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#### RURAL WARI FAR FROM THE HEARTLAND: HUAMANGA CERAMICS FROM BERINGA, MAJES VALLEY, PERU

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The Wari state, dating from roughly cal A.D. 500 to 1000, centered on a core area around the city of Huari in modern Ayacucho Department.<sup>1</sup> There, an agrarian society supported an indigenous elite of impressive wealth, power, and organization. This heartland was surrounded by a far-flung, but sparse, network of special-purpose outposts (Figure 1) such as Viracochapampa (about 500km north of Lima, outside Figure 1; Topic 1991), Pikillacta (McEwan 1987, 1991, 1996), Jincamocco (Schreiber 1991), and Cerro Baúl (Moseley et al. 1991; Watanabe 1984; Williams 2001). These sites were intrusive islands in territories occupied by non-Wari populations, suggesting some form of imperial organization in which outposts were operated by the heartland in order to control or exploit distant provinces in variable, regionally-specific ways (Jennings and Craig 2001; Glowacki and Malpass 2003; McEwan 1996; Schreiber 1992, 2000), although other alternatives have also been proposed (Isbell and McEwan 1991; Kaulicke 2000; Topic and Topic 2000).

A different form of Wari influence prevailed in the Majes drainage, comprising the Camaná Valley near the coast and the Majes Valley further inland, fed by the highland Colca and Chuquibamba systems (Figure 2). Although the Majes drainage is far from the Ayacucho core, Wari cultural markers are pervasive there. Most of the sites are not formally planned centers, but rather suggest rural agricultural settlements and cemeteries that added up to a sizable and broadly dispersed population of farmers who routinely used pottery similar to that used by common folk in the countryside around Huari.

One such settlement was the site of Beringa, near Aplao in the Majes Valley (Tung 2007). This paper describes the ceramics from Beringa and compares them to other published assemblages. In so doing I date and substantiate this reconstruction of Wari in Majes, to facilitate future comparisons, and to propose hypotheses about chronology, the Wari presence in the Majes Valley, and by extension, the development of the Wari phenomenon itself.

#### BACKGROUND

Evidence from the Majes drainage, on the far south Pacific slope of Peru, complicates the imperial model of the Wari polity. At 370 km in a straight line from Huari, the Majes drainage is farther from the core than are the outposts of Pachacamac or Pikillacta, both under 300 km from Huari. A modest center with architecture reminiscent of Wari patterns, Sonay has been identified in the mid-coastal portion of the Majes drainage, known as the upper Camaná Valley (Malpass 2001, Malpass *et al.* n.d.). Recent looting has scattered ceramics and

<sup>&</sup>lt;sup>1</sup> Following Isbell (2001:456-458), "Huari" here refers to the urban site in Ayacucho Department and features associated with it specifically, while "Wari" refers to the prehistoric culture, polity, and style widely distributed beyond the city.

textiles with Wari motifs over numerous mortuary and residential sites throughout the drainage, as is well documented in the Majes Valley by García and Bustamante (1990) and noted in the Camaná Valley by Manrique and Cornejo (1990). These sites are found all along the Majes drainage from its mouth near Camaná to at least 90 km upriver, north of Aplao. A copious hodgepodge of Wari, Wari-influenced, and presumably local ceramics and textiles fill private and municipal collections, a sampling of which is illustrated by García and Bustamante (1990). In the Majes drainage, the Wari presence was far more pervasive and influential than it was in the countryside around some betterknown centers elsewhere in the Wari periphery.

The contemporary state of Tiwanaku to the south established an agricultural colony in the Osmore Valley, with a considerable population that probably immigrated from the state core (Goldstein 1989; Goldstein and Owen 2001). Wari itself probably moved laborers into closer peripheral regions such as the Sondondo (formerly called Carhuarazo) Valley (Schreiber 1991, 2000), roughly 130 km away. It is tempting to hypothesize that the Wari state carried out a similar strategy in the Majes Valley, moving people from the heartland to the Majes Valley to exploit its rich agricultural potential. The distance is far greater, however, and the ceramic analysis presented here suggests that the Wari presence in the Majes Valley was different from Tiwanaku's wholesale transplantation of people, possessions, and ideas to a few discrete sites in the Osmore Valley.

Wari ceramics fall into a range of named styles, most of which themselves vary from extremely finely made and iconographically elaborate to casually made and simply decorated. The finest variants of the formal styles such as Chakipampa, Conchopata, Ocros, Pachacamac, and Viñaque were well made, highly burnished, brightly polychromed, and laden with complex iconography treating both supernatural and secular themes. Such vessels were probably beyond the reach of ordinary people except as occasional valued pieces, and would have been used primarily by the highly developed institutions and elite of the Wari state. These ceramics are mostly found in ritual offerings and in high-status residential, productive, and ceremonial contexts both in the more urban settlements of the heartland and in the far-flung Wari outposts. They presumably most often served institutional, perhaps imperial,

ends (Cook 1994; Knobloch 1991; Menzel 1964,

1968).

In contrast, the less fine variants of the same styles were widely used by the rural heartland people from whom the state arose. Around Ayacucho, these ceramics are often classified as Huamanga or Wamanga (Anders 1986, 1998; Knobloch 1991:252-256; Lumbreras 1974a:181-182; Ochatoma and Cabrera 2001:152; Vivanco and Valdez 1993:95-97). Similar ceramics have also been called regular, as opposed to fancy, Chakipampa (Menzel 1964, 1968), Atarco (Isla 2001), Viñaque (Jennings and Yépez 2001), regular, as opposed to fancy, Viñaque (Menzel 1964:16), secular Viñague (Knobloch 1991: 252), Pinilla (Paulsen 1968), and Q'osqopa (García and Bustamante 1990), although those categories also include ceramics that would not generally be considered Huamanga. Because in common usage the Huamanga category lumps the lower-quality variants of multiple styles that are thought to have been used at different times, identifying ceramics as Huamanga does not sharply define either their style or their date. Dating a Huamanga assemblage more precisely than simply to the Middle Horizon requires more detailed comparisons to temporally significant styles and/or assemblages from other dated sites. Recurring suggestions that Huamanga ceramics fall in Middle Horizon Epoch 2 (Anders 1986:292; Valdez et al. 2002:398) are presumably based on narrower definitions of the style than are commonly applied, or on implicit comparisons of the particular examples to other Epoch 2 styles.

Although the Huamanga category is a blunt tool for chronology, it may be a useful indicator of general ethnicity, function, and social status. Huamanga pottery is the more variable and plebian pottery found throughout the urban and rural sectors of the Wari heartland, both alongside the formal wares and in assemblages where ceramics of very high quality are rare, as well as in some of the provincial outposts. Many Huamanga ceramics are decorated, and while they are generally less well made and less iconographically complex than vessels on the formal end of the spectrum, they are not simply poorer versions of them. Huamanga ceramics include a restricted subset of the motifs used in the formal styles, plus decorations and forms that are not characteristic of the formal styles at all. Huamanga ceramics were evidently used in quotidian contexts by both common folk and the elite (Anders 1998:140; Knobloch 1991: 252; Lumbreras 1974a:181-182; Ochatoma and Cabrera 2001:152). A Huamanga assemblage with few examples of finer wares, as at Beringa, should indicate an occupation by low to moderate status people with Wari material culture who did not play primarily political or institutional roles.

Much of the decorated pottery from Beringa is similar to Huamanga ceramics of Ayacucho: not the vessels particularly identified with imperial overseers and institutions, but those used by everybody, including the common farmers in the Wari heartland. Yet the cooking and storage wares are different, suggesting different practices and social organization at the private and conservative level of the domestic unit. These apparent differences in domestic practices suggest that the farmers who used Huamanga ceramics in the Majes Valley did not live quite like the ones in the Wari heartland, so they may not have come from there, at least not directly and recently. Neither imperial administrators nor transplanted colonists, the Middle Horizon farmers of the Majes Valley seem local in their domestic practices, yet their decorated household ceramics make them seem scarcely less Wari than their rural counterparts in Ayacucho.

#### BERINGA

The site of Beringa is located about 85 km upriver from the sea, some 5 km north of the modern city of Aplao, at about 700 masl on an elevated river terrace roughly 50meters above the lush, arable floor of the Majes Valley (Figure 2). This upper portion of the narrow Majes Valley floodplain is a rich agricultural oasis about 40 km long and one to two km wide, well watered by the Majes River, which has the highest annual volume of flow of any Peruvian river south of the Santa (Oficina de Coordinación 1988:127). Briefly described by García and Bustamante (1990:36), Beringa was the subject of a mapping, surface collection, and excavation project directed by Tiffiny Tung in 2001 (Tung 2007).

The most intensely occupied portion of the site is an area with architectural remains in sector A, as defined in Tung (2007). This area comprised about 0.4 ha of partially agglutinated but evidently unplanned generally rectilinear patios and rooms defined by double-faced fieldstone wall bases and a few traces of adobe and perishable walls, perched over a band of agricultural terraces slightly above the floodplain that must have been watered by a canal originating several kilometers upriver. What little can be made out in the badly disturbed plan of the site (Tung 2007) does not clearly follow Wari architectural canons (Isbell 1991) seen at centers like Pikillacta, but there are a few walled rectangular patios with a narrow room and bench along one side that hint at the Wari tradition. The general rectilinearity, technology, scale, and use of walled open spaces are grossly compatible with rural Wari architecture (Ochatoma and Cabrera 2001) without specifically indicating a connection. The built-up area was occupied long enough for sizable domestic middens to accumulate, and for the inhabitants to repeatedly modify or rebuild the structures. Interspersed throughout the architecture are numerous burials of various types (Tung 2007).

The site is severely looted, which exposed the plentiful human remains that were a focus of the Beringa project. This disturbance made it difficult to reconstruct the architecture, and virtually impossible to discern any stratigraphic relationships between the burials and the domestic occupation, or to clearly separate the contents of disturbed domestic middens from discarded mortuary offerings except in limited cases. This situation raised concerns that the human remains might not be contemporary with the architecture and middens, and that the ceramics and other materials in the collections might represent a mixture of different occupations and uses of the site. Fortunately, most of the ceramics appear to fall into a coherent Middle Horizon assemblage, although a few are later.

#### CONTEXT OF THE CERAMICS

Almost all of the ceramics described here were collected from the surface or excavated from the architecturally built-up area of the site (part of sector A in Beringa project nomenclature; part of sector B in García and Bustamante 1990:36). Most of the ceramics come from soil disturbed by looters. These deposits appear to be a mixture of domestic midden, probably some prehistorically redeposited midden used as fill and construction material, and burials within the residential area. Some intact domestic, midden, and mortuary contexts were also excavated, but this initial site-level description treats the entire collection as a whole, rather than attempting to divide it according to context or degree of disturbance. Most of the whole and partially reconstructable vessels were presumably burial offerings that were overlooked or rejected by looters, who are said to have been seeking feathered textiles. For this reason, the most highly decorated pieces are probably underrepresented among the sample of whole vessels, although the sample of sherds broken during the occupation should be relatively complete. The fragmented finewares and plainwares probably represent a mixture of mortuary offerings broken and discarded by looters, and vessels broken in antiquity. Numerous whole or partially intact large plainware vessels were found in situ in domestic contexts, where they had been placed upright in deep holes with the mouths near floor level, apparently for storage.

#### **PROVENIENCE SYSTEM AND METHODS**

Surface collection and excavation areas at Beringa are called units. Some material was labeled N, S, NW, etc. (for compass directions) to indicate a general area within the unit. Each subdivision within a unit, such as a natural stratum, a feature, or an arbitrary subdivision of the deposit, is called a *locus*. Units and loci were numbered arbitrarily in sequence with no repetition. Objects of interest were assigned an hallazgo especial (special find) or HE number. In some cases, a single HE number was assigned to multiple sherds or other objects from a single locus. Contents of burial pits or tombs were further labeled with a tumba (tomb) number. Human remains and objects associated specifically with them were labeled with an entierro (burial) number. A complete provenience thus includes a unit with optional sub-area letter(s), locus number, optional HE number, optional tumba number, and optional entierro number. Each ceramic vessel or sherd also received a CID (ceramic ID) number during cataloging.

Ceramics were collected by hand and from 1/4 inch screens during surface collections and excavations, both of which included screening superficial looters' backdirt. Vessels and sherds were sometimes brushed clean, but were not washed, because trials showed that thorough wetting sometimes caused sherd surfaces to flake or removed some paint, especially the cream color. Damage due to recrystalization of salts after wetting was also a concern. Fortunately, the dry, sandy soil did not adhere well to the sherds, so designs were generally visible with minimal treatment. Some vessels and sherds were lightly cleaned with moist paper towels to bring out painted decoration without deeply wetting the ceramic. Subsequent to this analysis, all sherds without cream paint or visible organic deposits were soaked in repeated water baths to draw out salt for conservation purposes.

Form and decoration data, diameters and thicknesses, count and mass, and modifications such as repair holes, postfire engraving, and organic crusts were recorded for all whole vessels and sherds on a tabular catalog form. No paste data were collected. Profiles were drawn of all rims. All whole or largely intact vessels were drawn, photographed on 35mm slide film using a 400mm lens to minimize parallax distortion, and digitally photographed. Almost all sherds with decoration or other features of interest were digitally photographed, some were photographed on 35mm print film, and some were drawn. When the catalog data were entered into a database, all the form and decoration data were revised by the author according to the rim profiles, photos, and catalog notes to correspond to a consistent categorization scheme. The illustrations presented here were prepared by the author from drawings and photographs.

This description generally treats the ceramics collected at Beringa as a single assemblage, without subdividing by context or degree of disturbance. This gross level of analysis is appropriate here because most of the ceramics come from disturbed deposits without recoverable cultural context, and because many of the relevant published descriptions are also at a siteassemblage level. Although sherds and vessels were weighed, for the sake of simplicity this analysis is based on sherd counts. An intact vessel is counted as a single sherd, while all sherds are counted individually, even if they fit together.

#### DESCRIPTION OF THE CERAMICS

#### The sample

The ceramics recovered by the Beringa project comprise 25,171 sherds (Table 1), including 41 substantially complete vessels and 15 additional vessels well represented by sherds that extend from the base to the rim. Most of these largely complete vessels are illustrated here. About 19% of the assemblage is slipped, and about 6.6%, or 1,666 sherds, have painted decoration. The description that follows emphasizes form and decoration, leaving a systematic analysis of pastes and other technical studies for future research.

#### General Wari indicators

The Beringa assemblage is described in detail below, but a brief summary of its clearly Wari content may be useful. All told, 46 sherds, or about 0.9% of the slipped and/or painted assemblage, are definitely Chakipampa or Ocros. In addition to these, 61 sherds have variants of the feathered wing motif, six are fragments of faceneck vessels very similar to those at other Wari sites, and so on. While any segregation of the assemblage into "Wari" and "not-Wari" would be arbitrary and highly dependent on the individual analyst, I suspect that most would identify a minimum of 2% or 3% of the slipped and/or painted sherds, or at least 6% or 7% of the sherds with painted decoration, as

"Wari"2Sm without hesitation. I argue that by taking into account form, design organization, features such as rim decoration treatments, and other traits of rural, rather than formal, Wari assemblages, almost all of the Beringa material can be interpreted as a local instantiation of the rural Wari tradition.

#### Forms

The forms commonly represented at Beringa are illustrated in Figures 3 through 7, while some of the less common forms are shown in subsequent figures. Table 2 summarizes the frequencies of the various form categories and surface treatments.

The simple open and globular forms can be identified with some precision from rim sherds, and so can be divided into fairly detailed categories. The boundaries between most of these categories are not sharp, and there are many borderline cases. For this reason, it is likely that some of these categories do not correspond exactly to the folk taxonomy of the prehistoric inhabitants of Beringa. Nevertheless, some apparently do at least roughly parallel the types conceived by their makers, because they are associated with specific forms of decoration. Shallow bowls, for instance, are almost exclusively decorated on the interior and/or rim only, while the formally similar medium bowls are overwhelmingly decorated on the exterior and/or rim only. The exceptions may indicate where the boundaries between the form categories should be adjusted. Categories that appear most likely to reflect "real" ethnotypes in this way include shallow bowls, deep bowls, the other bowl forms as a group in opposition to the first two, escudillas, painted faceneck vessels, the distinctly different plainware faceneck vessels, and globular restricted forms as a group. The small and large olla categories and the pitcher category also seem distinct enough that they probably correspond to prehistorically recognized types.

Necked forms are more difficult to categorize, for several reasons. The body form of a necked vessel cannot be directly inferred from the rim unless the sherd extends far down the profile of the vessel. Among the relatively complete necked vessels at Beringa, rim and neck forms do not correlate to body shapes, sizes, or handle configurations, so a typology of rim and neck forms would not be very informative. For these reasons, necked forms other than relatively complete small ollas, pitchers, and spouts are lumped into a globular necked fineware category for slipped sherds, and an "other necked form" category for plainwares. These categories undoubtedly include vessels of multiple forms and functions.

With the exception of the utilitarian thickened rim category, rims are generally rounded in section. Most vessels maintain a roughly uniform thickness right up to the rounded rim, although some finewares taper slightly to a reduced thickness towards the rim. These tapered rim sections may be more common on more finely decorated vessels, but the correlation is not strong and has not been formally tested. No fineware rims are clearly squared, and none are notably thickened or flanged. Utilitarian rim sections are more variable, even around the rim of a single vessel. Most are roughly rounded, while some are more squared with rounded corners.

Bowls comprise almost half of the non-plainware sherds with identifiable forms (Table 2). While the forms vary, they are all relatively shallow and open, probably suited for serving solid foods, stews, or soups. The bowl forms range primarily from about 10 to 20cm in diameter (Table 3), appropriate for individual servings or sharing among a few people. The most common non-plainware form in the assemblage is a shallow, open, rounded bowl (Figure 3: bowl 1-shallow, Figures 8, 9, 10), comprising over 20% of the non-plainware sherds with identifiable forms, while the third most common nonplainware form is the slightly deeper medium bowl (Figure 3: bowl 2-medium, Figure 11).

Globular restricted vessels make up an additional quarter of the non-plainware sherds with identifiable forms (Table 2). These tend to be slightly smaller, with median rim diameters of 13 to 14cm, but they cover about the same range of sizes as the more open bowl forms (Table 3). The shapes of the slightly restricted and medium restricted forms, as well as their smaller sizes, suggest that these vessels may have been more suitable for serving drink, probably fulfilling the functional role played in other assemblages by cups, beakers, keros, and bottle forms, which are notably scarce at Beringa. The second most common form in the non-plainware assemblage is a range of fairly deep, slightly restricted globular vessels (Figure 3: globular 1slightly restricted, Figure 12).

Escudillas (Ochatoma and Cabrera 2001) are a distinctive variation on the general bowl form, with flaring straight to slightly concave-out walls separated from a flat to convex-out, finished base by either a sharp carination or a tight curve (Figure 3: escudilla, Figures 13, 14). This form is similar to the "cumbrous bowls" described in many Wari styles (Paulsen 1968). At least two examples had three bulbous feet (Figure 14; only one of several sherds is illustrated). These are counted in the detailed tables as tripod escudillas, but are lumped into "other" in the tables of common forms. One escudilla (Figure 14, CID 285) apparently cracked in two places after being painted, but before firing. One crack is repaired with unpigmented fine gray clay that obscures part of the painted design, while a less serious second crack was treated by additional burnishing when the vessel was already in a leather-hard condition. Some sherds classified as "ambiguous, conical" are probably from additional escudillas. Comprising about 2.3% of the non-plainware sherds with identifiable forms (Table 2), *escudillas* are a minor but definite component of the assemblage.

The assemblage includes fragments of several beakers, ranging from cylindrical to flaring (Table 2, Figures 15, 16). Some of the rim sherds classified as "ambiguous, cylindrical" and "ambiguous, conical" may represent additional beakers. There were at least two oversized beakers, one so large that it must have been nearly unusable (Figure 15: CID 364). These large beakers were somewhat more flaring than the conventionally sized ones, and were considerably less carefully shaped, painted, and burnished. A variant beaker or tumbler was modeled and painted as a head and face (Figure 17: CID 323 & 896).

Two canteens or flasks were identified, one in a style consistent with other sherds in the assemblage (Figure 16: CID 585), and the other clearly exotic (Figure 18: CID 365 & 366). These two vessels were represented by many conjoining sherds, making the canteen form look more common in Table 3 than it actually is.

A single lyre cup was recognized (Figure 16: CID 2426). Four pitchers (*jarras*) with a single strap handle from the base of the neck to the rim were recorded (Figure 19), of which only one was slipped and painted. The pitcher form is difficult to identify from small pieces, so it may have been more common than the sherd counts suggest.

Fragments indicate the presence of at least three nearly identical painted faceneck jars (Figure 20: CID 321) and at least one slightly different one (Figure 17: CID 2234), as well as several plainware faceneck vessels in an entirely different style, with "coffee bean" eyes, a beaklike nose and mouth, and tab ears (Figure 20: CID 2098). Modeled face protuberances also occurred rarely on plainware vessels (Figure 20: CID 3348). One incomplete and badly eroded vessel (not illustrated) had a flat-bottomed globular body with a minimally modeled human or monkey head projecting from the top, one sculptural arm arching from the shoulder to the head, and probably a mouth or spout rising separately from the top rear. The only other reconstructable sculptural form was a camelidshaped vessel (Figure 18: CID 446). Fragments of two ceramic spoons lacked decoration, but it may have been eroded from the poorly preserved surfaces (Figure 17: CID 1814). A third had indecipherable traces of painted decoration.

Two-handled *cántaros* (Figure 21, Figure 17: CID 340) and some narrow-necked, bottle-like variants (Figure 17: CID 1281) are present but very rare among the non-plainwares, probably in part because they can only be identified if a large part of the vessel is present. One possibly exotic plainware *cántaro* (Figure 6: CID 676) has an unusual conical neck and basal carination, carefully patterned burnishing, and light tan surface that do not match other vessels in the assemblage. The "globular necked fineware" and "utilitarian, other necked form" categories (Table 2) probably include sherds from additional *cántaros* and pitchers.

Small plainware cooking ollas were fairly common among the small number of identifiable plainware vessel forms, comprising at least 13 examples (Table 2, Figure 7). These are carelessly formed, poorly burnished, unslipped, and often blackened by fire and caked with carbonized organic crusts. The forms are globular and somewhat squat, slightly restricted, and either neckless or with varying degrees of low to medium height, vertical to strongly everted necks and rims. Most or all had two opposed small vertical strap handles located as low as the upper mid-body or as high as the upper body, in these cases joining to the rim and sometimes projecting above it. Nearly identical forms were made with and without tripod feet, although the tripod form was not common. Only one sherd was found with a foot still attached, although on other sherds and more complete vessels, scars clearly marked the locations of the feet. Only one definitely identifiable small olla foot was found. Olla feet may have broken into unidentifiable pieces in cooking or on removal from the vessels. The attachment scars suggest that some of the feet may have been solid, while others were hollow, in at least one case with a welldefined opening or vent near the attachment area. The bulbous foot forms suggested in the figure are based on the few examples from sherds of tripod *escudillas*, and could well be incorrect for these particular vessels.

Small plainware boot pots (Figure 19: CID 249), comparable in size to the small ollas, were represented by just two definitely identified vessels. This form is difficult to identify from sherds, and may have been more common than the sherds suggest. Both were blackened by exposure to fire, and one retained a burned organic crust (Table 4). Two chunky, annular plainware sherds (Figure 4: tube spout/handle, massive) may be the attachments of thick, crude tubular spouts such as those illustrated by Ochatoma and Cabrera (2001, color plate before page 177).

Fragments of at least five large neckless globular ollas were recovered, most with crusty organic deposits burned onto them (Figure 4, Tables 2, 4). Because smaller sherds of these vessels would be difficult to distinguish from other forms, they were probably somewhat more common than the counts suggest. These large neckless ollas were almost certainly cooking vessels.

A rare and variable range of large utilitarian vessels had massively thickened rims, reinforcing wide open mouths (Figure 4, Table 2). The sherds represent from nine to eleven thickrimmed vessels. The large, open forms suggest cooking, or perhaps other tasks such as soaking, that required easy access to the interior, rather than storage or transportation. Only one thickened rim sherd retained a burned organic crust, but that may be because the only diagnostic part of these large vessels is the rim, while organic crusts may more often develop lower on the vessel.

Numerous large plainware vessels with more restricted mouths (Figures 5, 6, Table 2) were recovered relatively intact from subfloor pits, where they were apparently placed as storage containers. These vessels were usually carelessly shaped, burnished very casually or not at all, unslipped, and blackened with soot. Sherds and intact vessels were frequently crusted with burnt organic material on the inside, outside, or both (Table 4). The most common form was a slightly to considerably prolate spheroid, with a rounded conical base, two opposed small vertical strap handles at mid-body or slightly higher, and a moderately restricted mouth with a short neck that could be slightly inverted to strongly everted. A less common variant was more spherical, lacked handles, and may have tended to a slightly narrower mouth. One example of the more spherical form had two opposed handles on the shoulder. These vessel forms seem suited to storage and transportation, although some were clearly set in fires before being buried.

#### Slips and paint colors

Most (80.6%, Table 1) of the sherds at Beringa are utilitarian plainwares or lack preserved surfaces that might indicate otherwise. Of the 4,877 slipped and/or painted sherds, the great majority (95.4%, Table 5) have a red slip, but a small (1.6%) and differently executed group have a tan to slightly orange slip that often either matches the paste color or was produced on the vessel itself by wetting. The remaining slip categories make up minor portions of the assemblage and might be exotic, including 0.8% with an apparent cap of red slip on top of cream slip, 0.9% with paint on the natural paste surface, 0.3% with a dense cream slip, and 0.1% with a dark brown slip. The characteristic Ocros orange slip is present only on a few Ocros exotics, comprising about 0.6% of the decorated assemblage. Seventeen sherds (0.3% of the fineware) were separated out as definitely Chakipampa in style, although some less obvious examples might be included in other categories (Tables 5, 6, Figure 22). These Chakipampa sherds have a variety of slips, but were separated to allow for a clearer picture of the Huamanga-grade assemblage at Beringa.

The slips vary from very weak and transparent to moderately dense. On the exterior, the slip rarely covers the entire vessel, more often covering just the upper part of the exterior, or just the very rim. On the interior, the slip may cover the entire surface, just the sides of the vessel, or, most often, only a band around the inside of the rim. Different forms have different characteristic patterns of slip coverage, as shown in the figures. Some shallow open bowls with a band of red slip around the inside edge also have slip carelessly applied in an irregular area in the center of the bowl (Figures 8, 9, 10), and two have red slip covering one half of the interior, as part of the decoration (Figure 8). Slipped and unslipped surfaces are usually pebble burnished, from very casually to moderately well. Surfaces in which the pebble strokes are largely smoothed away are rare, and truly flat, uniform surfaces are restricted to exotics.

Painted decoration almost always includes black, usually as one or more lines. For example, of the red-slipped sherds with any paint at all, 91% have black paint, of which 66% have additional colors (Table 5). White or cream is by far the most commonly added color, appearing as lines and sometimes areas on 58% of the red-slipped sherds with black paint. White is vary rarely used without black, appearing alone or with orange on only 4% of the painted redslipped sherds. Orange is less common (on 13% of painted red-slipped sherds), and again is almost always used along with black, black and white, or rarely with just white. Gray takes the place of orange on a few sherds. The white and sometimes the orange are more fugitive than the other colors, sometimes barely visible. A dark red or reddish brown is the least common major color, found on 6% of painted, red-slipped sherds, 65% of tan-slipped sherds, and rarely elsewhere. On red-slipped sherds it is almost used always used with black, and often with white, orange, or both as well as black.

On tan-slipped sherds, by contrast, red paint is common, always along with black. 65% of all painted tan-slipped sherds have red and black paint (Table 5, Figure 23). White is the only additional color used. These sherds have a number of other characteristics that differentiate them from the rest. They are decorated with a distinct subset of design motifs, emphasizing moderately narrow lines in repetitive but simple patterns, few filled or solid color areas, and uniformly spaced crosshatching made of lines of the same width as the enclosing boundaries of the spaces. These differences suggest separating tan-slipped sherds as a separate "Black and Red on Tan" category.

With the exception of "feathered wings", colored motifs are almost never outlined in black, apart from in occasional Chakipampa or Ocros exotics. The fine black lines bounding white areas in the illustrations here are not present on the sherds themselves.

#### Design organization

Painted decoration is arrayed on the vessels in a limited variety of characteristic ways, with specific preferences concerning symmetry, appropriate vessel forms, and other attributes.

The principal organizational modalities are particular forms of continuous design bands, rectangular register bands, pendant rectangular registers, pendant motifs, and floating motifs, all explained below (Table 7). It is possible that these organizational modalities and related organizational principals such as the lack of a specified front, center, or orientation on most vessels, and the rules governing alternation, orientation, and presence or absence of symmetry in the arrangement of motifs, were less consciously selected and manipulated than were motifs, colors, and other discrete aspects of design content. If so, these organizational qualities would be particularly useful in comparisons with assemblages from other sites and regions, as indices of shared or divergent customary ways of thinking among the potters who produced them.

The most common configuration is a continuous band of decoration that encircles the exterior wall of the vessel in contact with the rim, almost always without any unique feature indicating a front or center of the design, and often but not always with one or more horizontal lines delimiting the bottom of the decorated band (Figure 24: lazy [horizontal] S and X; lazy S variants; lozenge band, Figure 25: zigzag band with horizontal lines, etc., see Figure 15: CID 363 for an exception). The design band may be composed of truly continuous or linked motifs (as in Figure 24: lozenge band), or a closely spaced series of motifs, often alternating in color and/or form (as in Figure 24: lazy S and X). In most cases, there is only a single row of motifs in addition to any horizontal bounding lines, but occasional examples have multiple rows of motifs (Figure 24: lazy S variants, first illustration) or even additional design bands stacked below the one in contact with the rim (Figure 24: wavy line below rim, third illustration, Figure 15: CID 364).

Not quite all continuous design bands are external. One also occurs on the interior of one *escudilla* in contact with the rim (Figure 13: CID 334). All other examples of interior continuous bands are ambiguous, because the only interior patterns potentially organized in this way are horizontal wavy line motifs, which also occur as discontinuous patterns. Because continuous interior bands can only be distinguished from discontinuous designs in the rare cases where a third or more of the rim is present, they are presumably underrepresented in Table 7.

Continuous band design organization occurs primarily on the exterior of the deeper bowl variants and on restricted globular vessels (Table 7). It is almost never used on shallow bowls or *escudillas*, which are almost always decorated on the interior with one of several other organizational schemes. It is also not used on globular necked vessels other than on one pitcher.

The next most common organizational modality is a band in contact with the rim, divided into rectangular panels or registers by vertical lines or blocks, delimited at the bottom by one or more continuous horizontal lines ranging from narrow to broad. The registers may be empty or may contain one or more design motifs. Both often occur on the same vessel, often in alternating or repeating arrangements (Table 7, Figure 24: rectangular register bands, Figure 25: geometric line motifs). The registers may be delimited with one or more lines at the top, or the rim may serve this purpose with no painted delimitation. Like the continuous band modality, rectangular register bands are uniform around the entire circumference of the vessel, with no front or center indicated. The least continuous of these designs have two effectively identical wide "central" panels with smaller flanking registers or vertical bands between them. In these cases, there are two apparently preferred viewing orientations in which one or the other main panel is in the center of view, but neither is marked as the front or the back.

Rectangular register band organization is more common in the assemblage than it appears in the illustrations, because many examples are represented by sherds with portions of the register boundaries but not enough of the contained designs to yield a useful illustration. This organizational modality occurs only on the exterior of vessels, especially medium bowls and slightly and medium restricted globular vessels, similar to the context of continuous band organization.

Also occurring in the same form contexts are the very few examples of checkerboard design organization (Table 7, Figure 24: checkerboard). Checkerboard organization involves an exterior circumferential design band in contact with the rim, some or all of which is divided by horizontal and vertical lines into at least two rows of roughly square, small registers or panels. Some of these panels are filled with solid color or small designs, typically in a diagonally alternating arrangement. This modality is sufficiently rare at Beringa, represented by only six examples, and the motifs are sufficiently unusual, that it might be an exotic feature not manufactured locally.

Another common organizational modality comprises pendant designs, which are those that hang from the rim, touching it along the upper edge of the design, without being connected to each other as a band (Table 7). Pendant designs never have a lower horizontal line that continues all around the vessel, although some touch a line along the rim. At Beringa, pendant designs occur in two general modalities: pendant rectangular registers, and more commonly, pendant motifs not enclosed in registers.

Pendant rectangular registers are almost always horizontally oriented (wider than they are tall), and divided in two by a single horizontal line (Figure 24: pendant rectangular register, subdivided). These and a single variant example (Figure 24: pendant rectangular register, not subdivided) are tallied as pendant rectangular registers in Table 7. About half contain horizontal wavy lines in white or occasionally orange, as in the illustrated example, while the other half are apparently empty. This may be the original intent, or may be due to the complete loss of fugitive white paint. Pendant rectangular registers occur both on the interior of some more open bowl forms, and on the exterior of bowl and globular forms with steep or incurving walls.

Pendant motifs not in registers (Table 7) include variants of shallow arcs and wavy lines hanging from the rim, vertical bars descending from the rim, "feathered wings" touching the rim along one long edge, and occasional other motifs such as an opposed escalonado (stair step) design (Figure 24: arcs pendant from rim, Vertical bar pendant from rim, Figure 25: feathered wing, pendant, escalonados pendant from rim). Vertical bars are distinguished from registers in that they are not a delimited design area with a closed boundary across the bottom. Arcs are the most common pendant motifs, occurring almost exclusively on the interiors of the more open bowl forms, especially shallow bowls (Table 8). Similarly, pendant feathered wings are always on the interior of open forms, especially escudillas (Table 9). Pendant vertical bars, by contrast, are almost always located on the exteriors of medium bowls (Table 10).

Finally, and least frequently, motifs may float freely in the design space, not in bands, registers, or attached to the rim (Table 7, Figure 25: feathered wing, floating). On the interior of vessels, floating motifs are usually centered in the bottom of the vessel, usually in shallow bowls, *escudillas*, and tripod *escudillas* (these last included in "other" forms in Tables 7-10). On the exterior of vessels, floating motifs occur in the same upper portion of the walls as do decorations organized as bands or pendant motifs.

Some motifs, such as the lazy S, feathered wings, *escalonados* (Figures 24, 25) and the rare flamingo (?) motif (Figure 26: CID 1056), could potentially be alternated with their mirror images, forming symmetrical pairs or patterns around intervening motifs. Most of these motifs do occur in both reflected forms at Beringa, but they are very rarely used together on a single

vessel. The strong preference was to use a single "isomer" of the motif that faces the same way all the way around the vessel. The most common exceptions are geometric patterns in rectangular register bands, as in Figure 25: geometric line motifs.

#### Design location

The location of painted decoration on vessels is strongly patterned by design organization, as indicated above, and by vessel form (Table 11). Not surprisingly, deeper and more restricted forms were generally decorated on the exterior, because the interior was less accessible. For example, decoration on the relatively vertical-sided deep bowls is always in a wide exterior band below the rim, and almost all the decoration on restricted globular vessels is also on the upper exterior (Table 11).

Shallow bowls and *escudillas* were decorated almost exclusively on the interiors, which, while seemingly equally self-evident, is actually a matter of choice. Shallow vessels could have been held up, stood on edge, or turned upside down to display external decoration, and styles such as the Algarrobal phase Chiribaya (Owen 1993) did, in fact, restrict shallow bowl decoration to the outer walls. At Beringa, there is a continuous gradation from more frequent interior decoration in more open forms, to more frequent exterior decoration in more closed forms.

Additionally, decoration was strongly restricted to the upper portions of vessel walls. All of the design organization modalities discussed above involve a connection to the rim except for the floating motif modality, which occurs on relatively few vessels. The only consistent exception is decoration centered in the bottom of open bowl and *escudilla* forms, but even this pattern is found on barely 1% of sherds of known form. Again, this is certainly a matter of choice. Many styles involve decoration well down the exterior of vessels, or designs that use much or all of the interior of open bowl forms.

About one sixth of all rims in the entire assemblage were decorated along the outer edge of the rim, the inner edge of the rim, and/or the top surface of the rim itself (Table 11). Rim decorations range from a single horizontal line to various combinations of lines, broken lines, and crosswise ticks, discussed below. The patterning by form is not obvious, but over 80% of the *escudilla* fragments and over 60% of the slightly restricted bowls were decorated on the rim, with most other decorated forms grading down to percentages in the low twenties.

Finally, the rightmost three columns of Table 11 tally the frequency of slip and painted decoration on most forms. Bowls and globular vessels were probably used for individual servings of food and drink, and 75% to 90% or more of these serving vessels were decorated.

#### Motifs

The most common decoration, occurring on 20 to 60% of many bowl and globular forms and 76% of *escudilla* sherds, is a simple horizontal black line all the way around the vessel along the inside, outside, or top of the rim, frequently lapping down onto one side or the other (Tables 8 and 11). About 80% of these black rim lines are accompanied by other motifs, or are part of other designs such as a rectangular register band. The line is usually on only one side of the rim or the other, not both.

The top edge of the rim of about 6% of bowls, 1% of globular restricted forms, and 31% of *escudilla* sherds is decorated with short black lines or ticks crossing the rim, clustered into six to nine groups of three to seven ticks each (Table 10). These groups of ticks are themselves sometimes grouped into sets of three (and possibly also other numbers) by being painted on top of discontinuous white or orange line segments on the rim (Figures 8-10, 13, 14). Because the rims of many vessels are worn, the illustrations may not show all the ticks that were originally present. Rim ticks rarely occur alone, but rather almost always add to the decoration of vessels with other painted motifs, at least a horizontal black line below the rim (Table 12). Rim ticks are disproportionately common on sherds with feathered wing motifs, interior horizontal wavy lines, and partial slipping used to create a design.

About 7% of all painted sherds are decorated with horizontal, and occasionally vertical or diagonal, wavy lines (Table 8, Figure 24 wavy line below rim, wavy line variants, pendant rectangular register, subdivided and not subdivided, Figure 10: CID 312, 313, Figure 13: CID 334, Figure 20: CID 321, Figures 21, 23, 27, 28). These wavy lines are usually in black or white, but are occasionally orange, and are often flanked by straight black, or sometimes white, lines. Sometimes a single black wavy line ends and is continued smoothly by a similar one in white, or vice versa. About half of the examples run horizontally just below the rim, mostly but not all on the interior. The remainder occur in a variety of other contexts. A common variant, not included in the previous percentages, is pendant wavy arcs. Pendant arcs decorate 15% of shallow bowls, 5% of medium bowls, and scattered examples of other forms, usually as a compound motif consisting of two smooth arcs alternating with two wavy arcs (Figure 24: arcs pendant from rim, Figures 8, 10, 27).

The next most common distinctive motif is a lazy S motif (Figure 24: lazy S and X, lazy S variants; Figure 11, Table 8), appearing in one variant or another on the exterior of about 6% of bowls and 14% of globular restricted vessels. The lazy S never appears on interior surfaces, and is particularly common on the deep bowl form, appearing on seven of the nine examples. Usually cream in color, but occasionally orange, the lazy S occurs in both possible orientations, with the long stroke ascending to the right ("Z" orientation) or descending to the right ("S" orientation), but usually with only one orientation on a given vessel. The recurving ends usually angle to approximately face each other, as though they could be continued to form a closed figure 8, but some examples spiral or hook more aggressively (Figure 28: CID 324). One atypical example contains a circular ring filler element (Figure 28: CID 1494). The motif is often executed as a single, fairly fat brush stroke with rounded ends.

More than half of the lazy S motifs occur in an alternating arrangement with an X figure in a contrasting color, often black, but sometimes orange or cream. Because some lazy S examples are on sherds that do not include the space where the X might have appeared, the true percentage may have been even higher. The X figures may or may not have contrasting dots or short wavy lines in the upper and lower, lateral, or all four spaces between the arms (Figure 24: lazy S and X, Figure 28: CID 345, 2459). In a few examples, a light colored lazy S or X has a narrower black line down the center (Figure 24: rectangular register bands, lazy S variants). The association of lazy S and X is usually in the form of a continuous band with no other motifs except any filler elements between the arms of the X and one or more horizontal bounding lines below (Figure 24: Lazy S and X, Table 8). However, there are occasional examples without the lower bounding line, in rectangular register bands, and other combinations, as well (Figure 24: rectangular register bands).

Some vessels with fairly straight, flaring walls, as well as some globular restricted forms, were decorated with one or more bands of motifs that can be viewed either as linked Xs or lozenges, usually executed in white. In some cases, filler elements such as white or black plus signs, rings, or arcs fill the lozenge spaces (Figure 24: lozenge band, Figure 15, Figure 28: CID 2420, 2781). Like the lazy S motifs, lozenge bands occur only on the exterior of vessels. One of the very few examples of a design with a central motif that might indicate a preferred viewing orientation is a flaring beaker with a lozenge band interrupted by a large black dot ringed by a wavy line (Figure 15: CID 363, Figure 28: CID 2781, probably fragments of the same vessel). The illustrations show two different black dots, presumably once located opposite each other on the vessel.

A less common motif that appears on about 1.5% of decorated sherds, in the same vessel forms, location, and quality of execution as lozenge bands, is a band divided into alternating triangular panels by a zigzag line between the rim and the lower delimiting line, with either all or alternating triangular panels filled by several horizontal lines of graduated length, alternating in color from one triangular panel to the next (Figure 25: zigzag band with horizontal lines, Figure 11: CID 291). The zigzag band motif is also used in occasional variants with dots rather than the horizontal lines (Figure 25: zigzag variant) and in other forms that may or may not be related (Figure 16: CID 292, Figure 26: CID 1583, Figure 23: CID 420).

The "feathered wing" motif occurs on almost 4% of decorated sherds, especially on the interior of *escudillas*, where the wing is usually pendant from the rim, with one long edge defined by a black line around the inside of the rim (Table 9, Figure 25: feathered wing, pendant, floating, in register, and variant, Figure 13, 14, 29: CID 2346, 2975). The concentration of this motif on the interiors of *escudillas* is even more distinct than it appears in Table 9, because the ambiguous conical sherds are probably *escudilla* fragments, the three "other" form sherds with interior feathered wings are from a tripod *escudilla*, and the many fragments of "other" form with exterior feathered wings are pieces of a single unusual canteen, partially illustrated in Figure 16: CID 585.

Feathered wings and the "feathertip boxes" sometimes abstracted from them (Figure 25: feathertip box variants) are, unlike any of the other common motifs, outlined and detailed in black. The central area is usually orange, and a single or double row of rectangular tips is filled in white or sometimes in the same orange. Variants have wings floating free below the rim, or in rectangular registers on the exterior of deeper bowls (Figure 29). Most wings are isolated motifs, not connected to anything other than the rim line. On any given vessel other than the unusual variants described below, the wings all face in the same direction. That is, they progress around the interior or exterior in the same way that the lazy S motifs of a single orientation do, rather than forming opposing pairs.

A few vessels combine parts or variants of feathered wings with other motifs and alternative design organizations. One example is the unique canteen decorated with four wings in alternating black and white colors arranged radially around a central connecting ring and separated by white dot filler elements with black centers (Figure 16). This piece combines the darker reddish brown slip, color scheme, wavy lines, and casual execution typical of the open bowls, deep bowls, and cántaro (Figures 8, 9, 10, 11, 21) with a modified form of the wing motif that is usually found on escudillas that have lighter red to red-orange slip, more colors, and somewhat more formally executed decoration. Another fragment (Figure 25: feathered wing variant) substitutes aberrant unfilled feathered wings in a tip-upwards orientation for lazy S motifs in an otherwise typical continuous band, alternating with a X motifs and bounded below by a wide horizontal line. Other examples use the "feathertip box" portion of the wings alone or in other contexts (Figure 25: feather tip box variants, Figure 29: CID 346, 349, 1778).

The 8-pointed star is often cited as an important Wari motif, but it is rare in the Beringa assemblages (Table 10). The *cántaro* in Figure 21 is a dramatic example, but only a few other cases can be tentatively inferred from sherds. This piece looks stylistically later than most of the others, and in fact it comes from a burial that has been radiocarbon dated to the Late Intermediate Period, evidently intrusive into the earlier deposits at Beringa (Tung 2007).

The more common filler elements and their design contexts are summarized in Table 13. Occasional filler elements include solid dots in cream, black, dark red, or in a few cases, orange (Figure 25: zigzag variant, Figure 16: CID 292, 585, Figure 26: CID 348, 435, 1583). Cream dots and the rare orange dots may have a black center, and black dots may have a cream center (Figure 16: CID 585). Cream dots are occasionally crossed by one or two short parallel black lines, generally horizontal when the orientation can be determined, or a black X or plus sign (Figure 12: CID 129, Figure 27: CID 343). The large dots with contrasting centers or black X or plus signs are not as common as the sherd counts suggest, because many examples come from a limited number of highly decorated and fragmented vessels such as the unusual canteen CID 585 (Figure 16). Other filler elements are small rings or circles in black, cream, or dark red, with or without a central dot of the same or a contrasting color (Figure 24: lozenge band, wavy line below rim, Figure 12: CID 298, Figure 15: CID 364, Figure 17: CID 340, Figure 23: CID 2985, Figure 28: CID 1494, 2420). Most of the plain ring filler elements occur in lozenge bands, and most of the remainder are used with lazy S motifs. Semicircles in cream or black, always with the open side oriented either straight up or straight down, generally fill spaces in lozenge bands and variants of lazy S and X bands. Some Black and Red on Tan sherds have red semicircles used in the same orientations

and kinds of contexts. Small plus signs or Xs in cream, black, and in one case, orange, are generally fillers in lozenge bands. Finally, small black or cream dots, distinct from the short ticks used on rims, may individually fill spaces such as the angles between the arms of an X or plus sign motif, or more often are arranged in closely spaced lines (Figure 19: CID 294). Cream dots sometimes occur spaced along a slightly wider black line, reminiscent of the Chiribaya style (Figure 12: CID 280 is an unusually sloppy example).

*Escalonado* motifs occur in several variants, but are not common (Table 9, Figure 25, Figure 14: CID 285, Figure 26: CID 317). Simple face, hair, and headdress details were painted on a number of face-neck jars and one portrait beaker (Figure 17: CID 2234, 323, 896, Figure 20: CID 321). Parallel hatching and crosshatching (Figure 23: CID 336, 531, Figure 25, Figure 26: CID 1556, 2460) occur rarely, generally either on Black and Red on Tan vessels, or in unusual designs that recall the Collaguas style, discussed below.

I have lumped a number of uncommon and fairly different patterns as "geometric line motifs" because they are mostly comprised of narrow, straight line figures (Table 10, Figure 25, Figure 26: CID 435, 1890, Figure 29: CID 3153). One of the recurring motifs is a variant of the stairstep or *escalonado*, drawn as a square with two of the sides extended (Figure 29: CID 3153), often with a dot in the center of the square. Other variants involve multiple motifs, often in panels outlined and divided in complex patterns by additional straight, narrow lines. These designs have a more busy, detailed, compartmentalized quality than most of the others, and may be exotic.

#### Use and Reuse of Plainware Vessels

Lower and upper bound estimates of the volumes of all sufficiently complete plainware

vessels and sherds were estimated by calculating the volumes of the ellipsoids represented by the smallest and largest ellipses that could reasonably fit inside the profile drawings of the vessels (Table 14). In cases where the ellipse projected significantly above the rim of the vessel, a correction was applied to reduce the volume estimate accordingly. For complete or largely complete vessels, the two estimates are identical. For less complete vessels, the largest and smallest possible ellipses often implied vessels of improbably squat or tall form, or with disproportionately sized mouths, suggesting that the actual volumes were probably not near either extreme.

The small ollas (Figure 7) are strikingly small in volume, despite sooting, organic crusts, wear, and modifications when tripod legs broke off that suggest that they were heavily used for cooking. Estimated volumes range from 170 to 1480 ml when full to the rim, and presumably less in actual use; only one might have exceeded 1000 ml. Given that a conventional but small modern serving of soup is about 250 ml, these small ollas were suitable for preparing a light meal for one to three people at the most, or a substantial meal for just one or two. These vessels appear small for routine use in a nuclear family, much less an extended one. The small boot pots, which may have been used for toasting maize, are also smaller than is typical of similar forms in other regions. At Beringa, food was apparently often prepared for just one or two people at a time.

Most of the large plainware vessels in the assemblage were reduced to sherds that are too small to permit the reconstruction of the forms and volumes of the vessels. There are three categories of exceptions. Three sherds of large, globular neckless ollas (Figure 4, Table 2) are large enough to make volume estimates. These were almost certainly cooking vessels. Thirteen utilitarian rims were extremely thickened on the outer edge (Figure 4, Table 2). This reinforcement allowed seven sherds to survive in sufficiently large pieces to permit bounding estimates of the vessels' volumes. These vessels are widemouthed forms that may have been used for cooking or other food preparation tasks. Finally, numerous large utilitarian vessels were found set into holes in the subsoil, with their mouths approximately at floor level, often partially or fully intact (Figures 5, 6). All of these were recorded as "Utilitarian, other necked form", even though the neck was absent in some cases. Although the large sizes, somewhat restricted forms, sturdy rounded conical bases, and handles of these vessels suggest that they were intended for liquid transport or storage, their blackened, sooty surfaces indicate that most were placed in a fire, and presumably used for cooking, shortly before being placed in the floor. One exception was found with a carrying harness made from vegetal fiber rope tied in place through the handles, with no sign of fire damage. Two, including the one with the carrying harness, were found with wool cloth scraps draped over the mouth. Many of these large vessels had the rims, necks, and sometimes upper body broken away, apparently intentionally, as discussed below. All this suggests that they were not originally made for subfloor storage, but were modified for this secondary purpose after being used for transport and/or cooking, maybe after developing cracks, because many had damaged bases. While large vessels with the necks broken away were used for burials at Conchopata (Lumbreras 1974a:171-176), none of the large vessels at Beringa contained human burials or animal bone, or anything else other than open space, soil, and bits of domestic refuse mixed with it, even though many were undisturbed by looters.

The three large neckless ollas were considerably larger than any of the small ollas, all exceeding 5 liters (Table 14). The thickened-rim vessels and the other large utilitarian necked vessels also started at over 4 liters, and covered a similar range up to over 35 liters, with one example over 56 liters (Table 14). Interestingly, there are virtually no plainware vessels with volumes between 1 and 4 liters, and probably few or none between 4 and 5 liters, either. This 1 to 4 or 5 liter range would be appropriate for cooking for a family unit of two parents, a few children, and perhaps a few others. The apparent absence of cooking vessels in this size range may indicate something interesting about the social organization of food preparation and possibly the corresponding residential units at Beringa. Specifically, the volume data suggest that food was rarely prepared for groups the size of a nuclear family, but instead that the people at Beringa carried out their food preparation and perhaps other domestic activities in two non-nuclear family modes, either as individuals or very small groups, or as large, multifamily groups. This pattern could suggest either some unexpected form of domestic organization, or some special circumstances such as temporary work groups in which the Beringa residents were often separated from more usual family settings.

This distribution of utilitarian vessel volumes could also be an artifact of preservation processes. Small vessels are inherently sturdy, and may be over-represented, while both the thickened-rim vessels and those placed in subfloor pits may be unusually large vessels that were disproportionately prone to survive because of their reinforcement and their careful burial, respectively. Smaller neckless ollas should have survived at least as well as the three large ones represented here, but if they were not numerous, it is possible that the failure to encounter them was just bad luck. None of this negates the pattern, however, and the possibility of some unexpected domestic organization at Beringa remains a reasonable hypothesis.

#### Modification of Vessels

The practice of breaking the rim and neck off the large vessels described above is confusing. In most cases the modification did not significantly enlarge the mouth, it weakens the rim, and it would seem to make the vessel more susceptible to dirt falling into it when it was set into a hole in the ground. Yet this treatment was clearly intentional, because there are two examples of deep postfire scoring around the base of the neck to guide the breakage (Figure 28, CID 713). The regular form created by the broken edges in many cases confirms this impression even when scoring is absent, and the broken rim edges of one vessel (Figure 6, CID 305) were partially ground smooth and sealed with an unidentified glossy black substance. Rim modification was not limited to large plainware vessels, although that was the most common context for it. One decorated escudilla (not illustrated) is completely lacking its rim, which was broken away relatively neatly in a plane that is somewhat inclined from the base. A shallow bowl (Figure 9, CID 297) has also had most, but not all, of the rim broken away at a roughly uniform level. While this case is not as clearly intentional, it is hard to imagine an accident or wear that could cause such damage.

Another common modification was the removal of tripod feet from small ollas. Only one sherd of a tripod olla was found with a foot attached. In some cases, the foot had been broken off such that small fragments remained projecting from the base of the olla. In others, the attachment area was ground down to smooth the scar. This may have been a way of salvaging tripod vessels when one leg broke during use. While sherds of tripod *escudillas* are rare, the several footed *escudilla* sherds all still had the feet attached.

At least six vessels were marked with postfire incisions in the form of a plus sign on an unslipped portion of the exterior of the vessel, above the base (Figure 28, CID 911, 712, 1459a). One sherd had the same mark neatly cut into the surface before firing, when the clay was still soft (Figure 28, CID 443). The only more complex post-fire incisions noted were a number of parallel and perpendicular lines on the exterior of a well decorated beaker (Figure 16, CID 292) and a tiny pattern of lozenge shapes on the decorated interior of a shallow open bowl with the rare squat opposed pendant *escalonado* design (Figure 26, CID 317). The unusual design and incision both hint that this might be an exotic piece.

Numerous vessels were repaired using holes drilled on both sides of cracks or breaks, but it is not clear that this treatment was more common than at other sites. Sherds were occasionally reused as scrapers, with one or more edges rounded or flattened, possibly by distinct kinds of wear. Only a few show signs of casual working to a roughly rectangular or oval shape. The use of sherds as scrapers was a recurring practice, but it was not so uniform or frequent as to suggest specialized ceramic production or other unusual activities at the site. The edges of these tools are all convex in plan, in contrast to the often concave edges on ceramic-working implements from the Wari heartland (Cook and Benco 2000:491; Pérez Calderón 1998:126-127; Pozzi-Escot et al. 1993:474). Some sherds were reworked into disks with center holes that appear to be spindle whorls. Such whorls were occasionally found with the wooden spindles still in place, although small ceramic whorls modeled specifically for this purpose were more common. A few sherds were broken or ground into disk shapes without center holes, some of which were too large to be blanks for spindle whorls.

#### Matching Unequal Pairs

Many of the decorated ceramics, and possibly some of the small ollas, seem to occur in matching but unequal pairs. Although few of the intact ceramics come from undisturbed, sealed contexts, two (and only two) clearly (Cool similar vessels were often found in the same units or the same loci, while similarly matching vessels did not turn up in other units (Figures 7, 8, 9, 10, 14, 15, 29). The paired vessels generally share similar shapes and decorative motifs, but are often obviously different in size and have other subtle but clearly intentional design differences. These pairs most likely come from single burial offerings, but because many show signs of wear, the sets were presumably made for use and served only secondarily as grave goods.

signs of wear, the sets were presumably made for use and served only secondarily as grave goods. The meaning and importance of these unequal pairs is obscure, but it might be related to notions of male and female, or more generally to traditional Andean unequal duality (Allen 1988; Moore 1995; Sallnow 1987). A possible exception are three nearly identical face-neck vessels (Figure 20, CID 321) indicated by two matching left ear fragments from unit 18, and a third from unit 4.

#### COMPARISONS AND CULTURAL AFFILIATIONS

Many of the forms and decorative conventions of the Beringa ceramics are clearly related to Wari styles (Figures 12, 13, 14, 16, 17, 20, 29). Fragments of the elaborate, distinctive elite wares described by Menzel (1964, 1968) and others (Cook 1994; Knobloch 1991), including definite examples of Chakipampa and Ocros styles, and possible examples of Viñague, are present but rare (Figure 22). This is not surprising, because Menzel (1964:38, 40) long ago noted "Viñaque influence" in the upper Majes drainage. Many, if not all, of these pieces may have been exotics, as probably were other rare, very fine fragments that recall Nasca<sup>2</sup> workmanship (Figures 18, 26). The occasional more formal Wari pieces link the Beringa assemblage primarily to epochs 1B, 2A, and possibly 2B (Cook 1994; Knobloch 1991; Menzel 1964, 1968). The extremely fine Conchopata and Robles Moqo ceremonial styles are absent. Instead, the closest consistent comparisons are to the regionally variable, more ordinary quality Huamanga ceramics, the vaguely defined Qosqopa (or Q'osqopa, or Ccoscopa)<sup>3</sup> style, and to some extent a regional "rim-slipped tradition" (Sciscento 1989:117-122).

As noted earlier, Huamanga assemblages (Anders 1986; Lumbreras 1974a) are generally related to Menzel's (1968) "secular Viñaque", and may be interpreted as a grade of regionally specific selective syntheses of the simpler aspects of the range of Wari iconography with local or original concepts, adopted for common use not only by elites with ample access to the finer wares for purposes requiring them, but also by rural people of ordinary status who generally had access to only occasional pieces in the more formal styles (Anders 1986:294, 1998:140; Knobloch 1991:252; Lumbreras 1974a181-182; Ochatoma and Cabrera 2001:152). Huamanga ceramics are essentially the more rustic end of the range of variation of Wari ceramics, losing many of the diagnostic features of the formal styles such as Chakipampa and Viñaque and incorporating additional, less systematically controlled motifs and concepts that are not found in the formal styles. This makes it difficult to link most Huamanga vessels or assemblages to any one of the formal Wari styles. At the same time, Huamanga ceramics are not sharply distinguishable from the lower-quality variants of Chakipampa, Ocros, Viñaque, and other formal styles, and separating them involves an arbitrary division of a continuous range of variation.

<sup>&</sup>lt;sup>2</sup> Following Silverman (1993:ix), "Nazca" here refers to the geographical area, river, and town, while "Nasca" refers to the prehistoric culture and style.

<sup>&</sup>lt;sup>3</sup> Continuing the orthographic practices above, I propose to use "Ccoscopa" to refer to the original tomb lot after which the style was named, and "Qosqopa" for the broader and poorly defined stylistic category.

As might be expected of a rural, folk construct, Huamanga ceramics are variable from place to place (Anders 1986, 1998), and do not lend themselves to specific definition in the way that the formal styles do. Even sites in the Wari heartland as close together as Conchopata (Pérez 1998) and Ago Waygo (Ochatoma and Cabrera 2001), separated by only a few kilometers, have distinctly different Huamanga ceramics (Anders 1998). In order to avoid reifying what is in fact a grade of iconographic quality and a degree of relatedness to Wari canons rather than a singular style, I will generally specify the site or region from which a given Huamanga assemblage comes, as in "Huamanga of Aqo Wayqo". Other Huamanga assemblages incorporate different Wari and local traits, forming a regional pattern that might be described as a set of overlapping but differently shaped and centered clines of popularity of various forms, motifs, colors, design organization schemes, and so on, only some of which were shared with the formal Wari styles.

Reconstructing this pattern of overlapping clines would be a large task. Anders (1986, 1998) and Lumbreras (1959, cited in Anders 1986:296) began defining this pattern, and the rapid pace of fieldwork is providing the data necessary to specify it more fully. My purpose here is more limited. In order to better understand the place of the Beringa ceramic assemblage and the people who used it in the geographic and cultural context of the time, I compare the Beringa material to numerous Wari assemblages to which it bears some resemblance. The results are consistent with the conception of Huamanga assemblages that I have just outlined, but beyond that, the comparison highlights the surprisingly strong similarity of the Beringa Huamanga assemblage to the analogous rural traditions in the Wari heartland around Ayacucho. Wari traits in rural ceramics, while regionally variable, do not seem to fade increasingly with distance in the way that might be expected in a distance-decay or center/ periphery model. At the same time, these ceramics are so locally variable and quotidian in quality that they are not likely to have been intended to convey political affiliation or religious symbolism in the manner of a corporate style (Moseley 2001:78-79). I will return to some possible interpretations of this pattern after reviewing the relationships of Beringa ceramics to others in the south-central Andes. I have not had the opportunity to view any of this material except surface scatters in the Majes, Camaná, and Moquegua Valleys and a few museum pieces from Cerro Baúl, so the comparisons are based on published descriptions and illustrations.

#### Comparisons to assemblages from the Wari heartland

Beringa lies about 360 air kilometers from the city of Huari and the Wari rural heartland around it, and considerably farther by any walking route across the extreme landscape between them. Even so, the inhabitants of Beringa regularly used ceramics surprisingly similar to those of the rural Wari heartland population. The considerable distance makes the similarities in the ceramics noteworthy, and the differences expectable.

Among the Huamanga variants in the Wari core, the most striking parallels are with the Huamanga ceramics of Aqo Wayqo (Ochatoma and Cabrera 2001), attributed to Middle Horizon Epoch 1A, 1B, and the beginning of 2A (Ochatoma and Cabrera 2001:197). In particular, the "feathered wing" *escudillas* from Beringa share similar forms, finishes, colors, motifs, and execution with those from Aqo Wayqo, although there are clear design differences as well. The Aqo Wayqo feathered wings are generally used as two pairs of wings joined at their apices, often with an additional motif in the center of each pair. The two pairs are opposed to each other across the diameter of the vessel, and are often separated by a vertical panel motif on each side. The Beringa examples have single wings that all face in the same direction and all have the same color scheme, neither joined as pairs nor opposed across the vessel. They also lack the vertical panel motifs, although one example has stair step (escalonado) designs in their place. Another parallel is the lazy S motif, although it is used in different contexts at the two sites, and is often outlined at Ago Waygo but almost never outlined at Beringa. Both assemblages include horizontal wavy black and white lines bounded by straight lines, typically inside the rims of open vessels, although some details differ. Both include similar escalonado designs, although they are not common at Beringa. Both occasionally organize designs as vertical bars pendant from the rim or in subdivided rectangular registers pendant from the rim, although the registers at Beringa are oriented and subdivided horizontally, while those at Ago Waygo are oriented and subdivided vertically, and are divided into a larger number of separate design fields. Both include squat opposed escalonados pendant from the rim, although these are rare or even exotic at Beringa. Some vessels from Ago Wayqo have grouped black ticks on their rims, sometimes with the groups secondarily grouped by underlying discontinuous white line segments on the rim as at Beringa, but these decorations are apparently scarcer and simpler at Aqo Wayqo. Both assemblages include ceramic spoons of the widespread Ayacucho form. People at both Beringa and Aqo Wayqo occasionally incised angular designs into the slipped surfaces of decorated vessels after firing, although the Beringa examples are generally simpler (Figure 16: CID 292, Figure 26; Ochatoma and Cabrera 2001:164 and plate facing page 100).

The Aqo Wayqo Huamanga ceramics include features that are rare or absent at Beringa, such as chevron bands, interlocking L patterns (Greek frets), the "stoplight" motif of three outlined circles in a vertical panel (Knobloch 1991:253), black vertical S motifs, frequent use of vertically oriented rectangular pendant panels, gray paint, and others. Aqo Wayqo bowls (as opposed to escudillas) tend to be flatterbottomed, with straighter, lower sides than those at Beringa, corresponding best to the relatively scarce Beringa deep bowl form. The Beringa ceramics, in turn, include some features that are apparently rare or absent at Aqo Waygo, such as pendant arc designs, a preponderance of rounded bowl forms including shallow, deep, and small restricted bowls, continuous horizontal lazy S and X bands, lozenge bands, and others. Ago Waygo Huamanga vessels emphasize pendant vertical registers and symmetrical design organizations with paired oppositions that form the principal structure of the decoration of the entire vessel, while Beringa ceramics tend towards directional, continuous band design organizations and rarely establish symmetry or oppositions except within small portions of the design field. Restricted globular vessel forms seem to be more common at Beringa. The Aqo Wayqo Huamanga ceramics formed part of an assemblage that also included a considerable quantity of casually-made Chakipampa ceramics, which were comparatively rare at Beringa. Overall, the similarities are intimate and suggest very specific shared ideas, yet the differences, especially in design organization and symmetry, are profound.

The Huamanga assemblage of Conchopata (Pérez 1998; Lumbreras 1974a) also seems to emphasize the *escudilla form*, which is present but far from preponderant at Beringa, with decorations similar to those on Beringa *escudillas*, including feathered wings pendant horizontally from the interior rim, pendant vertical bars, and pendant squat opposed *escalonados*. If this latter motif is common at Conchopata, that would contrast with its rare occurrence at Beringa. Lazy S motifs in horizontal bands occur at both sites, but while at Beringa they are almost always in a single row on the exterior of a restricted vessel, and most commonly alternate with X motifs, the illustrated examples from Conchopata are located inside open bowls or escudillas, occur as two rows separated by horizontal lines, and apparently lack contrasting motifs. "Comb" motifs are apparently common at Conchopata, but absent from Beringa, while hook or arc (gancho) motifs, present at Conchopata, are very rare at Beringa. Again, both occur at Conchopata in doubled continuous horizontal bands, a form of organization that is rare at Beringa. Lumbreras (ibid:144) illustrates examples from Conchopata with pendant rectangular registers that are subdivided both vertically and horizontally in patterns more complex than any in the Huamanga ceramics at Beringa, where registers are never divided vertically, and horizontally by never more than a single line. Huamanga decoration at Conchopata uses a greater variety of colors than is found at Beringa. Conchopata Huamanga bowl forms tend to be straighter-sided and flatter-bottomed, sometimes have ring bases, and seem to minimize the closed globular forms that carry much of the exterior decoration at Beringa. Conchopata is awash in the formal Wari styles as well, and both these fine wares and the substantial architecture of the site suggest that the context of use of the Huamanga ceramics at Conchopata was probably urban and high-status (Isbell and Cook 2002), in contrast to Beringa's provincial, rural setting. While Beringa ceramics have less in common with the Conchopata Huamanga assemblage than with the more rural Aqo Wayqo assemblage, the similarities are considerably beyond the generic.

Anders dated the Huamanga assemblage of Azángaro in the northern part of the Wari heartland to MH Epoch 2 with some Epoch 1B vessels (Anders 1986, 1991:185, 1998). She identified Huamanga ceramics first by paste and finish characteristics, and then found a consistent set of forms and decorative conventions associated with it, which she called the Wamanga/Wanta style (Anders 1986:308-308, 322). Huamanga ceramics at Azángaro include more bowls than any other form, including rounded, open bowl forms similar to those prevalent at Beringa, as well as escudillas much like the Beringa examples, and rounded bowls with the flatter bottoms that seem typical of the Ayacucho area. These open bowls grade continuously into restricted globular vessels, as at Beringa, but globular restricted forms are much less common at Azángaro. As at Beringa, open bowls are decorated on the inside, deep bowls mostly on the outside, and restricted globular forms only on the outside, these last forms usually with continuous band designs close to the rim in the Beringa manner. More than half of the bowls are decorated, a considerably higher proportion than at Beringa. Bowls at Azángaro often have rim decorations including a black line around the inside of the rim and/or black cross-ticks evenly spaced or in groups on a white ground, very similar to rim decorations at Beringa, but on a much larger fraction of the bowls. Tripod bases occur at both Azángaro and Beringa, although the forms of the feet differ somewhat, and tripods are more concentrated on utilitarian vessels at Beringa than at Azángaro. Motifs from Beringa such as pendant arcs, horizontal wavy lines bounded by straight lines, various other uses of wavy lines, and pendant squat opposed escalonados are present at Azángaro, although they are not common, and Anders is evidently correct to attribute them to coastal influences. The "geometric line motifs" of Beringa are almost identical to examples from Azángaro, although Anders classified those as "Wari ware" instead of Huamanga. Face-neck vessels from Azángaro are modeled and painted very similarly to those from Beringa, but the Azángaro examples have more elaborate headdresses and comprise a larger fraction of the

assemblage. The lozenge band designs with plus-

sign fillers that are common at Beringa also

occur at Azángaro, but only as decorations on

these elaborate headdresses on faceneck jars.

Anders included some sherds with recurved ray designs in the Azángaro Huamanga assemblage. While I classified a few sherds with these motifs at Beringa as Chakipampa or Ocros (Figure 22), the designs themselves are extremely similar. Finally, both Huamanga assemblages include feathered wing motifs that are similar in shape, execution, colors, and context, especially examples in which the wing is pendant from a bowl rim by one long edge. On the other hand, the Azángaro examples seem to follow the paired, opposed design organization of the Aqo Wayqo escudillas, rather than the continuous band organization seen at Beringa. Other feathered wing variants from Azángaro have no parallels at Beringa.

There are also some strong contrasts between the Huamanga assemblages at Azángaro and Beringa. Ring bases are present at Azángaro, but only one example is known from Beringa, on a clearly exotic vessel (Figure 18). The large, deep serving vessels at Azángaro (Anders 1986:408) and the blackware that makes up 3% of the assemblage there are both completely missing from Beringa. This difference makes sense if Anders is correct in suggesting that both were used in state-sponsored feasts, which presumably did not occur in small, informal settlements like Beringa. Related differences in site function might account for the much higher proportion of decorated vessels at Azángaro (over 40%) than at Beringa, where under 20% of sherds are slipped and under 7% are painted. Chevron bands and various feline motifs recur occasionally at Azángaro, but are absent and extremely rare, respectively, at Beringa. Postfire incision was practiced at both sites, but the patterns at Azángaro were often detailed figures similar to the painted iconography, while those at Beringa are simple crosses or only slightly more complex designs that are not particularly intelligible. The small tripod ollas of Beringa seem to be absent from Azángaro. A tripod olla has recently been reported (Valdez et *al.* 2002:398) from a roughly contemporary burial at Posoqoypata, about 5 km from Azángaro, but it is a full-sized vessel with a rim diameter of some 25cm and tall tripod legs similar to some at Jargampata, discussed below.

By far the most common motif at Azángaro, the comb, is completely unknown at Beringa, and the next most common, the "hook" element, is either absent or extremely rare. These motifs are important not only at Azángaro, but also in assemblages at many other sites in the Ayacucho Basin, especially in the northern portion of it (Anders 1986:479-480). Step fret designs, or escalonados, are also common in the Wari heartland, especially the southern portion of the Ayacucho Basin (ibid: 480, 495, 578), but are very rare at Beringa. Design registers or the entire interiors of bowls at Azángaro are so frequently painted a solid color, most often white, that this could be a diagnostic Wamanga/ Wanta trait (ibid: 459, 469-477; Anders 1998: 140), yet only occasional small spaces are filled with white on Beringa ceramics. Decoration from Azángaro is often organized in pendant rectangular registers outlined in black, as at Beringa, but at Azángaro the registers are complexly subdivided vertically and horizontally into up to 16 compartments, while at Beringa these registers are never divided into more than two, always by a simple horizontal line. The elaboration of these complexly subdivided registers is a striking feature of the Azángaro assemblage, and Anders hypothesized that they might reflect cognitive patterns associated with sociopolitical organization and resistance (Anders 1986:465-468). There was no such ceramic expression at Beringa, so if Anders' interpretation is correct, some social, political, and associated cognitive patterns may have been very different at Beringa. Beringa vessels emphasize continuous horizontal design bands, which are uncommon at Azángaro, while Azángaro design organization often emphasizes symmetry and opposition across the vessel, in the manner seen at Aqo Wayqo but almost unknown at Beringa.

In general, the similarities between the assemblages at Beringa and Azángaro are so numerous and specific that there must be a close historical connection, yet the differences are so acute that it seems unlikely that one could have recently derived from the other, or that both could have developed from a recent shared origin. Instead, the Huamanga "grade" model of parallel development through selective adoptions from a shared Wari canon seems a better explanation.

Perhaps the most exhaustively described Wari rural heartland ceramic assemblage is from Jargampata, located east of Huari and a bit further from it than Azángaro (Isbell 1977). Isbell (*ibid*:45) assigns this assemblage to MH Epoch 2A and 2B, roughly cal A.D. 675 through 825. Like Azángaro, Jargampata shares with Beringa many specific forms, motifs, design layouts, and associations while also differing in many ways. Once again, there is a strong relationship, but not identity or parentage. If anything, the Jargampata assemblage seems somewhat less similar to the Beringa material than do those already considered.

Open bowl forms predominate in the Jargampata assemblage, as at Beringa, and they have a similar distribution of diameters and depths. However, while rounded bowl forms are most common at Beringa, casually made *escu-dilla*-like forms with flatter bottoms and straighter flaring sides substitute for them at Jargampata. Globular restricted forms similar to Beringa examples are present at Jargampata, but are much less common. As at Beringa, the more open bowl forms at Jargampata tend to be decorated on the inside, while the steeper-sided, generally smaller-diameter bowls and the occasional globular restricted forms tend to be decorated on the outside. Also as at Beringa, bowls

decorated on both the inside and the outside are extremely rare. The exterior-decorated bowls of Jargampata tend to be shallow, flat-bottomed forms with relatively steep rims that are not typical of Beringa, especially with their frequent addition of tripod tab feet. The percentage of bowls at Jargampata that are decorated varies by form and subperiod, but ranges from proportions similar to those at Beringa up to about twice as many. Tripod escudilla and lyre cup forms are found at both sites in comparable very low frequencies, although they differ in decoration and form details. The straight-sided cups at Jargampata are similar in form, size, and low frequency to the cylindrical and flaring beakers at Beringa, although again, the decorative motifs and layout are different. The thickened rim forms at Jargampata (Isbell 1977: figure 10bg) are similar to those at Beringa (Figure 4), but are used on much smaller vessels. As at Beringa, ring bases are virtually absent. A number of forms that Isbell identifies as exotic to Jargampata also occur at Beringa, including rare but very similar ceramic spoons, two modeled faceneck vessels with plastic and painted treatments strikingly similar to those from Beringa, and two escudillas with interior pendant wing motifs that are close variants of those from Beringa and Aqo Wayqo, but with an angled bar element at the apex of the wing that is not known from either of the latter sites.

Overall, the percentage of more formal Wari style sherds at Jargampata is comparable to that at Beringa, ranging from 0.5% to 6.4%, compared to the 0.9% total of definite Chakipampa and Ocros at Beringa (Tables 5 and 6). The two assemblages are even more similar on this score than these figures suggest, because the Jargampata exotic category is more inclusive than the definite Chakipampa and Ocros categories at Beringa.

Long vertical and horizontal wavy line motifs are common at both sites, often bounded

by straight lines that may delimit a solid color background band. The layouts in which these occur are mostly similar, including vertical bars, pendant rectangular registers, and bands immediately below the interior or exterior rim. The Jargampata versions frequently include many small dots as filler elements, which are extremely rare at Beringa, and they seem to include ring or hook filler elements more commonly than at Beringa. While the pendant rectangular registers are conceptually the same as at Beringa, they tend to be more complexly divided. A variant of the highly specific "colored disk with Saint Andrew's cross" motif (Isbell 1977:85, figure 21, plate 13), often with a vertical line descending from the bottom of the disk, also occurs on a few sherds at Beringa. The Beringa examples differ in being smaller, more finely executed, located on the outside of globular restricted vessels rather than on the inside of open bowls, and rather than having a line descending from the bottom of the disk with the cross, are instead associated with smaller "lollypop" motifs that have a solid disk with a line descending from it (Figure 17: CID 2288). The few examples are atypical enough in finish and execution that they may be exotic. At Beringa, lozenge bands are common and occur only as exterior decorations, while at Jargampata, they are scarcer and also occur on the inside of open bowls, often with the addition of many small dots. Both assemblages include zigzag bands pendant from bowl rims. Both emphasize design areas along or pendant from the rim, although the decoration at Jargampata more often extends most or all of the way down to the interior or exterior base of the vessel.

There are additional differences. The Jargampata assemblage involves a much wider use of paint on unslipped ground, dark red paint, and white paint in broad areas. Jargampata designs much more often include wide bands or design areas outlined in a contrasting color. Small rings or dots as filler elements or in bands are much more common at Jargampata. The brushwork on Jargampata ceramics seems generally more casual and cursive. The small flaring-necked jars of Jargampata are rare or absent from Beringa, and Jargampata's oversized plain bowls, pedestal bowls, most of the tripod foot forms, and the occasional blackware do not occur at Beringa at all. Conversely, the small tripod ollas and very common pendant arc motifs of Beringa are not found at Jargampata.

More generally, the large two-handled utilitarian vessel forms from Beringa (Figures 5, 6) are very similar to examples from Marayniyoq and elsewhere in the Ayacucho Basin, where they have been labeled Huamanga and may be associated with chicha production (Valdez 2002:78).

#### Comparisons to assemblages farther from Huari

Pikillacta, together with the Wari sites of the Huaro Valley just a dozen kilometers from it, represents the easternmost known major Wari occupation on the Amazonian side of the Andes (Glowacki 1996; Glowacki and McEwan 2001; McEwan 1987, 1991). Some 5% of the ceramics from Pikillacta have been classified as Huamanga (or wamanga) (Glowacki and McEwan 2001:40), and the site has been attributed to MH Epoch 1B and 2, possibly continuing still later (ibid: 39-40; Knobloch 1991:253; Menzel 1968:93). Radiocarbon dates bracket Pikillacta between roughly cal A.D. 650 and 1000 (McEwan 1991:111-112, 1996:181 calibrated by OxCal 3.5). The Huaro occupations may have begun earlier (Glowacki and McEwan 2001). Pikillacta escudillas are similar to other Huamanga examples, emphasizing the vertical panels, "stoplight" motif, and chevron bands of some heartland variants that are rare or absent at Beringa. Examples from Qoripata in the Huaro Valley that are identified as Huamanga by Glowacki and McEwan (ibid: figures 17a, 17b) differ considerably from Beringa examples in applying a rectangular register band to the

inside of an escudilla form, filling spaces with many hook motifs, and using color differently in register borders. On the other hand, horizontal and vertical wavy lines flanked by straight lines, pendant rectangular registers, pendant arcs, grouped black rim ticks, and plainware faceneck vessels with coffee bean eyes from Pikillacta parallel Beringa examples remarkably well. Gray paint is common in Huamanga ceramics at Pikillacta, but not at Beringa, while rounded bowl forms, decoration in wide horizontal bands divided into rectangular panels, pendant feathered wings, and other motifs at Beringa are rare or absent among the Pikillacta ceramics. One Nasca canteen from Qoripata (*ibid*: figure 10) is reminiscent of a similar exotic item from Beringa (Figure 18), suggesting participation in a similar network of exchange, despite the sites' separation by some 270 km across most of the width of the Andes mountains.

The Pampas-Qaracha area, about 70 km south of Huari, is on the outer fringes of the immediate Wari heartland, or perhaps outside of it (Valdez and Vivanco 1994; Vivanco and Valdez 1993). While this area is almost directly between Beringa and Huari, at 320 km from Beringa, it is actually a bit farther away than Pikillacta. The Huamanga assemblages identified by Vivanco and Valdez (ibid:95-96) in the Pampas-Qaracha area comprise the most reduced and derived heartland variant considered here. It is not radiometrically dated, but the more formal associated ceramics suggest an initial occupation in MH epoch 1B, with most of the material pertaining to epoch 2A (Valdez and Vivanco 1994:146; Vivanco and Valdez 1993:97). The open plato forms are similar to the shallow bowls at Beringa, and similarly tend to be decorated on the interior. The bowl forms resemble Beringa's globular restricted forms, and the decorated examples in the illustrations are all painted on the exterior, emphasizing the band below the rim, as at Beringa. Pendant "feathered wing", rectangular panel, and horizontal wavy line motifs in the Pampas-Qaracha material are similar to examples from Beringa, albeit generally more casually executed. The general use of red and orange slip with black, white, and red paint (ibid: 1993:95) is similar to the Beringa ceramics. The Pampas-Qaracha Huamanga vessels also include a gray paint that was almost unknown at Beringa, and the illustrations (ibid: 1993:96) indicate brown, rather than red, painted decoration in a choice of terms that could be applied to the the Beringa "red" paint color as well. Other Pampas-Qaracha motifs, such as vertical lines on the exterior of bowls or escudillas, variants of horizontal chevron bands, and grid patterns, have few or no parallels at Beringa except among a few clearly exotic sherds. Once again, the relationship to Beringa is present in some specific features, yet the assemblages are also quite distinct.

To the northwest of Huari, and much farther away from Beringa, intrusive tombs at Cajamarquilla include formal Wari ceramics and at least one escudilla identified as Huamanga (Mogrovejo and Segura 2000:578-579). The escudilla has pendant wing motifs similar to those from Aqo Wayqo, and more distantly related to those from Beringa. A short journey away on the coast, Pachacamac is the apparent center of the Wari style of the same name (Menzel 1964) that might seem likely to bear some connection to Beringa. However, Pachacamac ceramics are generally finely made, iconographically loaded, presumably ceremonial objects, and as Kaulicke (2000:336) notes, they are usually found in mortuary or offering contexts clustered in widely separated "islands", suggesting an entirely different context of use than the quotidian Huamanga grade of ceramics. Not surprisingly, then, the forms and decoration of Pachacamac style ceramics generally have little overlap with the Beringa material.

Moving south along the coast, we come to Cerro de Oro in the Cañete Valley, where there was a dramatic change in architecture, iconography, and ceramics with a wave of Wari and Nasca stylistic traits early in the Middle Horizon (Ruales 2000). Nevertheless, the resulting style had little in common with the Beringa assemblage except for the most clearly Chakipampa and Nasca pieces. The Wari influence in the Cañete Valley seems to have been of a nature different from that in Majes.

Almost the same holds true two valleys further south, at El Carmen in the Chincha Valley (Alcalde et al. 2001). In this case, however, the Wari mortuary ceramics also include a few smoothly rounded bowls that begin to approach the form of bowls and restricted globular vessels from Beringa. One has an exterior band of X motifs just below the rim in an organizational modality familiar from Beringa. Two escudilla forms are comparable to those from Beringa, and a faceneck jar has modeled and painted treatment broadly similar to the Beringa examples. Aside from the faceneck jar, the colors and motifs on all of these vessels are quite different from those at Beringa, but the shared features do constitute a few faint echoes of the Majes assemblage not noted in the coastal styles to the north.

Continuing south along the coast, the first strong parallels with the Beringa material appear in Middle Horizon burials and offering caches from the Ica-Palpa-Nazca drainages, roughly 300 km from Beringa (Isla 2001). Burials of this period include Chakipampa, Atarco, and Pinilla ceramics as well as the local Nasca 8 or Huaca del Loro style (Paulsen 1968; Silverman and Proulx 2002:35-37; Strong 1957:36-43). Loro style ceramics, both from burials and from the ritual interment context of the Room of the Posts at Cahuachi (Silverman 1987, 1993:174-194, 228), strongly reflect Ayacucho influences, especially in aspects that remind Isla (2001:556) of Huamanga ceramics and Silverman (1988b: 27) of vessels from Jargampata (Isbell 1977) that I have treated here as Huamanga. Numerous rounded bowl forms resemble those from Beringa, although they tend to the deeper variants rather than the shallower ones that are most common at Beringa. Escudilla-like cumbrous bowl forms are also present. Bowls and escudillas tend to be slipped on just the upper exterior wall and on a band below the rim, as at Beringa. Bands of white X motifs on a dark ground recall portions of some lazy S and X bands from Beringa, and the lozenge bands around the exterior rim of deep bowls are also similar. These similarities to Beringa examples are particularly clear among bowls from a single gravelot that Isla identifies as Atarco in style (Isla 2001:571). In addition, four bowls from this lot are decorated with a sinuous horizontal line with shallow arcs or horizontal lines in the alternating spaces above and below the line. This design is not found at Beringa, but it is analogous to the more angular zigzag band with horizontal lines design that is common on the same location on almost identical deep bowl forms at Beringa. Pendant interior arcs in the more open bowl and escudilla forms are similar to some from Beringa, while differing in the absence of wavy arcs and in having slip applied only in the area of the arcs, not in a narrow band all around the interior rim. Strong (1957: figure 18e) and Paulsen (1968: figures 12a, 12b) illustrate a bowl with interior shallow pendant arcs in each quadrant, somewhat reminiscent of some Beringa bowls, but different in color, slip patterning, the solid filling of the arcs, and form. Strong assigned this bowl to the Early Ica period, and Paulsen labeled it Pinilla. A few shallow bowls from Late Nasca (Strong 1957:30) through what Isla identifies as Atarco (Isla 2001:575) have exterior lazy S bands that are similar in concept to Beringa examples, albeit different in detail and execution. A close variant of a pendant arc motif flanked by vertical lines found inside escudilla-like forms from burials at Pacheco and Los Medanos (ibid: 575a,c) also occurs inside a few shallow bowls at Beringa, including one that combines the motif with the nested pendant arcs and wavy arcs that seem to be unique to Beringa (Figure 27: CID 2365). The emphasis on bowl forms and decoration associated with the rim is characteristic of Beringa. Nevertheless, the Ica-Palpa-Nazca examples tend to have more colors and include an extensive repertoire of additional forms and motifs that are rare or absent at Beringa.

A small Middle Horizon mortuary assemblage from Tambo Viejo, in the Acarí Valley (Kent and Kowta 1994), slightly closer yet to Beringa, might be expected to continue the pattern of increasing similarity with increasing proximity. It does not. These ceramics seem to be a locally idiosyncratic style that combines Nasca, Chakipampa, and other concepts, but with little that resembles Huamanga material or the Beringa assemblage except for the few Chakipampa fragments there.

Due east of Tambo Viejo is the highland Cotahuasi Valley, slightly less than 100 km from Beringa and almost directly between it and Huari. Jennings and Yépez (Jennings 2002; Jennings and Yépez 2001) describe a range of ceramics from Cotahuasi that include some with generic similarities to those of Beringa. The Middle Horizon ceramics that they identified range from local imitations of Chakipampa, Ocros, and Viñaque styles through local styles that reflect Wari influence. Among all of these is a preponderance of open and closed bowl forms that parallel the bowls, globular restricted forms, and possibly escudillas that are common at Beringa. The illustrations suggest a similar tendency towards exterior decoration associated with the rim, often in continuous band or rectangular register band design modalities as at Beringa, and some generally similar, although not identical, motifs. The presence but scarcity of the lyre cup form is like that at Beringa. Some Cotahuasi vessels have ticks along the rim, although these seem to be evenly spaced, rather than grouped, sometimes located more towards the inside of the vessel, and are sometimes white, which is not seen at Beringa. Some motifs that are described but not illustrated may also be similar. Other features, such as the frequent use of cream slip, purple paint, chevron bands, concentric and interlocking circles, columns of S curves, and so on, are rare or absent at Beringa. Interestingly, some of the closer specific parallels (Jennings 2002: figures 6.8, 6.9, 6.12) are with notably atypical Beringa sherds, which might be exotics from somewhere closer to Cotahuasi.

Jennings' Pullhuay style in Cotahuasi (ibid:298-301) is, as he notes, apparently the local version of a broadly distributed tradition that in the central Colca Valley has been called "red-slipped rim" (Denevan 1987:57-59), "rimslipped" or "Material 1" (Malpass and de la Vera Cruz 1988:209; 1990:44-46), and "red rimslipped" or "partially red-slipped" (Brooks 1998: 349-353). In the Chuquibamba area, Sciscento (1989:117-122) called similar ceramics "red rimslipped", "partially red-slipped" and "rimslipped". The consensus of all these authors, with the possible exception of de la Vera Cruz, is that this general tradition was probably a widespread southern highlands feature from the Middle Horizon into the Late Horizon. As well as I can tell from the descriptions, this material bears a broad resemblance in form, finish, and slip to many of the plainer bowls from Beringa. Nevertheless, the Cotahuasi variant does differ from the Beringa material in its particular painted motifs, more interior location and uniform spacing of rim ticks, and more frequent use of patterns done in red slip.

Overall, the Cotahuasi ceramics seem to share some general, probably regional, qualities with the Beringa material, while not strongly resembling the Huamanga material of Ayacucho, the more Huamanga-like aspects of the Beringa assemblage, or what may be more locally-specific features at Beringa. The Cotahuasi material is not obviously intermediate between the Beringa and heartland Huamanga assemblages, as would be expected in a distancedecay model. That is, Beringa and Cotahuasi seem to have acquired or developed their different Wari ceramic traits independently, rather than in a progression from Huari to Cotahuasi to Beringa.

The last distant comparative ceramic tradition of interest here is from the central Colca Valley (Denevan 1987; Malpass and de la Vera Cruz 1988, 1990; Wernke 2003), including the small Río Japo Basin that is tributary to it (Brooks 1998). This highland area is in the upper drainage that feeds the Majes River, about 100 km from Beringa and separated from it by a long, deep, narrow, and only sporadically habitable rocky canyon. Sherds with clear Wari influence are scarce. As already noted, "rimslipped" or "Material 1" and related ceramics from the central Colca Valley are probably part of the same widespread and long-lived tradition of plain and slightly decorated vessels that seems to be the basis of some of the Beringa assemblage. The specific rounded shapes, as well as the strong emphasis on bowls and globular restricted forms (Wernke 2003: figures A-12 to A-17), are very similar in the central Colca and Beringa material. Some of the rim-slipped vessels, as well as Malpass and de la Vera Cruz's relatively rare "Material 2" Wari-related ceramics, have lozenge bands containing plus-sign or lazy S motifs that strongly resemble Beringa designs, despite differences in colors, the occasional location of the design on the inside of bowls, the use of the lazy S in a context that is not seen at Beringa, and the addition of stacked short horizontal lines as filler elements outside the lozenges. This last variation, though, recalls the zigzag band with horizontal lines design from Beringa, even to the alternation of the colors from one stack of lines to the next. Exterior bands of X motifs touching the rim are similar, albeit not identical, in both valleys. One of the illustrated "Material 2" sherds recalls Huamanga vessels with rectangular registers filled with hook motifs, although this particular decoration was not found at Beringa. "Material 2" vessels also often had black lines around the rim, as at Beringa, and black or white rim ticks. However, these do not appear to have been grouped as the Beringa examples usually were, they include white rim ticks that were not seen at Beringa, and they are not reported to occur on orange or white lines along the rim, as on some Beringa vessels. Many of the central Colca "Material 1" sherds have pre-fire incised designs, of which only a single example was noted at Beringa. The impressed dot and ring designs that Wernke (2003:470) notes on some Colca Middle Horizon sherds are absent from Beringa. The close relationship of the ceramics from Colca and Majes is clear, while they are nevertheless clearly distinguishable.

Ceramics from the central Colca that are generally associated with the Late Intermediate Period, including Brooks' (1998:317-349) Collaguas style, Wernke's (2003: figures A-20 to A-30) Collaguas I and II styles, and the poorly defined Chuquibamba style (discussed more specifically below), also show some strong resemblances to some of the Beringa material. This may be because some features of these styles actually originated during the Middle Horizon, or because the similar vessels from Beringa are intrusive Late Intermediate mortuary offerings. The inventory of bowl and globular restricted forms in Collaguas ceramics is similar to that at Beringa, although the central Colca seems to lack the escudilla form that tends to carry the most diagnostically Huamanga decoration at Beringa. Many of the distinctive hatched and cross-hatched designs of the Collaguas ceramics occur at Beringa, especially those in which the outline of the figure is thicker than the hatching or crosshatching lines within it. These sherds are not common at Beringa, though, and they may be exotics. Some of the Beringa examples seem better executed and have more colors than the Collaguas examples, hinting at a possible as yet unknown third area as the center for these motifs. Some of the Collaguas sherds recall Beringa Black and Red on Tan designs, albeit not closely, while the use of black rim ticks is comparable even though they are rarely grouped as at Beringa. There are considerable differences between the assemblages, too, with the Collaguas material including common adorno appendages on bowl forms, frequent bird and animal motifs, spoked wheel and eight-pointed star motifs, straight lines with a chain of arcs attached to one side, and other features that are never seen at Beringa. As with the Cotahuasi assemblage, the central Colca material lacks many notable features from Beringa, including pendant interior smooth and wavy arcs, lazy S and X bands, and feathered wings.

There is a clear, and by no means surprising, historical connection between the central Colca ceramics and the Beringa assemblage. However, most of the similarities are either general, in the vessel forms and patterns of slipping of the rimslipped category, or very regionally specific and not very common, such as the hatching motifs. They seem to share only a few of the Huamanga-grade features of the Beringa assemblage. Only a handful of clearly Wari sherds have been recovered from the central Colca (Brooks 1998:308-309), in contrast to their relative ubiquity and influence in the Majes Valley. As Wernke (2003) notes, the relationship of people in the Majes Valley to Wari seems to have been stronger than, and probably qualitatively different from, that of the inhabitants of the central Colca.

It is necessary here to take a detour to the anomalous site of Cerro Baúl, some 200 km southeast of Beringa, in the region more directly influenced by Tiwanaku. The ceramics from this site and its neighbors in the small Wari enclave above Moquegua are predominantly Chakipampa and Ocros, with a few possibly Conchopata vessels (Williams et al. 2001). There are also some variants that have been identified as Viñaque and Qosqopa (Moseley et al. 1991:135; Williams and Isla 2002:92), although these categories, especially Qosqopa, cover a very broad range of variability. Watanabe (1984:45) illustrates some sherds from Cerro Baúl that have pendant rectangular panels and wavy line motifs that are reminiscent of Huamanga assemblages and some Beringa examples. Other than these, there are few specific analogies to the Huamanga-grade material at Beringa. In general, because the more formal styles are only scarcely represented at Beringa, the assemblages are broadly different and presumably reflect different functions or processes at the sites. Both were linked to the larger Wari tradition, but probably in different and not directly related ways.

Finally, Haeberli (2001) compiles a few scant references and his own observations of some Wari material from the Ocoña Valley, adjacent to Majes drainage to the north, and the Sihuas Valley, adjacent to the south. The extent and nature of any Wari occupations in these valleys is still unclear.

#### Comparisons to assemblages in the immediate region

The Chuquibamba area is a small highland drainage that flows into the Majes River, centered about 40 km from Beringa. It gave its name to the Chuquibamba ceramic style, generally dated to the Late Intermediate Period and Late Horizon (Sciscento 1989:111-117). Chuquibamba is also where the Ccoscopa tomb was located. This large mortuary deposit of ceramics was the basis for Neira and Lumbreras's (Lumbreras 1974a:144, 1974b:155-157, 174-175; Neira 1990:129-136) definition of the Qosqopa (or Ccoscopa) style, a regional expression of Wari ceramic concepts loosely reminiscent of the less fine or "secular" variants of Menzel's Viñaque style (Lumbreras 1974a:144, 1974b:155-157, 174-175; Menzel 1964, 1968).

As already noted, Sciscento's (1989:117-122) "red rim-slipped" and "partially red-slipped" wares in Chuquibamba seem to be part of a wider general tradition in which Beringa also participated. However, the black line designs that she illustrates as typical of "partially redslipped" ceramics bear virtually no resemblance to any Beringa decorations, even on unusual or possibly exotic pieces. This supports Sciscento's (*ibid*: 121, 132) suspicion that the undecorated "red rim-slipped" ceramics were earlier, starting in the Middle Horizon, while the "partially slipped" ones with painted decoration developed later, presumably after Beringa was abandoned and could no longer be affected by them.

Sciscento identified many Qosqopa sherds in surface collections at five residential and mortuary sites without visible diagnostic Wari architecture (ibid: 123-124, 162-171, 244-252, 264-270), including Número 8, which is sometimes hypothesized to be a Wari center (Schreiber 1992). Oddly enough, while the rounded bowl and globular restricted forms strongly resemble those prevalent at Beringa, there are few other specific parallels between these sherds and the Beringa material. One slightly modeled faceneck vessel is painted in roughly the same manner as the Beringa examples, a few sherds might be comparable but do not have specifically diagnostic features, and most do not particularly resemble the Beringa material at all. In addition, Sciscento's Qosqopa sherds have a cream or light orange-beige slip, which is either a variant of the tan slip found on a small minority of Beringa sherds, or a feature that is absent from Beringa altogether. The Chuquibamba Qosqopa sherds have a wider range of grays and reds in the paint colors, while apparently lacking the orange that was common at Beringa. The motifs on a few of Sciscento's "miscellaneous polychromes" (Sciscento 1989:172b, 174a) recall some Beringa ceramics, but these are motifs that are also found on Collaguas ceramics from the central Colca Valley. They probably reflect Collaguas imports or influence at both Beringa and the Chuquibamba sites. The lack of an unmistakable correlation between two Wariinfluenced collections located only one or two days' walk apart in the same drainage is surprising.

On the other hand, some of the vessels from the original Ccoscopa tomb lot, along with other unprovenienced pieces that have been labeled as Qosqopa, do correspond to Beringa ceramics (Lumbreras 1974a:144; Neira 1990). The Qosqopa style is not well defined. The term is used for a wide range of Wari-related ceramics, from pieces that should probably be called Chakipampa, to others that fall in the Huamanga or Viñaque range, to others that are idiosyncratic variants. Sciscento's Qosqopa sherds tend to lack many of the more specifically characteristic features illustrated by Neira and Lumbreras, suggesting that they may not be part of the same assemblage, and may reflect different social processes. Pieces that have been called Qosqopa probably fall in a wide date range, perhaps beginning as early as Epoch 1, continuing through the Middle Horizon, and reaching into the Late Intermediate Period for the more derived variants, some of which have similarities in form and decoration to the supposedly Late Intermediate Period Chuquibamba style.

The Ccoscopa tomb collection included sherds of small restricted globular bowls and flaring beakers that are nearly identical to examples from Beringa (Neira 1990:133). Qosqopa and Beringa ceramics share the same common modalities of decorative organization in wide horizontal bands below the rim, optionally separated into rectangular registers by broad divider panels. The two assemblages also share the characteristic un-outlined lazy S motif, often alternating with Xs that have dots or short wavy lines in the angles between the arms. Both the camelid-shaped vessel (Figure 18) and the monkey-headed vessel from Beringa have good analogues among unprovenienced Qosqopa ceramics (Neira 1990:135 A and C), although these vessels could come from Majes or even Beringa itself. Rings with central dots of the same color, solid circles with central dots of a contrasting color, the arrangement of rectangular register dividers with a wide center panel flanked, but not touched, by narrow lines in a contrasting color, and variants of feathered wings all occur in both assemblages. Nevertheless, many typical forms and designs from Beringa, including shallow bowls, pendant arcs, horizontal wavy lines, and others, do not appear among published Qosqopa ceramics. Similarly, common Qosqopa features such as a simplified profile head with a single curved feathered wing, and horizontal rows of solid triangles in one color pointing up and another pointing down (Lumbreras 1974a:144 b, c, e), are not found at Beringa. Even the Ccoscopa tomb lot includes vessels that would stand out as aberrant at Beringa. The Ccoscopa tomb may have contained Wari variants from multiple sources. Given the poor match of Sciscento's surface collections to the Beringa material, the close parallels to Beringa in Chuquibamba may be restricted to a subset of the vessels in a limited number of special mortuary contexts. These could represent exotic items that circulated with other Qosqopa vessels in a network of exchanges of relatively elaborate, regionally produced pieces bearing Wari-derived iconography suitable for mortuary and ritual purposes. Exchange of such special items might be expected to be more spatially extensive than domestic economic interactions, which apparently did not transfer many Huamanga-grade ceramics between Beringa and Chuquibamba.

The Beringa material also has a few parallels in the Chuquibamba style. The most striking example is a *cántaro* with an eight-pointed star motif (Figure 21) that is very similar to an unprovenienced vessel classified as Chuquibamba style by Neira (1990:137 B). These pieces recall southern Peruvian tricolor del sur styles usually associated with the Late Intermediate Period, and in fact a radiocarbon date on the burial that contained the cántaro falls in the Late Intermediate Period (Tung 2007). On the other hand, virtually all other Chuquibamba decorative motifs, many Chuquibamba forms, the usual dark, lustrous finish, and the frequent use of design organization modalities that involve floating motifs and undelimited design areas (Lumbreras 1974b:212; Neira 1990:137-138; Sciscento 1989:111-117, 137-156) do not occur at Beringa. The traces of Chuquibamba ceramics at Beringa are apparently limited to a few examples from intrusive Late Intermediate Period burials.

Not surprisingly, the ceramics most similar to those at Beringa come from other sites in the same valley. As noted earlier, Garcia and Bustamante (1990) surveyed a large portion of the Majes Valley, including the area around Beringa. Based on their work and my own visits to some of the sites, at least five other Majes sites have assemblages generally similar to Beringa's. These sites include La Real (Tung 2003), Huario, Casquiña, Santa Rosa II, and Huancarqui, although I may have visited a different site near Huancarqui. Widespread shared features include lazy S and X bands, X motifs with dots or other fillers between the arms, Beringa's "geometric line motifs" (Figure 25), profile felines, pendant vertical bars, grouped rim ticks, a preponderance of Beringa-like bowl and globular restricted forms, occasional extremely thickened utilitarian rims (at Beringa and Huancarqui, at least), the zigzag band with horizontal line designs, lozenge bands with plus-signs inside the lozenges, a creature with pinniped-like hind limbs (Figures 17:CID 340 and 26: CID 354; Garcia and Bustamante 1990:39), and a rectangular face with a headdress bearing a short vertical feathered wing in the center and a longer, curved two-feathered wing drooping down from the top edge on each side (Figure 11: CID 606,607,608; ibid: 1990:30). Despite the strong similarities, some forms and decorations from other Majes sites are not found at Beringa, and the shallow bowls with pendant arc motifs so common at Beringa seem rare at other sites. These differences may indicate that the sites are not fully contemporary. They could also reflect functional differences, because the Majes sites range from a ceremonial mass mortuary site at La Real (Tung 2003), through villages of varying layout, size, and density with associated burials at Beringa, Huancarqui, Casquiña, to extensive but probably only periodically occupied encampments where major transit routes enter or exit the valley, as at Huario and possibly Santa Rosa II.

Downstream from the middle Majes where Beringa is located, in the Camaná Valley, there are not only numerous villages and cemeteries with surface scatters grossly comparable to Beringa's, but also an architectural compound that suggests a Wari planned installation. Malpass's 1996 excavations at this site, Sonay, produced just a handful of decorated sherds. This material is consistent with Beringa ceramics and other Wari-related material, but is not diagnostic enough to associate with any particular style or assemblage. Until further material is studied, the probably close relationship of Wari domestic assemblages in Camaná to that of Beringa can only be assumed.

# Comparisons to utilitarian forms in other assemblages

Utilitarian ceramics are less fully illustrated and described than are decorated ones, so comparisons are limited. Nevertheless, it appears that the plainwares from Beringa differ from those in many other Wari assemblages. Plainwares from Aqo Wayqo and Conchopata often have a single vertical strap handle that rises high above the rim of a medium-sized widemouthed pitcher form with a pointed base. Neither these handles nor this body form and size combination are found at Beringa, although such bodies might be difficult to identify from sherds alone. Cooking pots from Aqo Wayqo and Azángaro emphasize larger, wide-mouthed, flat-bottomed ollas with horizontal strap handles, a form unlike any known from Beringa. Squat, flat-bottomed ollas with a single "basket" handle above the squared, thickened rim are described from Aqo Wayqo (Ochatoma and Cabrera 2001), Azángaro, Conchopata, Jincamocco, Pikillacta (Anders 1986), and Huari itself (Bennett 1953), but no sherds of this easily identifiable form were found at Beringa. Instead, cooking at Beringa was often done in small, globular, vertical-handled ollas with or without tripod feet, which are not mentioned or illustrated in other Wari-related assemblages. Tripods do occur in some Wari styles, but more often on bowls, while they are primarily used on cooking vessels at Beringa. As noted in the discussion of the Jargampata assemblage, there are a handful of tripod bowls there, but not ollas, and the forms of the feet and the vessels themselves are generally different (Isbell 1977). The very large, open, thickened-rim utilitarian vessels at Beringa do not seem to have a close correlate in the Wari heartland, where thickened rims do occur, but with a more triangular section and on rims of smaller diameter (Anders 1986:370-373). The large plainware vessels from Beringa apparently differ from those in some assemblages, sharing the general body and mouth shape of some vessels from Azángaro and Aqo Wayqo, but with considerably larger sizes and lower, vertical handles, while they closely parallel large vessels associated with chicha production at Marayniyoq and other sites (Valdez 2002). While Silverman (1988a:421) reports "denecked" vessels set into floors at Cahuachi, a Nasca center, this common treatment of large utilitarian vessels at Beringa does not seem to have been noted at other Wari sites.

#### Summary of comparisons

The Beringa assemblage is at least generally representative of ceramics found on at least six sites in the Majes Valley, and is presumably closely related to assemblages from the Camaná Valley downstream. The Beringa material shares multiple, specific features with Huamanga-grade assemblages from the Huari heartland, its outer edge in the Pampas-Quaracha area, and its outpost at Pikillacta and Huaro, while also differing considerably from each assemblage considered here. The shared features are different from site to site. That is, there is no single package of Huamanga traits that Beringa shared with the other sites, but instead the Huamangagrade ceramics at each site seem to incorporate different but partially overlapping selections from a pool of Wari traits. Another way of glossing this pattern is that these assemblages represent local combinations of many overlapping but differently distributed stylistic clines, of which we regard the combination at Huari as being particularly important. Some assemblages outside the heartland, like those of Pikillacta and Huaro, might have been transplanted as assemblage units from somewhere in the core, or might have maintained long-term connections with some portion of the core, over time developing a combination of Huamanga-grade features and ceramic traits local to the peripheral region.

The assemblage at Beringa may be somewhat more different from these heartland and outlying assemblages than they are from each other, but not drastically so. The specific similarities in forms, colors, motifs, designs, design organization modalities, and so on between Beringa and the Huari core is striking, given that these ceramics were evidently not an explicitly standardized corporate style and were used and probably made so far away from Huari. One possible explanation is that the Beringa and other Majes assemblages represent a wholesale transplantation from somewhere in the Wari heartland. On the other hand, the many apparently regional features of the Beringa assemblage hint at some other or additional process.

Parallels with the coastal expressions of Wari were much more tenuous. From Cajamarquilla and Pachacamac to Tambo Viejo in Acarí, only the occasional vessel in a Wari grave lot resembles Huamanga material, and these match the heartland Huamanga variants rather than the Beringa assemblage. The notable exception is the Ica-Palpa-Nazca region, where a small subset of the forms and very diverse motifs have a general relationship to those common at Beringa, and a few vessels very much like Beringa examples are reported, apparently from just a limited number of burials and the ritual interment of the Room of the Posts at Cahuachi. The more broadly distributed similarities probably reflect regional traditions that affected both the Majes and the Ica-Palpa-Nazca area. The more specifically similar vessels might, if they are truly limited to burial and ritual contexts, be exotic to the Ica-Palpa-Nazca area, brought in by exchange or visitors. If this material also comes from habitation debris, then Beringa-like Huamanga-grade ceramics may either characterize a larger area than it currently seems, or the Majes and Ica-Palpa-Nazca regions may be cultural islands of a similar nature. More work in the valleys between Acarí and Camaná is needed to determine if this region represents a coastal extension of Wari culture that could have included Beringa without need for direct highland contacts.

Closer to Majes, both Cotahuasi and the central Colca Valley share with the Beringa assemblage a general "rim-slipped" category described by Sciscento (1989:117-122), seemingly anchoring at least some aspects of the Beringa assemblage in a local, not intrusive, tradition. The Wari ceramics of Cotahuasi are not particularly similar to either heartland Huamanga assemblages or the Huamanga-grade ceramics at Beringa. Cotahuasi is geographically intermediate between Beringa and the Wari heartland, but its ceramics stylistically are not. The amount of Wari material from the central Colca is very limited, but it does have some similarities with the Beringa assemblage, along with distinct differences. Some traits or perhaps even imported pieces of the central Colca Collaguas style appear at Beringa, although the match is not perfect and might instead reflect interaction with some third location or later, intrusive burials.

The same pattern continues in the tributary valley of Chuquibamba. Chuquibamba also participated in the regional rim-slipped tradition. The surface-collected Wari-related material, though, generally does not match the Beringa assemblage. The Beringa material finds strong parallels only in a subset of the vessels in the Ccoscopa tomb, which may have contained pieces drawn from a variety of different regional Wari assemblages. The overall impression is that the Beringa assemblage incorporated regional ceramic attributes also found in Chuquibamba, Cotahuasi, and the central Colca, but had a set of Wari or Huamanga traits both different from, and more ubiquitous than, those in the neighboring areas. It is as though the Beringa variant of Huamanga-grade ceramics had leapfrogged over the surrounding regions, yet had accumulated enough regionally specific traits to be very distinct from the Huamanga-grade ceramics of the rest of the Wari realm.

#### CONCLUSIONS

Based on the assemblage-level similarities discussed above, as well as the presence of many individual traits discussed by Menzel (1964, 1968), Cook (1994), and Knobloch (1991), the decorated ceramics from Beringa suggest a chronological position from Middle Horizon Epoch 1B through 2A or 2B, that is, during the period in which Wari's influence or control expanded dramatically and reached its maximal geographic extent. Cook (1994:90-98, 330) suggests that these stylistic categories may not be sequential, preferring to lump some of Epoch 1A, Epoch 1B, and some of Epoch 2A as "Period III", which she places around cal A.D. 575 to 675. She suggests that Epoch 2A and 2B are difficult to separate and that they constituted largely a coastal phenomenon, interpretations which fit comfortably with the Beringa material and might permit extending Beringa's occupation a bit beyond her "Period III". The idiosyncratic features of the Beringa ceramics might be taken to reflect their geographic distance from the source of Wari inspiration, as in a provincial variant of a heartland assemblage. Alternatively, they might have resulted from a period of local development after an initial Wari inspiration occurred, making them a late, locally derived stylistic descendant of an earlier Middle Horizon style. However, the locally specific qualities of the Beringa ceramics do not seem much stronger than analogous local aspects of the Huamanga variants in the Wari core, which are variously attributed to Middle Horizon Epochs 1 and 2. That is, the degree of local variation specific to Beringa need not imply a cultural or chronological distance from Huari that is greater than that of any particular Huamanga assemblage in the heartland. In short, most of the Beringa assemblage falls within the stylistic range associated with the period of widespread Wari influence in the Middle Horizon, whatever the dates of that influence prove to be. There is some intrusive Late Intermediate period material, but the scarcity of Chuqibamba style ceramics and of motifs typical of the decorated "partially redslipped" tradition suggests that it is limited.

After the conclusions above were written, four radiocarbon dates generally confirmed them (Tung 2007). Two dates on *in situ* architectural elements and one on an organic crust
burned onto a large utilitarian vessel (Figure 6:CID 304) all fell between cal A.D. 540 and 770, at the 2-sigma level. The fourth dated the burial that contained the Chuquibamba-like cántaro HE 379 (Figure 21:CID 286). As the ceramic style suggested, this burial dated to the first half of the Late Intermediate Period, between cal A.D. 1040 and 1280 at the 2-sigma level. The ceramic analysis and the radiocarbon dates both indicate that the architecture and midden on the site are mostly Middle Horizon as described above, as are most of the burials from which the whole ceramics came. Some of the burials, however, represent reuse of the site as a cemetery up to perhaps 500 years after its abandonment.

The material illustrated by García and Bustamante (1990) and personal inspection of numerous sites suggest that the ceramics from Beringa are not unusual in the Majes Valley. In the area surveyed by García and Bustamente alone, there were at least five other sites with similar ceramics. Beringa was almost certainly not an isolated pocket of foreigners surrounded by a local population. On the contrary, general conclusions about the people at Beringa will probably apply to a significant part, if not all, of the population of the Majes Valley at the time.

The Beringa assemblage fits the Huamanga "grade" model much as the Wari heartland assemblages do. It shares with the heartland Huamanga assemblages a variety of traits that seem numerous and specific enough to imply significant contact or shared heritage. Many of the most broadly shared traits are those that would have been selected from the corporate Wari canon that all the Huamanga variants apparently referred to, such as feathered wings, ways of representing people on faceneck jars, recurved rays, and felines. The traits that differ the most are those that had little to do with the corporate Wari style, but were apparently specific to each region, such as combs, hooks, lazy S and X bands, lozenge bands, conventions of dividing pendant registers, and so on. Like all Huamanga assemblages, the Beringa material is a local variant. But it is not drastically more divergent than any other.

The mosaic of local, regional, and Wari features in the Beringa ceramics suggests that they arose through a process similar to that proposed for the Huamanga assemblages near Ayacucho (Anders 1986, 1998; Ochatoma and Cabrera 2001), in which an existing population with its own ceramic tradition incorporated a subset of motifs from Wari iconography into its own syncretic secular fineware tradition. Each population emphasized different but partially overlapping subsets of the Wari repertoire. Like other Huamanga-grade assemblages, the Beringa variant of the Wari tradition incorporated Wari ideas into the decorated pottery in common use. Wari influence was not separated from the general decorative tradition in the way that Inka corporate style ceramics existed alongside local decorative styles, although perhaps the rare, fine Chakipampa and Ocros pieces played such a role. In other words, the decorated Beringa ceramics seem to indicate a population that was culturally "Wari" in a manner and degree comparable to rural groups just kilometers from the urban capital.

Yet the utilitarian plainwares at Beringa differ significantly in form, size, and presumably function from those used in the Wari heartland, suggesting that the population at Beringa that adopted Wari decorative ideas differed significantly in domestic traditions and organization. At Beringa, food was often prepared for either just one or two individuals, or for large groups of one or two dozen or more, in contrast to the Ayacucho area, where food was more commonly prepared for groups of typical family size. The cuisine or cooking methods that made flatbottomed ollas and single, high handles the norm near Ayacucho and Pikillacta were not important at Beringa. The methods of handling In addition, the practice of post-fire engraving at Beringa emphasized a single, simple plus sign motif, in contrast to the varied and more complex patterns reported around Ayacucho. If post-fire engraving was part of a system of tracking ownership, exchange, or identity (Ochatoma and Cabrera 2001:162), then the corresponding system at Beringa was apparently simpler or different.

nary households were apparently less common

in the Wari heartland.

These domestic practices, involving cooking methods and cuisine, the size of groups for whom food is prepared, food or liquid storage and transport, and possibly the identification and tracking of goods, are probably rarely manipulated consciously, nor casually changed. The differences in such basic, daily matters suggests that the culture in the middle Majes Valley that came to reflect Wari decorative ideas was quite different from that of the Ayacucho groups that developed or adopted Wari iconography.

The problem is to explain this combination of: a) minor but consistent presence of formal Wari wares; b) a Huamanga-grade variant of Wari domestic ceramics; c) some form, slip, and iconographic features of a tradition local to the Cotahuasi, central Colca, Majes, and possibly Ica-Palpa-Nazca region; d) domestic practices in the realm of group sizes, cooking methods, household storage, and marking of ceramics that differ from those in the Wari heartland and other outliers; e) a valley-wide distribution, perhaps to the exclusion of other traditions; and f) surrounding regions that were less, and/or differently, influenced by Wari. This last point is important, and might have to be corrected if future research in the valleys between Camaná and the Ica-Palpa-Nazca area shows a series of Huamanga-grade occupations that could link Beringa to the Huari heartland via the coast. The Wari traits at Beringa, not to mention the occasional fragments in formal Wari styles, clearly imply a strong connection to the Ayacucho tradition, but the local aspects of the decorated and utilitarian wares suggest an insitu development. In broad terms, the Beringa tradition could be a local one that thoroughly incorporated selected Wari iconography, and presumably ideology, into an existing system. If so, the Beringa ceramics would support a model of Wari's influence on the western slope essentially similar to the ideological adoption, selection, syncretism, evolution, and secularization originally proposed by Menzel (1964, 1968). This observation does not explain the mechanism by which it came about, however, nor why the Wari influence should be so profound in Majes and Camaná, but apparently not in the areas between them and Huari.

If a relatively continuous and substantial band of Huamanga-grade occupations is eventually found from Majes to the Ica-Palpa-Nazca area, then the Beringa assemblage might represent part of an oddly-shaped but otherwise expectable gradation of cultural clines that included both the Nasca and Wari traditions. The local features of the material culture would represent variants whose distributions did not extend to the Wari heartland, while the Huamanga-grade aspects of the assemblage could result from participation in a network of interactions extending northwest along the coast and then north towards Huari. The Wari heartland tradition would extend organically down the coast to Majes and possibly to the adjacent Sihuas Valley.

If the coast south of Nazca proves not to be largely Huamanga territory, then Beringa will seem geographically isolated from the Wari heartland, as if the specific Wari influence seen at Beringa had hopped over intervening areas such as Chuquibamba and Cotahuasi on its way to Majes. In that case, the Majes Valley would not have been simply part of a pattern of crosscutting stylistic clines in the manner of the Ayacucho area. Instead, the Majes drainage, possibly together with the nearby Sihuas and Ocoña Valleys, would resemble the Huaro Valley and Pikillacta, where large numbers of people with Huamanga-grade ceramics filled a pocket or island in otherwise foreign territory.

Could this strong but incomplete Wari influence have arrived at Beringa in the hands of a transplanted or colonial population? Possibly, but there is no known Huamanga variant from the Wari heartland that would correspond to a source population for Beringa. Many motifs, and perhaps more importantly, features of design organization and vessel forms that were widespread in Huamanga ceramics of the heartland are rare or absent at Beringa. There is not a single comb motif in the entire Beringa assemblage, even though this figure dramatically predominates at Azángaro and is common throughout Huamanga assemblages of the Avacucho Basin, especially in the north. Outlined escalonados, a widespread motif in southern Ayacucho Basin Huamanga ceramics, are extremely rare at Beringa. Registers filled with white as a background and complexly subdivided pendant registers are widespread in Wari heartland Huamanga assemblages, but absent and rare, respectively, at Beringa. Ring bases are a minor but widespread feature in the Wari heartland. None were found at Beringa except on a single manifestly exotic piece. If people had moved to Beringa from anywhere near Wari, they would presumably have brought these and other ideas with them. Moreover, the regional rim-slipped tradition, the cooking and storage vessels, the regionally-specific motifs such as pendant wavy and smooth arcs, and possibly the simplified use of post-fire incision, suggest a significant local and regional component in the material culture that does not fit with a direct colonization model.

Was the Wari influence at Beringa the result of indirect rule, military or religious domination, or some other process in which a limited number foreigners introduced Wari corporate style and beliefs to an existing population? This option seems even less likely. Although Wari influence was pervasive, the proportion of Chakipampa, Ocros, and Viñaque corporate style ceramics that might have promoted this profound influence is low compared to other Huamanga-grade assemblages. In addition, there seems to have been no planned Wari center in Majes, and although there probably was one in the Camaná Valley, the radiocarbon dates seem to place it several centuries later than Beringa (Malpass 2001:65). That is, the power and cultural impact of the foreigners would have been weakened not only by the great distance to the Wari heartland, but also by the reduced exposure of Majes inhabitants to Wari corporate styles, and the absence of an imposing intrusive center. Yet, Beringa developed a ceramic tradition as fully "Huamanga" as did others clearly in the orbit of Huari.

A recent discussion of the Huaro Valley (Glowacki and McEwan 2001) may provide an analogy. Ayacucho occupation in the Huaro Valley may have begun before the Middle Horizon. The settlers evidently maintained contact with the Wari heartland, developing over a long period a local Huamanga-grade assemblage that presumably melded local concepts, Huamanga-grade innovations from the heartland, and Huamanga-grade selections and modifications from the Wari canon that would have occurred in a parallel process in the Huaro Valley itself. Pikillacta was apparently a later formalization of an existing Wari occupation in the adjacent Huaro Valley, rather than an abrupt, site-unit intrusion complete with an imported Huamanga assemblage.

While no evidence has been recognized of a pre-Middle Horizon Ayacuchano occupation in the Majes or Camaná Valleys, and none is implied here, a broadly similar long-term process might explain the Beringa assemblage. The combination of an idiosyncratic selection of Wari features with local ceramic traits, as well as the regionally specific habitus suggested by the plainwares and post-fire engraving, could be the result of a significant period of interaction and assimilation among transplanted Ayacuchanos and indigenous neighbors. The formal Wari ceramics, though scarce, presumably indicate ongoing contact with the heartland. The Huamanga-grade Wari traits could have been inspired by archipelago-style relations with users of Huamanga assemblages closer to the heartland. They could also have developed in Majes along a parallel but local track of selection and modification of Wari iconography, or they could reflect both of these processes. That is, the Beringa assemblage might represent not a Wari intrusion per se, but rather the legacy of an intrusion or other form of profound influence that took place earlier in the Middle Horizon or even before, and then had time to evolve into something regional and distinct. The material culture of Beringa makes sense as the result of a long period of synthesis of Wari and local practices, possibly differentiation and boundary maintenance with respect to the probable neighboring Huamanga-grade tradition in Chuquibamba, continuing participation in the Wari interaction sphere, and in-situ development of a regional variant of Huamanga-grade ceramics in much the same way that comparable material cultures arose in the rural villages of the Huaro Valley and in the distant Wari heartland.

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	Cour	nt	Ma	ss
	number	%	grams	%
Slip and paint	1,622	6.4	42,988	11.1
Slip only	3,211	12.8	45,628	11.8
Paint only	44	0.2	391	0.1
Subtotal: All finished sherds	4,877	19.4	89,007	23.0
Plainware and eroded	20,294	80.6	297,467	77.0
Total	25,171	100.0	386,474	100.0

Table 1. Size of the sample. Whole vessels are counted as one sherd. Reconstructable vessels are counted as their constituent sherds.

	Slip and	l paint	Slip	o only	Paint only	Plain	ware	To	tal
	#	%	#	%	#	#	%	#	%
Common forms:									
Ambiguous, conical	76	7.8%	7	2.6%		2	0.3%	85	4.5%
Ambiguous, cylindrical	12	1.2%	3	1.1%		1	0.2%	16	0.8%
Bowl 1-shallow	200	20.5%	64	23.8%		5	0.8%	269	14.2%
Bowl 2-medium	124	12.7%	23	8.6%		3	0.5%	150	7.9%
Bowl 3-slightly restricted	42	4.3%	4	1.5%		2	0.3%	48	2.5%
Bowl 4-flaring	13	1.3%	1	0.4%				14	0.7%
Bowl 5-deep (5)	9	0.9%						9	0.5%
Bowl 6-other form (6)	5	0.5%	3	1.1%				8	0.4%
Bowl 7-indeterminate form	94	9.6%	24	8.9%		3	0.5%	121	6.4%
Escudilla (17)	27	2.8%	2	0.7%				29	1.5%
Faceneck (7)	6	0.6%				3	0.5%	9	0.5%
Globular 1-slightly restricted	148	15.1%	21	7.8%		1	0.2%	170	8.9%
Globular 2-medium restricted	93	9.5%	12	4.5%		4	0.6%	109	5.7%
Globular 3-very restricted (7)	13	1.3%	1	0.4%		2	0.3%	16	0.8%
Globular 4-extremely restricted (7)			6	2.2%		1	0.2%	7	0.4%
Globular necked fineware	28	2.9%	45	16.7%				73	3.8%
Low spout (12)			5	1.9%		9	1.4%	14	0.7%
Olla, large neckless (5)						6	0.9%	6	0.3%
Olla, small necked (9)			1	0.4%		13	2.0%	14	0.7%
Olla, small tripod (4)						8	1.2%	8	0.4%
Pitcher (4)	1	0.1%	2	0.7%		1	0.2%	4	0.2%
Utilitarian, other necked form			26	9.7%		558	85.2%	584	30.7%
Utilitarian, thickened rim (9 to 11)			2	0.7%		11	1.7%	13	0.7%
Rare forms:									
Beaker, cylindrical (2)	3	0.3%	1	0.4%				4	0.2%
Beaker, flaring (3)	14	1.4%	1	0.4%				15	0.8%
Beaker, flaring giant (1)	4	0.4%	-					4	0.2%
Beaker portrait (1)	2	0.2%						2	0.1%
Boot pot (2)	2	0.270				2	0.3%	2	0.1%
Bottle, tall spout (1)			1	0.4%		2	0.570	1	0.1%
Conteen $(2)$	38	3.0%	1	0.170				38	2.0%
Escudilla, tripod (2)	50 7	0.7%						50 7	0.4%
Lyro cup (1)	1 	0.770						1 4	0.7%
$M_{\text{injecture}}(2)$	т	U. 7 /0	1	0.4%		1	0.2%	т 2	0.270
Madalad rub (4)			1	0.7/0		1	0.270	4	0.170
Modeled nub (4)	1	0.10/	1	0. <del>4</del> %		) 1	0.2%	4 5	0.2%
Other	1	0.1%	2 7	1.170		1	0.270	ر ۲6	0.3%
Other	<i>(</i> 1	0.1%	<i>(</i> 1	2.0%		12	1.0%	20	1.4%
Spoon (3) $T = 1$ (1)	1	0.1%	1	0.4%		1	0.2%	ر ۱	0.2%
1  ripod foot (1)			1	0.4%		2	0.20/	1	0.1%
I ube spout/handle, massive (2) $\frac{1}{2}$	-	0.50				2	0.3%	2	0.1%
Loomorphic (2)	5	0.5%	2.42	100.001			100.001	5	0.3%
Subtotal, known forms	977	100.0%	269	100.0%	0	655	100.0%	1,901	100.0%
Unknown	645		2,942		44	19,639		23,270	100.0%
Total	1,622		3,211		44	20,294		25,171	100.0%

Table 2. Frequencies of vessel forms. Numbers in parentheses are the number of vessels represented. "Ambiguous conical" probably includes many escudilla sherds. "Ambiguous cylindrical" may include some cylindrical beaker sherds. Sherds with indeterminate finish are grouped with plainware. Percentages are among sherds of known form only.

	Rim diameter (cm)												
	Rims	Min	10 <sup>th</sup> percentile	Median	90 <sup>th</sup> percentile	Max							
Common forms:			ł		1								
Ambiguous, conical	83	10	12	16	20	23							
Ambiguous, cylindrical	15	8	9	16	24	28							
Bowl 1-shallow	247	9	12	16	18	24							
Bowl 2-medium	143	10	14	17	20	28							
Bowl 3-slightly restricted	43	10	11	15	24	27							
Bowl 4-flaring	14	12	12	19	19	24							
Bowl 5-deep (5)	9	13	13	16	18	18							
Bowl 6-other form (6)	7	10	10	16	17	17							
Bowl 7-indeterminate form	90	10	11	14	18	26							
Escudilla (17)	27	13	14	16	22	22							
Faceneck (7)	7	5	5	7	10	10							
Globular 1-slightly restricted	149	6	10	13	18	24							
Globular 2-medium restricted	104	5	10	13	15	30							
Globular 3-very restricted (7)	16	7	12	14	15	25							
Globular 4-extremely restricted (7)	5	12	12	14	22	22							
Globular necked fineware	41	5	6	10	18	30							
Low spout (12)	14	3	3	4	5	5							
Olla, large neckless (5)	4	22	22	25	28	28							
Olla, small necked (9)	14	6	7	8	10	12							
Olla, small tripod (4)	7	7	7	7	9	9							
Pitcher (4)	4	6	6	8	10	10							
Utilitarian, other necked form	523	5	8	12	18	47							
Utilitarian, thickened rim (9 to 11)	11	18	18	26	42	58							
Rare forms:													
Beaker, cylindrical (2)	4	9	9	9	10	10							
Beaker, flaring (3)	15	9	11	26	26	26							
Beaker, flaring giant (1)	4	26	26	28	28	28							
Beaker, portrait (1)	0												
Boot pot (2)	2	8	8	8	8	8							
Bottle, tall spout (1)	1	3	3	3	3	3							
Canteen (2)	0												
Escudilla, tripod (2)	7	12	12	12	17	17							
Lyre cup (1)	4	9	9	9	9	9							
Miniature (2)	2	1	1	2	3	3							
Modeled nub (4)	2	10	10	20	30	30							
Modeled other form	1	10	10	10	10	10							
Other	10	5	8	11	15	15							
Spoon (3)	0												
Tripod foot (1)	0												
Tube spout/handle, massive (2)	0												
Zoomorphic (2)	4	5	5	5	5	5							
Subtotal, known forms	1,633												
Unknown	276	4	8	12	16	32							
Total	1,909												

Table 3.Rim diameters of vessel forms. Rim count includes whole vessels and sherds with measurable diameter.

	Slip	and pain	t	5	Slip only		Paint only		Plainware	!
	Crust	Hole	Incised	Crust	Hole	Incised	Hole	Crust	Hole	Incised
Common forms:										
Ambiguous, conical										
Ambiguous, cylindrical										
Bowl 1-shallow		1		3	4			1		
Bowl 2-medium	1		2	2				1		
Bowl 3-slightly restricted				1						
Bowl 4-flaring		1								
Bowl 5-deep (5)	3									
Bowl 6-other form (6)										
Bowl 7-indeterminante form				1						
Escudilla (17)										
Faceneck (7)										
Globular 1-slightly restricted	1			1						
Globular 2-medium restricted		1		1				1		
Globular 3-very restricted (7)										
Globular 4-extremely restricted (7)								1		
Globular necked fineware										
Low spout (12)								2		
Olla, large neckless (5)								4		
Olla, small necked (9)								8		
Olla, small tripod (4)								1		
Pitcher (4)										
Utilitarian, other necked form				3				162	1	
Utilitarian, thickened rim (9 to 11)								1		
Rare forms:										
Beaker, cylindrical (2)										
Beaker, flaring (3)										
Beaker, flaring giant (1)		4								
Beaker, portrait (1)										
Boot pot (2)								1		
Bottle, tall spout (1)										
Canteen $(2)$										
Escudilla, tripod (2)										
Lyre cup (1)										
Miniature (2)										
Modeled nub (4)										
Modeled other form										
Other										
Spoon (3)										
Tripod foot (1)										
Tube spout/bandle_massive (?)										
Zoomorphic (2)										
Subtotal known forme	5	7	2	12	4			183	1	
Unknown	,	2	2	12	7	3	1	4 2 7 9	17	8
Total	5	10	2	30	6	3	1	4,462	18	8

Table 4. Occurrence of organic crusts, repair holes, and post-fire incised designs on vessel forms.

			Count			Mass	
Slip	Paint	#	% of slip	% of all	grams	% of slip	% of all
Red	Black	463	10.0%	9.5%	7,682	8.9%	8.6%
	Black, Cream	631	13.6%	12.9%	21,204	24.6%	23.8%
	Black, Cream, Orange	67	1.4%	1.4%	2,411	2.8%	2.7%
	Black, Cream, Red	34	0.7%	0.7%	858	1.0%	1.0%
	Black, Cream, Orange, Red	8	0.2%	0.2%	236	0.3%	0.3%
	Black, Cream, Slip	6	0.1%	0.1%	1,379	1.6%	1.6%
	Black, Cream, Tan	6	0.1%	0.1%	37	0.0%	0.0%
	Black, Cream, Gray	3	0.1%	0.1%	41	0.0%	0.0%
	Black, Orange	83	1.8%	1.7%	2,353	2.7%	2.6%
	Black, Orange, Red	15	0.3%	0.3%	846	1.0%	1.0%
	Black, Red	17	0.4%	0.3%	352	0.4%	0.4%
	Black, Tan	14	0.3%	0.3%	319	0.4%	0.4%
	Black, Red, Tan	13	0.3%	0.3%	252	0.3%	0.3%
	Black, Gray	3	0.1%	0.1%	44	0.1%	0.0%
	Cream	61	1.3%	1.3%	1,096	1.3%	1.2%
	Cream, Orange	6	0.1%	0.1%	157	0.2%	0.2%
	Orange	20	0.4%	0.4%	343	0.4%	0.4%
	Red	4	0.1%	0.1%	90	0.1%	0.1%
	Slip used as lines or areas	5	0.1%	0.1%	77	0.1%	0.1%
	Unknown	14	0.3%	0.3%	158	0.2%	0.2%
	Rare combinations	20	0.4%	0.4%	1,015	1.2%	1.1%
	No paint	3,157	67.9%	64.8%	45,266	52.5%	50.9%
	Subtotal: All red slip	4,650	100.0%	95.4%	86,216	100.0%	96.9%
Tan	Black	16	20.5%	0.3%	189	15.5%	0.2%
	Black, Red	42	53.8%	0.9%	737	60.6%	0.8%
	Black, Red, Cream	9	11.5%	0.2%	170	14.0%	0.2%
	Rare combinations	11	28.2%	0.2%	120	9.9%	0.1%
	Subtotal: All tan slip	78	100.0%	1.6%	1,216	100.0%	1.4%
Red on cream	Black	7	17.1%	0.1%	24	12.4%	0.0%
	Black, Cream	4	9.8%	0.1%	6	3.1%	0.0%
	No paint	30	73.2%	0.6%	164	84.5%	0.2%
	Subtotal: All red on cream slip	41	100.0%	0.8%	194	100.0%	0.2%
No slip	Black	21	50.0%	0.4%	160	43.6%	0.2%
	Black, Cream	8	19.0%	0.2%	100	27.2%	0.1%
	Black, Red	3	7.1%	0.1%	15	4.1%	0.0%
	Orange	3	7.1%	0.1%	15	4.1%	0.0%
	Rare combinations	7	16.7%	0.1%	77	21.0%	0.1%
	Subtotal: All unslipped	42	100.0%	0.9%	367	100.0%	0.4%
Cream	No paint	16	100.0%	0.3%	126	100.0%	0.1%
	Subtotal: All cream slip	16	100.0%	0.3%	126	100.0%	0.1%
Dark brown	Rare combinations	1	25.0%	0.0%	37	64.9%	0.0%
	No paint	3	75.0%	0.1%	20	35.1%	0.0%
	Subtotal: All dark brown slip	4	100.0%	0.1%	57	100.0%	0.1%
Chakipampa	All paint combinations	17		0.3%	208		0.2%
Ocros	All paint combinations	29		0.6%	623		0.7%
	Subtotal: All obvious Wari	46		0.9%	831		0.9%
Total		4,877		100.0%	89,007		100.0%

Table 5. Slips and color combinations. Non-plainware sherds only. "Red on cream" appears to have red slip over cream slip. Chakipampa is a stylistic, not slip, category, separated for clarity. Some less definite Chakipampa sherds may be included in other categories.

				Count			Mass	
Style	Slip	Paint	#	% of slip	% of all	grams	% of slip	% of all
Chakipampa	Red	Black, Cream	1	6.7%		12	6.5%	
		Black, Cream, Gray, Brown, Tan	3	20.0%		40	21.7%	
		Black, Cream, Gray, Purple	1	6.7%		12	6.5%	
		Black, Cream, Orange	8	53.3%		99	53.8%	
		Black, Cream, Red	2	13.3%		21	11.4%	
	None	Black, Cream, Purple	1	5.9%		16	7.7%	
		Black, Cream, Red	1	5.9%		8	3.8%	
		Subtotal: All Chakipampa	17	100.0%	0.3%	208	100.0%	0.2%
Ocros	Orange	Black, Cream, Gray, Red	13	44.8%		125	20.1%	
		Black, Gray, Red	3	10.3%		34	5.5%	
		Black, Gray, Purple	1	3.4%		13	2.1%	
		Black, Orange, Red	1	3.4%		307	49.3%	
		Black, Red	8	27.6%		107	17.2%	
		None	3	10.3%		37	5.9%	
		Subtotal: All Ocros	29	100.0%	0.6%	623	100.0%	0.7%
Total			46		0.9%	831		0.9%

Table 6. Slips and color combinations of the definite Chakipampa and Ocros sherds. Percentages "of all" refer to all non-plainware sherds.

				Rectan	gular register				Pendar	nt from	rim,			
	N	Conti	nuous band		band	Che	eckerboar	d "	all	types	л	Pendant	rectangular re	gisters
A 1 1	IN 07	ext	int all	ext	int all	ext	mt	ан	ext	mt	au	ext	mt	all
Ambiguous, conical	60	24	24	3	3					8	8		1	1
Ambiguous, cylindrical	16	7	7	2	2									
Bowl 1-shallow	269	1	1	3	3					41	41			
Bowl 2-medium	150	14	14	17	17				21	13	34	8		8
Bowl 3-slightly restricted	48	7	7	11	11	2		2	1		1	1		1
Bowl 4-flaring	14	8	8						1		1	1		1
Bowl 5-deep (5)	9	3	3	1	1									
Bowl 6-other form (6)	8			1	1					3	3		3	3
Bowl 7-indeterminante	121	7	7	3	3					10	10		1	1
form Escudilla (17)	29		1	5	5					7	7			
Faceneck (7)	9													
Globular 1-slightly	170	38	38	42	42	4		4						
Globular 2-medium re-	109	13	13	35	35				2		2	1		1
stricted Globular 3-very restricted	16	10	10											
(7) Globular 4-extremely re-	7													
stricted (7) Globular necked fineware	73			2	2									
Low spout (12)	14													
Olla, large neckless (5)	6													
Olla, small necked (9)	14													
Olla, small tripod (4)	8													
Other	125	16	16	8	8					2	2			
Pitcher (4)	4	1												
Utilitarian, other necked	584													
Utilitarian, thickened rim	13													
Subtotal, known forms	1,901	149	1 148	133	133	6		6	25	84	109	11	5	16
Unknown	23,270	36	36	41	48				1	5	6			
Total	25,171	185	1 184	174	181	6		6	26	89	115	11	5	16

/... continued

Table 7. Summary of design organization modalities on inner and outer surfaces of vessels.

/continued	Pendant r ext	ect. divided registers int	, wavy lines all	Pendant ext	motifs, not in regist int	ers all	Floating motifs, not in band or register ext int all				
Ambiguous, conical					7	7		1	1		
Ambiguous, cylindrical											
Bowl 1-shallow					41			9	9		
Bowl 2-medium	2		2	13	13	26					
Bowl 3-slightly restricted	1		1								
Bowl 4-flaring											
Bowl 5-deep (5)											
Bowl 6-other form (6)		3	3								
Bowl 7-indeterminante		1	1		9	9		1	1		
form Escudilla (17)					7	7		5	5		
Faceneck (7)											
Globular 1-slightly restricted Globular 2-medium re- stricted Globular 3-very restricted (7) Globular 4-extremely re-				1		1					
Globular necked fineware							2		2		
Low spout (12)											
Olla, large neckless (5)											
Olla, small necked (9)											
Olla, small tripod (4)											
Other					2	2	24	7	31		
Pitcher (4)											
Utilitarian, other necked form Utilitarian, thickened rim (9 to 11)											
Subtotal, known forms	3	4	7	14	79	93	26	23	49		
Unknown				1	5	6	1		1		
Total	3	4	7	15	84	99	27	23	50		

Table 7 (continued). Summary of design organization modalities on inner and outer surfaces of vessels.

	E	Black horiz. line below Black horiz			riz. line	below	Lazy S motif, a	ıll variants	Laz	y S and X band	
	N	rim ±	other d	eco	rii	m only	all	out	int all	ant	int all
Ambiguous conical	85	6	14	20	4	2	6	7	7 <i>и</i> и	7	7
Ambiguous, colindrical	16	2	11	20	I	2	Ŭ	ſ	ʻ	1	i i
Bowl 1 shallow	269	1	60	70	1	26	27	3	3	1	1
Bowl 2 medium	150	33	22	55	2	20	11	17	17	0	0
Bowl 3 slightly restricted	150	25	22	27	2	2	11	1	1	1	, 1
Poul 4 floring	14	1	2	21	2	2	т	1	1	1	1
Dowr 4-naring	14	1		1				1	1	1	1
	9	1	2	4				l	(	1	1
Bowl 6-other form (6)	0	1	20	4	-	0	14		(	2	2
Bowl /-indeterminante form	121	9	29	38	2	9	14	0	0	2	2
Escudilla (17)	29	3	19	22		2	2				
Faceneck (7)	9	2		2							
Globular 1-slightly restricted	170	45	3	48	2	1	3	24	24	15	15
Globular 2-medium restricted	109	22	1	23		1	1	13	13	10	10
Globular 3-very restricted (7)	16							6	6	4	4
Globular 4-extremely restricted (7)	7										
Globular necked fineware	73										
Low spout (12)	14										
Olla, large neckless (5)	6										
Olla, small necked (9)	14										
Olla, small tripod (4)	8										
Other	125		3	3				3	3		
Pitcher (4)	4										
Utilitarian, other necked form	584										
Utilitarian, thickened rim (9 to 11)	13										
Subtotal, known forms	1,901	150	165	315	16	52	68	88	88	51	51
Unknown	23,270	28	9	41	13	2	15	24	25	12	13
Total	25,171	178	174	356	29	54	83	112	113	63	64

/... continued

Table 8. Common decorative motifs. "All" column includes motifs on the exterior, interior, and indeterminate side of the sherd.

/continued			Lozenge band	Wavy line b			ine below rim,		n, Straight wavy line, all contexts				rom
	N	ext	int	all	all ext	variants int	all	ext	int	all	ext	rım int	all
Ambiguous, conical	85	12		12				2	1	3		1	1
Ambiguous, cylindrical	16												
Bowl 1-shallow	269					27	27	3	32	35		41	41
Bowl 2-medium	150	1		1	2	7	9	11	7	18		7	7
Bowl 3-slightly restricted	48	1		1				2		2			
Bowl 4-flaring	14	3		3				1		1			
Bowl 5-deep (5)	9												
Bowl 6-other form (6)	8								3	3			
Bowl 7-indeterminante form	121					4	4		7	7		5	5
Escudilla (17)	29					1	1		2	2			
Faceneck (7)	9							2		2			
Globular 1-slightly restricted	170	9		9	5		5	11		11			
Globular 2-medium restricted	109				1		1	1		1	1		1
Globular 3-very restricted (7)	16	6		6									
Globular 4-extremely	7												
restricted (7) Globular necked fineware	73							1		1			
Low spout (12)	14							1		1			
Olla, large neckless (5)	6												
Olla, small necked (9)	14												
Olla, small tripod (4)	8												
Other	125	16		16				15		15			
Pitcher (4)	4												
Utilitarian, other necked form	584												
Utilitarian, thickened rim (9	13												
to 11)	1 001	40		40	0	20	47	40	50	101	1	5.4	~ ~
Subtotal, known forms	1,901	48		48	δ	39	4/	49	52	101	1	24	22
Unknown	25,270	9		9	1	3	4	12	5	17	1	2	3
Total	25,171	57		57	9	42	51	61	57	118	2	56	58

Table 8 (continued). Common decorative motifs. "All" column includes motifs on the exterior, interior, and indeterminate side of the sherd.

		Feath	iered w	ing	Feathe	ertip b	ox,	Feathered wing,		ng,	, Feathered wing,			Feather	red win	g in	Esc	alonados,		Escalon	ados, s	quat
	N				any	contex	t	pendar	it from	rim	fle	oating		rectang	ılar reg	ister	all	variants	-11	oppose	l in pai	nels
	IN	ext	ini	au	ext	ini	au	ext	au	au	ext	ini	ш	ext	пи	аш	ext	สน	au	ext	ти	au
Ambiguous, conical Ambiguous, cylindrical	85 16		5	5	1	4	5		5	5							2	1	3		1	I
Bowl 1-shallow	269					1	1															
Bowl 2-medium	150	2	2	4	2	1	3		2	2				2		2		3	3		3	3
Bowl 3-slightly restricted	48				7		7															
Bowl 4-flaring	14	1		1	I		1							1		1						
Bowl 5-deep (5)	9	1		1	1		1															
Bowl 6-other form (6) Bowl 7-indeter- minante form	8 121	2	4	6	2		2		4	4												
Escudilla (17)	29		10	10	1	7	8		6	6		4	4					2	2		1	1
Faceneck (7)	9																					
Globular 1- slight restricted	170	1		1	16		16							1		1	2		2			
Globular 2-med restricted	109				1		1															
Globular 3-very restricted (7) Globular 4-extr	16 7																					
Globular necked fineware Low spout (12)	73 14																1		1			
Olla, large neck- less (5)	6																					
Olla, small necked (9) Olla, small tri-	14 8																					
pod (4) Other	125	74	3	27	24	3	27		2	2		1	1									
Pitcher (4)	4	21	2	21	21	5	21		2	2		1	1									
Utilitarian, other necked	584																					
form Utilitarian, thickened rim (9 to 11)	13																					
Subtotal, known forms	1,901	31	24	55	56	16	72		19	19		5	5	4		4	5	6	11		5	5
Unknown	23270		6	6	9	4	13		3	3							1		1			
Total	25171	31	30	61	65	20	85	1	22	22		5	5	4		4	6	6	12		5	5

Table 9. Feathered wing motifs and variants.

		Black	k-outli	ned	Rim	Zigza	g band, all	Zigza	ıg band	w.	Verti	cal bar:	s pend	ant	8-poi	nted st	tar	Geome	tric line	motifs
	N	color	ed ma	otifs all	ticks	V( art	ariants int all	ho ext	riz lines	all	ovt	from 1	im	all	ort	int	all	art	int	all
Ambiguous conical	85	1	7	8	8	5	5	1	int	1	CAI	iiii		uu	CAI	int	un	CAI	1111	un
Ambiguous, collicat	16	1	1	0	1	2	2	1		1										
Ambiguous, cymuncar	260		2	2	12	2	2													
Dowl 1-snallow	209	10	د -	5	15	1	1	1			12		1	1.4						
Bowl 2-medium	150	10	С	15	8	1	1	1		1	13		1	14						
Bowl 3-slightly	48	7		7	1	1	1													
Bowl 4-flaring	14	1		1		4	4	4		4										
Bowl 5-deep (5)	9					1	1	1		1										
Bowl 6-other form (6)	8				3															
Bowl 7-indet. form	121		4	4	10	2	2	2		2										
Escudilla (17)	29		12	12	9															
Faceneck (7)	9																			
Globular 1-slightly	170	5		5	3	5	5	5		5								3		3
Globular 2-medium	109	3		3	1	1	1											13		13
restricted Globular 3-very	16																			
restricted (7)	10																			
Globular 4-extremely	7																			
Globular necked	73	14		14											1		1	1		1
fineware		- ,													-			-		-
Low spout (12)	14																			
Olla, large neckless (5)	6																			
Olla, small necked (9)	14																			
Olla, small tripod (4)	8																			
Other	125		3	3	2															
Pitcher (4)	4																			
Utilitarian, other	584																			
necked form	12																			
rim (9 to 11)	15																			
Subtotal, known	1,901	41	34	75	59	22	22	14		14	13		1	14	1		1	17		17
forms	23 270	41	6	40	2	13	12	11		11					3		3	11		12
	25,270	91	40	124	61	25	15	25		25	12		1	14	5		ر م	11		12
Total	25,171	82	40	124	01	35	35	25		25	13		1	14	4		4	28		29

Table 10. Additional decorative motifs (indet. = indeterminate).

			Interior (% of all sherds)							Rim (% of rims only)									
			Upţ	ber	Bottom Entire				An	ıy	Interior		Top Exte		Exte	xterior		Any	
	Ν	Rims	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
Ambiguous, conical	85	85	14	16%					16	19%	15	18%	8	9%	6	7%	23	27%	
Ambiguous, cylindri-																			
cal	16	16											1	6%	2	13%	2	13%	
Bowl 1-shallow	269	268	97	36%	9	3%	4	1%	128	48%	68	25%	13	5%			72	27%	
Bowl 2-medium	150	148	22	15%					27	18%	22	15%	8	5%	26	18%	49	33%	
Bowl 3-slightly									_			10/		• • •					
restricted	48	48							1	2%	2	4%	1	2%	27	56%	30	63%	
Dowl 4-haning	14	14							1	( 70									
Bowl 5-deep (5)	9	9		200/						200/		200/		200/		1.20/		5.00/	
Bowl 6-other form (6)	8	8	3	38%	_				3	38%	3	38%	3	38%	1	13%	4	50%	
Bowl 7-indet. form	121	117	20	17%	1	1%			29	24%	32	27%	12	10%	12	10%	45	38%	
Escudilla (17)	29	28	13	45%	2	7%			14	48%	19	68%	12	43%	4	14%	23	82%	
Faceneck (7)	9	6													2	33%	2	33%	
Globular 1-slightly													_						
restricted	170	168							3	2%	3	2%	7	4%	45	27%	54	32%	
Globular 2-medium	109	109									1	1%	2	2%	23	21%	24	22%	
Globular 3-very re-	10)	107									1	170	2	270	23	2170	21	2270	
stricted (7)	16	16													1	6%	1	6%	
Globular 4-extremely	_	_																	
restricted (7)	7	7																	
ware	73	40																	
Low spout (12)	14	14																	
Olla, large neckless																			
(5)	6	6																	
Olla, small necked (9)	14	14																	
Olla, small tripod (4)	8	7																	
Other	125	51	4	3%	6	5%			8	6%	3	6%	2	4%			3	6%	
Pitcher (4)	4	4																	
Utilitarian, other																			
necked form	584	562																	
Utilitarian, thickened	12	12																	
rim (9 to 11) Subtotal known	15	15																	
forms	1,901	1,758	173	9%	18	1%	4	0%	230	12%	168	10%	69	4%	149	8%	332	19%	
Unknown	23,270	416	14	0%					24	0%	9	2%	3	1%	13	3%	27	6%	
Total	25,171	2,174	187	1%	18	0%	4	0%	254	1%	177	8%	72	3%	162	7%	359	17%	

/...continued

Table 11. Location of painted decoration on common vessel forms. Percentages are within each form. The "Any" columns tally sherds with decoration anwhere on the interior, rim, or exterior, respectively, including those for which a more detailed location is unknown. Sherds may be decorated at multiple locations. High frequencies in the "Other form" row are largely due to the 38 sherds of two canteens with decoration on virtually all exterior surfaces.

/continued					Exter	ior (% c	of all sh	erds)			Anyw	here	Slip a	mly	Plainu	vare
			Up	þer	Lou	Lower		Entire		у						
	Ν	Rims	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Ambiguous, conical	85	85	40	47%					51	60%	76	89%	7	8%	2	2%
Ambiguous, cylindri-																
cal	16	16	11	69%					12	75%	12	75%	3	19%	1	6%
Bowl 1-shallow	269	268	5	2%					26	10%	200	74%	64	24%	5	2%
Bowl 2-medium	150	148	64	43%					79	53%	124	83%	23	15%	3	2%
Bowl 3-slightly	10															• • • •
restricted	48	48	31	65%					35	73%	43	90%	4	8% 7%	1	2%
Dowl 4-haning	14	14	10	1000/					11	1000/	15	9 <b>3</b> %	1	( 70		
Bowl 5-deep (5)	9	9	9	100%					9	100%	9	100%	2	200/		
Bowl 6-other form (6)	8	8	1	13%					1	13%	5	63%	3	38%		
Bowl 7-indet. form	121	117	20	17%					31	26%	95	79%	24	20%	2	2%
Escudilla (17)	29	28	4	14%			2	2 7%	7	24%	27	93%	2	7%		
Faceneck (7)	9	6	6	67%					6	67%	6	67%			3	33%
Globular 1-slightly																
restricted	170	168	122	72%					139	82%	148	87%	21	12%	1	1%
Globular 2-medium	100	100	74	68%					00	83%	03	85%	12	11%	4	4%
Globular 3-verv re-	109	109	7	00 /0					90	00/0	25	0/ رن	12	11/0	т	<b>T</b> /0
stricted (7)	16	16	13	81%					13	81%	13	81%	1	6%	2	13%
Globular 4-extremely																
restricted (7)	7	7											6	86%	1	14%
Globular necked fine-	73	40	20	27%					28	38%	28	38%	45	67%		
Low spout (12)	14	14	20	21/0					20	5070	20	50 /0	5	36%	9	64%
Olla, large neckless																
(5)	6	6													6	100%
Olla, small necked (9)	14	14									3	21%	1	7%	10	71%
Olla, small tripod (4)	8	7													8	100%
Other	125	51	34	67%	4	8%	27	7 53%	77	62%	87	70%	17	14%	21	17%
Pitcher (4)	4	4	1	25%					1	25%	1	25%	2	50%	1	25%
Utilitarian, other																
necked form	584	562											26	4%	558	96%
Utilitarian, thickened																<b></b>
rim (9 to 11)	13	13											2	15%	11	85%
forms	1.901	1.758	465	24%	4	0%	20	2%	616	32%	983	52%	269	14%	649	34%
Unknown	23,270	416	106	0%	7	0%	2,	2,0	356	2%	706	3%	2,942	13%	19,622	84%
Total	25,171	2,174	571	2%	11	0%	29	9 0%	972	4%	1,689	7%	3,211	13%	20,271	81%

Table 11 (continued). Location of painted decoration on common vessel forms. Percentages are within each form. The "Any" columns tally sherds with decoration anwhere on the interior, rim, or exterior, respectively, including those for which a more detailed location is unknown. Sherds may be decorated at multiple locations. High frequencies in the "Other form" row are largely due to the 38 sherds of two canteens with decoration on virtually all exterior surfaces.

	Sherd	ls w/ rim ticks	All fir	uished sherds	All painted	d sherds
Painted decoration in addition to rim ticks	#	%	#	%	#	%
None	4	6.6%	3,211	65.8%	0	0.0%
Black horizontal line below rim only	24	39.3%	83	1.7%	83	5.0%
Any painted decoration except black horizontal line below rim	33	54.1%	1,583	32.5%	1,583	95.0%
Any painted decoration	57	93.4%	1,666	34.2%	1,666	100.0%
Feathered wing	13	21.3%	61	1.3%	61	3.7%
Horizontal wavy line below rim, interior	6	9.8%	51	1.0%	51	3.1%
Partial slip used in design	5	8.2%	14	0.3%	14	0.8%
All sherds in category	61	100.0%	4,877	100.0%	1,666	100.0%

Table	12.	Motifs	associated	with	rim	ticks.
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Filler element	Sherds	Design contexts and illustrations
Large solid dot, cream	36	16 as row of closely spaced dots on a wider black line, as in Figure 25: CID 323 & 896. 9 between the arms of a black X.
Large solid dot, black	21	Various contexts. 7 as dots between the arms of an X motif. See Figure 26: CID 348.
Large solid dot, red	10	Various contexts. 2 in complex zigzag motifs, such as Figure 18: CID 292.
Large solid dot, all	55	Various contexts.
Large cream dot with black center	38	10 between the arms of black or white-outlined black X. 6 in geometric line designs. 22 are from the canteen Figure 18: CID 585.
Large black dot with cream center	1	Isolated, no identifiable context.
Large cream dot with one black line	1	Isolated, no identifiable context.
Large cream dot with two black lines	2	Both from Figure 14: CID 129.
Large cream dot with black plus sign	18	15 from the canteen Figure 18: CID 585 (other side, not illustrated). See Figure 22: CID 343.
Plus sign or small X, cream	13	7 in lozenge bands, 4 in motif shown in Figure 25: CID 353, 2288.
Plus sign or small X, black	7	All in lozenge bands. See Figure 8: Lozenge band.
Plus sign or small X, orange	1	Isolated, no identifiable context.
Plus sign or small X, all	20	Mostly in lozenge bands.
Semicircle, cream	18	Various contexts, including lozenge bands and lazy S and X band variants. See Figure 17: CID 363.
Semicircle, black	1	In lower triangular spaces of a horizontal black zigzag line.
Semicircle, red	8	All on "black and red on tan" sherds. See Figure 27: CID 420.
Semicircle, all	26	Mostly in lozenge bands.
Ring, cream	28	21 in lozenge bands, 5 in lazy S motifs such as Figure 23: CID 1494, 2 in geometric line designs. See Figure 17: CID 364, Figure 23: CID 1494
Ring, black	1	In a lozenge band.
Ring, all	29	22 in lozenge bands, most of the remainder with lazy S motifs.
Cream ring with cream dot	4	2 as possibly the only repeating motifs in below-rim continuous band bounded by black lines. Also Figure 14: CID 298.
Cream ring with black dot	1	Isolated, no identifiable context.
Black ring with black dot	9	Various contexts, including Figure 14: CID 280, Figure 25: CIF 340. 2 are Red and Black on Tan.
Red ring with red dot	1	Red and Black on Tan, Figure 27: CID 2985.
Ring with dot, all	15	Various contexts.
Small black dots	43	Various contexts. 11 as row of closely spaced dots, flanked by a solid line on either side. See Figure 21: CID 294.
Small cream dots	22	13 as row of closely spaced dots on a slightly wider black line, 4 as row on a red line or just on slip, 4 between arms of cream $+$ or X.
Small red dots	2	Between arms of a red X. See Figure 8: Checkerboard motif.
Small dots, all	61	Various contexts. 28 as row of closely spaced dots.

Table 13. Filler elements and their design contexts. Numbers in the design context column refer to the number of sherds on which the filler element appears in the context described, not the number of filler elements themselves. Summary lines such as "Semicircle, all" may not equal the sum of the detail lines, because some sherds have more than one kind of filler element.

		Estimated	volume (ml)			Volume (liters)								
		Low	High					volume (liters	)					
Form	CID	estimate	estimate	0	5	10	15	20	25	30	35	40		
Boot pot	249	540	540	•										
Boot pot	1621	950	950	•										
Olla, small necked	3090	180	250	- I -										
Olla, small necked	2159	300	470	- 1 III										
Olla, small necked 3	811,3819,3891	360	360											
Olla, small necked	740,913	360	1,480											
Olla, small necked	1938	390	390	•										
Olla, small necked	296	400	400	•										
Olla, small necked	283	450	450	•										
Olla, small necked	1810	480	480	•										
Olla, small necked	368	580	580	•										
Olla, small necked tripo	d 289	320	320	•										
Olla, small neckless trip	od 120b,355	170	170	•										
Olla, small neckless trip	od 248	920	920	•										
Olla, large neckless	2544	5,060	5,060		•									
Olla, large neckless	2565	5,700	5,700		•									
Olla, large neckless	2799	6,040	25,750											
Utilitarian, thickened rin	n 3408	3,700	7,050											
Utilitarian, thickened rin	n 2096	4,210	14,140											
Utilitarian, thickened rin	n 1774	4,690	13,200											
Utilitarian, thickened rin	n 3896	8,110	31,450											
Utilitarian, thickened rin	n 1772,1773	14,170	30,100											
Utilitarian, thickened rin	n 5	25,810	73,870									-		
Utilitarian, thickened rin	n 590	56,390	157,390									$\rightarrow$		
Utilitarian necked, not o	lla 1405	3,950	8,590											
Utilitarian necked, not o	lla 303	5,080	5,080		•									
Utilitarian necked, not o	lla 306	7,300	7,300			•								
Utilitarian necked, not o	lla 300	7,890	7,890			•								
Utilitarian necked, not o	lla 676	7,950	7,950			•								
Utilitarian necked, not o	lla 310	8,830	8,830			•								
Utilitarian necked, not o	lla 304	9,850	9,850			•								
Utilitarian necked, not o	lla 307	13,820	13,820				٠							
Utilitarian necked, not o	lla 308	13,910	13,910				•							
Utilitarian necked, not o	lla 301	19,230	19,230					•						
Utilitarian necked, not o	lla 305	20,420	20,420					•						
Utilitarian necked, not o	lla 309	20,880	20,880					•						
Utilitarian necked, not o	lla 311	35,400	35,400								•			
Utilitarian necked, not o	lla 302	36,090	36,090								•			
				0	5	10	15	20	25	30	35	40		

Table 14. Estimated volumes of utilitarian vessels.



Figure 1. Beringa and other sites in regional context.



Figure 2. Beringa in the Majes drainage. Site locations based on Garcia and Bustamante (1990), Malpass (n.d.), Sciscento (1989), and site visits.



Figure 3. Common vessel forms.



Figure 4. Common vessel forms.



Figure 5. Other necked utilitarian forms.





Figure 6. Other necked utilitarian forms.



Figure 7. Small tripod ollas (CID 120, 248, 289) and small necked ollas (CID 283, 296, 368).



Figure 8. Shallow bowls (Bowl 1).



Figure 9. Shallow bowls (Bowl 1).



Figure 10. Shallow bowls (Bowl 1) and other bowl form (Bowl 6) (CID 278).



Figure 11. Deep bowls (Bowl 5) and medium bowl (Bowl 2) (CID 606, 607, 608).



Figure 12. Globular medium-restricted bowls (Globular 2) and globular slightly restricted bowl (globular 1). (CID 129).



Figure 13. Escudillas.


Figure 14. Escudilla and tripod escudilla.



Figure 15. Flaring beaker (CID 363) and giant flaring beaker (CID 364).



Figure 16. Flaring beaker (CID 292), canteen (CID 585), and lyre cup (CID 2426).



Figure 17. Unusual forms and other motifs.



Figure 18. Zoomorphic camelid vessel and exotic canteen form.



Figure 19. Pitchers (CID 287, 294), miniatures (CID 288, 333) and boot pot (CID 249).



Figure 20. Facenecks and modeled nub (CID 3348).



Figure 21. Cántaro, tallied as globular necked fineware.



Figure 22. Ocros (CID 347, 383, 532, 2246) and Chakipampa (all others).



Figure 23. Black and red on tan.



Figure 24. Painted decoration categories. The top edge of each illustration is the rim of the vessel. The categories are not mutually exclusive; some designs are also included in other categories in addition to the ones they illustrate here. These cover only a sample of the variation in most categories. Additional variants are shown in other figures.



Figure 25. More painted decoration categories. The top edge of each illustration is the rim of the vessel except where noted otherwise. The categories are not mutually exclusive; some designs are also included in other categories in addition to the ones they illustrate here. These cover only a sample of the variation in most categories. Additional variants are shown in other figures.



Figure 26. Exotics and unusual decoration.



Figure 27. Rims.



Figure 28. Rims, pre- and post-fire engraving, and scoring for breaking off rim (CID 713).



Figure 29. Feathered wing variants and geometric line motif (CID 3153).