# The Late Intermediate Period Occupation of Pukara, Peru

Sarah J. Abraham

Across much of the Andes, the Late Intermediate period (AD 1100–1450) was a time of factionalism as polities fought to fill the power vacuum created by the political collapse of Wari and Tiwanaku. In the Titicaca Basin of south central Peru, the Colla were one of the groups that rose to predominance during this time. Much of our understanding of the Colla comes from ethnohistory but a growing body of archaeological research is both expanding and refining our knowledge of this culture. This chapter presents the results of recent research on the Collao occupation at Pukara. Although this site is best known for its Late Formative (500 BC-AD 200) occupation, excavations have uncovered a Late Intermediate period non-fortified habitational area, a site type relatively unknown in the northern Titicaca Basin. Using ceramic and architectural data, this chapter examines the nature of the Collao1 occupation of Pukara and its place in the regional chronology during a dynamic period in Andean prehistory.

# The Late Intermediate Period in the Titicaca Basin

Although it spanned hundreds of years, the Late Intermediate period is an understudied era in Titicaca Basin prehistory and our knowledge is based on limited archaeological research and historic documents. Shifting settlement patterns show that after the fall of Middle Horizon states, major population centers in the altiplano were abandoned as populations dispersed across the basin into agro-pastoral zones and shifted economic focus to animal husbandry (Frye and de la Vega 2005:177). People moved away from rich agricultural lands to settle in defensive sites high on hills and ridges, and in many places they built *pukaras*,<sup>2</sup> or hilltop forts and refuges, to provide protection in times of conflict. Although the impressive forts have been the focus of much of Collao archaeology, most Late Intermediate period sites were not fortified, as the majority of the Colla lived in small villages and hamlets at the base of or close to the *pukaras* (Stanish 2003:209). Unfortunately, there are few published data on these smaller sites in the Collao region.

The ethnohistoric record provides a wealth of information on how altiplano polities responded to Inca conquest, including detailed accounts of the Colla during this period. According to the chronicles, the Colla resisted Inca imperial expansion with both sides fighting with "equal courage" and with "much fury and persistence" (Cobo [1653] 1979:140). Sarmiento ([1572] 1999) reported as many as three Collao uprisings after Pachacuti's initial conquest. They were described as protracted conflicts in which each side incurred great losses. One battle waged for years as the imperial army chased the Colla from *pukara* to *pukara* until the Inca finally emerged triumphant. One of the last clashes took place at Pukara, where the Colla had fled for protection from the empire.

Data from the archaeological and ethnohistoric records also can help reconstruct the sociopolitical organization of the Colla and other polities in the basin during the Late Intermediate period. The chronicles depict the Colla as a unified kingdom, with various authors referring to the Colla as a series of kingdoms, nations, and other terms that suggest a high political complexity. Cieza identifies them, along with the Lupaqa, as the dominant groups during this time and characterizes them as powerful, arrogant, and tyrannical ([1553] 1984:356). He mentions that both these two groups had their own leaders and tells of their exploits:

Before the Inca reigned, according to many Indians from Collao, there were in their province two great lords, one named Zapana and the other Cari, and they conquered many pucaras that are their fortifications. [Cieza (1553) 1984:356]

Sarmiento de Gamboa ([1572] 1999:111) describes the Colla leader in particular as "increased in power and wealth among those nations of Collasuyu, [and] that he was respected by all the Collas, who called him Inca Ccapac." In sum, the ethnohistoric record depicts the Colla unified under a single leader, Zapana, and equally unified in its response to the Inca imperial expansion.

Conversely, the archaeological data suggest that the Late Intermediate period was not a time of political unification but of fragmentation. Frye and de la Vega (2005:173) argue that persistent warfare and factional competition over resources during this period would have prevented political unification in the basin. Although there is little doubt that altiplano polities allied with their neighbors from time to time, some do not believe that the Collao people were ever under the leadership of a single leader (Frye and de la Vega 2005:184). Moreover, Stanish (2003:14) argues that the Late Intermediate period settlement pattern does not demonstrate a high level of sociopolitical organization. Nor is there evidence of monumental architecture or other markers of social complexity in the basin at this time (see Frye 1997). Thus, many believe that the statelike characteristics attributed to these polities in the historical documents were the result of Inca reorganization and that the Late Intermediate period polities were probably simple chiefdoms (Stanish 2003:14; Graffam 1992:887). Recent work by Arkush (2008) confirms these observations.

Although seemingly contradictory, the archaeological and ethnohistoric lines of inquiry might actually be complementary. While it is likely that the Titicaca Basin was politically fragmented during most of the Late Intermediate period, the political landscape may have been changing just prior to Inca conquest. Some suggest that on the eve of the Late Horizon (AD 1450–1532), some *pukaras* became "centers of political and economic activity and most likely headed by an emerging elite group, which expanded its political and economic influence through feasting ceremonies and political alliances" (Frye and de la Vega 2005:184). Thus, the ethnohistoric record might be capturing this transitional period from small, rival polities in the Late Intermediate period to Inca imperialism.

# History of Colla Archaeology

Colla archaeology has a long and sporadic history. One of the first inquiries was Bandelier's 1905 article on Sillustani, a site occupied during the Late Intermediate period, with a large cemetery that is well known for its *chulpas*, or burial towers. This was followed in 1943 by Kidder's report presenting the results of his survey of the northern basin. He recorded many sites with Collao ceramics, expanding the previously defined boundaries of Collao territory. Shortly after, Tschopik's *Some Notes on the Archaeology of the Department of Puno* (1946) provided a detailed inventory of Collao sites and their associated artifacts. In her report, Tschopik presented stylistic typologies of ceramics, defining the Collao Plain and Collao Black on Red styles along with other Late Intermediate period ceramic types found in the basin. This seminal work continues to serve as the principal guide to ceramics in the northern basin.

These initial investigations were followed by Julien's research at the site of Hatuncolla and Carlevato's work at Pukara. Based on the ethnohistoric data, Hatuncolla has been described as the capital of the entire Collao polity and the site of a later Inca provincial center. While excavations at Hatuncolla uncovered a substantial Late Horizon site occupation, Julien found no evidence that the site was ever the Collao capital and in fact suggests it was founded after the Inca conquest (Julien 1983). Carlevato's investigations into the Late Intermediate period and Late Horizon occupation of Pukara provide the first in-depth analysis of Collao pottery (Carlevato 1988). Using collections from Kidder's 1939 excavations, Carlevato has been able to characterize ceramic pastes, identify clay minerals and inclusions, and reconstruct firing technology. She believes there was a strong continuity of Late Intermediate period ceramic technology into the Late Horizon, with local products coexisting with Inca craft production. According to Carlevato, the function of Pukara changed over time and it served as a Formative capital, a large local center during the Late Intermediate period, and a royal Inca tambo.

More recently, Stanish's survey in the northern and northeastern basin and Arkush's research in the northern basin have expanded our understanding of the Collao polity. In particular, the latter study has challenged traditional views of a monolithic Late Intermediate period in the northern basin. Using data collected from survey and test excavations, Arkush has established a chronology of *pukara* use in the northern basin during the Late Intermediate period. Results suggest that pukaras were built and inhabited mostly between AD 1275 and the late 1400s and not immediately after the fall of Tiwanaku (Arkush 2005:317). Thus, political collapse alone did not cause the major settlement shift to hilltop sites that characterized the Late Intermediate period. Instead, the Collao settlement pattern can be explained as the result of a combination of environmental, political, and economic factors. This new research also supports recent arguments that depictions of an integrated Colla polity fostered by the ethnohistoric record are incorrect and that survey data suggest the northern basin was home to many Collao polities with their own centers and even pottery styles (Arkush 2005:4).

## The Collao Occupation of Pukara

At 3871 meters above sea level, the site of Pukara is located in the northern Lake Titicaca Basin just south of the modern town of Pucará.<sup>3</sup> Pukara is best known for its monumental architecture, which includes the Kalasaya, a series of large terraces and multiple sunken courts. This architectural core was constructed by the Pukara culture and served as the center of the polity. Dense habitational areas have been found in the surrounding pampa along with a few adjacent artificial mounds that may hold additional sunken courts. However, the occupational history of Pukara postdates the Kalasaya by over a thousand years.

Around AD 100, the Kalasaya was "rapidly and peacefully" abandoned and was left uninhabited until the beginning of the Late Intermediate period (Wheeler and Mujica 1981). Collao sherds blanket much of the site's surface, suggesting that the whole area was occupied during the Late Intermediate period. Although focused on the Late Formative occupation of the site, research conducted by Kidder in 1939 and COPESCO in the 1970s found evidence of a Collao occupation on the Kalasaya, the slopes at the foot of the El Peñon outcrop behind the site, the nearby Calvario Hill, and the pampa in front of the Kalasaya (Wheeler and Mujica 1981; Carlevato 1988:40; Paredes 1985:38). Wheeler and Mujica (1981) report that the southwest corner of one of the Kalasaya platforms was used as a Collao cemetery. However, no associated Late Intermediate period architecture has been documented. The Collao occupation ended with Inca conquest, when the site became a royal *tambo*, or way station. The remains of that final pre-Columbian occupation are now underneath the modern town of Pucará. Like the Colla, the Inca also modified the Kalasaya, constructing buildings over the original Pukara architecture.

## **Excavation Results**

The data presented were recovered in 2001 by the Pukara Domestic Archaeology Project. While looking for Late Formative elite domestic contexts on the open pampa below the terraces, the project found substantial Late Intermediate period deposits. One of the excavation units, Block 1, had multiple strata and architecture and was selected as the focus of this study (Fig. 15.1). The topmost stratum was a Late Intermediate period fill that covered the entire unit (Fill Episode 1). However, once this layer was removed, the western and eastern halves of the unit had different stratigraphy. On the western half, the top fill was preceded by another fill (Fill Episode 2). Below these two fills, there were two occupation levels. The earliest Late Intermediate period deposit appears to be a fill that served to level the immediate area in order to build architectural features (Fill Episode 3). On the eastern half of the block, the Late Intermediate period presence begins initially with the leveling that created Fill Episode 3. On top of this deposit, the Collao built several architectural features that were assigned Occupation 1. These features in turn were covered in wall fall that is absent on the western half of Block 1 (Wall Fall 1).

While our knowledge of Colla settlements and architecture has been limited to hilltop sites, Block 1 is situated on the open pampa and represents one of a small handful of examples of non-hilltop Collao architecture. Excavations uncovered a large meter-wide wall (labeled as architectural subdivision 2, or ASD 2) running north/south across the block (Fig. 15.2). The wall was originally constructed during the Formative period and the Colla added large slabs and widened the wall (Fig. 15.3). As Klarich (2005) notes, both the Formative and Late Intermediate period wall represent a substantial investment in labor. On the eastern side of the wall, there were foundations of circular structures, roughly 2-3 m in diameter, which consisted of a single course of double-faced walls. The structures were built around the same time as ASD 2 and, based on their shape, are believed to be domestic in nature. At some point, the Collao wall was destroyed and most of the wall fell to its eastern side, covering the circular structures. Klarich (2005) interprets this wall fall pattern as evidence that the wall was intentionally destroyed. On the western side of the wall, there were smaller walls running parallel and perpendicular to ASD 2; they may have been part of a rectangular building.

In general, Late Intermediate period houses were round structures. Research in the Lupaqa region (Hyslop 1977) and the Colla region (Arkush 2005) has found that these circular dwellings were usually larger than 2 m in diameter and averaged about 3 to 4 m. This description is similar to those found in the ethnohistoric documents (see Cobo 1990:192-93). Structures smaller than 2 m in diameter are also found at Late Intermediate period sites and are interpreted as storage structures; recent excavations in the Lupaqa region validate this explanation (Stanish et al. 1993; Frye and de la Vega 2005). Finally, rectangular houses have been found at Late Intermediate period sites but their distribution appears to be restricted to the area around Vilquechico, Moho and Conima in the northeastern basin (Arkush 2005:169). Though relatively small, the circular structures found in Block 1 can be interpreted as habitational. However, determining the function of ASD 3 on the western side of the block is not as straightforward.

## **Ceramic Analysis**

Ceramic analysis was conducted to address the function of the Collao structures over space and time and to assist in developing a local chronology for post-Formative pottery. Questions included whether the circular and rectangular structures were functionally distinct, if there is a change in function over time in Block 1, and if there exist any changes in the ceramic assemblage over time. All diagnostic sherds (mainly rim sherds and decorated



Figure 15.1. Map showing location of Block 1 in relation to the Kalasaya and other sites mentioned in the text.



Figure 15.2. Block 1 showing architectural subdivisions (ASD) 1-5 (from Klarich 2005).



Figure 15.3. Profile of Collao wall in Block 1 (from Klarich 2005).

body sherds) were analyzed, and, due to time constraints, nondiagnostic sherds were counted and weighed. Attribute analysis was conducted using a 10× hand lens on a cleanly broken sherd profile and included the following:

*Vessel Form.* Sherds were sorted into basic restricted and unrestricted vessel categories. When possible, rim orientation, diameter, and rim percentages were recorded. Ceramic tools and other non-vessel artifacts (spindle whorls, scrapers, and so on) were also documented. Assigning vessel form was at times difficult because of the scarcity of complete or re-constructable vessels found during excavation. Only four complete Late Intermediate period vessels were recovered but they were associated with burials from Block 3.

*Paste Composition*. For each sherd, paste inclusions were recorded by size—small (<1 mm), medium (1–2 mm), and large (2–5 mm)—and by material. In addition, clay color was documented using a Munsell Soil Color book.

Surface Treatment. Surface treatments—including wiped/ smoothed, burnished, polished, and eroded—were recorded for each surface (Table 15.1). Interior and exterior surface colors were determined using a Munsell Soil Color book. The colors of slips and paints were also noted, along with any other decorative techniques (punctate, appliqué, and so on). Sherds that were too eroded or had motifs that were too fragmentary to confidently identify were not included in this analysis.

Collao, Late Horizon, and Transitional Types

# Collao

The most predominant ceramic type found in Block 1 is classic Collao pottery, described by Tschopik (1946) and Carlevato (1988). Common vessel types are beakers/tumblers, one-handled jars, two-handled jars, and deep bowls. Miniature bowls and jars were also found. In addition, spindle whorls, scrapers, figurines, and all other non-vessel ceramic artifacts found in Block 1 had Collao paste and thus are dated to the Late Intermediate period. Collao paste is coarse with large inclusions including talc schist, phyllite, and magnetite/hematite (Carlevato 1988:43). These inclusions create a pitted and lumpy surface. Carlevato (1988:43) reports that Collao clay is usually highly oxidized and fired below 900–1000°C. Collao pottery ranges in color from brick red, to orange-red, to pale orange. Some are self-slipped (usually bowls) and the surface is usually smoothed or lightly burnished.

Traditionally, the Collao ceramic type has been broken down into two principal subtypes based on decoration. Collao Plain ceramics lack painted motifs (and sometimes slips as well) and Collao Black on Red ceramics have matte black decoration on a red slip (Figs. 15.4–15.7). Collao Black on Red sherds have linear and curvilinear designs around the necks and bodies of jars, cup exteriors, and bowl interiors. The designs are made of lines of uneven density and often have irregular margins and dripping lines (Tschopik 1946). The decoration is applied with a very thin and weak black paint that is easily removed with

Table 15.1.	Surface	treatment	by	ceramic	type.*
-------------	---------	-----------	----	---------	--------

	No Treatment	Wiped/ Smoothed	Burnished	Polished
Collao	5	109	278	40
Transitional	0	12	45	23
Late Horizon	0	7	48	47

\*Eroded/undetermined not included





474/2, d=15 cm, interior 2.5YR 6/8 (dark orange), exterior 2.5YR 6/6 (dark orange)



1509/1, d=14 cm, interior and exterior 2.5YR 6.6 (dark orange)



418/1, d=10 cm, interior 5YR 6/6 (light orange), exterior 5YR 6/4 (light orange)



Figure 15.4. Collao bowls.

water. Several motifs are found repeatedly on Collao wares. A single undulating line around the interior bowl rim is fairly common. Striped and crosshatched butterfly designs are very frequent around necks, exterior jar rims, and bodies of jars. A ladder motif is also regularly used to decorate the interior rims of bowls. Other decorations include fillets of clay with a row of punctate incisions around bases, appliqué animal figures



Figure 15.5. Collao jars.

attached to bowl rims and the necks of jars, and handles with incisions (Fig. 15.8).

Asillo ware, a newly defined Collao pottery subtype, was found in the Block 1 assemblage. This ware is most common in the area near Asillo and Azángaro, although the full extent of its distribution is not yet known. Asillo wares are tentatively restricted to jars. As described by Arkush (2005:660), this ware can be distinguished from Collao wares by two characteristics. First, Asillo jars commonly have a branching plant motif that travels down from the rim to the neck. This motif also occurs on handles (Fig. 15.9). Secondly, this motif is frequently accompanied by vertical and horizontal appliqué bands with angular punctate. Asillo wares from Block 1 are made of Collao paste and received little surface treatment.

## Late Horizon

Late Horizon sherds were also present in the Block 1 assemblage. Vessel forms include shallow bowls, aryballos, and jars. The paste is finer with fewer, smaller inclusions and a small subset was made from fine kaolin paste. The surfaces are either burnished or polished. Late Horizon wares are characterized by well-executed motifs on the interior of bowls and the exterior of jars. Various slip colors are used and polychrome decoration is common. Most motifs fall into the Sillustani, Chucuito, and local





483/1, d=13 cm, interior 2.5YR 6/6 (dark orange), exterior 5YR 7/6 (light orange)



1663/8, d=15 cm interior 2.5YR 5/6 (light orange) exterior 2.5YR 6/6 (dark orange)



3115/6, d=13 cm interior 5YR 5/6 (light brown) exterior 2.5YR 5/6 (light brown)



3 cm



280/1, d=12 cm interior 10YR 6/2 (light brown) exterior 10YR 6/4 (light brown)



294/1, d=12 cm interior 10YR 5/3 (light orange) exterior 5YR 4/3 (dark orange)





Figure 15.6. Collao Black on Red bowls.

3039/2, d=13 cm, interor and exterior 10R 6/4 (red brown)



3741/9, interior 5YR 6/6 (light orange), exterior 2.5YR 5/8 (dark orange)



3025/6, interior 5YR 4/1 (dark brown), exterior 5YR 6/6 (light orange)



3 cm





439/3, d=12 cm, interior and exterior 2.5YR 5/8 (dark orange)



3021/4, interior 10R 6/4 (light brown), exterior 5YR 7/2 (light orange)



3065/5, interior and exterior 10R 6/4 (red brown)



1775/19, interior 2.5YR 5/6 (light orange), exterior 2.5YR 6/6 (light orange)



Figure 15.7. Collao Black on Red jars.

Figure 15.8. Collao pottery: rim tics and punctates.

33309/2, d=12 cm, int. & ext. 2.5YR 5/8 (light orange)



Figure 15.9. Asillo pottery.

Inca substyles. Fillets, punctate, and incisions are not common and no examples were found in the Pukara collection. No Cusco Inca sherds were found and there were very few local Inca pieces. The Late Horizon assemblage clearly differs from Collao pottery in paste, finish, decoration, and overall execution.

## Transitional

There is a third group of sherds that are not clearly Collao or Late Horizon. In fact, these sherds, provisionally labeled Transitional, seem to fall between these two well-documented wares in a few ways. While no complete vessels were found, deep bowl and jar fragments were uncovered (Figs. 15.10, 15.11). In general, the sherds are burnished and often polished while the paste is finer than Collao but not as fine as Late Horizon sherds. The decoration is better executed than the Collao wares and consists of linear and curvilinear motifs that more closely resemble Collao designs than Late Horizon ones.

# Summary of Attribute Analysis

Based on the ceramic types and their associated attributes, some general trends can be discerned from the Block 1 ceramic assemblage. First, each ware had a relatively limited distribution of forms. Most bowls were medium in size and came in deep and shallow varieties. The range of bowl rim diameters remained fairly constant over time at 11–16 cm (Fig. 15.12). Block 1 also had a handful of jar varieties, including a few Inca aryballo jars.

Secondly, in terms of paste, the Collao, Transitional, and Late Horizon wares were fairly consistent, with only minor variations in inclusion size. The most marked change in paste over time was a decrease in inclusion size from the coarser Collao to the finer Inca. Some paste recipes excluded mica and black inclusions but there were no temporal, spatial, or functional patterns associated with their distribution. The only exception was the small handful of Late Horizon kaolin paste sherds.

Thirdly, there was a wide range of surface treatments represented in the Block 1 assemblage. The majority of the sherds were smoothed or burnished. Most Collao pottery was either smoothed or burnished while the majority of Transitional and Late Horizon wares were either burnished or polished. The number of smoothed and burnished sherds decreases over time as the quantity of polished sherds increases. Thus, pottery in Block 1 received more intensive surface treatment over time. Decoration became more refined over time as well. The majority of the decorated wares from Block 1 had motifs executed in a weak black paint. Over time, other colors were introduced and polychrome pottery became more abundant by the Late Horizon.

# Temporal and Spatial Distributions

In Block 1, Collao pottery dominates the post-Formative assemblages in every event horizon (Table 15.2). However, the percentage of the Transitional wares increases over time, as does the percentage of Late Horizon sherds. This suggests that the Transitional wares could be placed temporally between the Collao and the Late Horizon and may represent a later Late Intermediate period ware. The small proportion of Late Horizon sherds was not entirely surprising considering most of the Inca occupation was located under the modern town of Pucará.







Figure 15.11. Transitional period jars.



Figure 15.12. Bowl rim diameter distribution.

Although Transitional and Late Horizon wares were introduced over time, they never replaced Collao pottery. The high proportion of Collao ceramics throughout the post-Formative occupation of Block 1 supports Carlevato's argument that Collao ceramic technology (paste type and vessel form) remained fairly consistent over time and even after the Late Intermediate period (see Carlevato 1988).

The Transitional wares also fall between Collao and Late Horizon types in terms of form distribution (Table 15.3). The Collao sub-assemblage comprises around 62% bowls and 38% jars but during the Late Horizon, these percentages change to 90% and 10%, respectively. The Transitional wares fall between that range with 77% bowls and 23% jars. The different proportions of bowls to jars over time are statistically significant ( $\chi^2 = 35.184$ , p < .001). These differences in form distribution between wares suggest that the Collao and the Transitional wares were probably used in a different context than the Late Horizon wares. The Late Horizon form distribution suggests an emphasis on activities involving bowls, such as food service and feasting instead of food storage or preparation. The different distribution of vessel forms between the Collao and the Transitional may bolster Frye and de la Vega's proposal that an elite group had emerged late in the Late Intermediate period and gained influence through feasting ceremonies. In addition, there is evidence that the relative frequencies of different functional classes changed over time. Bowls make up the bulk of all event assemblages (60–80%). In

	Collao	Transitional	Late Horizon	Other	Total
Fill Episode 1	154	38	35	7	234
Fill Episode 2	207	27	41	11	286
Occupation 1W	68	19	12	7	106
Occupation 1E	16	3	0	4	23
Occupation 2	63	8	11	1	83
Fill Episode 3	16	5	3	0	24

Table 15.2. Temporal distribution of the Pukara ceramic assemblage.

Table 15.3. Distribution of vessel forms by ceramic types.

 Table 15.4.
 Temporal distribution of vessel forms.

	Bowls	Jars		Block 1	Block 1
Collao	278 (62%)	170 (38%)		western Side	Eastern Side
Transitional	72 (77%)	21 (23%)	bowls	266 (68%)	81 (56%)
Late Horizon	94 (90%)	10 (10%)	jars	110 (28%)	59 (41%)
			other	13 (4%)	5 (3%)

fact, the percentage of bowls increases over time as jars drop out. This could indicate changes in activity patterns or function, change in the use of or need of one form over the other.

Combining the architectural and ceramic data from Block 1 generates a number of spatial and temporal patterns. Although the western and eastern sides of the wall have different architectural styles, the ceramic data suggest that both sides were occupied at the same time. This is based on the observation that they have almost identical distributions of Collao, Transitional, and Late Horizon wares. So, if the difference in architectural style is not temporal, a functional explanation can be suggested. Additional support for this interpretation comes from comparing the form distribution of these two areas. The western side has 68% bowls and 28% jars whereas the eastern side has 56% bowls and 41% jars (Table 15.4). This difference is statistically significant ( $\chi^2 = 7.6635, .05 > p > .02$ ) and suggests that the eastern side had a greater focus on storage, cooking and the range of domestic tasks than did the western side. The western side's assemblage can be associated more with a serving function. However, these distinctions need further investigation.

Finally, Carlevato's work suggests an increase in textile production during the Late Intermediate period at Pukara. Carlevato (1988) reports an increase in the quantity of spindle whorls at Pukara during the Late Intermediate period and believes that this relates to an increase in textile production. She links this to an increased access to camelid fibers during this period of pastoralism. Although Collao spindle whorls were found in Block 1 (n = 5), there are not enough data to support or contradict that argument.

#### Discussion

Artifact and architecture data from Block 1 offer a number of insights into the Colla, including the post-Formative occupation of Pukara as well as the sociopolitical development of the polity during the Late Intermediate period. With the reuse of a major Formative center and its impressive monumental architecture, the Late Intermediate period occupation of Pukara was unlike any other known Collao site. Ceramic data point to a change in activity over time in Block 1: an increased focus on food serving and possibly feasting within the Late Intermediate period. This finding supports the hypothesis that a Collao elite emerged late in the Late Intermediate period. However, further excavation and investigation are needed to clarify these questions of site use and corresponding issues of sociopolitical complexity.

Block 1 also provides data on Pukara's place in the northern Lake Titicaca Basin settlement pattern during the Late Intermediate period. While *pukaras*, small habitational clusters, and cemeteries are the most common Collao site types, Pukara cannot be easily classified as one of these. It may be a habitational cluster, but one much larger than those that have been recorded. It is possible that Pukara was a Collao center during the Late Intermediate period; the wide distribution of Late Intermediate period artifacts on the surface does imply a substantial Collao presence at Pukara although the full extent of that occupation is unclear. Unfortunately, a paucity of published reports makes comparisons with similar sites difficult. The question of when Collao occupied Pukara remains undecided but based on Arkush's and Frye and de la Vega's work, it might have emerged late in the Late Intermediate period along with other large sites in the region.

Lastly, the ceramic data from Block 1 contribute to our understanding of the post-Formative chronology of the northern basin and of Pukara in particular. Although Tiwanaku artifacts have been recorded in the region, there is no evidence of a Middle Horizon occupation at Pukara (see Stanish 2003:186-89). Nor were there any Huaña artifacts found, although this ceramic type and culture is provisional (see Stanish 2003:198). This supports the argument that after the fall of the Pukara culture, the site was abandoned for hundreds of years, until the Collao occupation. In addition, the Transitional wares may help further refine our understanding of the Late Intermediate period. Though once conceived as a long epoch of homeostasis, this period likely encompassed gradual shifts in sociopolitical complexity. The Transitional wares may correspond to that change but the nature of that change and how it corresponds to emerging elite class remains unclear.

## Conclusion

Excavations at Pukara have revealed a little-known Late Intermediate period site type as well as a new transitional ceramic style that falls between the classic Collao and the later Late Horizon traditions. Analysis of the ceramic assemblage indicates a shift in activity in Block 1 from one of food production and storage to one of serving and feasting. Along with recent investigations in the basin, this chapter suggests that toward the end of the Late Intermediate period in the northern Titicaca Basin, an elite class emerged through ceremonial feasting and the creation of political alliances. It is these more sociopolitically complex groupsthat later fiercely fought against Inca attempts to conquer this region-that have been well documented in the ethnohistoric record. As part of a growing body of Late Intermediate period research, the study of the Collao occupation of Pukara contributes to the changing perceptions of this complex and volatile era in Andean prehistory.

## Notes

1. "Colla" refers to the ethnic and political group whereas the term "Collao" is used when referring to aspects of that culture.

2. Although they share the same name, fortified hilltop sites, or *pukaras*, are distinct from the Pukara culture and the archaeological site of Pukara.

3. The modern town is Pucará but the archaeological site and culture are called Pukara.

## **References Cited**

Arkush, Elizabeth

- 2005 Colla Fortified Sites: Warfare and Regional Power in the Late Prehispanic Titicaca Basin, Peru. PhD dissertation, Department of Anthropology, University of California, Los Angeles.
- 2008 War, chronology, and causality in the Titicaca Basin. *Latin American Antiquity* 19(4):339–73.

## Bandelier, Adolph

1905 The aboriginal ruins at Sillustani, Peru. American Anthropologist 7(1):49–69.

Carlevato, Denise

1988 Late ceramics from Pucara, Peru. Expedition 30(3):39-45.

Cieza de León, Pedro

1984 [1553] La crónica del Peru. Crónicas de America 4, edited by Manuel Ballesteros. Historia 16. Madrid.

#### Cobo, Bernabé

- 1979 [1653] *History of the Inca Empire*, translated and edited by Roland Hamilton. University of Texas Press, Austin.
- 1990 [1653] Inca Religion and Customs, translated and edited by Roland Hamilton. University of Texas Press, Austin.

Frye, Kirk Lawrence

1997 Political centralization in the Altiplano period in the southwestern Titicaca Basin. In Archaeological Survey in the Juli-Desaguadero Region of Lake Titicaca Basin, Southern Peru, edited by C. Stanish, E. de la Vega, L. Steadman, L. Onofre, C. Chávez Justo, P. Calisaya, K. Lawrence Frye, and M. Seddon, pp. 129–41. Fieldiana no. 29. Field Museum of Natural History, Chicago.

Frye, Kirk, and Edmundo de la Vega

2005 The Altiplano period in the Titicaca Basin. In Advances in Titicaca Basin Archaeology–1, edited by C. Stanish, A. Cohen, and M. Aldenderfer, pp. 173–84. Cotsen Institute of Archaeology, University of California, Los Angeles.

Graffam, Gray

1992 Beyond state collapse: Rural history, raised fields, and pastoralism in the South Andes. American Anthropologist 94(4):882–904.

#### Hyslop, John

1977 Hilltop cities in Peru. Archaeology 30(4):218–25. New York.

Julien, Catherine

1983 Hatunqolla: A View of Inca Rule from the Lake Titicaca Region. University of California Publications in Anthropology, vol. 15. University of California Press, Berkeley. Kidder, Alfred II

1943 Some Early Sites in the Northern Lake Titicaca Basin. Papers of the Peabody Museum of American Archaeology and Ethnology, Harvard University, vol. 27, no. 1. Cambridge, MA.

Klarich, Elizabeth

2005 From the Monumental to the Mundane: Defining Early Leadership Strategies at Late Formative Pukara, Peru. PhD dissertation, Department of Anthropology, University of California, Santa Barbara.

Paredes, Rolando

1985 Excavaciones arqueológicas en Pukara, Puno. Thesis, Universidad Nacional, San Antonio Abad de Cusco.

Sarmiento de Gamboa, Pedro

1999 [1572] *History of the Incas*, translated and edited by Sir Clements Markham. Dover Publications, Mineola.

Stanish, Charles

- 2003 Ancient Titicaca: The Evolution of Complex Society in Southern Peru and Northern Bolivia. University of California Press, Berkeley.
- 2009 The Tiwanaku occupation of the northern Titicaca Basin. In Andean Civilization: A Tribute to Michael E. Moseley, edited by J. Marcus and P. R. Williams, pp. 145–64. Cotsen Institute of Archaeology Press, University of California, Los Angeles.

Stanish, Charles, Amanda Cohen, Edmundo de la Vega, Elizabeth Arkush, Cecilia Chávez, Aimée Plourde, and Carol Schultze

2005 Archaeological reconnaissance in the northern Titicaca Basin. In Advances in Titicaca Basin Archaeology–1, edited by C. Stanish, A. Cohen, and M. Aldenderfer, pp. 289–316. Cotsen Institute of Archaeology, University of California, Los Angeles.

Stanish, Charles, Edmundo de la Vega, and Kirk Lawrence Frye

1993 Domestic architecture on Lupaqa area sites in the Department of Puno. In *Domestic Architecture in South Central Andean Prehistory*, edited by M. Aldenderfer, pp. 83–93. University of Iowa Press, Iowa City.

Tschopik, Marion

1946 Some Notes on the Archaeology of the Department of Puno, Peru. Papers of the Peabody Museum of American Archaeology and Ethnology, Harvard University, vol. 27, no. 3. Cambridge, MA.

Wheeler, Jane, and Elías Mujica

1981 Prehistoric Pastoralism in the Lake Titicaca Basin, Peru, 1979–1980 Field Season. Report submitted to National Science Foundation, grant no. BNS 7015119.