7.1 Introduction
In this chapter, the characteristics of the Tiwanaku, Ilo-Tumilaca/Cabuza, and Chiribaya material culture will be introduced, with special attention for the textile tradition of each group. Up to today, the Ilo-Tumilaca/Cabuza and Chiribaya cultures are rather unknown, especially as far as their textile artefacts are concerned. In Chapters 5 and 6, it was said that these three groups of people once cohabited in the Osmore valley. The inhabitants of Chen Chen have convincingly been identified as Tiwanaku colonists from the Titicaca Basin, using several categories of material culture and osteological evidence. As for the lower Osmore sites, the evidence is less straightforward. Tiwanaku state-sent colonists are claimed to have settled at El Algodonal Ladera, La Cruz and El Descanso (Carpio 2000b, c; Guillén pers. com.). Owen (1993, 14, 52-53, 304), however, refuses a Tiwanaku identity for these settlements, and instead claims that the sites were inhabited by the direct ancestors of the Tiwanaku, the Ilo-Tumilaca/Cabuza. In their search for a new place to live after the Tiwanaku state structure collapsed around A.D. 950, the Ilo-Tumilaca/Cabuza people moved out of the middle Osmore valley into the higher and lower reaches, by now producing their artefacts in a style that slowly moved away from the ancestral Tiwanaku style. Tiwanaku state produced ceramics and textiles from the lower Osmore valley would then be heirlooms, brought along on their migrations, and therefore few in number. Whatever their identity, upon their arrival in the coastal valley, they met with the Chiribaya people, whom the author believes to be indigenous to this valley, with Formative or even Archaic Chinchorro ancestors and with millennia-old social-economic ties with the population of the Azapa valley to the south.

This thesis uses the textile traditions of these four sites to make a contribution to this discussion. As the contextual data for most of the textiles of all four sites were found to be unavailable, minimal or even lost, and with practically no descriptions or illustrations of the associated artefacts, this study has to rely heavily on previous textile studies of this area. As the Azapa area in northernmost Chile has proven to have had longstanding and very close cultural contacts with the Osmore valley, the Azapa textile tradition has been included here as well. Therefore, an extensive update of the few (available) publications and illustrations of the Tiwanaku, Ilo-Tumilaca/Cabuza, and Chiribaya stylistic (textile) features is given first, which the author feels to be a necessary contribution to Andean textile research. After such introduction, the author will move on to the presentation of the textile collections analysed for this study in Chapter 8.

7.2 Tiwanaku style: iconography and textile tradition

Tiwanaku iconography and artefacts such as textiles and ceramics so closely resemble the Wari specimens that it was first thought that they belonged to one and the same ‘Tiahuanaco’ and ‘coastal Tiahuanaco’ tradition (Uhle 1903; Larco Hoyle 1948). Only later were they identified as two separate cultures, with the Wari culture believed to be slightly later and to have derived its iconographic expression from its southern Tiwanaku neighbour (Menzel 1964; Bird and Skinner 1974; J. Rowe 1979). Recently, however, archaeologists found that both cultures were more or less contemporary in their expansion and demise (A.D. 550-1000) and that both had drawn their inspiration from the ancestral Yaya-Mama Religious Tradition and the Pukara culture located in the Titicaca Basin with their curvilinear and non-geometric profile and frontal figures (Bruhns 1994, 249; Haeberli 2001, 116-130; Isbell 2001, 456; Stone-Miller 1995, 119).

Tiwanaku art style is characterized by standardized, geometric shapes with remarkable graphic linearity and its state iconography put priority on clarity, whereas the Wari intentionally distorted and fragmented the tapestry figures into almost pure abstract images. Tiwanaku designs are thought to have promoted the
religious-political hierarchy by conveying symbolic messages of power and strength. Their primary expressions are to be found in the stone sculptures and snuff paraphernalia that were unknown in Wari territory. The symbols are conservative but show stylistic development through time (Conklin 1991, 282-283). As the textile designs are closely related to the ceramic and especially the sculptural and architectural designs, these other material expressions of Tiwanaku’s iconography are briefly mentioned as well.

Uribe and Agüero (2000) drew up an inventory of several of the major stone carvings from Tiwanaku which confirmed that Tiwanaku stone sculpture is focused on a single theme: a Frontal Personage (‘Señor de Cetros’), also called the Gateway God[1] is flanked by Profile Personages[2] and together they stand on top of a platform called ‘Banda-faja’, containing frontal anthropomorphic or geometric images in the spaces of the meandering band. This theme may be represented whole or partially (Uribe and Agüero 2000). The monolithic ‘Gateway of the Sun’ bears the most complex statement of Tiwanaku iconography, containing practically all their leitmotives and as such is thought to be the most important monument of the site. It shows a shallow, but intricate frieze that measures 3.5 m wide x 0.90 m high. Right above the narrow doorway, the frontally depicted anthropomorphic personage is carved in the deepest relief (fig. 7.1). Authors, such as Stone-Miller (1995, 134), Bruhns (1994, 245, 247) refer to the Gateway God as male, although no explicit reasons are given for this identification, while Moseley (1997, 206) and Kolata (1993, 148) do not identify gender. However, the presence of objects identified as battle regalia and the absence of a mantle over the tapestry camisa, form the strongest clues of male gender. The figure is standing on a triple stepped platform and holds two vertical objects in his outstretched hands, interpreted as spears and a spear thrower by Stone-Miller (1995, 134), as two vertical staffs terminating in condor heads by Moseley (1997, 206), and as a sling and spear thrower by Kolata (1993, 148). The Gateway God wears a camisa with lateral, vertical (tapestry) design bands, a belt and an elaborate headdress with 19 radiating appendages ending in circles or puma heads, resembling rays of sun, that gave the gate its name. His eyes are circular and surrounded by an eyepiece decoration (also referred to as a ‘tear line’ or ‘tear mask’) in the shape of a condor wing and ends in a puma head. The centrality of the figure, his relative large size and deepest relief, together with his frontal position and entitlement to carry two staffs and other accoutrements, signal the paramount and supernatural status of the personage (Stone-Miller 1995, 134). The origin of the frontal staff-bearer figure is not clear. According to Rowe (1971), this frontal god was ‘undoubtedly based upon the earlier staff god of the Chavín culture’ in the northern Peruvian highlands. The Chavin Frontal God may have arrived in the southern highlands via the Pukara culture that is thought to have traded dyed yarns with, for example, the Paracas culture at the south coast, where original Chavin fabrics with painted frontal Staff God figures have been found at the site of Karwa (Dwyer 1973, 74).[3] Frontal faces with angular mouth and divided eyes and surrounded by rays were also modelled into Pukara ceramics and woven into Pukara interlocked tapestry fabrics in red, blue and creamy white colours, found in Alto Ramírez contexts near Arica (Rivera 1991, 25-26, fig. 9). Even earlier representations of frontal human faces with appendages attached to all sides, are found on stone sculpture related to the Yaya Mama Religious Tradition from the southern altiplano (1400-850 B.C.), predating the Chavin culture, so that this feature may in fact be a local development (see Chapter 4).[4]

The frontal figure may have been a solar god, possibly identical to Thunupa, the later Aymara celestial god personifying natural forces and as such intimately associated with productive potential of the altiplano’s
and related to the sun, wind, rain and hail, with both positive and negative aspects (Kolata 1993, 148).

On either side of the frontal figure on the Gateway of the Sun, three superimposed, horizontal rows of eight square figures each approach the god (fig. 7.2). They are engraved in a shallower relief, smaller size, and in profile. The upper and lower row contain a repetition of human figures facing forward, while the middle row contains repeated bird (falcon-condor) figures facing upward. All figures are dressed in rich garments. Their headdress, staff, and the sash hanging down their back, end in raptorial bird heads with downwards pointed beaks or fish heads with upwards facing broad mouths (Oakland 1986a, 228). In addition, they hold a vertical staff in outstretched hand in front of them and are equipped with one wing on their back. Their legs are bent as if kneeling, running, or flying. As Reid (1991, 236) says: ‘We cannot be certain if they meant to portray flying figures, figures running with such speed that wing attributions symbolized flight, or ceremonial figures attired in avian guise’.

The fact that these figures are repeated within one scene, their rendering in profile and in smaller size, and the fact that they carry one vertical staff instead of two, has been interpreted as criteria of lower status compared to the frontal personage. They may be lesser supernaturals of the Tiwanaku pantheon, serving as the attendants of the paramount frontal god, yet simultaneously may represent ritually-attired priests passing through the gate (Stone-Miller 1995, 134). Moseley (1997, 206) reads the Andean dual organization principle in the two approaching groups of profile figures. The profile figures have also been interpreted as running messengers comparable to the Inca ‘chasquicamayoj’ (Reid 1991, 234).

Finally, below the central figure and triple rows of profile attendants, a single row of eleven frontal faces encircles by ray-like appendages are depicted within a meandering line with bird head appendages.[3]

7.2.1 PORTABLE TIWANAKU ARTEFACTS

The frontal and profile personages were popular figures on portable Tiwanaku-style artefacts throughout the Tiwanaku influence sphere as well as in Wari territory. They appear on pottery, textiles, stone and wooden carvings, both as whole figures as in shorthand. Many of these objects appear to have functioned in the ritual inhalation of rapé snuff powders (*Anadenanthera*...
**colubrina var. Cebil.** Characteristic of Tiwanaku style designs, regardless of the media employed, is the containment of the design within a square or rectangular space. The image almost completely fills this block, and the angular space determines the design’s form to a great degree.

In all media, mythical beings with human bodies but with a variety of animal part substitutions, are depicted. Human heads may be replaced by that of a bird, with a large wing attached to their backs like the Profile Personage. Often, small wings are attached to the feet. Feet and hands may end in claws, teeth may be replaced by fangs. Raptorial bird heads are recognizable by the bent-beak, fish heads by upturned snouts, feline head (probably pumas) by a round nose, triangular ear and N-shaped fangs, and llamas by their upturned tail and cloven hoofs. In addition, concentric circles and abstract, geometric forms such as stepped crosses, stepped frets, and meander patterns are represented, no doubt imbued with deeper meanings (Conklin 1996, 376; Oakland 1986a, 23-24, 129-130).

Ceramics are burnished and the figures are typically painted with fine black or white outline and filled in with red, orange, brown, white, black, and sometimes grey, against a dark red background in Tiwanaku IV-style ceramics and against a light brown background in Tiwanaku V-style ceramics (fig. 7.3). Polished black ware is less common. Popular Tiwanaku IV figures are the frontal of a human, condor, or feline head protruding from the flaring walls of a kero and surrounded by rays, while the body had been painted two dimensionally. Tiwanaku V vessels have thicker walls while their decoration shows more standardization, with thicker and more angular black lines used to paint flamingos, profile heads, full-body felines, volutes, crosses, and opposed-step stair motifs within well-defined registers (Goldstein 1989; Moseley et al. 1991a, 125-129; Stanish 2003, 199; Uribe and Agüero 2001, 414).

Tiwanku monolithic sculptures are generally carved in solid rectangular forms with rounded corners.[6] The arms and legs of anthropomorphic statues do not break away from the mass of the stone, but are indicated by shallow carving. The face is flat and square, with large rounded rectangles for eyes. The head is placed solidly onto the torso (fig. 7.4). The massive form, however, functions as a background
on which the finest engravings are chiselled. These fine-line engravings represent tapestry tunics, belts and headgear. The clothes are rendered in similar detail on the stone surface as in the actual tapestry weavings and probably once were brightly painted (fig. 7.5). Some tapestry figures follow the engravings so faithfully that the original tapestries may have been woven in the altiplano centre itself near these stone examples. Oakland feels that the particular poses and attributes shared by various media were considered important in the identification of certain figures (Conklin 1986, 124; Conklin 1991, 282; Oakland 1986a, 114-115, 239, 250).

Artefacts related to the hallucinogenic complex of rapé snuff powders are often richly and finely engraved with Tiwanaku IV-style iconography. Such artefacts are rectangular wooden tablets (fig. 7.6), wooden or bone tubes and small spoons, one or two leather bags with the psychoactive substance inside, usually held inside finely woven wool bags. Themes like the Frontal Personage, radiant frontal head, staff-carrying profile felines or avian figures, or a profile llama are carved as miniature sculptures on the handle of the tablet or spoon, incised in fine lines on the tube and woven into the bags (Oakland 1986a, 25-26; Torres 2001, 428-440).

Textiles have been derived from tombs, where they had been wrapped around the dead individuals. Only few general descriptions of Omo and Chen Chen phase textiles from the Omo site by Goldstein (1980), and a selection of textiles from Chen Chen described by
Uribe and Agüero (2001) are known to the author. Goldstein (1989, 68) describes the Chen Chen phase textiles from the Omo site as: 'Most individuals were buried wearing sleeveless tunics of fine to medium warp-faced plain weave. Some striped tunics had narrow vertical stripes in as many as six colors, including greens and blues that appear to be diagnostic for Tiwanaku textiles (Oakland 1985). A diagnostic feature found on many Tiwanaku plain weave tunics was between three and twelve rows of cross-knit loop stitch embroidery along selvages, armholes and neckholes, with symmetrical repeating geometric designs in red, green, blue, yellow, black and white. Similar techniques were also found for shawls, and a variety of smaller carrying cloths and bags (Goldstein 1989, 74).

He concludes that 'Tiwanaku style camelid wool textile exhibit similar uniformity (as ceramics), suggesting that some articles such as coarse blankets and tunics might have been mass produced for provincial consumption' (Goldstein 1989, 86).

Notwithstanding, Uribe and Agüero (2001, 401-402) suggest that the Tiwanaku colonists 'locally developed a textile production based on daily use' after reviewing a selection of the Chen Chen phase specimens from the Chen Chen site. The textile production is thought to have been gender related, as spindle whorls had been given to adult females only. Male adults and adolescents, on the other hand, had been buried with ceramic or wooden keros (Buikstra 1995, 247-248).

7.2.2 TIWANAKU TEXTILE TRADITION: FIBRES AND COLOURS

No systematic analyses of Tiwanaku textiles from the Omo valley are known to the author. Most Tiwanaku textiles have been discovered in the desert of northern Chile and in Bolivian and Argentinian dry caves.

Conklin (1983) and Oakland (1986a) found consistent use of camelid wool in the various Tiwanaku textiles, probably alpaca and/or vicuña. Only few specimens were found to contain hidden cotton elements or a combination of cotton with alpaca wool, and are thought to be locally manufactured Tiwanaku copies (Oakland 1986a, 250).[7] In all, cotton appears to have been rarely used in textiles that had been made in Tiwanaku's state controlled workshops (Oakland 1986a, 70). In contrast, Wari tapestry camisas contained hidden warp elements made of plied cotton or cotton plied together with alpaca warps, covered by the alpaca (or vicuña) wefts. This feature is shared by the Inca interlocked tapestry camisas centuries later (Bird and Skinner 1974, 7; Rowe 1979, 245).

The hidden warps used for interlocked tapestry camisas and mantas are of brown or bichrome brown shades. The average warp count yields 20 warps/cm (Conklin 1983, 3.9). Oakland found a camisa (#T2) and a manta (#T3) with paired warps, and thinks that the paired warp tradition may be from 'the opposite side of Titicaca Lake'. The Pukara tapestry specimen indeed had made use of paired warps, combining a solid brown plied warp with a bichrome warp. According to Oakland, paired warps are an expression of a local weaving custom, with no structural necessity (Oakland 1986a, 240).

The weft elements used for interlocked tapestry camisas and mantas are extremely fine and evenly spun with as many as 92 wefts inserted per centimetre (Conklin 1983, 9-10). All yarn is loosely twisted in two-ply /2/, for Tiwanaku and Wari culture alike (Conklin 1983, 17; Oakland 1986a, 170, 173, 189-190; Torres & Conklin 1995, 105).

Dyed colours are remarkably brilliant despite their millennium old age. Tiwanaku’s basic dyed colour palette has been described as a variety of blue (in the author’s colour codes: ‘31’, ‘35’, ‘38’, ‘93’), green (‘33’, ‘34’, ‘36’, ‘85’), red (‘09’, ‘23’, ‘28’, ‘92’), pink (‘82’, ‘91’), gold (‘15’), yellow (‘07’), orange (‘24’), and rare cases of purple (‘94’) (see Appendix 4). A natural light brown (‘05’) is favourite for the weft elements of tapestry weaves,
forming neutral colour fields between tapestry design bands. Natural black (‘01’), dark brown (‘02’) or white (‘14’) fibres are only sparingly applied (Oakland 1986a, 117, 130, 178).

Blue and green colours, however, are most characteristic of Tiwanaku fabrics. According to Conklin (1983, 17), the use of blue and green colours is even so specific for the Tiwanaku that ‘In tracing the use of blue and green, we can be quite sure that we are tracing the heritage of Pukara textiles and of Tiwanaku art’. The dominant use of blue and green colours plus additional red and yellow for the Tiwanaku period, was also observed in San Pedro de Atacama and in the Azapa valley (Oakland 1986a, 114, 117, 130; Ulloa 1981a, 101). Blue and green colours are also applied on Tiwanaku ceramics. Conklin (1991, 282) adds that traces of paint were found on a Tiwanaku architrave in the Völkerkunde Museum in Berlin, and Créqui-Montfort (1990, 541) describes that traces of blue-green colour were still visible on compound walls at the Tiwanaku site in 1904, so that it is probable that Tiwanaku’s architecture was once entirely painted. The colours of the remaining paint are reminiscent of the dominant colours used in textiles, strengthening Conklin’s (1991, 282) idea that Tiwanaku’s carved stone work represented colourful dressed personages.

In comparison, red, pink, purple, yellow, gold and white camelid yarn are characteristic for Wari colours, while blue and green hues are used only sparingly (Rowe 1996, 399). Perhaps the source of the blue dye, supposedly indigo (Indigofera tinctoria) or the dyeing procedure, was unavailable to the Wari (Oakland 1986a, 252-253).

7.2.3 TIWANAKU TEXTILE TRADITION: FORMS, FUNCTIONS, AND DESIGNS
Camisa (tunic)
Camisas are worn by human figures depicted on ceramics and carved into the anthropomorphic monoliths from the Tiwanaku site. The tapestry camisas cover their shoulders and reach down to the knees, often decorated with vertical bands and a belt (Oakland 1986b, 106).[9] The actual camisas found in burials inside dry caves in the highlands or in the coastal desert can be subdivided into several categories according to structure and decoration:

Warp-patterned camisas formed the daily outfit of Tiwanaku colonists living in the empire’s periphery, including Chen Chen and the oasis of San Pedro de Atacama (see Chapter 11) (Oakland 1992, 336; Uribe and Agüero 2001, 401-402). Warp-faced camisas are made from a single rectangular fabric, the warp elements twice as long as the required length of the garment. The weft is continuous. After finishing the web’s four selvages on the loom, the cloth is folded at the shoulder, so that the warps are worn in a vertical direction. The weft selvages are then sewn close, leaving an opening for the arms. Some camisas are plain while others have woven or embroidered lateral stripes, either mirrored or asymmetrical (Oakland 1994, 114; Oakland 1992, 326; Uribe and Agüero 2001, 401).[9]

Warp-faced camisas with lateral stripes
Unfortunately, only few Tiwanaku camisas with multiple lateral stripes (type 5A) have been described in literature, and even less show the actual lay out of the lateral stripes.

The catalogue of the Contisuyo Museum in Moquegua shows a full colour picture of a fragment of what is thought to have been a camisa of ‘Tiwanka culture’ (1997, 64, 111). The fragment shows a repeated pattern of two joined wide stripes (each about 1 cm wide) interspersed by a group of six to eight stripes of each about 1 mm wide (2 warps), all in random but contrasting colours, greenish black (‘13’), cream (‘14’), pale red (‘23’), olive green (‘35’), greyish green (‘36’), brownish red (‘12’), and gold (‘15’).

In addition, Oakland (1992, 328-334) distinguished five types of polychrome warp-patterned camisas from Tiwanaku contexts in the San Pedro de Atacama oasis of Chile, with multiple lateral stripes and a plain brown central area. Both use more or less similar colours: red, blue, green, maroon, and yellow.

Warp-faced camisas with embroidered decoration
According to Uribe and Agüero (2000), embroidery was of minor importance in the Tiwanaku textile tradition. The embroidery was applied in several rows covering both lateral seams, often below the neck split on both sides of camisas and sometimes around arm openings as well (fig. 7.70). The Tiwanaku used two different embroidery techniques: close worked cross-knit loop stitches or horizontal satin stitches. Though the two techniques result in different decoration styles, both are characterized by Tiwanaku’s angular shapes in figurative or rigid
geometric patterns. The most common geometric motifs require 3 to about 14 rows and result in solid or (concentric) squares, or in ‘U’ forms with internal checks (fig. 7.7b). Combined figures often occur, such as two connected ‘U’s resulting in a S or Z form or meander, or step-frets (Oakland 1986a, 164, 176-177, 316). The figuative motifs consist of various angular zoomorphic or anthropomorphic figures in profile or frontally viewed, holding a staff in both outstretched hand, reminiscent of the tapestry figures (see below) (Oakland and Fernandez 2000, fig. 13, 14, and 15).

The colours of individual motifs seem to be chosen in a random sequence and contrast with their surrounding colours just like the geometric designs in tapestry weaving (Oakland 1986a, 178).

When applied at the base of the neck split, the satin stitches usually form two horizontal rows with checkerboard pattern by two alternating colours, often maroon with gold above and green and blue below. Oakland considers such checkerboard plaque as one of the principal emblems of Tiwanaku affiliation, expressing symmetry and duality like the Tiwanaku central site itself (Oakland 1992, 335).

Tie dye camisas

Tie dyed camisas have been found in Tiwanaku as well as in Wari contexts. In the Tiwanaku sphere of influence, tie dyed camisas are generally composed of four large, rectangular panels in contrasting colours linked by discontinuous warps and wefts (fig. 7.8). The Wari on the other hand, preferred to organize the smaller panels in a stepped pattern, likewise linked by discontinuous interlocking warps and wefts. Red and dark blue are the favoured colours. The tie dye procedure created...
concentric rhomboid designs in off-white colour all over the surface (Oakland 1992, 333–335; Oakland and Fernández 2000, 125, fig. 10).

As the Wari made identical tie dyed fabrics as the earlier Nasca people within their influence sphere, Prümers feels that the origin of this technique is to be found in this culture (Prümers 2000, 303, fig. 21).

Tapestry camisas

In the literature, there is much confusion about the identification of Tiwanaku and Wari tapestry camisas, although analysis of such camisas has made clear that these two cultures had very different methods of manufacturing tapestry camisas:

The Tiwanaku tapestry camisas are made of a single web with all four sides finished on the loom. The neck slit of the camisas was produced by discontinuous warps, probably with the aid of weft scaffolding like the later Inca tapestry tunics. The weft selvage was reinforced by doubling or tripling the outer two or three warps. The rectangular cloth would be folded in half at the shoulder area, resulting in a camisa of about 110 cm x 105 cm wide. The lateral sides are sewn up, sparing an opening for the arms near the fold (Conklin 1983, 10; Oakland and Fernández 2000, 125; Rowe 1986, 151-153).

The Wari, on the other hand, made their camisas out of two separately woven, rectangular panels (fig. 7.9). In addition, the Wari did not finish all four selvages of a tapestry fabric on the loom like the Tiwanaku, but cut the warps loose from one side of the loom. The dangling warp elements were diagonally interwoven along the warp end. The advantage of this edge finishing was that the heddle and shed rod could stay inside the fabric so that no time consuming final weft insertions with the aid of needles were required. The opposite warp end had a selvage with the thicker heading cord either left in place or removed upon finishing the web. In the latter case, the warp ends form small loops. These are then worked together in the form a chain, pulling one loop through the other, and thus creating a compact selvage. Then they are folded and sewn lengthwise, usually joining both braided warp ends under the armpit and both chained warp ends or selvages under the neck slit. No such selvage treatment was observed in Tiwanaku specimens (Bird and Skinner 1974, 6, 8; Conklin 1983, 13; Oakland 1986a, 34-35, 23; Rowe 1986a, 153).

The size of the camisas is similar to the Tiwanaku specimens. Bird and Skinner (1974, 5) estimated that a 105 cm square tapestry camisa, worn by a man of 170 centimetres tall and an arm span of 167.5 cm, would reach just over the knees, while the arm opening would almost reach to the elbows. The neck opening is about 21 cm deep, while the arm openings measure 16 cm from the shoulder line down to the arm pit, fitting rather tightly around the upper arm.

Both the Tiwanaku and Wari tapestry camisas were woven with the warp elements forming the shortest side of each rectangular web, that is, in horizontal position. This implies that the weft dimension is about two metres long. To produce a Tiwanaku or Wari tapestry camisa, an exceptionally wide loom would be required to hold the total weft width (fig. 7.10). Most likely, a vertical weaving loom would have been used for this purpose, allowing two or more weavers to work side by side on the specimen. In fact, in order to operate the heddle that creates the shed for all wefts, at least two weavers were required. Two weavers could interlock weft yarns where necessary or pass on a single weft element from selvage to selvage to form solid weft stripes. This interlocking tapestry structure was found in the older Pukara sash as well (Bird and Skinner 1974, 9; Conklin 1983, 3; Oakland 1986a, 116-117, 124, 237-238; Sawyer 1963, 1).
A unique Wari structural characteristic are so-called ‘lazy lines’, which can be detected as diagonal lines in the monochrome fields that were woven independently from, rather than interlocking with the patterned bands. The lazy lines imply that the Wari had made divisions between work sections on the loom. As a result, a weaver did not have to pull a weft from one selvage to the other, and not even did he/she have to open the shed along the full width of the fabric as the Tiwanaku did. A flexible heddle made of a cord together with a small beater may have been used to work on small areas (Bird and Skinner 1974, 7; Conklin 1986, 124; Oakland and Cassman 1995, 39).

The tapestry weaving procedure implies that designs had to be woven in a 90° angle from the weaver’s viewpoint, that is, perpendicular to the warp. In Tiwanaku and Wari tapestry camisas alike, individual design blocks are commonly arranged in vertical bands. Each band varies in width between 5.5 cm and 15 cm and may be flanked on one or both sides by solid stripes, but never on the side of the plain central area (Oakland 1986a, 24, 163). One or two vertical bands may flank a solid coloured central area, or six vertical bands may be evenly placed over the whole surface (fig. 7.11a,b). Some camisas have an additional narrow tapestry band along its lateral selvage, measuring only 1.6 to 3.7 cm wide. One Tiwanaku tapestry camisa was found with a separately woven tapestry band of 16.5 cm wide sewn in horizontal position to its bottom. Conklin (1996, 377) feels that the number of design bands may be related to the expression of status, comparable to the Inca tapestry camisas which had one or more horizontal or vertical band(s) or an all over design of lined up so-called ‘tocapu’ figures, which are geometric designs contained within a square or rectangular block.

Fig. 7.10 Reconstruction of loom to weave tapestry camisas (Bird and Skinner 1974, 10)

Fig. 7.11 Tiwanaku tapestry camisas with vertical bands placed laterally (a) or over the whole surface (b) (Uribe and Agüero 2001, fig. 2B, 3B)
The Tiwanaku tapestry figure within its block is never exactly duplicated in its adjacent block. Even if one single design is repeated throughout the band, this design is mirrored and, in case of geometric figures, inverted as well. Anthropomorphic designs are mirrored only and never depicted standing upside down, which implies that in camisas, the orientation of the blocks is inverted at the line of the shoulder, as the design bands run unbroken from bottom to bottom over the shoulder. The orientation of the design unit in one vertical band is repeated in the other vertical bands, creating additional horizontal symmetry. The only tapestry weaving in Oakland’s collections that does not have multiple designs lined up in vertical bands is a rather coarse cloth from Arica, that holds one large, centrally placed figure flanked by broad lateral solid stripes (see fig. 8.33) (Oakland 1986a, 126-128, 221-222).

In contrast to ceramic decoration and stone engravings, no contours are used in tapestry figures. Contrary to the clearly readable Tiwanaku designs, the Wari intentionally distorted and fragmented the tapestry figures into almost pure abstract images by stretching and compressing woven figures in narrower bands towards the lateral sides of the camisa (fig. 7.12). Sawyer (1963a, 37) believes that the lateral distortion serves as a devise to create an optical illusion of roundness to overcome the ‘flat sandwich board effect’ of the rectangular camisa form. Conklin approaches this lateral distortion structurally, that is, as seen on the loom: then the bands have a horizontal orientation, in which the figures condense in closer spaced horizontal lines towards the upper zone, as if receding into the distance like a vanishing horizon (Conklin 1986, 125).

Another typical Wari feature is the fragmentation and truncation of body parts. Heads, especially the eye, nose and mouth with teeth, and the fingers may be represented without the rest of the body, and placed in a non-figural composition. The most common Wari design is a combination of a profile face that may represent a human trophy head, separated by a white diagonal line from a step-fret motif (see fig. 7.9). Such slanting line was much less common in Tiwanaku designs (Bird and Skinner 1974, 6, 11; Conklin 1996, 324, 379). Counting of the elements of the Wari tapestry designs made clear that the figures were not woven with similar number of warps or wefts, suggesting that exact copies of the design were not pursued (Bird and Skinner 1974, 9).

The Tiwanaku tapestry motifs have been subdivided into three general categories:

A motif may be ‘composite’ when a single figure has been mirrored along a vertical axis, and often mirrored once more along a horizontal axis. The result is a quadripartite pattern with a radial symmetry, with or without colour change (fig. 7.13).[5] Oakland (1986a, 129-130) finds antecedents for such mirrored and quadripartite radial symmetry in the snake-like images on monolithic stela in the so-called ‘Asiruni style’ of Lake Titicaca Basin, related to the Yaya Mama sculptural style.[6]

‘Geometric’ designs are most often woven in tapestry bags. They are woven into rectangular or square blocks lined up in vertical bands. The inversion and mirroring of the designs and colours result in positive and negative shapes of more or less equal proportion. Most common motifs are steps, interlocking frets and combined step-frets (stepped blocks ending in an appended, descending angular scroll), stepped zig-zag
lines, irregular angular curving lines and composite step-frets (fig. 7.14) (Oakland 1986a, 163-165, 309).

‘Staff-bearing figures’ include both frontal and profile figures that are placed within a square or rectangular design block (Oakland 1986a, 247-248). The characteristics of the frontal staff personage correspond with the depiction of the frontal figure in the ‘Gateway of the Sun’, while the profile staff-bearing figures resemble their stone counterpart (fig. 7.15a, b). The profile figures may have pure anthropomorphic features and look forward, or they have anthropomorphic bodies with zoomorphic heads that face upwards. The profile figure is always depicted in upright position, and appears to be running or kneeling, despite the single wing on his back. It forms the most common personage of tapestry designs. Conklin (1986, 124-125; 1991, 284) suggests that the profile figures should be viewed as woven on the loom, which implies a ninety degrees turn from the direction in which the camisas are worn, so that the mythical creatures can be ‘read’ as flying rather than running or kneeling. It is strange though that the repeated figures are not woven in horizontal position lined up in horizontal bands, especially since the tapestry structure allows practically total freedom of design. Nonetheless, the similarity of composition seems too close to be coincidental and an intentional combination of horizontal with vertical ordering of symbol-laden space may have been intended.

The representation of the so-called ‘sacrificer’ figure is known in the wider Andean region, including the highland Pukara culture (200 B.C. – A.D. 200), the coastal Paracas culture (600-150 B.C.) and especially the coastal Nasca culture (0-700 A.D.). Usually the sacrificer is depicted as a human figure with feline features (fig. 7.15c). His body and arms are rendered frontally, with the head and legs in profile. He has a mouth with feline fangs, while a trophy head is depicted on this chest facing upward. He holds a human trophy head in one hand, and often an axe in the other hand. The sacrificer may represent a deity with human and feline characteristics or a priest with feline mask, or a human being in the process of transforming into a feline (Conklin 1983, 11-12, 41; Oakland 1986a, 144-221).

**Manta and pañuelo**

Mantles apparently were not a common garment in the Tiwanaku sphere of influence. Few actual mantas have been found, and even less have been depicted on ceramics or stone sculptures. Possibly, the manta was a typical female garment during the Middle Horizon, as two Tiwanaku mantas are found in association with female mummy bundles at Coyo Oriental in San Pedro de Atacama (fig. 7.16). One tapestry mantle measured 80 x 150 cm with four selvages finished on the loom. The mantle had been pinned with long cactus spines to a mummy bundle of a woman of around 40 years old. It had been repaired, indicating that the garment had been worn on a regular basis (Oakland 1986a, 94-95, 105, 124).

The mantles are woven in interlocked tapestry structure. The warp is oriented horizontally when worn, so that the designs were woven in a 90° angle from the weaver’s point of view, just like the camisas. Unlike the tunics, however, the warp forms the longest direction of the rectangle. Some mantas have all four selvages.
strengthened by four rows of cross-knit loop embroidery on both faces (Oakland 1986a, 120).

Tiwanaku pañuelos are square or rectangular (47 x 55 centimetres), with the warp elements forming the shortest direction of the one web weaving. All four selvages were finished on the loom. Some fabrics were woven with broad warp stripes, while others were plain brown.

Some pañuelos have all four selvages embroidered with few rows or plaques of cross-knit loop stitches, while others only have their corners covered by plaques of embroidery (fig. 7.17). If only the corners have been embroidered, two rows of cross-knit loop stitches reinforce the selvages between the corner plaques. The front and backsides of the fabric are embroidered with an equal amount of rows (11 to 36 rows wide) and identical figures. The embroidery is strikingly colourful and forms geometric designs. None of the pañuelos had their contents preserved (Oakland 1986a, 173-175).

**Bolsa (bag)**

Characteristic of Tiwanaku interlocked tapestry bags are the warp elements that are warped on the loom in circular fashion, and thus form a tube. The bag is used with the warps in a horizontal direction, forming the widest side (fig. 7.18a). One weft selvage is stitched closed, forming the bottom of the bag. Some bags have this bottom strengthened by adding one or two rows of cross-knit loop embroidery. A typical measures 14 cm x 20 cm. (Oakland 1986a, 35, 156-157).

Warp-faced bags have the warp elements vertically oriented. All four selvages are finished on the loom and then folded into a rectangular or semi-trapezoidal shaped bag. They are patterned by warp striping in solid natural and dyed colours and by (multiple) ladder stripes. The lateral seams and mouth opening are reinforced with plaques of cross-knit loop stitches with
geometric or figurative designs (fig. 7.18b)/Espouey et al. 1995b, 120–121; Oakland 2000, 247; Oakland 1986a, 16–17; 167–171).

Most bags have woven or oblique interlaced carrying straps attached. Both types of bags are commonly associated with paraphernalia of the rapé snuff complex, and usually they were placed outside the funeral bundle (Oakland 1986a, 153, 157).

Cinta and faja (belt)
The cintas and fajas range in size between 2.5 and 7.5 centimetres in width and 52.5 and 90 centimetres in length. Some bands formed the carrying straps attached to bags, while others were wrapped around objects of the rapé snuff cult. They are delicately woven with intricate patterns in brilliantly dyed colours plus natural colours. Complementary, supplementary, and transposed warp structures were applied, as well as oblique interlacing with or without weft insertion. Repetitive geometric triangles, diamonds, scrolls, frets, steps, and zig-zag motifs are contrasted against a plain background colour (fig. 7.19). The weft elements were of natural brown and black wool shades (Oakland 1986a, 184–205).

Gorro (headgear)
Characteristic for both Tiwanaku and Wari cultures are polychrome four-cornered hats. They are more or less cubic shaped, although slightly narrower at the top. Each side measures about 10 to 12 cm and it has appendices of 4 cm high standing up from the corners. Four cornered hats are made of a single element forming knotted loops with the aid of a needle. Two mirrored simple loops (so called ’lark’s heads knots’ or ’cow hitches’) are formed by pulling the yarn through each previously row. A regular cap contained some 12 rows of vertical knots and 5.5 horizontal knots per cm² (Rowe 1996, 407–410).

A Tiwanaku hat is made in one piece. It is started at the top, spiralling out of the centre and augmenting knotted loops near its four diagonals in order to create a square form. Then the knotted looping continues down to the body. Finally, the characteristic four knotted points are added to the corners (fig. 7.20).

The hats are polychrome, using up to nine colours. The top part is usually divided by diagonals into four quarters with mirrored symmetry, while the body contains diagonal designs of zig-zag lines with triangular appendages, or square blocks with crosses. Relief may be added by reversing the face of the knots (Sinclaire 1996, 174).[^2]

Though looking alike, Wari hats are made differently: a Wari four-cornered hat is made of nine separate side panels seamed together (one top panel, four side and four corner panels) instead of one whole like the Tiwanaku. The side panels are started at the hat’s bottom and worked into flat rectangles of approximately 12 x 9 cm. The four points at the corners may be triangular or tubular shaped and some may end in tassels (’borlas’) (d’Harcourt 1987, 165; Rowe 1996, 409–412). In addition, Wari four-cornered hats often include supplementary yarn in the square knots of the looping technique (’knotted pile’). This supplementary element is inserted in each alternate row and trimmed off to form
short tufts after finishing the looping. The cut pile is usually dyed in various colours and contributes to the design (Rowe 1996, 407-410). Frame (1990, 6, 8) feels that the four-cornered hats may relate to headdresses made of animal heads that are often represented on ceramics and in tapestry designs: the points at the corners may have been derived from animal ears while the pile could imitate fur.

In the Tiwanaku and Wari cultures, such four cornered hats appear to be part of the attire of dignitaries with ceremonial and/or political authority, as the iconography on ceramics, textiles and sculptures suggest. These dignitaries appear to be adult men who wear the caps together with high status tapestry or tie-dyed camisas. In the Tiwanaku colonies in the western valleys, labour-intensive and iconography-rich polychrome four-pointed...
hats and tapestry fabrics were quite rare (Cook 1985, 209; Goldstein 1989, 75).

At Coyo Oriental, one such a hat was indeed found with an adult man. However, at the site AZ-01 in the Azapa valley, an intact tomb contained an infant’s bundle with a polychrome four cornered hat over its covered head, dated A.D. 850 ± 90 (Sinclair 1998, 170-174). The author observed a child sized mummy bundle with similar hat being brought in from the field from the 2002 excavation of Chen Chen. Therefore, the four-cornered hat in children’s tombs may implicate a sense of territoriality instead of just symbolizing a high ranking, male position within the Tiwanaku state organization, that would have been restricted to few Tiwanaku state representatives and local leaders (Frame 1996, 8; Oakland and Fernández 2000, 124).

7.3 Ilo-Tumilaca/Cabuza style: iconography and textile tradition

The Ilo-Tumilaca/Cabuza style artefacts are named after the type site Tumilaca in the middle Osmore valley and after the Cabuza ceramic and textile tradition from the Azapa valley in northern Chile, which shows strong resemblance with the later or cruder artefacts of the Tumilaca population. ‘Ilo’ refers to the coastal Osmore variant of these related stylistic expressions (see Paragraph 6.6). The Tumilaca and Ilo-Tumilaca/Cabuza people represent the direct descendants of the altiplano Tiwanaku colonists in the middle Osmore valley. Owen (1993, 414) dated the Ilo-Tumilaca artefacts between A.D. 950 to 1075, and the Ilo-Cabuza style artefacts between A.D. 1000 to 1250, although he does not exclude the possibility of contemporaneity of both variants, with the Ilo-Cabuza style as the socially poorer expression of one group of people (Owen pers. comm. 2004).

The Cabuza people from Azapa, however, were found to have coastal instead of highland ancestors, just like the Chiribaya are thought to have. However, the Cabuza were strongly acculturated by the Tiwanaku traders visiting the Azapa valley and by the Tiwanaku colonies in the Osmore valley. The Cabuza cultural expression has been dated between A.D. 750 and 1300 for the Azapa valley, which implies that they were (partly) contemporary with the Tiwanaku and with the Maytas-Chiribaya culture (Goldstein 1995; Lozada 1998; Sutter 1997, 81-85, 269-270; Uribe and Agüero 2000).

7.3.1 Portable Ilo-Tumilaca/Cabuza artefacts

Typical (Ilo-) Tumilaca ceramics are tazones (flat bottomed small bowls) with straight or slaring walls, handled pitchers with flaring necks, and keros (tall drinking cups) with flaring walls, often with one protrubrance at the rim or handle and a single raised horizontal band around the waist which has been pressed out from the inside. The pots were burnished and had an orange-brown background on which the designs were painted in black, white, orange, brownish red, and light brown colours (fig. 7.2a, b). Typical Ilo-Tumilaca designs are the stairstep diagonal lines contained within horizontal lines. Often they are combined with concentric circle(s) and thus form an abstract profile face. Ilo-Cabuza ceramics have more or less similar forms but a decoration that has been simplified to transparent black lines. Typical is the design of a tall and narrow panel painted with straight lines in which one to three vertical sinuous lines run. The horizontal line is usually extra wide (fig. 7.22a, b) (Owen 1993, 359-385).

The Ilo-Tumilaca/Cabuza people produced less and cruder carved wooden objects, such as wooden spoons with profile cameld silhouettes cut in the handles. No Tumilaca style stone sculpture has been found (Owen 1993, 17, 20, 94-76).
**Fig. 7.21** Typical Ilo-Tumilaca ceramics: jarra (a) and kero (b) (Owen 1993, 365, 368)

**Fig. 7.22** Typical Ilo-Cabuza ceramics: jarra (a) and tazón (b) (Owen 1993, 374, 378)
Ilo-Tumilaca/Cabuza textiles, like the Tiwanaku and the Chiribaya textiles, are mainly wrapped around buried individuals.

### 7.3.2 Ilo-Tumilaca/Cabuza Textile Tradition: Fibres and Colours

Like their Tiwanaku ancestors, the Ilo-Tumilaca/Cabuza weavers used almost exclusively camelid wool for their textiles. Cotton fibre had been used for domestic purposes, mostly for net bags, whereas vegetable fibres, probably junco stalks, had been used to twist or braid ropes to tie up the funeral bundles. Likewise they used / and a warp-faced plain weave (Owen 1993, 96; Uribe and Agüero 2001, 402).

The Ilo-Tumilaca/Cabuza textiles from the Osmore valley show a rich variety of natural and dyed colours, although on the whole the Ilo-Tumilaca/Cabuza used less dyed colours than the Tiwanaku. Common are natural shades of brown (‘05’, ‘08’, ‘03’, ‘11’), black (‘01’) and white (‘14’), plus various shades of red (‘09’, ‘12’, ‘23’, ‘27’, ‘28’, ‘84’, ‘92’, ‘96’), green (‘13’, ‘34’, ‘36’, ‘85’), blue (‘31’, ‘35’, ‘93’), pink (‘91’), yellow (‘07’), gold (‘15’), and orange (‘10’, ‘24’; see Appendix 4). The dominant shade of blue in embroidery is Prussian blue (‘31’), which is rather rare among the Tiwanaku specimens. The four lateral wide stripes in type 5A and 5B camisas are dominantly green (‘85’ or ‘36’) or greenish blue (‘34’ and ‘35’) combined with dark red (‘27’, ‘92’, ‘84’ or ‘12’) stripes flanking a plain centre in a corresponding shade of red. No such clustering of four wide stripes is known among the Tiwanaku camisas. Although green and blue shades are common in Tiwanaku tapestry fabrics, they are not dominant in warp-striped camisas.

Similar colours are present in the Cabuza textiles from the Azapa valley, described as ‘yellow, dark green, bright green, bright blue, sea blue, greyish blue, dark red, and reddish brown and cream’ (Horta 1997, 84). However, the Cabuza applied more shades of blue are used instead of the greenish shades of the Osmore valley (see Appendix 13).

Wallert and Boytner (1996, 857, 859) examined the dyes applied in the Ilo-Tumilaca textiles from the El Algodonal site. They found that the red and orange dyes were obtained from the Relburnium plant (*Relburnium microphyllum* or *Relburnium hypocardium*) that grows in the fog lomas along the Peruvian coast, and presumably in Ilo’s lomas as well. Blue would have been obtained from indigo (*Indigofera tinctoria* or *Indigofera suffruticosa*) which could also have grown in Osmore valley. Purple was made by mixing red and blue dyes. Yellow colours were mostly natural camelid hues but a dyestuff containing luteolin was found as well. Mixing yellow with indigo dye yielded the Tumilaca green colour (Wallert and Boytner 1996, 857-860).

No chemical analyses of Tiwanaku textile dyes are known to the author, so that it is unknown whether the Ilo-Tumilaca/Cabuza used similar stuffs as their Tiwanaku ancestors. Similar dye stuffs would be indicative of local clothing fabrication by the Tiwanaku colonists instead of importing them from the homelands in the altiplano.

### 7.3.3 Ilo-Tumilaca/Cabuza Textile Tradition: Forms, Functions, and Designs

**Camisa (tunic)**

Like the daily camisas of the Tiwanaku colonists, the Ilo-Tumilaca/Cabuza camisas of the Osmore valley and the Cabuza camisas from Azapa are all warp-faced woven and made out of one fabric. They range in shape from square to semi-trapezoidal by allowing the warps to spread out. The neck slit is woven into the fabric through discontinuous wefts. The size of Ilo-Tumilaca/Cabuza camisas from Algodonal varies between 54 x 57 cm square to 120 x 107 cm (semi?) trapezoidal (Boytner 1998, 327-328; Uribe and Agüero 2001, 402).

Owen (1993, 96-97) describes the Ilo-Tumilaca/Cabuza camisas as decorated with “broad areas of many parallel stripes of numerous colors and variable widths” (that is, the type 5A/B of this study) or with “bands of loop-stitched decoration” (that is, type 3A), which he found were rare to non-existent among the mummy bundles associated with Chiribaya ceramics.

Embroidered Ilo-Tumilaca/Cabuza camisas are virtually identical to the embroidered Tiwanaku specimens with cross-knit loop stitches covering the lateral seam from the arm opening down to the bottom. Five to seven rows are most common, although camisas up to 11 rows are found in Ilo-Tumilaca/Cabuza burials at Chiribaya Alta.
Often, these camisas also have a horizontal plaque below the neck slit on one or both sides, embroidered with cross-knit loop or satin stitches in horizontal alignment. According to Boytner (1998, 333), the Ilo-Tumilaca/Cabuza neck plaque design is always slightly asymmetrical along the vertical axis, with variations between the geometric designs in the left and right sides. He found combinations of ‘M’ motifs, solid triangles, elaborate S volutes that are vertically reflected or rotated 180 degrees, often in different colours (fig. 7.23). A change of colour along a vertical axis was also practiced by the Tiwanaku (Agüero 2000b, 217-218; Boytner 1998, 329-330; Owen 1993, 96).

Likewise, the Ilo-Tumilaca/Cabuza warp-faced camisas with multiple lateral stripes closely resemble the Tiwanaku specimens: the polychrome lateral stripes of Ilo-Tumilaca/Cabuza style camisas are solid and either of equal width but divided by a thin line in contrasting colour or wide stripes are separated by a cluster of thin stripes (see fig. 7.24). They flank a plain centre in natural brown or red colour. The lateral stripes use both dyed and natural wool colours. According to Boytner (1998, 330), continuous lateral stripes with a single thin dividing line are typical of Ilo-Tumilaca/Cabuza burials at Algodonal. However, at Chiribaya Alta, such camisa styles have been found in Chiribaya contexts as well, which led him to assume that such colourful camisas may have been associated with high status.

In the Azapa valley, similar striped camisas with or without neck plaques in cross-knit loop or zig-zagging satin stitches are found associated with Cabuza ceramics. Some camisas contain outer stripes that change colour at the shoulder (type 5B). The centre is commonly dyed using in a reddish brown, red, dark or greyish blue colour. The lateral stripes show sky blue and reddish brown as dominant colours, plus additional colours such as yellow, greenish blue, bright and dark green stripes (fig. 7.24) (Agüero 2000, 217-224).

Pañuelo (small cloth)
Owen (1993, 97) found pañuelos to be extremely rare in Ilo-Tumilaca/Cabuza contexts. Cabuza pañuelos from the Azapa valley are described as having their corners either embroidered with cross-knit loop plaques or their warp ends finished by weft twining (fig. 7.25) (Agüero 2000, 223-224; Agüero 2001, 402).

Ch’uspa (cocabag)
Ilo-Tumilaca/Cabuza ch’uspas are rectangular or semitrapezoidal shaped, although bags have been widened through the insertion of discontinuous warps. The ch’uspas are typically red or natural brown, interspersed by three identical vertical stripes with (block-) ladder pattern (fig. 7.26). Boytner (1998, 330) identified the required structure erroneously as supplementary warps. Cabuza ch’uspas from Azapa are likewise made with three vertical stripes decorated with small block-ladders, squares, and stepped triangles (Horta 1997, 83; Ulloa 1981b, 122).

BOLSA FAJAS ARE TYPICALLY WOVEN WITH SOLID STRIPES OF VARIOUS WIDTHS, INTERSPERSED BY THREE STRIPES PATTERED BY FLOATING WARP MOTIFS. UNLIKE THE CH’USPAS, THE THREE STRIPES ARE USUALLY PLACED UNEVENLY OVER THE SURFACE. THE WARP ENDS OR CORNERS ARE OFTEN EMBROIDERED WITH PLAQUES OF CROSS-KNIT LOOP STITCHES IN REPEATING COLOURS (FIG. 7.27) (SANTORO AND ULLOA 1985, 49; ULLOA 1981b, 119).

GORRO (HEADGEAR)


7.3.4 TEXTILE EVIDENCE INTERPRETED


IN ADDITION, BOYTNER FOUND NO EVIDENCE OF DISTINCT GARMENTS ACCORDING TO GENDER, AS THE FORM, DECORATION,
techniques of weaving and finishing of male and female garments are equal. He adds that ‘societies in which males and females share the same status are not unknown in the Andes, but not common’ (Boytner 1998, 336-337).

7.4 Chiribaya style:
iconography and textile tradition

The Chiribaya culture was concentrated in the lower Osmore valley, with settlements in middle and upper reaches of the drainage as well. The origin of the Chiribaya culture is much debated. A highland origin has often been suggested, mainly based on the stylistic similarities between the Chiribaya and the Tiwanaku and their descendants, the Ilo-Tumilaca/Cabuza. More recently, however, a coastal origin has been proposed, sustained with ceramic style and bioarchaeological evidence (see Paragraph 6.6.3). The Chiribaya knew economically specialized communities that allowed a more or less self-sufficient society. The vertical trade route was not very important in the Chiribaya culture, whereas coastal contacts with the Azapa valley were strong. The Chiribaya style has been subdivided into an “Early (Algarrobal) phase” (A.D. 970 to 1130) and a “Post-Algarrobal phase” (including Jessup’s Yaral and San Geronimo phase), dated (A.D. 1070 to 1370). In the Azapa valley of northern Chile, the local variant of the Chiribaya is known as the Maytas style. This implies that the Chiribaya had contacts inland as well as along the coast (Owen 1993, 17). The Chiribaya culture came to an end around A.D. 1350, probably as a result of a disastrous Niño that destroyed the agricultural fields (see Paragraph 6.6.7). After that event, the Chiribaya had abandoned their typical ceramic and textile decoration style together with their destroyed hamlets and adopted the austere stylistic traits of the Estuquina culture that had been spared from the catastrophic event, thus resulting in a style known as “Terminal Chiribaya”.

7.4.1 Portable Chiribaya artefacts

Typical Chiribaya ceramics are jarras (jars with one handle), cantaro (jar with two handles), cuenco (rounded bowls), whereas ollas (open pots), tazones (cups), or keros (tall drinking cups) with or without handles are less common (see fig. 3.2). In time, the straight walls of the Chiribaya ceramic forms became rounder, and the decoration more standardized. Designs are painted in black, white, orange, and brown colour against a brownish-red background. Characteristic of Chiribaya ceramics are the black lines with white dots inside that run along the rim and sometimes surround a design panel, which are absent in the closely related Maytas style from Azapa. Jars (fig. 7.28a) and pots (fig. 7.28b) were decorated with trapezoidal shaped panels contained within horizontal lines. Although these horizontal bands with motifs contained by parallel lines and/or stairstep patterns are similar to the Tiwanaku and Ilo-Tumilaca/Cabuza ceramics, the trapezoidal shape of the panels is unique for the Chiribaya culture. Either one or two horizontal rows of trapezoidal panels are painted on the body, and another row on the flaring neck. Often semi-circles are placed against the edge of the trapezoidal panels and may form a whole circle with the adjacent panel’s semi-circle. The cuencos are often decorated with a broad cross motif on the inside, or a (half) eight-pointed star, half circle, or ‘bowties’ below the rim on the outside (fig. 7.28c) (Jessup 1991, 1-6; Owen 1993, 389-391).

The Chiribaya produced some metal work through a technique known as ‘oxidization gilding’. This technique uses an alloy of copper mixed with a 10 to 30% of silver or gold. By laminating, cutting and embossing, the copper is removed from the surface, so that the object appears to be made of pure silver or gold. Metal artefacts are pins, bracelets and necklaces of cone shapes, chest pieces and diadems with a stylized frontal face within a trapezoidal panel in relief (Asociación Contisuyo 1997, 93). The excellent organic preservation of Chiribaya sites has made clear that many tools were made of wood. Real or miniature harpoons, miniature boats and oars have often been found in burials, cups and jars for liquids, spoons for eating, panpipes and drums for music, staffs for ceremonies, and bars, batters and combs for textile production. Most if not all wood from the molle, lúcuma and algarrobo trees would have been taken from the lomas to the north of modern Ilo.

Practically all Chiribaya textiles have been found inside tombs. The dead are wrapped in similar fashion as the Tiwanaku and Ilo-Tumilaca/Cabuza, although the Chiribaya tied their dead mainly with ropes made of wool.
instead of vegetable fibres. During the Early Chiribaya phase, only few objects and little quantities of coca leaves were tucked into the bundle, whereas during the later phase, the Chiribaya buried their dead with increasing amounts of artefacts, including textiles and textile production tools, pottery miniature boats, harpoons, and shell bead necklaces. Bolsa fajas, fajas, pañuelos and four cornered gorros are rare, whereas ch’uspas with coca leaves are quite commonly found, ranging from one specimen for children to nine ch’uspas for adult men. Head decoration of tocados hilo and palito have been found with adults and children (Lazo 1990, 9-16).

7.4.2 CHIRIBAYA TEXTILE TRADITION: FIBRES, COLOURS, AND STRUCTURES

Chiribaya woven fabrics are practically all made of camelid wool, although small quantities of cotton, bast fibres and even human hair have been used as well, mainly to make knotted bags, cords and ropes (Boytner 1998, 332; Clark et al. 1993, 6; Reycraft 1998, 232).

The Chiribaya weavers used great quantities of natural light brown (‘08’, ‘05’) camelid fibres, especially in the plain (centres of) camisas. Compared to the Tiwanaku and Ilo-Tumilaca/Cabuza textiles, the Chiribaya weavers used a limited palette of dyed colours.
Favourite among the Chiribaya textiles are various shades of red, ranging from bright red ('92'), fuchsia red ('22'), dark red ('21'), Bordeaux red ('27') to dark brownish red ('99'), and from reddish purple ('25') to blackish purple ('94'). Other dyed colours that the Chiribaya frequently used, especially in the later phase, are dark green ('33') or greyish green ('36'), very dark blue ('29') or Prussian blue ('31'), and reddish orange ('96') or the natural colour golden brown ('15').

Wallert and Boytner (1996, 854-857) analysed some of the dyes used in Chiribaya textiles from the Chiribaya Alta site and concluded that the red and purple dye stuff was obtained from the cochineal shield louse (probably Dactylopius confusus, or D. cleydonicus or D. tomentosus) that feed on the local Opuntia cactus.[24] Dependent on which mordants are used, the cochineal red dye stuff yields a bright red to very deep purple colour. For instance, purple was obtained by adding an iron-rich mordant. This implies that the Chiribaya made use of a completely different source for their most important textile colour than the Ilo-Tumilaca/Cabuza people, who used vegetable dye stuff from the Relbunium plant.

Like the Tiwanaku and Ilo-Tumilaca/Cabuza, the Chiribaya people had made use of warp-faced plain weave (/1) and of two plied /2 warp and weft elements as basic structures that are thought to have its origin in the southern highlands weaving tradition, from which the coastal Formative and the highland Pukara and Tiwanaku derived their weaving skills as well (Clark et al. 1993, 8; Clark and Oakland 1994, 293). However, Wallert and Boytner described warp element twists from Chiribaya Alta as S-plied of three rather loosely Z-spun threads, that is /3; with weft elements as single S-spun threads (Wallert and Boytner 1996, 854). Possibly the Chiribaya fabrics buried with the individuals at this elite site had been woven with distinct yarns that required more spin and ply skills, suggesting higher prestige. Later, Boytner describes the vast majority of Chiribaya fabrics from the Algodonal site as 'single yarns S-plied', that is, the warp and weft elements were spun only, without plying, which led him to the suggestion that 'the Ilo-Tumilaca/Cabuza and Chiribaya cultures possibly both adopted North Coast yarn preparation technology' (Boytner 1998, 332). This, however, would be highly unusual for warp elements, as unplied warps are too weak to withstand the tension caused by the weaving process.

The characteristic (Maytas) Chiribaya designs have been made with two sets of complementary warps instead of the floating warp structure using one set of warp elements like the Ilo-Tumilaca/Cabuza weavers (Agüero 2000, 222; Boytner 1998, 328; Horta 1998, 145; Rowe 1977, 103). However, Boytner (1998, 330, 336) and Wallert and Boytner (1996, 854) identify the structure used for the figurative designs of Chiribaya textiles from the Algodonal site as made of supplementary warp elements with floating warp elements on one face. Clark et al. (1993, 13) describe the figurative design from one bolsa from Chiribaya Baja as made of supplementary warps, but state that this structure is very unusual for the Chiribaya culture, as all other designs are made with complementary warps.

7.4.3 Chiribaya textile tradition: forms, functions and designs

Camisa (tunic)

Typical Chiribaya camisas are made like the standard Tiwanaku and Ilo-Tumilaca/Cabuza camisas, made of a single web in a plain warp-faced woven structure and with all four selvages finished on the loom. The weft selvages of the arm openings and neck slits were often reinforced with closely spaced overcast stitches in red colour and/or with cross-knit loop stitches in a single or double file, usually polychrome with a certain colour pattern (Boytner 1998, 350-351).

The Chiribaya camisa is either rectangular (the warps as the longest dimension) or semi-trapezoidal like the camisas from the Tiwanaku and Ilo-Tumilaca/Cabuza people, or, unlike them, (extreme) trapezoidal shaped by inserting discontinuous supplementary warps at the shoulder line and sometimes at one or two levels more. These discontinuous warps are inserted at intervals and dovetail around a single weft element (Rowe 1977, 103).

The rectangular camisas measure about 125 cm long x 105 cm wide, whereas the semi-trapezoidal camisas widen about 25 cm by spreading the warps. These camisas are practically always associated with females and often are decorated with thicker supplementary warps floating over the plain fabric (type 1Aa) to gain a striped effect. Similar textural decoration had been
applied at Chen Chen and at Ilo-Tumilaca/Cabuza sites of the lower Osmore valley. The trapezoidal shaped camisas, on the other hand, are associated with men, women, and children alike (Clark et al. 1993, 16). Trapezoidal camisas measure between 90 and 100 cm in length and range in width between 110 cm at the bottom to 150 cm to 180 cm at the shoulder, becoming wider in time. They are typical of the Late Intermediate Period and will vanish with the Chiribaya culture itself. This shape has been found from the Osmore valley to the Azapa valley, Pica oasis and San Pedro de Atacama (Chiu-Chiu) in Chile (Lazo 1990, 15-16; Ulloa 1981b, 112).

Apart from single web camisas, a few camisas have been described to be composed of two fabrics. Two webs are joined with a central vertical seam with vertical neck and arm openings and are either plain or with lateral stripes (Boytner 1998, 327; Ulloa 1981b, 111-112).

Some camisas from Chiribaya Alta have neck plaques embroidered with satin stitches in zig-zag alignment. Each horizontal zig-zag line is executed in a different colour, usually cream, red, green, and purple, and the colour sequence is inverted along a central, vertical axis. In the Azapa valley, such zig-zag neck plaques are common within Cabuza contexts (Agüero 2000, 219; Boytner 1998, 334).

As among the Tiwanaku and Ilo-Tumilaca/Cabuza, plain camisas (type 1A) in light brown (‘05’) colour are common in Chiribaya contexts as well, and make up as much as 80% of the camisas from the site Chiribaya Baja (Clark et al. 1993, 5). Few plain camisas were found with fringes hanging down from the warp ends and in fact may be ponchos, associated with children only (Boytner 1998, 330; Clark et al. 1993, 16; Lazo 1990, 13, 18; Ulloa 1981b, 111).

A standardized decoration observed in all camisa shapes consists of a few asymmetrical lateral stripes in two dyed colours flanking a plain brown centre. The asymmetry lies in the sequence of the colours of the lateral stripes, which are repeated instead of mirrored (fig. 7.29). The lateral stripes may vary in width, number, and exact shade of colour, yet the overall design is clearly recognizable: the colours used are a shade of purplish red together with a dark colour, ranging from purple to black. Most common is a pattern of two broad stripes, each about 5 cm wide, with an accompanying thin stripe in opposite colour flanking both sides. These lateral stripes may be continuous (type 4A) or discontinuous when the warps change colour at the shoulder line (type 4B). Flaring trapezoidal shaped camisas with such lateral stripes have been categorized as type 4BW (Boytner 1998, 329-330; Clark et al. 1993, 6-7).

A small percentage of the Chiribaya camisas contains figurative designs contained within blocks and vertical stripes (fig. 7.30). Although the layout of vertical, patterned stripes was probably copied from the Tiwanaku tapestry camisas, the weaving structure differs drastically: the Tiwanaku produced patterned stripes with interlocked weft-faced tapestry weave versus Chiribaya warp-faced weave with two complementary sets of warp elements. Included in these different structures is the orientation of the figured stripes while weaving: the tapestry stripes were woven in horizontal position versus a vertical position for the complementary warp stripes.

The Chiribaya designs are made with one set of white (‘14’) warp elements, while the complementary set is either plain red (‘21’ or another shade) or polychrome striped, using purple (‘25’), dark green (‘13’, ‘33’ or ‘36’), and light brown (‘15’) colours. The designs include abstract geometric, zoomorphic, anthropomorphic, or ornitomorphic designs. Similar designs are found on ch’uspas, pañuelos and bolsa fajas. The motifs are arranged in square or rectangular blocks lined up in vertical stripes, which can reach a maximum width of
10 cm in camisas. The broadest stripes may contain two or three similar designs lined up horizontally, unlike the Tiwanaku tapestry camisas. Usually the adjacent figure has its colour combination sequence inverted, resulting in positive/negative appearances of the same motifs.

*Geometric figures* are often mirrored along a vertical axis and/or horizontal axis, resulting in a quadripartite square in positive/negative colour alternation. Horta (1997) studied Maytas Chiribaya figurative designs from northern Chile and found a clear distinction between Maytas-Chiribaya (A.D. 700-1300) and the later San Miguel style (A.D. 1100-1430) compositions of quadripartite squares: the former consist of a rhomboid as centre surrounded by stepped diagonals, with stepped triangles placed in the corners and small concentric hexagonals and S volutes filling up the spaces (*fig. 7.31a*). The latter compositions lack the rhomboid centre and have serrated diagonals filled in with a triple or quadruple S volute (*fig. 7.31b*).

Other common themes are S shaped volutes and continuous zig-zag lines with hooked appendages emerging from one or both sides. The earliest hooked appendages are curved (*fig. 7.32a*), while the latter style shows angular and truncated appendages (*fig. 7.32b*).

*Zoomorphic motifs* have been identified as serpents (a), camelids (b), frogs or toads (c), monkeys (d), spiders (e) and so on.
Some figures are depicted double-headed, especially the snake. This creature may have been imported from other regions, presumably the south coast where the Paracas and Nasca cultures had flourished before. Soon the figure was stylised into an S shaped volute.

*Ornithomorphic designs* are identified as the condor from the highlands (a) and the pelican and cormorán from the coast (b) (fig. 7.34).

*Anthropomorphic designs* show stylized humans, sometimes double headed (a) or with one head and sex indication (b) (fig. 7.33). Diagonal lines or curved appendages come out of the head, which contains two
eyes and a smiling mouth. The arms are always raised, the hands show three fingers (Boyten 1998, 336; Horta 1997, 84-88; Horta 1998, 147-163; Horta 2000, 241; Ulloa 1981, 111, 121).

The zoomorphic, anthropomorphic, and ornitomorphic motifs have in common that they all have some object depicted inside their trunk. Horta showed that the Azapa collection can be subdivided into an early phase with creatures containing concentric hexagonal motifs, while the later figures had S volutes, rhomboids with four hooked appendages or zoomorphic figures such as a lizard or snake inside their trunk (Horta 1997, 86-99).

**Manta (mantle)**

Chiribaya mantas form either rather simple constructs or represent the finest woven fabrics of the Chiribaya culture. The simple mantas are plain brown wool fabrics made of one or two webs in more or less square form. At Chiribaya Alta, they were found with children only. Finer woven mantas are usually made of two webs and form a large rectangular cloth, with either warp or weft element as the longest dimension and have been found with adults only at Chiribaya Baja. The fine mantas are commonly decorated with the characteristic Chiribaya red and purple stripes that flank a plain brown central area, either on one or on both sides (fig. 7.36) (Lazo 1990, 7-18; Reycaft 1998, 267-274).

**Pañuelo (small cloth)**

Pañuelos are square, rectangular, or trapezoidal shaped and range in size between 22 x 30 cm up to some 60 x 60 cm. They often have several rows of weft twining along the warp selvages, usually decorated with rhomboid or chevron design. These twined weft elements are often extended to form the straps of the cloth that are used to tie the bundle together. Pañuelos are practically always highly decorated. Their basic fabric is of a natural brown or dyed red or purple colour, with several solid or figured stripes along the lateral sides. Pañuelos with solid stripes typically have purple, dark green, blue, and brown stripes interspersed by red stripes. Figurative stripes contain a continuous geometric designs or repetitive anthropomorphic/zoomorphic motifs in positive/negative colour alternations. The designs are similar to the ones used in camisas and ch’uspas (fig. 7.37) (Reycaft 1998, 278-311).

Most pañuelos were placed in the tombs of female individuals, usually tied up to form a bundle with coca leaves and sometimes dry food stuffs inside. At Chiribaya Alta, one child from cemetery 7 had four pañuelos placed on its face within the funerary bundle (Clark et al. 1993, 26; Lazo 1990, 12).
**Ch’uspa (coca bag)**

Chiribaya ch’uspas range between square to extremely trapezoidal shapes and vary in size between 17 x 22 cm and 25 x 30 cm. Some bolsas are woven with double wefts at the bottom for extra strength. Ch’uspas usually have three wide vertical stripes with complementary warp pattern placed at roughly $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$ of the surface, interspersed either by plain areas in either red, purple, or natural brown colour, or by several narrow solid stripes in various colours. All three stripes may be identical, or the central stripe may be wider with (slightly) different design, choosing from the typical geometric or figurative Chiribaya designs described above (fig. 7.38) (Boytner 1998, 330; Clark et al. 1993, 20-21).

Most ch’uspas contain coca leaves and appear to be typical funerary gifts for adult male individuals. Usually they are placed on the chest or shoulder between the layers of fabrics of the bundle. At Chiribaya Alta, few adult males were found buried with as many as nine bolsas (Lazo 1990, 9-12).
Bolsa faja (belt-bag)
Not many bolsa fajas are listed among the excavated artefacts from Chiribaya sites and none is described in more detail than ‘polychrome with geometric designs’, even though Owen (1993, 97) said that bolsa fajas are one of the ‘textile forms that are common in Chiribaya burials’. Chiribaya style bolsa fajas on display in the Algarrobal Museum measure about 18 cm wide x 70 cm long, and are decorated like ch’uspas, with three identical figured stripes separated by narrow solid stripes in various colours. Few (Maytas-)Chiribaya bolsa fajas, however, had zoomorphic figures covering the whole width of the bag (fig. 7.39) (Horta 1997, 86).

Lazo (1990, 11-12) and Clark et al. (1993, app. 4) both list one bolsa faja with coca inside among their analysed specimens, both found with adult men. The bags had been wrapped around the throat or placed on the chest outside the fardo.

Bolsa malla (net bag)
Net bags are usually made of camelid wool, although cotton netted bag fragments have been found in domestic contexts. Intact specimens are rectangular shaped, about 55 x 22 cm. The netted bags are made by knotted looping structure (cow’s hitches) and continuous spiralling. They often have a pattern of broad horizontal stripes in natural beige and grey colour. The net bags are thought to have functioned to capture and transport marine resources. Several netted bags have been found in situ on the throat of buried male individuals, with raw camelid fibre inside (Clark et al. 1993, 3, 11; Reycraft 1998, 297-300).

Taparrabo (loin cloth)
Taparrabos are quite common in the Chiribaya culture, in contrast to the Tiwanaku and Ilo-Tumilaca/Cabuza contexts. All loincloths analysed by Clark et al. (1993, app. 1-13) were found in adult male burials, although the reason for sex determination in fact may be the very presence of taparrabos. Most loincloths are found covering the private parts. However, among the fardos from Chiribaya Baja, Clark et al. (1993, app. 1-13) found six taparrabos placed on the chest, over the head or under an arm, versus 13 specimens covering the loins.

Chiribaya loincloths are found in two distinct forms: hourglass shaped or trapezoidal shape:

Hourglass shaped taparrabos are made of three webs, with the central panel woven in hourglass shape by inserting supplementary discontinuous warps towards the warp ends. Both lateral panels are rectangular shaped and are seamed to the weft selvages of the central panel. The central panel is plain, while the lateral panels contain vertical stripes with geometric complementary warp patterns. Twined or braided tie straps extend from all corners.

Trapezoidal shaped taparrabos, on the other hand, are made of a single web, shaped by inserting discontinuous supplementary warps towards one warp selavage. They measure about 46 cm long x 40 to 55 cm wide. A trapezoidal taparrabo is usually decorated with thin red
stripes over brown base with cords attached to the corners (Clark et al. 1993, 24; Recraft 1998, 291-294, 312).

**Faja (belt)**
Lazo (1990, 8-11, 18) found few fajas at Chiribaya Alta. They were 3 to 5 cm broad and either woven or obliquely interlaced. They were tied around the waistline outside of the funeral bundle of three adults and three children. The fajas are described as having a polychrome and geometric design. Ulloa (1981b, 114) describes Mayta-Chiribaya style braided faja of eight strands that form 6 to 10 pointed stars. Similar braided fajas are on display in Ilo’s Algarrobal Museum in brightly dyed colours (fig. 7.40).

**Gorro (headgear)**
Classic Chiribaya hats are made of densely knotted looping structure with short points sticking out from its four corners, just like the Tiwanaku and Ilo-Tumilaca/Cabuza specimens. In contrast to their square hats, the Chiribaya wore tall, rectangular hats, measuring about 18 cm in height versus a width of 5 to 7 cm at the top and 10 cm at the base. The bottom may even be circular, giving the whole hat a cylindrical appearance despite its square top panel. The appendices at the corners are much shorter than the Tiwanaku specimens, and stick out only 1 to 1.5 cm above the top panel. Contrary to the Tiwanaku but similar to the Ilo-Tumilaca/Cabuza hats, the Chiribaya made their hats dark brown or dark blue with or without a red top panel. By changing the faces of the knots, zig-zagging horizontal lines or concentric rhomboid motifs were created, sometimes with a vertical accent along the corners.

According to Recraft (1998, 309) these hats are male associated (Clark and Oakland 1994, 296; Lazo 1990, 9-10; Sinclaire 1998, 177-182).

**Tocado (head ornament)**
Small wooden palitos with one end wrapped by a dark blue or green dyed yarn, some of them with a yellow feather inserted, are found in practically all burials from the Chiribaya Baja site, either infants, children, men or women. The sticks are usually stuck under the ropes that are wrapped around the funeral bundle’s covered head, or sometimes are tucked inside the layers of the fabric (Clark et al. 1993, 8-25; Lazo 1990, 11-13).

7.4.4 **Textile evidence interpreted**
According to Buikstra (1995, 259), Chiribaya women are always buried with their faces covered and often with a wide faja tied around their camisas. They are often accompanied by looms and several large ceramic pots. Clark et al. (1993, 3-6, 25-27) add that most women wore their hair long and either hanging loose or worked into two simple braids. Only women were found buried with artefacts related to textile production, such as combs, needles, wichiñas (bone picks), spindle whorls, and looms, suggesting that textile production was an exclusive female task in Chiribaya society. Chiribaya men, on the other hand, are commonly interred with their faces exposed, often wearing a hat. Men wore trapezoidal shaped camisas (by inserting discontinuous warps), of which 70% was decorated, either with asymmetrical lateral stripes, or with figurative stripes. They often wore their hair in multiple braids or multiple braids interworked into one broad braid at the back.
Men with the latter hairstyle had been buried with some of finest and most decorated textiles, although most of them had been well worn. Some males had been buried with fishing kits and non-utilitarian axes, and one male even with two female attendants (Buikstra 1995, 259; Clark et al. 1993, 3-6, 25-27). As no obvious gender differences are mentioned for the Tiwanaku colonists (Oakland 1992), Ilo-Tumilaca/Cabuza (Boytner 1998), Cabuza and Maytas of the Azapa valley (Cassman 1997; Horta 1997) these differentiated gender roles among the Chiribaya, expressed in their garments, bundling fashion, and associated grave gifts, appear to have been a local development.

Clark et al. (1993, 6-7) conclude that the Chiribaya population of Chiribaya Baja existed of two and maybe three sub-groups, each including both sexes of apparently all ages.\(^{[3]}\) One sub-group was buried with thicker, cruder, and natural coloured textiles, and with a greater diversity of tools, textiles, and hairstyles, and is thought to represent a lower class group of workers. A second sub-group was buried with less textiles but of better quality, that is, finer woven and with more dyed elements, suggestive of a higher class group. A tentative third sub-group seems to be formed by individuals who were buried with standardized type 4B and 4BW trapezoidal camisas and apparently associated with only the later style of Chiribaya ceramics. As the latter camisas are worn by both sexes and by at least one small child, and because they are of either fine or medium quality, Clark et al. (1993, 7) interprets these individuals as an ethnic group who maintained their different traditions, rather than carriers of some economic status.\(^{[6]}\)

Lazo (1990, 15) does not mention ethnic distinction, but instead identifies temporal variations in the style of bundling the dead, as well as status differences in the textiles wrappings of the individuals buried at the nine cemeteries of Chiribaya Alta.\(^{[7]}\) The cemeteries 1, 2, and 3, and the very disturbed cemeteries 5, 6, 7, 8, and 9 contained both individuals buried with plain and often very crude weavings, as individuals with multiple and often highly decorated camisas (either double lateral stripes or figurative designs in vertical bands). However, the mummy bundles from cemetery 4 had been buried in many layers of finely woven camisas, all of high technical skills and with great variety of designs. Lazo concludes that part of Chiribaya’s population managed to accumulate better living standard, allowing them to wear better quality clothes in life and in death and that cemetery 4 must have formed the elite burial ground.\(^{[9]}\) Buikstra (1995, 260-261) supports this theory when she concludes that cemeteries 4, 5 and 6 belong to the later Chiribaya period when an elite class had emerged.

Armed with this knowledge about the stylistic characteristics of the Tiwanaku, Ilo-Tumilaca/Cabuza, and Chiribaya textile traditions, the Osmore textiles will be presented in Chapter 8. The precise cultural affiliation of the textiles from Chen Chen, La Cruz, El Descanso, and Algodonal Ladera will be traced in Chapter 9.

**Notes**

1. The Frontal God can be identified by his headdress, facial adornments, clothing, his stance upon a pedestal, carrying objects in the hands, mainly composed of essentially geometric elements, plus some bird, feline, fish and human elements (Uribe and Agüiero 2000).

2. The Profile Personages have been derived from the older Pukara iconography, where they are practically always represented as two opposed and non-identical figure, and/or asymmetrically associated with a frontal personage. Usually the Profile figures are represented as human beings wearing camisas, but also with bird or feline features or masks (Uribe and Agüiero 2000).

3. Karwa is also spelled as ‘Carhua’. This site was found some 30 kilometres south of the Paracas Peninsula and is known for its painted and slit tapestry weavings with authentic Chavín iconography. However, as Dwyer (1973, 74) states: "Chavin brings religious motifs and design ideas which are expressed on cloth, but the weaving tradition must be a southern one. (...) Both wool use and the tapestry technique occur on the South coast five hundred to a thousand years before they turn up on the Central and North Coasts. The sudden access to large quantities of wool given to South Coast weavers and denied to their northern neighbours, as well as the sophistication of early wool textiles and the rapid development of a myriad of new weaving techniques on the South Coast, implies the existence of an archaeologically as yet unknown South Highland weaving tradition. I would guess that, beginning in the middle of the Early Horizon, a complex trading relationship between the South Coast and the highlands transmitted wool and weaving ideas to the coast. Perhaps religious ideas went the
other way; we can’t tell; but certainly the technical contribution of highland wool allowed the development on the coast of one of the world’s finest textile traditions”. Although he does not mention the Pukara culture, which was hardly known when he published his article, this culture’s influence is known to have been present at the Azapa valley at the northern Chilean coast during the Alto Ramirez phase (500 B.C.-A.D. 300) (Rivera 1991, 22-24), and the Ica valley at the southern Peruvian coast (Conklin 1983, 2-8).

4. According to Rivera (1991, 23), frontal faces with rayed appendages and vertically divided eyes, including tear mark and eye ornament had already been carved into Yaya Mama style stone sculptures. In addition, felines with frontal faces and profile bodies, cross and checkered cross designs, and stepped designs with vertical opposition were common.

5. Posnansky (1957) and Zuidema (1983) interpret the relief of the Gateway of the Sun as a calendar: the eleven frontal faces from the bottom relief together with the central Sun God make twelve months of a solar year, with the running figures referring to the days of each month (in: Kolata 1993, 148-149).

6. The sculptural style is clearly related to the Pukara style. Large-scale figures may be rendered in flat relief on slabs, or full round in blocky, columnar shapes of about one metre high, with huge, squared oval eyes, and a fanged and open mouth. Many of the anthropomorphic statues depict a so-called ‘degollador’, a sacrificer, holding a human trophy head in one hand and an axe in the other.

7. For instance, the local textile technology of the sites of Mojocoya and Omereque in Bolivia, from which she derived part of her textiles, was based on cotton fibre (Oakland 1986a, 244).

8. No Tiwanaku or Wari belt has been found in archaeological context, not even on intact mummies dressed in tapestry camisas. Conklin feels that this anomaly may be explained as the difference between the customary ceremonial garments versus the customary burial garments (Conklin 1996, 380).

9. The fabrication of warp-patterned camisas with lateral stripes was continued by the successive inhabitants of the Titicaca Basin, the Colla Aymaras (Adelson and Tracht 1983).

10. Tie-dyed textiles are also known as ‘plangi’ textiles (Bühler, 1972). Tie-dyed camisas have also been found at the AZ-6 site of the Azapa valley (Ulloa 1981a, 100), and another specimen comes from the lower Osmore valley. Although the provenience is unknown to the author, this tie dyed camisa was probably found at La Cruz.

11. A tie dyed cloth was photographed as wrapped around the head of a buried individual, kept in place by an Early Nasca style cinta at the site of Cabezas Achataadas (Disselhoff 1981, 122). A Nasca-Wari transition mantle with rhomboid tie dyed designs is illustrated in Reid (1991, 213). The Tiwanaku tie dye tradition may have been inspired by these cultures, or by the Aguada culture from Northwest Argentina region, part of the Tiwanaku influence sphere, where figurative designs were made by high quality tie dying and resist-dyeing around A.D. 600. (Torres and Conklin 1995, 103).

12. Two web camisas have also been found for the Chancay and Recuay culture: two equally sized cloths constitute a camisa, although no braiding of the warp ends was practiced here. Nor were any cotton elements used in the Recuay interlocked tapestry (Oakland and Fernández 2000, 126; VanStan 1967, 16).

13. A similar procedure was observed by Rowe (1997, 8) in an Inca bag made of complementary welt structure, in which cut off warp elements were diagonally interlaced back to secure them.

14. In intact Wari tombs, the tapestry camisas were found draped over the exterior of mummy bundles, more or less as worn in life. No belts are wrapped around the waist (Rowe 1986, 169, fig. 7 and 8). A male and female figure depicted on a Wari ceramic jar are dressed in knee-long camisas, while the female figure wears a manta as well (illustrated in: Posnansky 1957, Vol. III and IV, plate LVIII; Menzel 1977, fig. 122, 123).

15. Oakland alters Sawyer’s tripartite subdivision of Tiwanaku designs, by placing the designs in two basic categories, composite figures and profile figures, since she did not locate any example of ‘paired elements’, Sawyer’s first category. The ‘composite motif’ category corresponds to Sawyer’s type II a, including reptile faces and to II b, including inverted profile bird heads and headdresses (in: Oakland 1986a, 128).

16. This Asirun style is called ‘Geometric Style’ by Bennett (1934) or ‘Abstract Style’ by Schaedel (1952, 48-49). A stone figure
mirrored along a vertical axis was found on two flanking sides of a square stone, each side depicting a (human?) face in profile that together form a frontal face when seen from the vertical corner/axis. A good example of a quadripartite pattern is the so-called ‘Thunderbolt’ Stela, excavated in the palace-like structure west of the Kalasasaya at the Tiwanaku site. The other half of the stela was found in Arapa on the opposite, northern site of the Titicaca Lake, from where it was probably transported to the Tiwanaku site to underline the supremacy of this site (Chávez 1976, 11; in Oakland 1985a, 218-219, fig. 54; Moseley 1997, 197, figure 79).

17. This category corresponds to Sawyer’s type III a: winged profile figures with staff in front; and to III b: anthropomorphic figures without wings holding staves in both hands plus variations (Oakland 1986a, 129).

18. The composition of two (groups of) figures approaching the central axis with or without frontal figure, has also been engraved into the so-called ‘Kantatayita architrave’, the Calle Linares architrave, the VA10883 architrave in the Berlin Museum für Völkerkunde (Conklin 1991, 262-284).

19. In Cabuza tombs Q 4/3 from the site AZ-3, sector III in the Azapa valley, feline masks have been found as part of a mortuary attire (Espoueys et al. 1993b, 120).

20. Burger (1995, 157) describes tenon heads placed in the outside wall of both the Old and New Temple of Chavín de Huantar as different stages of shamanistic transformations into a jaguar or crested eagle. These trances are caused by inhaling psychotropic powdered substances by the nose, resulting in running mucus which is actually depicted on these tenon heads.

21. Such a loom is depicted by Nordenskiöld (1919, fig. 63; in O’Neale 1949, 111). O’Neale describes it as an ‘Arawak’ type vertical loom, although this type of loom has been found among widely distributed peoples, such as the Carib and Paressí-Cabishi. They produce circular baby slings on it, measuring some 23 to 31 cm wide, that pass over the mother’s right shoulder and under the left arm, so that the child sits on the loop (O’Neale 1949, 107).

22. Two perfectly preserved Tiwanaku polychrome four-cornered hats from Arica have been illustrated in the 1999 museum catalogue (Córdova et al., 1999, 28). Another Tiwanaku hat is illustrated in the museum catalogue from Moquegua (Asociación Contisuyo 1997, 79). The latter shows remarkable similarities with one of the hats from Arica: the geometric pattern include rhomboids with quadripartite content, crosses, stylised felines, birds, and humans, while the square top panel is decorated with four triangles.

23. Boytner (1998, 325) examined 99 textiles from the three Ilo-Tumilaca/Cabuza cemeteries of Algodonal and from the Chiribaya tombs of the same site’s domestic area, plus 218 specimens from the same site but found out of context, and another 54 textiles from Chiribaya contexts from Chiribaya Alta and 24 specimens from El Yaral.

24. Wallert and Boytner analysed 5 textile fragments from Ilo-Tumilaca/Cabuza contexts from El Algodonal and 4 Chiribaya fragments from the surface of Chiribaya Alta for their dyestuffs in order to gain a better understanding of differences and similarities in the textile technology of the two cultures (1996, 853-854).

25. Clark et al. (1993) analysed 582 textiles from 77 mummy bundles from cemetery 1 from Chiribaya Baja, originating from a rescue excavation of tombs plus surface finds. Unfortunately, no illustrations were present in the available report. The ceramics of this site show stylistic elements related to all phases of the Chiribaya culture (early or Algarrobal phase, and post-Algarrobal or Yaral and San Gerónimo phase).

26. I disagree with the rapid equalling of various camisas styles with proof of multiple ethnicities. Various researches have indicated that the Chiribaya population consisted of a hierarchically tiered population with maritime and agricultural specialized segments, especially in the later phase (Bawden 1989a; Buiistra 1995; Jessup 1991; Lozada 1998). Lozada (1998, 66-67, 158-162) found that these specialists even expressed their distinctness through different permanent cranial deformation styles. Therefore, standardized camisas worn by an inclusive group may have been used to express a certain group identity related to some economic or political specialization, who need not have felt themselves ethnically distinct.

27. The author found no references about Ilo-Tumilaca/Cabuza burials at Chiribaya Alta in the report by Lazo (1990), although other sources do mention a mixed Ilo-Tumilaca/Cabuza and Chiribaya burial ground (Boytner 1998, 331; Owen 1993, 151, 157).
Therefore, the author feels that the bundles described above as ‘earliest’, may in fact refer to Ilo-Tumilaca/Cabuza style bundles, based on the descriptions of their garments and bundling method. An analysis of the contextual data will be required to gain certainty in this matter.

Lazo (1990) analysed part of the textiles from the 1990 excavation campaign in Chiribaya Alta. The textiles had been obtained from 192 funerary bundles from the nine separate cemeteries surrounding this site. Unfortunately, her report on 22 unwrapped mummy bundles is very basic with a minimum of descriptions and no illustrations included.