequent destruction and removal) may help to explain Yayno's general lack of doorways which preserve to full height.
4. Tello (1929, 36) also reported axe- and mace-heads at Yayno. At least two maceheads in the Huayllán town museum are reported to have come from the site. Various others, including Yayno's site guardian, have found

maceheads in the monumental area (M. Jaramillo pers. comm. 2006).

5. For detailed discussion, see Lau (2010).
6. This contrasts with a later Inka period deposit at Yayno, which included abundant remains of *Spondylus* sp. shell, obsidian and greenstone objects.
7. C. Aguirre Chang-Jui, former director of INC-Ancash, personal communication 2005.

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