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Processes of State Formation in the Inca Heartland (Cuzco, Peru)

Author(s): Brian S. Bauer and R. Alan Covey

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BRIAN S. BAUER  
R. ALAN COVEY

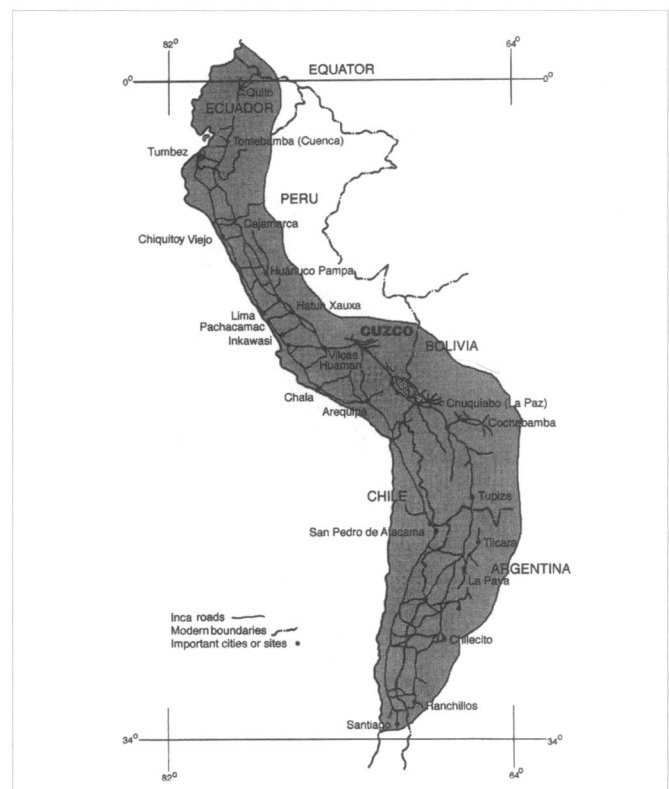
## Processes of State Formation in the Inca Heartland (Cuzco, Peru)

**ABSTRACT** This article addresses Inca state formation in the central highlands of Peru. Using ethnohistoric materials and new archaeological survey data from three areas surrounding Cuzco, the capital of the Inca empire, we argue that rapid Inca expansion after C.E. 1400 was made possible by long-term processes of state formation and regional consolidation. From C.E. 1000–1400, a centralized state developed in the Cuzco Valley, extending its direct administrative control over numerous neighboring groups. Less powerful neighboring polities accepted Inca administration early on, perhaps even initiating Inca patronage. Strong rivals to Inca control maintained their independence, at times depopulating intermediate areas and settling in defensive sites to protect settlements and resources. Finally, groups of intermediate complexity used alliances and violence to align themselves with the strongest regional competitors. Such variability in regional integration strategies reveals how Inca state formation processes influenced later patterns of imperial conquest and administration. [Keywords: Inca, state formation, imperialism, archaeology, ethnicity]

**I**N THIS ARTICLE WE EXAMINE the dramatic social transformations that occurred in the Cuzco region between C.E. 1000–1400, sometimes called the Late Intermediate Period.<sup>1</sup> Conceptually, this encompasses regional developments following the decline of the Wari empire in the south central Andes and leading up to the first Inca territorial expansion outside of the Cuzco region. As such, this era represents the critical time when the Inca transformed themselves from one of many competing complex polities on the post-Wari political landscape into a well-integrated state capable of dominating the central Andean highlands.

Because Inca imperialism occurred just before the Spanish conquest of the Andean highlands (C.E. 1532), some information recorded in 16th- and 17th-century colonial documents can be compared critically with archaeological data recovered through excavations and settlement surveys in the Cuzco region (Figure 1). References to the interactions between Cuzco's ethnic groups during the Late Intermediate Period facilitate a more detailed discussion of Inca state development than would otherwise be possible.

In considering the ethnohistoric record, we acknowledge the problems inherent to the study of these documents (see Bauer 1992; Julien 2000; Rowe 1946:192–197), at the same time asserting that their *anthropological* study can yield important perspectives on long-term regional



**FIGURE 1.** The Inca Empire, C.E. 1532. The Inca polity expanded from the Cuzco Valley in the south-central Andes of Peru, creating the largest empire of the pre-Hispanic Americas.

processes. While individual Inca rulers are often credited with specific events or achievements, we use the documents to construct multiple lines of evidence for state formation processes, rather than as historical facts. Our processual focus in this article necessarily leaves many issues of local decision making and individual agency for later discussion, although we believe that such issues can be addressed more fully once long-term, group-level interactions have been described.

### STATE FORMATION, REGIONAL CONSOLIDATION, AND IMPERIAL EXPANSION

Some of the contingencies of Inca political origins and imperial expansion can be hypothesized through a comparative anthropological perspective on empires (see Alcock et al. 2001; Doyle 1986; Sinopoli 1994; Smith and Montiel 2001). Empires often expand rapidly to incorporate groups of varying political complexity (Schreiber 1992), particularly in cases where territorial annexation occurs against small, isolated rivals or on a politically balkanized landscape (Marcus 1998). More noteworthy cases of rapid territorial expansion include Rome (c. 264–146 B.C.E.) (Badian 1958; Harris 1979; Sands 1975; Scullard 1980), the Aztec Triple Alliance (c. C.E. 1428–1519) (Berdan et al. 1996), Vijayanagar (c. C.E. 1340–1450) (Sinopoli and Morrison 1995), and the Achaemenid empire (c. 550–522 B.C.E.) (Kuhrt 2001). Cases where vast and complex territories were conquered during the reign of a single dynamic individual include the Macedonian expansion of Alexander the Great (336–324 B.C.E.) and Mongol imperialism under Genghis Khan (C.E. 1206–1227).

Individual rulers do oversee the rapid acquisition of new imperial territory, but as Carneiro argues, “the actions of individuals, no matter how gifted, count for naught *in the absence of certain enabling conditions*,” (2000:178). Without preexisting patterns of political interaction, marriage alliance, and regional consolidation, Alexander’s campaigns would not have been as successful, while Roman incorporation of the Mediterranean region might not have occurred had the Italian peninsula not shared an Italian identity as Rome challenged processes of Punic imperialism. Cultural and ecological conditions influence and enable individual action, so that charismatic individuals can affect the tempo of (or come to embody) major social transformations without actually being personally responsible for creating the conditions for such changes (Flannery 1999:18; Giddens 1984; see Boyd and Richerson 1985).

One condition for rapid imperial expansion is a well-integrated heartland region. Emerging empires incorporate new territory rapidly, in part, because they can mobilize large numbers of people and large amounts of resources from a unified core area, including an army that is prepared to engage in extended campaigns. A centralized and specialized government must develop an ideology and exercise control over the military and the economy of the heartland, necessitating the development of

state-level political organization. While anthropologists, archaeologists, and historians have studied how empires expand, few have considered the relationship between processes of state formation, integration of core or heartland regions, and imperial expansion.

The development of archaic states is a hotly debated topic in anthropological archaeology, and this article is not intended as the forum to review such literature (see Fried 1967; Service 1962, 1975; Wright 1977 for classic definitions). We can note that approaches to state formation have included elite managerial functions (Wittfogel 1957), population pressure and violent conflict (Boserup 1965; Carneiro 1970, 1981; cf. Wilson 1983), ecological factors (Sanders and Nichols 1988; Sanders and Price 1968), information exchange (Wright 1977, 1984; Wright and Johnson 1975), and elite interaction (Blanton 1998; Blanton et al. 1996). Drawing from a neo-evolutionary theoretical perspective (e.g., Flannery 1999; Spencer 1990), we will consider both archaeological indicators of state formation (e.g., Flannery 1998; Johnson 1980:249; Marcus and Flannery 1996:172–194; Wright 1986:257–258), as well as evidence from written sources, to interpret some of the processes involved in the formation of the Inca state. These can be compared to other ethnohistoric cases of state formation and expansion (e.g., Brown 1979; Dewar and Wright 1993; Flannery 1999; Gluckman 1960; Sidky 1996). Some general transformations involve territoriality, economic management, and intensity of control and administration.

### *Territorial Aspects of State Formation*

One important factor in state formation is the establishment of a well-integrated territory, a process often occurring within a relatively small region. As Spencer (1990: 6–8, 1998) has noted, personal and nonspecialized administration of a complex polity precludes the delegation of authority, limiting effective control to less than a day’s walk from a paramount leader’s own community. Ethnographic observations of polity size in such groups are actually somewhat smaller than Spencer’s idealized estimates, and it is rare for centralized, but not internally specialized, administration to extend successfully beyond 1,000 square kilometers (Spencer 1990:7; see also Goldman 1970:169; Helms 1979:53; Redmond and Spencer 1994; Renfrew and Cherry 1986). Although conditions of extreme environmental circumscription appear to promote larger territory sizes for some prestate polities (e.g., Carneiro 1991; Earle 1978; Kirch 1984), we consider a 20-kilometer radius to be a reasonable limit for prestate political administration. Archaeologically, one indicator of regional consolidation by an emerging state is evidence of a more complex settlement hierarchy signifying direct and sustained control over areas well beyond this territorial limit (Wright 1977; Wright and Johnson 1975).

The successful shift to internally specialized officeholding may take several generations to develop, and this

process is often followed by a period of rapid territorial expansion in areas surrounding the emerging state. Expansion is often a patchwork affair, and emerging states may focus on formalizing access to long-distance prestige goods or trade routes early on, while leaving some major local or regional rivals independent (see Balkansky 1997; Helms 1991; Marcus 1992; Marcus and Flannery 1996:206; Redmond 1983; Smith and Hodge 1994; Spencer 1982; Spencer and Redmond 2001). This mosaic of regional interactions often leads to the rearrangement of local settlement, colonization of new areas, internal development around the capital, and the establishment of depopulated buffer zones between major rivals. Anderson (1994:39–41) suggests that extreme territoriality and boundary maintenance increase with sociopolitical complexity, and that encroachment on depopulated buffer zones is often an indicator of settlement expansion by more complex groups.

The integrated heartland will share a state-directed economy and ideology, forming the basis for state programs of expansion through diplomacy, alliance, intimidation, and military conquest. By the time new states have finished the integration of territory around their capital, they often have a territory of 20,000 square kilometers or more, an area that may include multiple ethnic groups and is well beyond prestate administrative limits. Settlement hierarchies and rank-size graphs can be used to investigate the degree of state control over the core. Settlement lattices tend to become more regularized as the core region becomes well integrated.

### **Economic Control in Emerging States**

The development of state administration involves the integration of several previously autonomous groups, requiring some changes in the regional economic system. Ethnographic and ethnohistoric cases indicate that corvée labor or tribute claimed by elites in complex societies is often mobilized by rulers to create privately owned resources for which usufruct involves obligations to the ruler/state that undercut individual autonomy and local identity (e.g., Bradbury 1967:6–12; Sidky 1996; Spencer 1993). Internally, developing states create new resources by expanding intensive agriculture into marginal areas or buffer zones, by coordinating the production cycles for agriculture and pastoralism, and by restricting nonstate access to natural resources and exotic goods. Tribute or corvée labor from local populations provides the basis for developing state incomes, and the reorganization of local production into a high-cost, high-return direct administration may be the most effective development of the core region (Covey 2000). State production policies—particularly intensive monocrop agriculture and major settlement shifts—undercut the traditional managerial authority of local elites, frequently resulting in local attempts to assert autonomy (see below). Local rebellions (or accusations of collaboration) provide ruling elites with a pretext for replacing local elites with loyal state administrators,

often intensifying the level of state administration and altering local settlement patterns.

### **Population Growth and Elite Interaction**

Territorial expansion and the intensification of natural resource exploitation require human labor, and successful state development is strongly associated with major population growth (cf. Boserup 1965; Carneiro 1991). The populations of emergent states can be most rapidly increased by encouraging immigration, developing urbanized settlements, and annexing nearby groups. Conquest of neighboring groups and appropriation of their resources is an especially attractive option since it can augment state resources dramatically. Weak neighbors may be coerced to accept a subaltern position, although some actually solicit the patronage of stronger, ethnically related groups to ensure protection against rival polities. Alliances with stronger groups limit the costs of interpolity conflict, and more durable ties, such as elite marriage exchange, may eventually lead to the domination, and later full integration, of subordinate allies. Where a neighboring group is too strong to conquer immediately, an expanding polity may create buffer zones, contract nonaggression treaties, and continue to develop its own resources and alliances until an effective advantage presents itself.

Alliances and indirect control tend to be unstable or less cost-effective in the long term. Local leaders might defer group autonomy as an attractive short-term strategy to avoid conflict or increase their personal networks (through intermarriage or access to prestige goods), but they often reassert their independence and break away from the developing state at a later time. Thus, while incorporation of some groups may not initially require military action, the shift from hegemony to direct administration may ultimately involve military incursions (or reconquests after rebellions) and the imposition of permanent state administrative facilities. Where archaeologically detectable, the transition from local autonomy to direct state administration may involve multiple settlement shifts resulting in the development of more dependent local economies and settlement locations.

A developing state will be capable of making large, and frequently rapid, territorial conquests outside of its core region once it has eliminated its most powerful local rivals, brought less complex groups under direct control, and developed its political and economic system throughout the heartland. The state should integrate local worldviews within a state ideology that justifies territorial expansion (Bauer 1996; Conrad and Demarest 1984). This may take several centuries, particularly in cases where the heartland has considerable cultural or linguistic diversity, where the expanding state is limited by ecological or demographic factors, or where independent political, ideological, and economic structures persist. Archaeological evidence should indicate a more regular hierarchical settlement system, population growth, local resettlement,

the development of state infrastructure (roads, storage facilities), economy/administration (intensive agriculture, increased labor specialization, public architecture), and ideology (state organization of temples and shrines).

### PREVIOUS RESEARCH ON THE DEVELOPMENT OF THE INCA HEARTLAND

Before the 1970s, many writers described Inca political origins in terms of the personal achievements of Inca rulers. Using certain Spanish chronicles, it has been proposed that the Inca emerged from obscurity in the early 15th century during the reign of Viracocha Inca and his son Pachacuti. The catalyst for the sudden political growth in the Cuzco region is said to have been the ability of these two Incas to unite the various ethnic groups of the region and to score a decisive military victory over a traditional rival, the Chanka. Davies summarizes the traditional interpretation on Inca political origins: "When he [Pachacuti] became ruler, the Incas formed only a modest village community; at his death they were the mightiest empire of South America" (1995:59). In recent years, new data have emerged that force us to reevaluate the accuracy of the chronicles.

While Inca imperial expansion appears to have occurred quite rapidly, researchers increasingly view this as the result of antecedent and long-term regional political processes, rather than the serendipitous outcome of a single battle and the aspirations of specific individuals. The chronological scope of such developments exceeds that of the reliable ethnohistoric record. Accordingly, some scholars have read the documents for more causal or processual perspectives on Inca state formation. For example, Rostworowski de Diez Canseco (1978, 1988) suggests that the manipulation of institutionalized exchange relationships (and not military conquest) led to political integration and Inca territorial expansion. Conversely, Lumbreras (1978) emphasizes class conflict and traditional interregional hostilities between Cuzco and the Chanka. Murra (1972), Schaedel (1978), and Isbell (1978) have each stressed the importance of economic management and redistribution systems in stimulating Inca political centralization, while others have suggested the Inca system of dual inheritance as the ideological impetus for territorial expansion (Conrad 1981; Conrad and Demarest 1984; Demarest and Conrad 1983; Patterson 1985). Through the investigation of broad categories of social and economic organization, these authors have shifted their interpretive focus from the actions of a single individual to more general processes of social change. In this article, we expand on this processual orientation by introducing archaeological data that make explicit the relationship between processes of Inca state formation in the Cuzco region and Inca imperialism.

While earlier theoretical discussions of Inca origins have advanced our interpretive orientation, they have been unable to test ethnohistorically generated hypothe-

ses against independent archaeological data. As Conrad and Demarest observed in the mid-1980s, "archaeology could greatly further our understanding of the pre-imperial Inca by revealing the precise chronology of their cultural development and by serving as a means of evaluating conflicting hypotheses derived from the chronicles. The practical problem is that the archaeological data available at present are not very extensive" (1984:96). Fortunately, a large body of new survey and excavation data has been collected in the past two decades, and we can now evaluate Inca state formation with two independent lines of evidence.

Traditionally, there has been a general bias in the Cuzco region for conducting archaeological research at sites that contain monumental architecture. Great strides have been made in understanding large imperial Inca sites, such as Machu Picchu (Valencia Zegarra and Gibaja Oviedo 1992), Ollantaytambo (Protzen 1993), Chinchero (Alcina et al. 1976), and Yucay (Niles 1999), while smaller, earlier sites in the region—sites that played a role in early state development processes—have not been as extensively studied. Furthermore, until recently, the interpretation of excavation data has been hindered by a lack of regional settlement pattern data from intensive survey projects. Most archaeological projects in the Cuzco region have either concentrated on conducting excavations at a single site, or on collecting surface pottery from a limited number of sites. With the possible exception of Kendall's (1976) work in the Cusichaca Valley, located some 60 kilometers northwest of the Cuzco Valley, no systematic survey work was conducted in the Cuzco region prior to the mid-1980s. While excavation data are crucial for understanding site-level effects of state formation, only regional settlement data can address the full scope of state formation processes and contextualize the occupations of individual sites.

### *Archaeological Surveys in the Inca Heartland*

The first systematic archaeological survey project in the Inca heartland was conducted by Bauer between 1984 and 1987 in a 600-square-kilometer region directly south of the Cuzco Valley (see Bauer 1990, 1992, 1999).<sup>2</sup> The results of this work indicated a greater time depth to a regionally dominant Cuzco polity than suggested by some historical accounts (e.g., Rowe 1944; cf. Means 1931). Bauer expanded on this work in 1994, examining the long-term developmental processes within the Cuzco Valley proper in a second regional project. This 350-square-kilometer study region was completed by Bauer and Covey between 1997–99 (Bauer and Covey 1999).<sup>3</sup> A third survey, covering over 300 square kilometers in the Vilcanota Valley to the north of Cuzco, was directed by Covey in 2000.<sup>4</sup> Combined, these three contiguous survey projects comprise a total area of over 1,200 square kilometers and document the locations of more than 2,000 archaeological sites (Figure 2). Equally important, the three survey projects form an 80 kilometer north–south transect through

the Inca heartland. As such, the surveys cover the center of the Inca polity in the Cuzco Valley, as well as the lands of several ethnic groups living to the north and south of its capital.<sup>5</sup>

These three survey projects provide an unprecedented opportunity to examine the developmental processes of the Inca state. The survey data can be combined with the results of excavations and reconnaissance work conducted to the east and west of Cuzco to assess the changing political interactions between the emerging Inca state and its neighbors of other ethnic identities. We find that during the period of state development, as for the better-understood period of imperial expansion, the Inca employed a wide range of strategies to extend their influence and to consolidate their control.

Of special interest to this study are those groups identified as "Inca of Privilege," to whom Inca ethnic status was extended at the onset of the imperial period (Figure 3). Subservient to Cuzco and yet allied with it, the Inca of Privilege represented a large, tribute-paying social stratum that not only supported the ruling elite in Cuzco but also occupied low-level bureaucratic positions in the empire (see Rowe 1946:260–261). Inca imperial expansion was predicated on the administrative and ethnic unification of what became the imperial heartland, a dramatic increase in "Inca" population in which different ethnicities participated unequally. The full integration of some groups and the elimination of others marked the point of departure

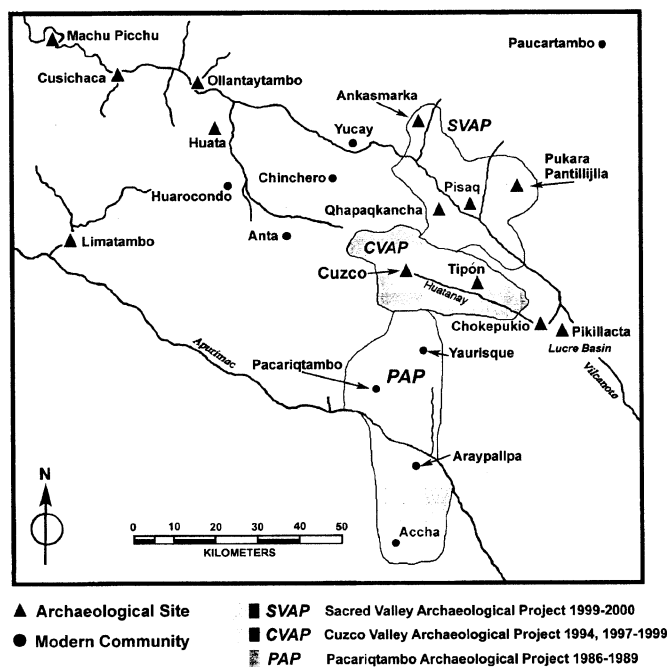
for Inca imperial expansion into neighboring non-Inca regions.

Through a series of case studies, we can now observe that these strategies targeted different levels of local social complexity and exploited patterns of elite interaction within the emergent heartland. We will first present a regional picture of the heartland before C.E. 1000, then turn to the sociopolitical conditions in the Cuzco Valley during the Late Intermediate Period. Having considered some of the internal developments of the early Inca state, we then examine its external interactions with other groups living to the south, west, northwest, north, and east of Cuzco.

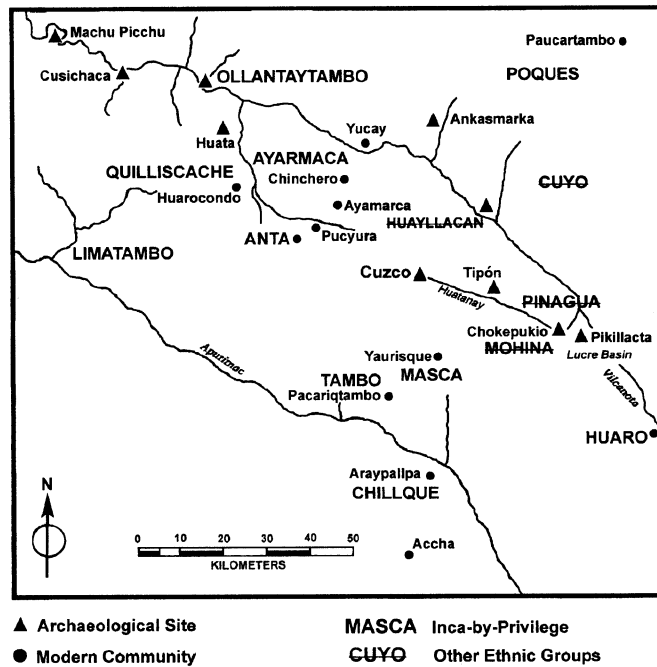
### SETTLEMENT PATTERNS IN THE CUZCO REGION BEFORE C.E. 1000

During the Middle Horizon (c. C.E. 600–1000), the Wari polity dominated the Cuzco region from the immense site of Pikillacta in the Lucre Basin, some 30 kilometers southeast of modern Cuzco. Survey data indicate, however, that Wari administration did not significantly disrupt the local settlement pattern in the Cuzco Valley (Bauer et al. 2001). Both before and throughout the Middle Horizon, a network of villages was concentrated along the southern side of the main Cuzco Valley, where large transverse streams drained into the Huatanay River, and where low alluvial terraces provided excellent locations for villages close to valley bottomlands and rainfall farming on the valley slopes.

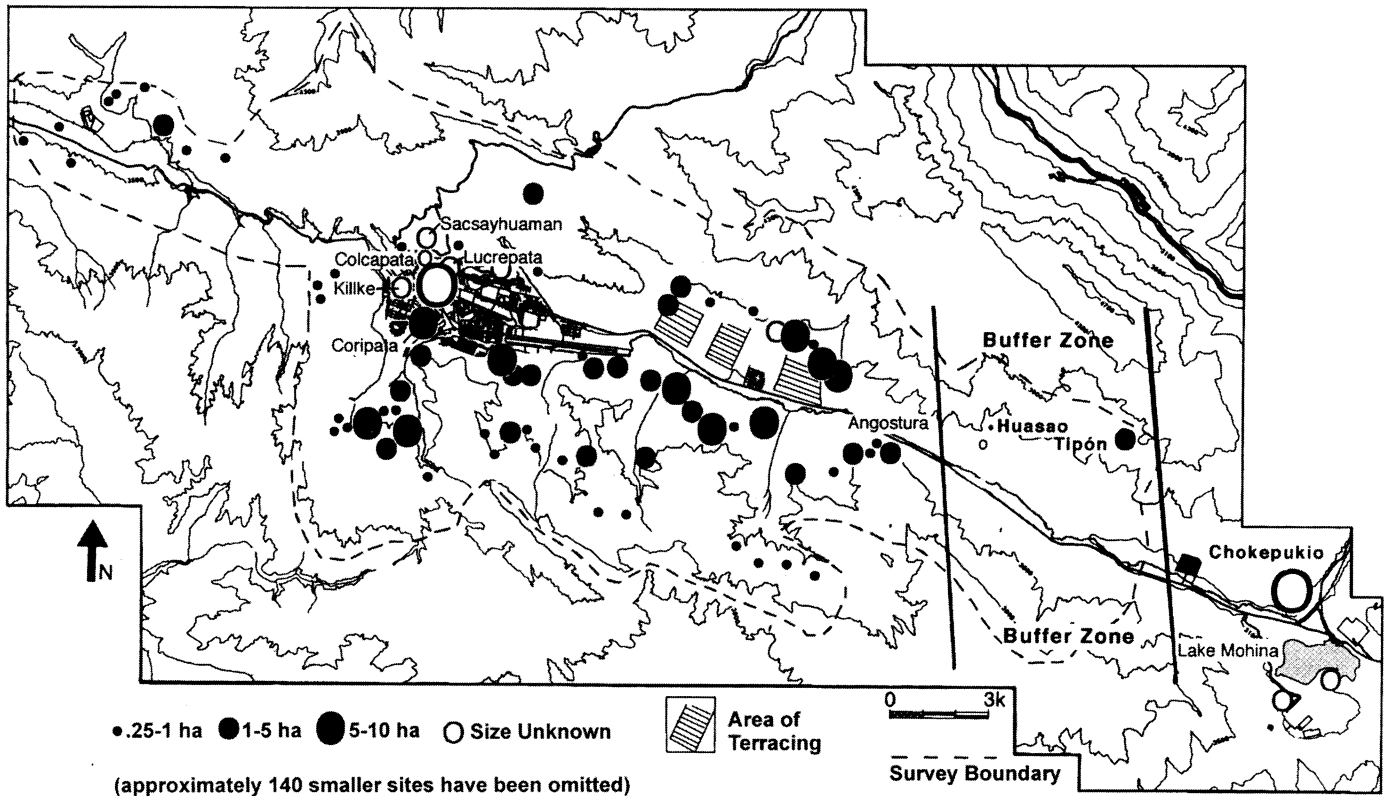
The Middle Horizon populations to the south of Cuzco were settled within the maize-producing elevations



**FIGURE 2.** Regional settlement surveys in the Cuzco region. Three systematic regional surveys have been conducted in the Inca heartland to understand the processes of state development. Research was conducted in the areas north and south of Cuzco, as well as within the Cuzco Valley itself.



**FIGURE 3.** Boundaries of the Inca imperial heartland, showing the location of different ethnic groups. These groups were incorporated into the Early Inca state through various strategies, and many (but not all) had Inca ethnic status extended to them during the imperial period.



**FIGURE 4.** Late Intermediate Period village sites in the Cuzco Valley, C.E. 1000–1400. After C.E. 1000, a series of large villages and agricultural works was developed in the northern side of the Cuzco Basin. The densely populated basin between the Cuzco and Lucre basins was depopulated, creating an empty buffer zone between Inca villages in the Cuzco Basin and those under the control of the Mohina and Pinahua groups. Tipón, the only Late Intermediate Period site in the buffer zone, contains large fortification walls.

in a series of scattered hamlets and small villages. Wari pottery in this region appears as isolated fragments at a few sites, and the Wari influence over this area may have been limited to religious or economic influence (see Bauer 1999). Although systematic data are lacking for the Middle Horizon to the west and northwest of Cuzco, we hypothesize that future survey work planned for this area will reveal a similar low-intensity Wari presence.

To the north of Cuzco, very little Wari pottery is present in the Vilcanota Valley. Settlement patterns and ceramics in the Chit'apampa Basin indicate that this area had political and cultural ties to the Cuzco Valley. Settlement in the basin was restricted to areas closest to the Cuzco Valley, located near good valley bottom lands with abundant water. Although most Middle Horizon sites in the Chit'apampa Basin are small, two discrete clusters of settlements were encountered near the modern communities of Huillcapata and Patabamba. Village occupations in these areas displayed a two-tier settlement hierarchy, consisting of small villages that were surrounded by hamlets and dispersed households. In other parts of the Sacred Valley survey region there is no evidence that more distant villages and hamlets were under the domination of either the Wari or Cuzco polities at this time.

While the full discussion of Middle Horizon settlement will be presented elsewhere, it is sufficient to note

that sites at this time favor locations where simple irrigation agriculture could be conducted, and where community defense tended to be a secondary settlement priority.

#### STATE FORMATION IN THE CUZCO VALLEY, C.E. 1000–1400

Regional settlement changed radically after about C.E. 1000 with the decline of the Wari polity and the abandonment of Pikillacta. A regional political vacuum spurred competition among several groups, leading to political developments in the Cuzco Valley proper. Population within the valley appears to have increased significantly at this time. A series of new settlements was established in more remote parts of the southern valley, while most of the well-established valley bottom settlements grew substantially. During this same period the northern side of the valley was transformed dramatically (Figure 4).

Because streams in this area were entrenched, the northern part of the valley historically had few horticultural/agricultural settlements. During the Late Intermediate Period, however, a series of large villages was constructed on the lower northern valley slopes. The agricultural potential of this area was developed through the construction of new terraces and irrigation canals. The canals emerged from ravines near the new villages, supplying water to new agricultural terraces that ran nearly down to

the Huatanay River. These terraces created hundreds of hectares of improved agricultural land and rank among the largest agricultural projects to be undertaken in the valley. They would have supplied the developing Cuzco polity with significant agricultural surpluses while also presenting the Inca elite with a means of rewarding supporters in local communities. It is likely that the Inca built these agricultural works with the use of rotational *corvée* labor. The ability to organize and construct large public works, and by doing so create new resources for the Inca elite, represents an important element of the state formation process.

Ethnohistoric sources suggest that some of these new agricultural resources (probably maize lands, a crop requiring a constant water supply) were held by important lineage groups of the valley, while others may have been given to groups from outside the main valley that were moved to these lands, either to seek the protection of Cuzco or forcibly resettled after military defeat. Internal development, resettlement, and colonization were important strategies used by the Inca state not only to increase resources available for regional competition but also to reduce redundancy within the developing hierarchy (see Flannery 1972). The scale of such processes and their link to dynastic groups indicates political organization beyond the level of prestate societies.

The large agricultural villages in the emerging Inca state were dominated by its rapidly urbanizing capital, Cuzco. Excavations throughout the modern city have revealed that the Inca capital grew to perhaps 50 hectares during the Late Intermediate Period, up to ten times larger than most villages in the main valley. Killke pottery (i.e., early Inca pottery) was first identified in the very heart of Cuzco during excavations at the Coricancha (Rowe 1944). Since that time, Killke pottery and building foundations have been found in the surrounding area (González Corrales 1984). Excavations conducted in the Jesuit Church beside the plaza and within the plaza itself have also yielded abundant Killke materials (Valencia Zegarra, personal communication, May 16, 1995). Furthermore, substantial deposits of Killke ceramics have been found in each of the major suburbs of the city, including Lucrepata (Bustinza, personal communication, July 20, 2000), Coripata (Cumpa Palacios 1988), Colcapata (Valencia Zegarra, personal communication, June 15, 2001), and Killke (Rowe 1944). Large and deep deposits of Killke ceramics have also been found at Sacsayhuaman (Dwyer 1971; Rowe 1944), demonstrating a significant occupation throughout the Late Intermediate Period and into Inca imperial times. In other words, current data suggest that the Late Intermediate Period occupation of Cuzco was quite large, over time approaching that of the city under the mature Inca empire.

The early Inca polity invested in local infrastructure and developed projects that created new resources. Resettled populations were dependent on Inca elite control of these resources. They received some benefits from living in the main valley, but would have been obliged to the

rulers of the developing state. Internal political consolidation and resource development created settlement buffer zones in the area surrounding much of the main valley, as some small groups were brought more closely into Cuzco's orbit (Figure 5). Not all groups were resettled in the Cuzco Valley, however. Several small groups located south of Cuzco came under Inca control early in the Late Intermediate Period without experiencing much of the reorganization seen within the main valley.

#### **THE REGION SOUTH OF THE CUZCO VALLEY, C.E. 1000–1400**

Historic evidence indicates that the region immediately south of the Cuzco Valley was inhabited by at least three separate ethnic groups during the Late Intermediate and Inca Periods (Poole 1984; see Bauer 1992). The Chillque settlement clustered around the present-day community of Araypallpa, while the Masca were concentrated around the town of Yaurisque and the Tambo were located near the community of Pacariqtambo. Ethnohistoric research indicates that each of these groups was organized into a regional moiety system at the time of the Spanish Conquest (Gade and Escobar Moscoso 1982; Poole 1984; Urton 1990). Bauer's regional survey data demonstrate that these systems of dual organization have great antiquity and date to the Late Intermediate Period, if not earlier (Bauer 1987, 1992:124–139). It is important to note that these ethnic groups were never organized into large polities. In late pre-Hispanic times, the smallest group, the Tambo, comprised several hundred individuals, while the larger Masca and Chillque polities each numbered only in the low thousands. The large-scale complexity of settlement in the Cuzco Valley and the relatively simple organization of Paruro during the Late Intermediate Period demonstrate the historical inaccuracy of migration accounts present in Inca origin myths (see Bauer 1991, 1992:120–123).

Except for the construction of an Inca imperial estate/administrative site at Maukallacta, the regional settlement pattern continued relatively unchanged from the Middle Horizon through the Inca imperial period. The distribution of Killke pottery at sites in this area indicates that the early Inca state dominated villages as far as the Apurimac River, or up to 40 kilometers from Cuzco (Bauer 1992) (Figure 6). Furthermore, systematic surveys in this area recorded no obvious evidence of large Late Intermediate Period defensive settlements. The regional settlement system consisted of small, widely scattered, unprotected settlements generally located adjacent to areas of agricultural land. The early Inca villages in this area are smaller than those in the Cuzco Valley, the largest being only about four hectares. The absence of any clear indication of Late Intermediate Period warfare and the continuous occupation of all major Late Intermediate Period sites into the Inca period suggests that this region was absorbed relatively early into the developing Inca state with little resistance (Bauer 1992).

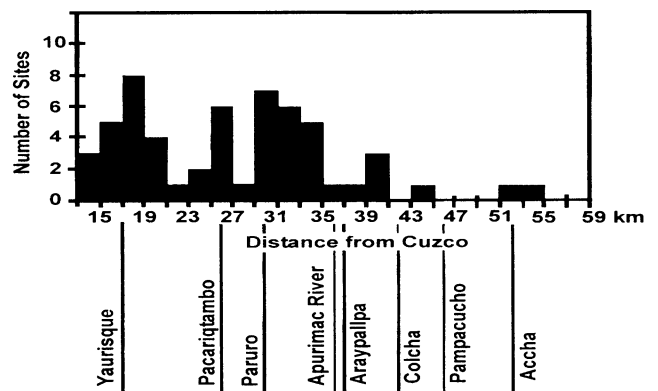




**FIGURE 5.** The Cuzco Valley, facing southeast. New villages and agricultural infrastructure were developed by the early Inca state on the northern side of the valley (on the left of the photo).

**THE REGION WEST AND NORTHWEST OF THE CUZCO VALLEY, C.E. 1000–1400**

Several ethnic groups lived to the west and northwest of the Cuzco Valley, including the Limatambo, Quilliscachis, Mayo, Hequeco, Sanco, Conchacalla, Anta, and Ayarmaca. Among the largest and most powerful of these were the Anta and the Ayarmaca. Killke-related pottery produced in this area has a wide distribution throughout the region, and both groups appear to have had large populations. Although there has been no systematic regional survey in this region, reconnaissance work by the authors of this article and others (Alcina et al. 1976; Kendall 1974, 1976, 1985; Rostworowski de Diez Canseco 1970a; Rowe 1944) provides some information for preliminary discussion. The Anta were most likely concentrated around the modern town of Anta, which rests above a large pre-Hispanic settlement. This site may well have been the paramount village for a small complex polity during the Late Intermediate Period.



**FIGURE 6.** Distribution of Early Inca (Killke) pottery south of Cuzco. The number of sites with Killke pottery decreases as a function of distance from Cuzco, with the presence of Killke material identified over 50 kilometers from the Inca capital.

### The Ayarmaca

The Ayarmaca are better known than the Anta (Rostworowski de Diez Canseco 1970a). Their territory extended from the area of Pucyura in the south (where it shared a border with the Anta) to the area of Chinchero in the north (where it shared a border with the Huayllacan). Although the region is largely unexplored archaeologically, the paramount village of the Ayarmaca most likely existed near the modern-day town of Ayarmaca or, perhaps, near Chinchero. Oral histories of the region recorded by the Spaniards tell of long-term conflicts among the Anta, Ayarmaca, and the Inca (Guaman Poma de Ayala 1980; Sarmiento de Gamboa 1906; Garcilaso de la Vega 1966). These conflicts may have finally subsided after the unification of the groups through a series of strategic elite marriages.

Sarmiento de Gamboa (1906:56) notes that Mama Runtucaya, the principal wife of Viracocha Inca (the eighth ruler) was from Anta, and descendants of her family still lived there in the Colonial period (Toledo 1940:114) (Table 1). The legitimate wife of Yahuar Huacac (the seventh ruler), Mama Chicya, was the daughter of an Ayarmaca lord; and the wife of Capac Yupanqui (the fifth ruler), Curi Hilpay, may have been an Ayarmaca elite as well (Sarmiento de Gamboa (1572: chs. 18, 22). The marriage of Yahuar Huacac to Mama Chicya is of special interest because it appears to have involved an exchange of daughters between rival lords. Sarmiento de Gamboa writes: "Before Inca Roca died he made friends with Tocay Capac [Lord of the Ayarmaca], by way of Mama Chicya, daughter of Tocay Capac, who married Yahuar Huacac, and Inca Roca gave a daughter of his, named Curi Occllo, in marriage to Tocay Capac" (1906:54).<sup>6</sup>

Tracing the intermarriages of elite Incas with men and women from rival ethnic groups reveals the gradual extension of Cuzco-based regional alliances. While the earlier Inca rulers are said to have married the daughters of community leaders from within the Cuzco Valley, and the last Inca emperors considered their full sisters as principal wives, several generations of interethnic regional marriage alliances occurred between Cuzco and other powerful groups of the heartland during the period of state forma-

tion. The Inca modified this practice as their empire spread across the Andes, with the Inca ruler and his kin taking secondary wives (no longer principal wives) from the noble houses of subordinate ethnic groups. This strategy continued well into the postconquest period, with high-ranking Cuzco elite offering their female relatives to the Spaniards in hopes of building alliances with the newly established colonial conquerors.

### The Limatambo

It is clear that other groups in this region interacted differently with the emerging Inca state than the Anta and Ayarmaca. Heffernan (1989) has conducted intensive exploration beyond Anta in the Limatambo area, approximately 50 kilometers west of Cuzco. His field conclusions on the Late Intermediate Period settlement pattern in this region are similar to Bauer's for the area south of Cuzco. Heffernan finds that most Late Intermediate Period occupations are located near large cultivable areas and that few (if any) of these sites contain clear evidence of fortification. While there may have been a small shift in population from higher to lower altitudes between the Late Intermediate Period and Inca Periods in the Limatambo region, the overall settlement pattern of the two periods is very similar. Comparing his field observations with the information presented in the Spanish chronicles, Heffernan writes, "The mythico-historic characterization of pre-Inca populations as constantly warring, in light of field evidence, is imbalanced and fails to appreciate stable elements in the socio-economic landscape of Limatambo" (1989:413).

### The Quilliscachis

Research in the region farther northwest of Cuzco, beyond the areas controlled by the Ayarmaca, reveals yet a different scenario. In the area of the Quilliscachis, who were concentrated near present day Huarcocondo, there are fortified Late Intermediate Period sites. The largest of these is Huata (Rowe 1944; Vera Robles 1998), located approximately 40 aerial kilometers northwest of Cuzco on a remote mountain summit and surrounded by a large fortification

**TABLE 1.** Inca rulers and their principal wives, according to Sarmiento de Gamboa (1906).

Inca Ruler	Principal Wife	Wife's Identity	Comments
Manco Capac	Mama Occllo	Sister	Culture hero, following imperial marriage pattern
Sinchi Roca	Mama Cuca	Elite woman from Sañu	Intravalley alliance
Lloque Yupanqui	Mama Cava	Elite woman from Uma	Intravalley alliance
Mayta Capac	Mama Tacucaray	Elite woman from Tacucaray	Intravalley alliance
Capac Yupanqui	Curi-Hilpay	Elite woman from Ayarmaca	Regional alliance
Inca Roca	Mama Micay	Elite woman from Huayllacan	Regional alliance that sparks war with Ayarmaca, leads to alliance with Anta
Yahuar Huaccac	Mama Chicya	Elite woman from Ayarmaca	
Inca Viracocha	Mama Runtucaya	Elite woman from Anta	
Inca Yupanqui	Mama Anahuarqui	Sister	Establishment of imperial marriage pattern
Tupac Inca	Mama Chimpa	Sister	

wall (Figure 7). Reconnaissance work done by Kendall (1974, 1976, 1985) in the Cusichaca River Valley between Ollantaytambo and Machu Picchu also located Late Intermediate Period sites on extremely steep ridge tops. The presence of ridge-top sites in the Cusichaca region, as well as the fortified site of Huata, indicates that this area was not directly controlled by the Inca state until the end of the Late Intermediate Period.

#### **THE REGION NORTH OF THE CUZCO VALLEY, C.E. 1000–1400**

Important ethnic groups residing in the region north of Cuzco included the Huayllacan, the Cuyo, the Tambo, the Yucay, and several other unnamed groups such as those living at Ankasmarca and in the Chit'apampa Basin. Until recently, what little we knew about these groups was based largely on the oral histories recorded by Sarmiento de Gamboa. Recent archaeological research has provided additional evidence for those of Chit'apampa as well as the Huayllacan and Cuyo, for whom the chronicle references can now be compared with archaeological data (Figure 8).

#### ***The Chit'apampa Basin***

Major changes in the settlement pattern occurred in Chit'apampa after C.E. 1000. In the upper part of the basin (closest to Cuzco), a buffer zone formed as the Middle Horizon sites of the basin were abandoned. Populations were either pulled into the Cuzco Valley or moved farther down the basin into a mosaic environment (near maize, tuber, and pasture lands) that had defensive locations for nucleated settlement. The chronicles mention repeated Inca incursions against their neighbors to the north, and

several sites are found in areas with natural (cliffs) and artificial (walls, ditches, etc.) defenses.

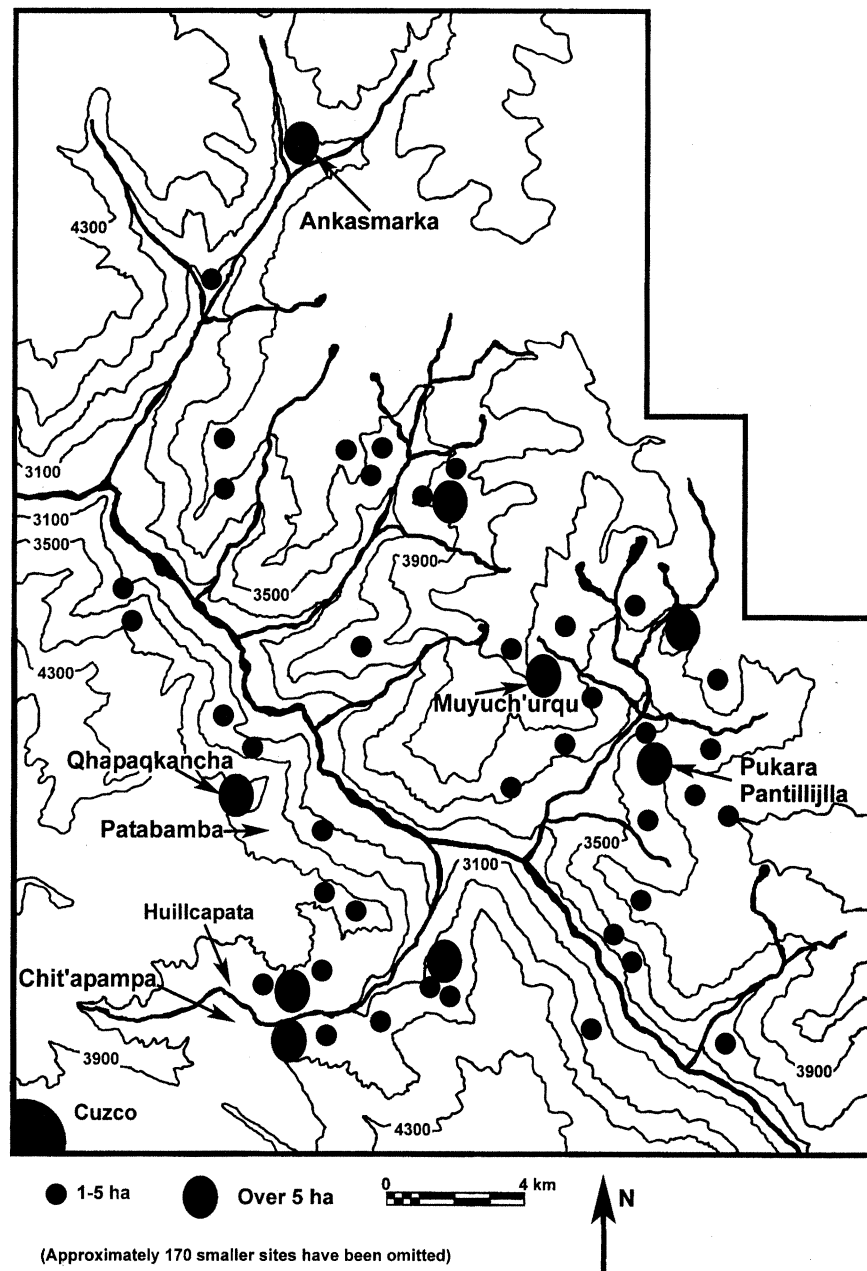
As Cuzco gained direct control over the lower Chit'apampa Basin, parts of the buffer zone were populated with Cuzco allies or newly subjugated local groups, and some sites with almost exclusively Cuzco pottery were established. Permanent Inca control of the Chit'apampa Basin involved the development of state infrastructure, including canal and terrace systems, roads, administrative centers, and storage facilities. Under the Inca state, settlement became more dispersed and focused on the valley bottom, particularly in lower elevations where irrigated maize agriculture was possible.

#### ***The Huayllacan***

Although the ethnic identity of Chit'apampa inhabitants is unclear, there are some cases where the ethnohistory provides very specific details on ethnic groups to the north of Cuzco. Chronicles and archival land documents locate one group, the Huayllacan, in communities around modern Patabamba (Sarmiento de Gamboa 1906:51) on the southern rim of the Vilcanota Valley just over 15 kilometers from Cuzco (Las Casas 1939; Zuidema 1986). According to Sarmiento de Gamboa (1906:49), Inca Roca married Mama Micay of Patahuallacan, who was the daughter of the leader of the Huayllacan, Soma Inca, and may have been a political leader in her own right (Cabello Balboa 1951:293; Cobo 1979:124; Las Casas 1939:91; Murúa 1946:93; cf. Gutiérrez de Santa Clara 1963:81). Later, their son, Yahuar Huacac, is said to have destroyed this group after they betrayed him while conspiring to maintain their political autonomy and influence Inca



**FIGURE 7.** The pre-Inca fortress of Huata, to the northwest of Cuzco.



**FIGURE 8.** Late Intermediate Period village sites in the Vilcanota Valley, C.E. 1000–1400. Groups to the south of the river appear to have shared close cultural ties with Cuzco and were incorporated into the developing state earlier than those of the north side.

royal succession. We are told that Yahuar Huacac then took some Huayllacan lands as a personal estate, and that during the colonial period his mummy was found by Polo de Ondegardo in Paullu (Acosta 1940:491–492; Sarmiento de Gamboa 1906:56).

The archaeology of the Huayllacan area provides some interesting perspectives on this account. Around C.E. 1000, local populations moved from the Patabamba area to a large nucleated ridge-top site called Qhapaqkancha (Royal Enclosure). Located 4,000 meters above sea level, the site comprises over four hectares of densely packed semicircular stone structures, many of which have been badly damaged.<sup>7</sup> In addition to this small center, there are about 20 other Late Intermediate Period sites nearby, ranging from isolated

households to small villages, situated on the slopes below the main settlement.

The archaeological survey data suggest that Qhapaqkancha was already the center of a small independent polity during the early Late Intermediate Period. It was located in a defensible area with good views of the main valley, while several subordinate villages were situated below it, 100–200 meters above the main valley floor. Additional archaeological data indicate, however, that this center came under the control of Cuzco well before the end of the Late Intermediate Period. A large rectangular platform with three early Inca buildings is located just outside the area of nucleated settlement at Qhapaqkancha. This was probably constructed sometime after C.E. 1300 as a royal estate or a small administrative complex.

In sum, the archaeological and ethnohistoric data both suggest how the small Huayllacan polity came under Inca control. Political alliances may have been established initially through marriage exchange, and then transformed through military action, well before the period of Inca imperial expansion. Over several generations, direct control was established in the area, and, ultimately, Huayllacan resources came under the direct administration of Inca elites. That the Huayllacan were not made Inca by Privilege during the imperial period may be because of their repeated attempts to throw off Inca control. This certainly appears to be the case for their neighbors, the Cuyo.

### **The Cuyo**

The Cuyo occupied the Cuyo Basin, located in the side valley above the Inca site of Písaq. Like the Huayllacan, Pínahua, and Mohina (see below), the oral histories of the Cuyo recorded by Spaniards describe two or more Inca conquests of the region. Several authors suggest that in their first territorial expansion from the Cuzco Valley, the Inca defeated the Cuyo during the reign of the fifth Inca, Capac Yupanqui (Cabello Balboa 1951:290; Pachakuti Yamqui 1993:209 [f.14–15]; Sarmiento de Gamboa 1906:48). According to Cobo (1979:122), Capac Yupanqui placed Tarco Huaman, a rival brother, as governor over the new province. This conquest is linked in the various sources to long-distance exchange (the Inca invaded after the Cuyo ruler refused to send exotic birds from the jungle lowlands to Cuzco) and to religion (the Inca visited the principal shrine of the Cuyo and asserted the superiority of the Inca solar cult over the local deity).

Aside from a possible reconquest of the region by Yahuar Huacac (Sarmiento de Gamboa 1906:54–55), no mention is made of the Cuyo until the reign of Pachacuti (the ninth ruler). Several authors (Pachakuti Yamqui 1993: 226–227 [f. 22v.–23]; Sarmiento de Gamboa 1906:71–72) relate that after defeating the Chanka, Pachacuti held a festival at which an attempt on his life was made. The Cuyo were blamed, although Cabello Balboa (1951:300) claims that they were falsely accused. In any case, the Inca reaction was to campaign throughout the region, destroying the Cuyo center and killing many of its inhabitants. Although some authors state that the Cuyo were completely killed off, remnants of this group are mentioned in colonial land documents (Espinoza 1977; Toledo 1940:74), and were possibly resettled in the Vilcanota Valley proper or sent to grow coca in the lowlands of Paucartambo.

The archaeological picture from this area also seems to substantiate some of the chronicle accounts. Survey data indicate major population growth during the first part of the Late Intermediate Period, when the Cuyo Basin was dominated by several large nucleated villages, most of them located on ridge tops at high elevation (above 4,000 meters above sea level). The largest of these was Muyuch'urqu, a six-hectare village protected by cliffs and defen-

sive walls. Muyuch'urqu was the center of a chiefdom surrounded by five or six smaller villages. It was positioned to control caravan traffic between the Vilcanota Valley and the Paucartambo lowlands, and would have commanded a mosaic economy that included agricultural production and herding. The Muyuch'urqu polity, which included a ceramic style and mortuary tradition of funerary towers not found in areas to its south, appears to have been culturally (and, perhaps, linguistically) distinct from groups living in the Cuzco Valley.

A major settlement shift in the basin during the latter part of the Late Intermediate Period indicates that Cuzco was developing indirect control over what had been an independent group. The defensive location of their sites and distinctive pottery and mortuary styles suggest that during the first part of the Late Intermediate Period, the people of the Cuyo basin had maintained little peaceful contact with the developing Inca state. The principal early Inca settlement in Cuyo territory is Pukara Pantillijlla, a site located at about 3,950 meters above sea level on a ridge across the basin from Muyuch'urqu. At more than ten hectares, this site is larger than Muyuch'urqu and appears to have administered a greater area. Pukara Pantillijlla has a mix of semicircular and rectangular stone structures. Like Qhapaqkancha, the slopes around the site are heavily terraced and would have been used for additional settlement and agriculture. Local Late Intermediate Period wares and a substantial amount of Killke pottery dominate the dense ceramic scatters that cover the surface of the site. Covey's excavations at Pukara Pantillijlla in C.E. 2000 demonstrate that the occupation area expanded toward the end of the Late Intermediate Period, when many of the rectangular buildings were constructed (cf. Dwyer 1971). It is important to note that only a small component of Inca imperial style shards was identified among the 50,000 fragments analyzed from the excavations, indicating that the main occupation of the site ended before the florescence of the imperial period.

Once this area was well integrated into the Inca heartland, settlement shifted to the bottom of the valley (900 meters lower), and was administered by Písaq, an impressive complex of architectural compounds and agricultural terraces that was the private estate of Pachacuti (Toledo 1940; Rostworowski de Diez Canseco 1970b). The construction of this site was associated with massive projects to canalize the Vilcanota River and extend irrigated agriculture onto new terrace groups on the lower valley slopes.

To summarize, the Cuyo were independent during the early part of the Late Intermediate Period. Settlement was then reorganized around Pukara Pantillijlla as the Inca established control over the region. Before Inca imperial expansion, the occupations in the upper Cuyo Basin were largely abandoned and there was a major settlement shift to the valley bottom, favoring lands associated with intensive maize production.

### THE REGION EAST OF THE CUZCO VALLEY, C.E. 1000–1400

It is well documented that the Lucre Basin, which lies to the east of the Cuzco Valley, contained two separate, but apparently closely related, ethnic groups: the Pinahua (or Pinagua) and the Mohina (or Muyna). Oral histories recorded by the Spaniards suggest that these groups were important rivals when the Inca consolidated their control in the region. In 1572 Sarmiento de Gamboa noted that a series of early Inca kings, including Inca Roca (1906:49), Yahuar Huacac (1906:55), Viracocha, and Pachacuti Inca Yupanqui (1906:56) had each staged military incursions against the principal Pinahua and Mohina settlements. For example, Sarmiento de Gamboa writes:

And then he [Viracocha Inca] went against the people of Mohina and Pinahua, Casacancha and Rondocancha, five small leagues from Cuzco. They had already made themselves free, even though Yahuar Huaca had defeated them. And they [the Inca captains] attacked and killed most of the natives and their cinches [leaders], who at that time were named Muyna Pongo and Guaman Topa. They suffered this war and cruelties because they said they were free and would not serve or be his subjects. [Sarmiento de Gamboa 1906:57–58, translation by the authors]<sup>8</sup>

Unlike some groups north (Huayllacan) and west of Cuzco (Anta and Ayarmaca) with whom the Inca practiced some form of elite marriage exchange early in the period of state development, it appears that the Inca were locked in prolonged conflict with the Mohina and Pinahua throughout much of the Late Intermediate Period.

With Inca imperial development under Huascar (who reigned c. 1525–32), many of the Pinahua were removed from their traditional lands and resettled in the coca-producing lands around of Paucartambo. Huascar, who was born in a town on the shore of Lake Mohina, then built a private estate in the basin. Soon after the Spanish conquest, the Pinahua petitioned the Spanish courts to have their lost lands returned to them (Espinoza 1974). Documents presented during this 16th-century court case describe the Pinahua territory in detail. It is clear that before their removal, the Pinahua controlled the area on the northern side of the Huatanay River east of the Angostura to its confluence with the Vilcanota River. There is no doubt that the Pinahua once occupied the large site of Chokepukio, because it is specifically and repetitively mentioned as one of their former towns in the earlier documents of the suit. The site was probably the principal city of the Pinahua, referred to as “Pinagua-Chuquimatero” in the later documents. For example, in 1571 Pedro Lampa states, “there was in past times on one side of the narrow drainage of Lake Muyna in some old buildings, a town that was called Pinagua-Chuquimatero” (Espinoza 1974:205).<sup>9</sup>

Although the name *Lake Mohina* is still used for the lake in the Lucre Basin, the area and principal city of the Mohina ethnic group is more difficult to define and no

large collection of documents has yet been found to help reconstruct their holdings. The situation is made more complex by the fact that the Spaniards and later travelers refer to Pikillacta as the “ruins of Mohina” (e.g., Cieza de León 1979:261; Squier 1877:419–422). Possibly, the Mohina controlled the area to the south of the lake, opposite the Pinahua-controlled region. It is known that in 1537 Pizarro awarded Paullu Topa Inca Yupanqui the lands of Mohina (Vázquez de Espinosa 1948:551). By the 17th century, some of the Mohina had been reduced to the town of Oropesa, located between the Cuzco and Lucre basins, close to the fortified Late Intermediate Period site of Tipón (Stavig 1999:92).

Exploratory work in the Lucre Basin (McEwan 1984) indicates that Chokepukio is its largest Late Intermediate Period settlement, suggesting that the Pinahua quickly filled the power vacuum created by Wari withdrawal from the region. Chokepukio certainly was an impressive site during the Late Intermediate Period, with considerable monumental architecture (McEwan et al. 1995). Dated samples of organic materials (vines) used during the construction of these walls (Kendall 1985: 347; McEwan 1987: 227) suggest that their construction may have begun near the time of Wari’s collapse and continued throughout the Late Intermediate Period. Although Chokepukio remains one of the best-preserved Late Intermediate Period sites in the Cuzco region, it was not unique. The city of Cuzco was at least as large, while other nucleated sites existed in the Anta and Chinchero regions.

The regional settlement data from the eastern end of the Cuzco Valley illustrate the interactions between the Inca and ethnic groups of the Lucre Basin. As early as the Formative Period (c. 1000 B.C.E.), the stretch of valley between the Cuzco Basin and the Lucre Basin contained numerous dispersed settlements located on alluvial terraces and low slopes bordering the rich maize-producing valley bottom. During the Early Intermediate Period and the Middle Horizon, there was an especially large clustering of hamlets and villages around the Huasao area. With the decline of Wari influence in the neighboring Lucre Basin, there was a major disruption in the settlement pattern of this area. Most strikingly, *all* valley-bottom settlements were abandoned in the early Late Intermediate Period, and a single nucleated settlement, Tipón, was established on a broad ridge, 300 to 400 meters above the valley floor. This Late Intermediate Period settlement and its agricultural lands and water sources were surrounded by an enormous defensive wall, constructed of rough field stones and mud mortar, approximately five meters in height. In other sections, areas of sheer cliffs blocked access to the site. These defensive features of the site run for several kilometers. The site of Tipón is even more remarkable when one considers that, with the exception of the Inca imperial fortress at Sacsayhuaman, this is the only fortified settlement in the Cuzco Valley.

The complete depopulation of the alluvial terraces and valley floor area between the Cuzco Basin and the Lucre

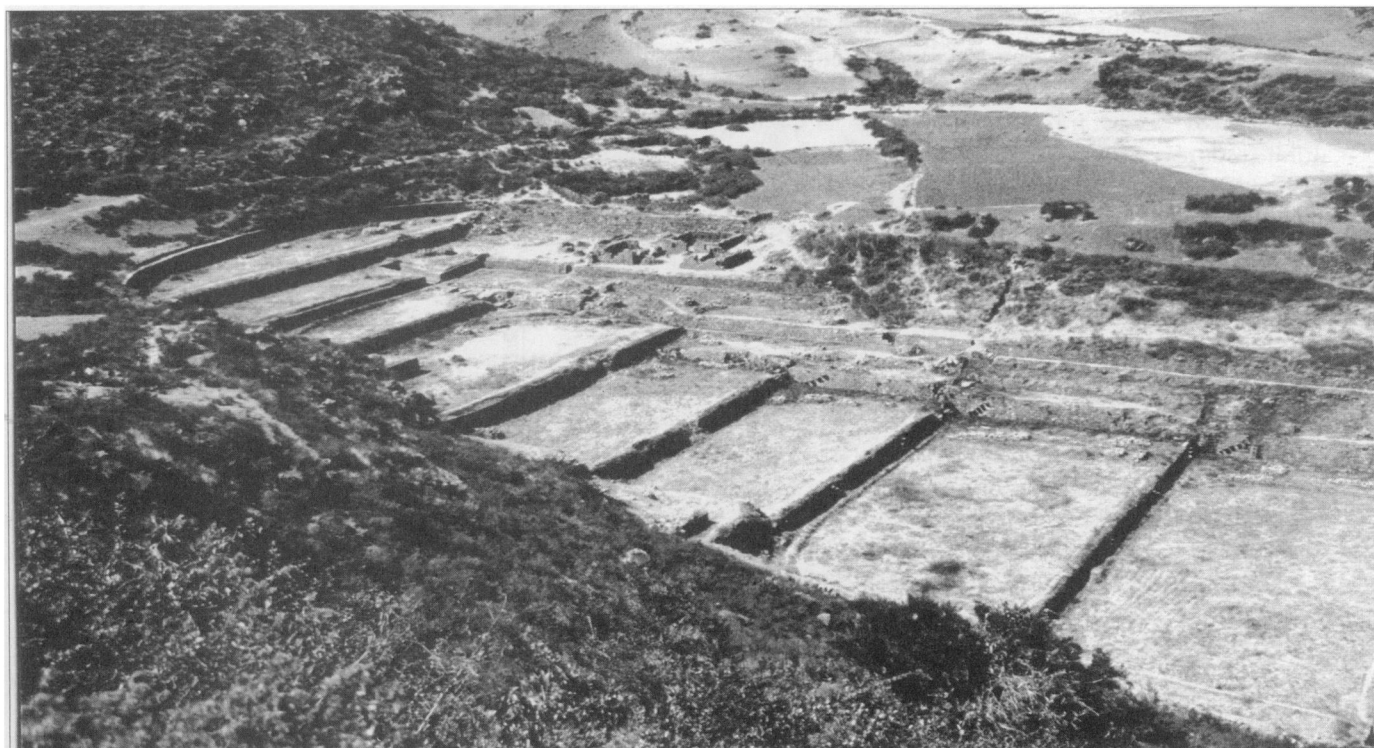
Basin represents the establishment of a well-defined buffer zone between two rival polities (Anderson 1994: 39–41; Marcus and Flannery 1996:124–125). The fact that the only Late Intermediate Period settlement in this valley area is within a large, nucleated fortification further supports the argument that the two regions were important rivals. From this evidence it is clear that the ethnic groups of the Lucre Basin were sufficiently large and well organized to resist Inca attempts to expand from the Cuzco Valley to the east until most of the region was already under the sway of the early Inca state.

The Tipón area and Lucre Basin did eventually fall under Cuzco domination. According to statements from indigenous informants, recorded in a C.E. 1571–90 land dispute over fields within Tipón, this fortified site fell to Viracocha Inca (La Lone 1985), who then transformed it into a royal estate (Garcilaso de la Vega 1966:286) (Figure 9). Our survey data indicate that numerous new Inca sites were established on the low alluvial terraces and valley floor within the buffer zone once it was incorporated under Cuzco control. The Huasao area was resettled with *mitmaquna* (colonists) who were given their own lands, as well as the task of caring for the lands in Tipón assigned to the cults of Viracocha Inca and that of the Sun (La Lone 1985). Other tracts in the region were given to members of important Cuzco-based lineages. For example, various documents in the Cuzco archive indicate that the elite of Chocco, as the descendants of Mama Anahuarqui, the principal wife of Pachacuti, were awarded land across the

valley from Huasao (Rostworowski de Diez Canseco 1966:34).

#### INCA STATE FORMATION AND IMPERIAL ADMINISTRATIVE STRATEGIES

The cases discussed above illuminate how the Inca used diverse strategies to consolidate regional power over allies and rivals of varying ethnicity and organizational complexity. The ethnohistory and archaeology of some areas outside of the current Cuzco survey regions suggest that early Inca conquests were often ad hoc affairs, and that the patchwork nature of the linguistic, ethnic, and political landscape favored cases of leapfrogging when making conquests (see Mannheim 1991:31–60). For example, Ollantaytambo (to the northwest) and Huaru (to the southeast) were both separated from Cuzco by regional rivals (the Ayarmaca and the Pinahua, respectively [Espinoza 1974; Rostworowski de Diez Canseco 1970a]), yet they are mentioned as being early allies of the Inca (Cabello Balboa 1951:283; Cobo 1979:115; Guaman Poma de Ayala 1993: 71). The developing Inca polity is likely to have had direct control over, or close alliances with, some groups outside of the Cuzco Valley even before it was completely consolidated, a condition documented in other cases of early state formation (see Algaze 1992; Marcus 1992; Sidky 1996; Spencer and Redmond 2001). The transition from state to empire is subtler than as suggested by the Spanish chronicles, as alliances and hegemonic control were extended beyond the heartland region prior to the full implementation of direct control. The Inca continued their



**FIGURE 9.** Inca terracing at the site of Tipón. The site was developed as an estate by Viracocha Inca after the conquest of the local Mohana and Pinahua polities.

processes of consolidation throughout the imperial period, developing new estate lands and continuing to reduce the autonomy of remaining local ethnic groups.

The full integration of the Inca heartland was an uneven and unstable process, one whose tempo and duration were influenced by the personalities of elite leadership and the military might that could be mustered. The achievements of one leader's rule did not necessarily continue into a successor's reign, and early territorial conquests were frequently challenged when new Inca rulers came to power. Even intergroup elite marriages—whose overall goal was to stabilize cross-generational alliances—often broke down between generations, particularly during interregna, a problem that was also common at the provincial level during the imperial period. The numerous rebellions, reconquests, and negotiations that took place between various groups of the region after the death of an Inca leader underscore the importance that individuals played in extending Inca control throughout the heartland. In certain cases, powerful allies are even said to have played important roles in the promotion of specific Cuzco leaders. Both the Ayarmaca and the Huayllacan are said to have blatantly attempted to manipulate dynamic succession in Cuzco, even to the point of assassinating unwanted contenders to the throne.

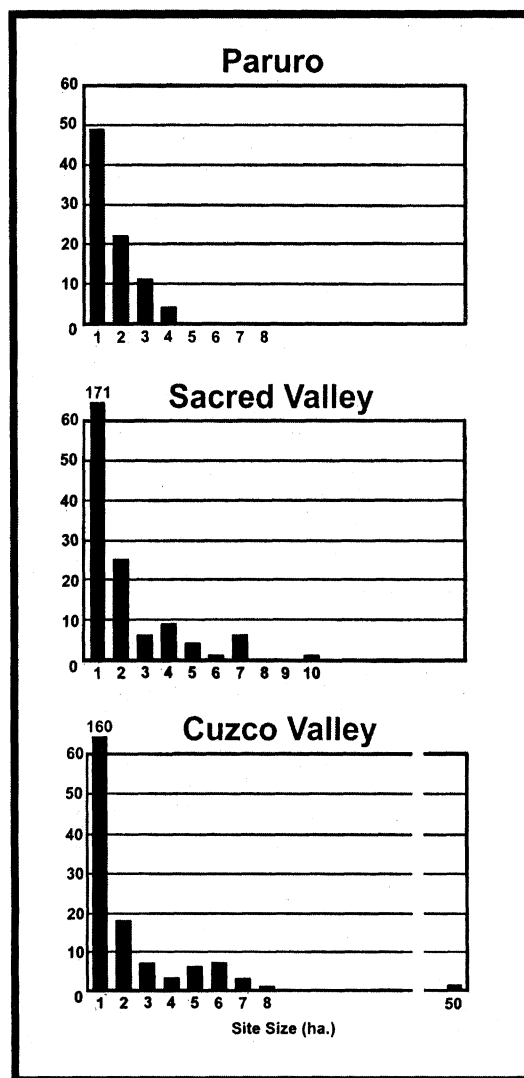
The strategy of internal development accompanied by alliance building, intimidation, and isolation of rivals can be seen as part of the Inca imperial strategy as well. Imperial Inca expansion was based on the opportunistic manipulation of local ethnic and political relationships, and in many cases involved several generations of conquest and reintegration and the establishment of more direct administration of local populations (e.g., the Colla and Lupaca in the Titicaca Basin [Stanish 1997, 2000]). Population resettlement (see Murra 1985) and the development of natural resources in ways that undercut local identity (Wachtel 1982) are also imperial strategies whose practice is seen in the Late Intermediate Period development of the early Inca state. Using the Late Intermediate Period settlement patterns and historical sources, we can now discern greater time depth to the development and practice of Inca expansion and administration.

### SUMMARY

Many of the strategies that the Inca empire used to incorporate and administer new territories and ethnic groups were developed between C.E. 1000–1400, when a centralized state formed in the Cuzco Valley and extended direct territorial control over surrounding regions (Figure 10). Within the Cuzco Valley, population numbers and density increased dramatically, and the productive landscape was transformed in a way that created stable state incomes while undercutting local and individual autonomy. The city of Cuzco developed as an urbanized center with a series of large satellite villages surrounding it. Outside of the valley, powerful rivals included the Pinahua and Mohina

of the Lucre Basin and the Ayarmaca of the Chinchero area, but there were several other polities of varying size scattered across the region. The Paruro area, which was sparsely populated, saw little direct manipulation of local settlement by the Inca, while the more densely populated Cuyo Basin was reorganized under Inca control, first through a secondary center established at Pukara Pantillijlla, then at Písaq. The unification, or in a few cases the successful elimination, of these groups over the course of several centuries resulted in the creation of an Inca heartland capable of sustaining rapid Inca imperial expansion.

The colonial documents provide differing, and frequently contradictory, accounts of how and when various groups within the Cuzco region were incorporated into the emerging Inca state. Nevertheless, the chroniclers stress that several different relationships existed between Cuzco



**FIGURE 10.** Settlement hierarchy in the Cuzco region, C.E. 1000–1400. The Paruro region displays a low population lacking a clear site hierarchy or evidence of a developed administrative center. Settlement in the Vilcanota Valley has small and large villages, as well as the Inca secondary center at Pukara Pantillijlla. The Cuzco Valley was dominated by Cuzco and had a dense population with large and small villages, but no secondary administrative center.



and its neighbors. For example, although frequent conflicts occurred between the groups living to the north and west of Cuzco (including the Anta, Ayarmaca, and Huayllacan) these groups were eventually allied through marriage exchanges. In the case of the Huayllacan and Ayarmaca, repeated attempts to reassert local autonomy ultimately led to military conquest, while the Anta appear to have maintained more stable alliances that were held together by elite kin ties and external threats.

To the east of Cuzco, alliance formation failed or was never even attempted, possibly because of ethnic or linguistic differences. The Pinahua remained in a nearly constant struggle with Cuzco until they were defeated militarily and a large proportion of their population was sent to colonize remote lowland areas. In the region to the south, where numerous small groups had longstanding contact with Cuzco, cultural affiliation with the Inca led to early political incorporation, without evidence of violent conflicts. It is clear that differences in ethnicity and local political complexity had a major influence on the development of the Inca heartland. The end result of these conflicts, marriages, and alliances was the formation of a complex social and political hierarchy across the Cuzco region that reduced ethnic diversity, political competition, and administrative redundancy to create an Inca heartland capable of expanding to become the largest native empire of the Americas.

**BRIAN S. BAUER** Department of Anthropology, University of Illinois, Chicago, IL 60607-7139

**R. ALAN COVEY** Division of Anthropology, American Museum of Natural History, New York, NY 10024-5192

## NOTES

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1. The period chronology used in this article is based on that developed by Rowe (1960, 1966). To make it of practical use for the Cuzco region, the dates of the periods, originally developed for the prehistoric occupations of the Ica Valley, have been slightly altered. Regarding Quechua orthography, we use common spellings for modern place-names and individuals and groups named in the Spanish chronicles (e.g., Cuzco, and not Cusco, Qosqo, or Qusqu).
2. The Pacariqtambo Archaeological Project.
3. The Cuzco Valley Archaeological Project.
4. The Sacred Valley Archaeological Project.

5. Each of the survey projects followed essentially the same methodology, modified from that developed by Parsons and Hastings (1977) for regional survey projects in the Andes. Small crews of three to five members covered all passable areas in lines of approximately 50 meters, recording all prehistoric sites. General ceramic collections were made at all sites, and these collections were analyzed in the laboratory. Observations regarding geomorphology, preservation, and site location were recorded on standard forms.
6. Y antes que Inga Roca muriese, hizo amistades con Tocay Capac por medio de Mama Chicya, hija de Tocay Capac, que casó con Yaguar Guaca [sic], y Inga Roca dió otra su hija, llamada Curi Occllo, por mujer á Tocay Capac.
7. The site size is somewhat deceptive because the slopes of the mountain below the principal zones of buildings and domestic terraces are covered with small irregular agricultural terraces that may have included some habitation.
8. Y luego fué sobre los pueblos de Mohina y Pinagua, Casacancha y Rondocancha, cinco leguas pequeñas del Cuzco, que ya se habían puesto en libertad, aunque Yaguar Guaca los había destruido. Y los asoló y mató a los más de los naturales y á sus cinchas, que también en este tiempo se llamaban Muyna Pongo y Guaman Topa. Hizoseles esta Guerra y crueldades, porque decían que eran libres y no le habían de servir, ni ser sus vasallos.
9. En tiempos pasados en el angostura del desaguadero de la laguna de Muyna estaua en el un lado, en unos edificios viejos, un pueblo que se decía Pinagua-Chuquimatero.

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