



## Chapter 10

# Tiwanaku in the Tarapacá Region (Chile): Realities or Illusions in the Desert?

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In Chapter 10, Carolina Agüero and Mauricio Uribe examine archaeological materials from the Tarapacá region of northern Chile, where objects in Tiwanaku style have been reported since Max Uhle's excavations early in the twentieth century. The people of this region all participated in the great south Andean interaction sphere, also discussed by other contributors to this volume. However, can a single and unified type of interaction explain social and cultural processes materialized, primarily in mortuary remains, throughout this vast and diachronic region? Agüero and Uribe answer in the negative by providing first a review of interpretive thinking developed in the final decades of the twentieth century and then an alternative proposal based on carefully examined and illustrated material remains from the Tarapacá sites.

In the late twentieth century, thinking about the Tarapacá oases of northern Chile, and indeed the entire south Andean interaction sphere, was altiplano centric. A powerful and centralized Tiwanaku state, or empire, was assumed to have dominated the vast Andean south. Some form of colonial insertion of ethnic enclaves was believed to have been combined with an elusive form of provincial administration. Raised field agriculture was just beginning to be investigated as a possible explanation for dense highland populations, assumed to have resided in the altiplano capital on the basis of scarce information, so long-distance trade in staples was accepted as essential to the economy of ancient Tiahuanaco, as an urban capital.

Very influential in the last quarter of the twentieth century was John Murra's (1972) model of vertical ecological complementarity, a peculiarly Andean form of regional interaction and integration, which many archaeologists applied enthusiastically to the economies of prehistoric case studies throughout Andean archaeology. Not surprisingly, northern Chilean and Tarapacá prehistory were interpreted in terms of economically motivated colonization by Tiahuanaco, employing the vertical ecological complementarity model described by Murra. This was characterized by

multiethnicity in peripheral, or colonized, settlements, with the transplanted people of each homeland producing for, and supplying specialized subsistence goods to, relatives who remained in communities of origin. The diversity of artifact styles discovered in Tarapacá and other northern Chilean cemeteries that dated to the Tiwanaku apogee seemed clear proof of multiethnicity among Tarapacá (and other) mortuary populations, exactly as predicted by the Murra model.

Reexamination of Tiwanaku-style textiles and other artifacts from Tarapacá yields surprises, which are carefully described and illustrated by Agüero and Uribe. First, the number of objects is shockingly small for a region thought to have been under significant control of Tiwanaku migrants concerned with maintaining heartland identities through the consumption of traditional material goods. Indeed, a resident population of migrants could hardly have expressed traditional identities with so very few objects of the appropriate style. Second, the kinds of objects differ from those in other areas of Tiwanaku influence, and dating seems problematic as well. In several cases, stylistic identifications of artifacts do not reveal Tiahuanaco heartland goods but products of Tiwanaku hybridity with other peripheries within the assumed altiplano interaction sphere. Agüero and Uribe conclude that processes varied from subregion to subregion within northern Chile and that, for example, Moquegua and probably also Arica enjoyed very different Tiwanaku experiences from Tarapacá. San Pedro de Atacama was apparently undergoing yet another Tiwanaku experience.

Agüero and Uribe conclude arguing that the nature and dating of Tiwanaku materials from Tarapacá cemeteries do not confirm an altiplano-centric process determined by a centralized and hierarchical Tiahuanaco policy. Rather, archaeologists must examine local cultural processes, social relations, and economic motives to understand the distribution of Tiwanaku-style objects and symbols. Furthermore, these processes certainly differed from time to time and place to place as the people of Tarapacá exercised their own agency in complex social and cultural fields composed by diverse actors, identities, and motivations.



**S**ince very early in archaeological research, the close stylistic similarities of certain materials . . . to those of Tiwanaku were regarded as evidence for the presence of this Altiplano culture in the north of Chile [Berenguer and Dauelsberg 1989:129, translation WHI].

Until recently, the presence of Tiwanaku-style objects in the south-central Andes had been interpreted essentially as the direct or indirect establishment of enclaves or colonies and/or results of direct exchange. In the specific case of the Tarapacá populations in the north of Chile, studies on the type of relations with Tiwanaku affirmed the existence of an important bond with the altiplanic center. Some of these studies were based on a “migrational” approach, which established that the politically more powerful altiplanic societies moved toward these culturally “marginal” territories driven by a need

for economic complementarity and imposing themselves over the coastal populations (Berenguer and Dauelsberg 1989; Rivera et al. 1995–1996). Simultaneously, the model based on the mobility of llama caravans explained the way in which movements carrying out economic transactions would have taken place. The alternative that cultural independence was maintained by various groups maintaining was, of course, also a possibility. Caravan traffic would originate in the highlands, setting up movable fairs integrating the altiplano territories, inland oases, and the coast. Direct control of production may have also been involved (Núñez 1984; Núñez and Dillehay 1995 [1979]). All this downplayed the importance of the local populations, assigning a fundamental and relevant role to the altiplano as the agent driving social and economic change.

Nevertheless, at least in Tarapacá, it was evident that the empirical base of these relations was not that clear. Also, the archaeological data were not similar to what was observed in other areas of the Chilean desert, such as Arica and San Pedro de Atacama. Therefore, the issue of Tiwanaku relations was open to discussion, as it was only a hypothesis in need of further evaluation and systematic investigation. Thus, a number of studies during the past decade have claimed that it was secondary settlements that would have articulated vast territories distant from the altiplanic center, generating a different kind of impact among populations that were distant from the political center, such as those in the Great North of Chile (Uribe and Agüero 2001, 2004).

This prompted us to review what was assumed about Tiwanaku materiality in Tarapacá, specifically the sites, textile objects, and the psychotropic kits, which have traditionally been classified as belonging to the Middle Horizon (era of Tiwanaku influence) since, as also pointed out by the authors quoted at the beginning of this article, there were regions where “the protagonists of the event and their cultural materials never arrived” (Berenguer and Dauelsberg 1989:129).

### Tiwanaku in the Western Valleys of the North of Chile

The south-central Andes extends from Arequipa and Lake Titicaca (Peru) in the north to Chañaral in the south (Chile) and from the Pacific Ocean to Sucre (Bolivia) and Jujuy (Argentina) in the interior. Besides the Western Valleys, it also includes the circum-Titicaca, southern altiplano, Valluna, and Circumpuneña subareas (Figure 10.1). The Western Valleys subarea extends from the Majes River (Peru) to the Loa River in the north of Chile, including the Tarapacá region, and it is characterized by a series of water courses that flow into the Pacific Ocean. It is located within the south-central Andean area, which is defined by the development of scattered settlements correlating with the existing ecological diversity, which never allowed urban development as was the case in the central Andes. Rather, it promoted high mobility, probably in the form of llama caravan traffic, but nonetheless promoting great levels of social and economic complexity (Lumbreras 1981; Núñez 1984).

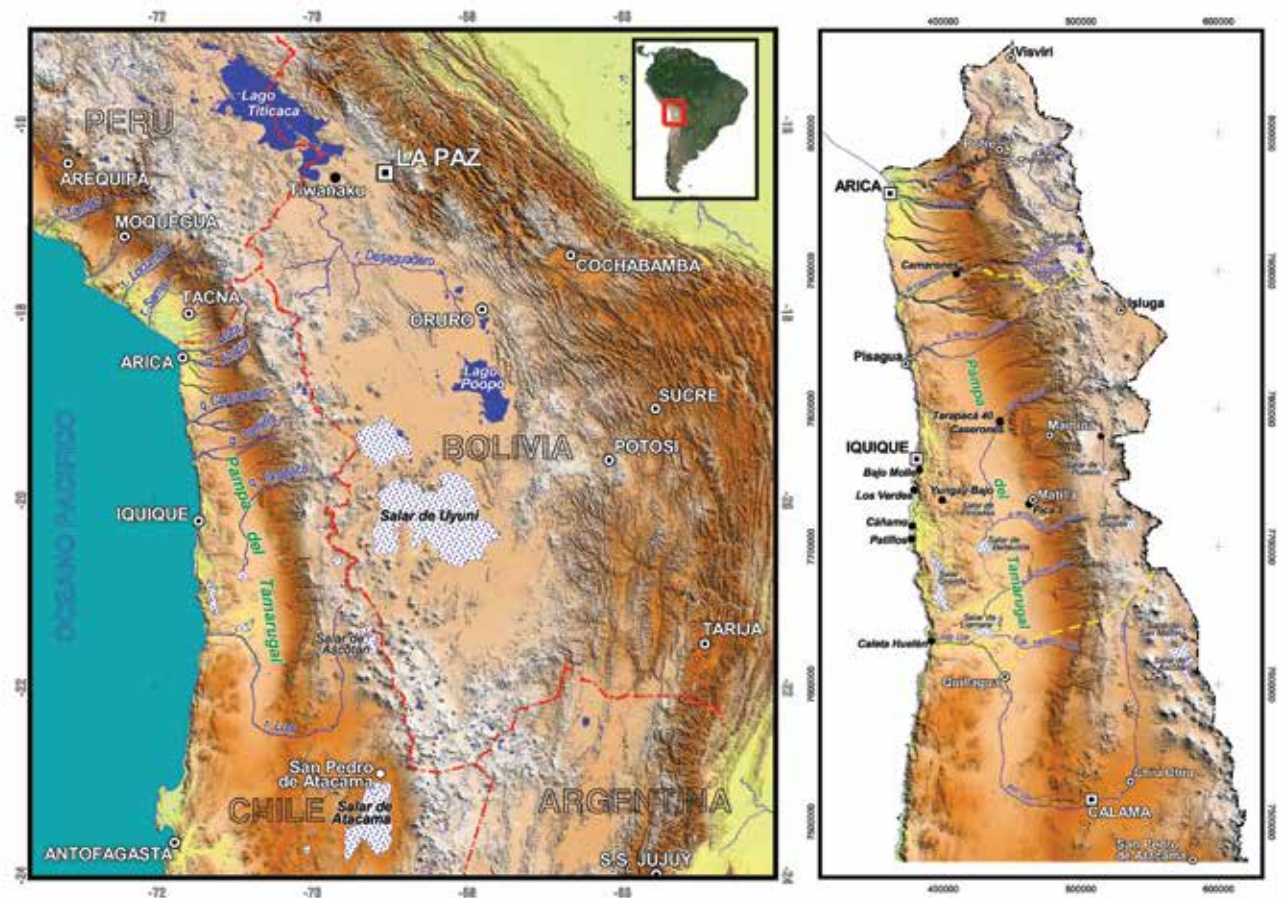
In this context, in the north of Chile, Formative Period developments were followed by a chronological period between AD 500 and 1000, during which most of the territory would have been under the direct influence of Tiwanaku, according to the popular definition

of this Middle period (Berenguer and Dauelsberg 1989). This altiplano culture would have come into contact with the formative populations of Arica and Atacama, and the Cabuza and Quito Phases would have appeared between AD 300/400 and 700, respectively. Both would have represented “the first steps of Tiwanaku in order to incorporate a *periphery* for the high Andean plateau settlers in the valleys of the extreme north of Chile (Cabuza Phase), and an *ultraperiphery* for exchange of goods in the western edge of the Atacama Puna (Quito Phase)” (Berenguer and Dauelsberg 1989:146, translation and italics *ours*). This interpretation became the accepted model that, nevertheless, is beginning to be debated (Berenguer 2000; Chacama 2004; Rivera 2004; Uribe and Agüero 2001, 2004).

In this perspective, access by Tiwanaku to the Western Valleys of Arica was regarded as part of the vertical control model proposed by John V. Murra (1972), in which coastal expressions of “multiethnic archipelagos” were distinguished, whose political center lay in the circum-Titicaca altiplano. Such formations would have an archaeological correlate visible in the diversity of, for example, ceramic styles in a single site, which would be relatively contemporary and, therefore, would not represent overlapping phases as had been previously emphasized (Dauelsberg 1982; Focacci 1980). With this same approach and within the same economic interpretive framework, but considering a more ideological emphasis, the Tarapacá region was understood and integrated within the Tiwanaku system (Moragas 1995; Núñez 1979a, 1984; Rivera 2004, 2008; Sanhueza 1985).

Between 1970 and 1990, there was agreement in understanding Tiwanaku access to the Western Valleys under the verticality principle, with its consequent altiplanic settlements. However, the difficulty of identifying this process archaeologically was acknowledged by the creation of multiethnic and socially differentiated geographical maps. Thus, stylistic diversity was interpreted as the expression of multiethnicity. At the same time, departure from original or “pure” styles was taken as evidence of social *heterogeneity*, and the archaeological material of Middle Horizon Arica and Tarapacá societies was interpreted in this light (Chacama 2004).

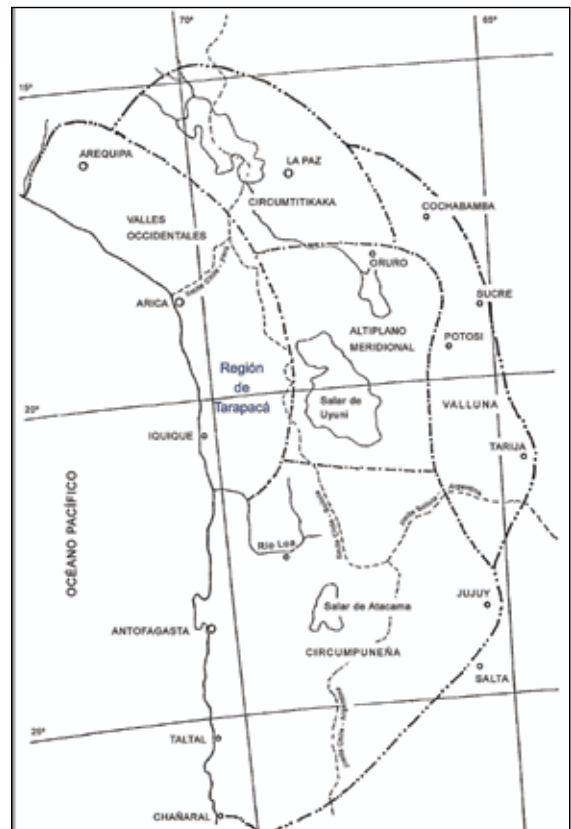
Initially, it was postulated that this process began in Arica around AD 300, although without sufficient absolute and calibrated dates (Focacci 1985).<sup>1</sup> Adding to this drawback was the scarce evidence coming from systematically excavated habitation sites (Goldstein 1995–1996). In fact, practically all the material dated comes from funerary sites, prioritizing cemeteries that



a

have given the name and content to each phase and cultural group. At the time, the origins of the Cabuza population were not being discussed, which, although not believed to be necessarily Tiwanaku, were nevertheless considered altiplanic. However, more advanced genetic and population studies that are now available had not yet been performed on the bioarchaeological material from the cemeteries (Rotthammer et al. 2003; Sutter 2000). It was thought that

entire families of these settlers, known as Cabuza, moved into the middle course of the valley, settling near watersheds that allowed them to water their crops. . . . For a while, the Cabuza coexisted with their predecessors, the Alto Ramirez, until these were gradually assimilated by the newcomers or moved somewhere else [Berenguer 2000:50, translation **W.H.U.**].



b

**Figure 10.1.** (a) Maps of the southern Andes, showing its environmental/cultural subregions, its geographic features, and modern national boundaries.



Consequently, the reconstruction of the Middle Period was based on funerary evidence lacking in adequate chronological and population information.

Within this framework, it was understood that the Azapa Valley was colonized and agriculturally exploited through an altiplanic pattern of sedentary settlement, where the settlers would spread in hamlets made of perishable material that did not form villages. However, the population density was significant, judging by the great number of cemeteries that included hundreds of individuals in each of them (Focacci 1993).

It was thought that decorated Cabuza pottery—painted in black and/or white over red, where the chalace or *kero* stands out—was introduced, as well as several textile techniques (e.g., loom textile weavings, floating warps, “fish bone” embroidery) and types of woven items (e.g., *chuspa* or coca bag, *inkuña* or small ritual cloth of rectangular shape, *bolsas-faja* or belt-bag and tunics). Excavation contexts included new headdresses (four-cornered hats) and hairstyles (complex braids) that replaced previous ones. Also noticed was a development of bone and wood carving in quotidian objects as well as more exclusive ones (e.g., spoons, vessels, and artifacts of the “psychotropic kit,” namely, snuff trays, little boxes, and tubes used to prepare and inhale psychoactive substances), along with cane musical instruments (e.g., *sicus* or *zampoñas*), basketry, leather work, and gold metalwork. Agricultural evidence pointed to the production of corn, cucurbit, sweet potato, beans, quinoa, and squash. Coca leaves were also found. In then-popular thinking, part of this produce would have been consumed, being kept in storage pits within the settlements, while another part would have been shipped to the altiplano by llama caravans. The operation of these caravans was inferred from camelid wool and bone remains (e.g., feet) found in graves, llama depictions in several media, and manure associated with residential spaces, which suggested the existence of barnyard areas. Furthermore, the fact that the presence of marine resources was scarce toward the interior of the valley, in the same way that Cabuza materials were scarce on the coast (Bird 1943), strengthened the idea that there were two different populations, with those from the interior displacing ancestral littoral groups.

According to this pattern of colonization, the limited spread of Cabuza in the region appeared to be logical, showing a modest presence in the Camarones Valley and farther south, as well as in the northern Chiribaya Valley (Owen 1993; Schiappacasse et al. 1989). This would have been combined with a high mortality rate, accounting

for numerous Cabuza cemeteries. An elevated frequency of death was attributed to syndromes associated with poor adaptation among the presumed altiplanic people in the warm lowlands, creating ideal conditions for the reproduction of infectious and contagious diseases, especially malaria (Berenguer and Dauelsberg 1989).

To complete this outlook, a style called Loreto Viejo was distinguished, which initially made exclusive reference to the polychrome ceramics of a funerary site in the south of Peru that had pottery with a distinctive Tiwanaku appearance and finer look (Lumbreras 1974). Subsequently, this same denomination was used for all those more sophisticated material expressions of the Azapa Valley, which displayed an assumed altiplanic stylistic relationship (e.g., polychrome four-cornered hats, tapestry tunics and bags, some spoons, decorated baskets, and metals). The materials and contexts of Loreto Viejo were judged as “clearly finer” (Berenguer and Dauelsberg 1989:171), especially the polychrome four-cornered hats and decorated tunics, which were the high-ranking emblems that distinguished Tiwanaku elite who would have settled in the ravine. It was argued, “At first [the Cabuza] worked without supervision, . . . after four or five generations, the Lords of the Sacred Lake thought it was convenient to send high ranking individuals to administer these thriving albeit small coastal colonies” (Berenguer 2000:50, translation ours). Thus, the Cabuza populations were incorporated into the altiplano state. Nevertheless, the same researchers who hold this interpretation stress that, at least in regard to chronology, supporting data are insufficient (Berenguer and Dauelsberg 1989). Furthermore, we should not ignore the existence of a differential distribution of the funerary contexts with this class of special offering types in the local cemeteries (Focacci 1981, 1985). Beyond the problem of origins, these varied associations require discussion for they permit sociological interpretations of the mortuary activities (Uribe 2004a).

Once the Cabuza populations were integrated into the political sphere and the administrative periphery of Tiwanaku, it was proposed that a social reorganization must have taken place in Azapa. This would have created new material complexes such as Maytas, which, together with Loreto Viejo and Cabuza, would have shared the valley, promoting a high level of social complexity during the second phase of the Middle Period (AD 700–1000). Therefore, toward AD 700, the Maytas Phase started, which was initially understood as the “ultimate expression of the coastal colonies established by Tiwanaku in the north of Chile” (Berenguer and Dauelsberg

1989:167, *translation ours* Furthermore, they mark the transition between the Middle Period and the Late Intermediate Period: Cabuza, Maytas, and San Miguel (Berenguer and Dauelsberg 1989:169; Ulloa 1981). In fact, it was believed that the three-color decoration of the Maytas Chiribaya ceramics, as well as the textile style and even the carved wooden spoons and other artifacts used to prepare and consume psychoactive substances, was more elaborate and displayed greater virtuosity than those assigned to Cabuza, so they were thought to represent an evolutionary development from that phase.

However, as it became evident that the Maytas Chiribaya style differed from styles of the altiplano and, surprisingly, showed greater affinity with the ceramic expressions of the far southern Peruvian coast, such as Churajón and Chiribaya, it was argued more recently that its producers should be regarded as a different group of coastal farmers who represent the antecedents of Arica culture (Berenguer 2000; Espoueyes et al. 1995). The elements that make up the Cabuza material heritage are shared and behave similarly during Maytas, although they are more numerous and somewhat more sophisticated; “even though the Maytas Chiribaya at first wore the distinctive four-pointed hat and other Tiwanaku elements, and buried their dead in the same cemeteries as the altiplano settlers, they gradually accentuated their own cultural features” (Berenguer 2000:55, *translation ours*)

In short, it was proposed that the Azapa Valley was inhabited by a population divided in three social classes (Cabuza, Loreto Viejo, and Maytas) constituting a very complex political situation (Berenguer and Dauelsberg 1989:172). It was understood that, even though the altiplanic occupation of the coast had begun with Cabuza, it later expanded during Maytas to other sites of the littoral, some exclusive to this phase (e.g., sites of Playa Miller 9 and La Capilla 4). An efficient colonization process of the Azapa Valley is inferred, moving from the coast into the interior where the site San Lorenzo (Azapa 11) stands out as the central settlement with its location in the middle of the valley. This site includes occupations from the Maytas Phase and from the later Late Intermediate San Miguel Phase, although it also has traces of previous and subsequent activities. It consists of a residential space located on a promontory delimited by a wall that is located in the middle of two cemeteries. It is characterized by terraces that served as the base for habitations with stone foundations and cane walls (Muñoz 1983). The San Lorenzo settlement

is associated with modern agricultural fields and springs of water. Within it are storage pits as well as camelid and guinea pig offerings in some of the walls, as well as graves. Because of its size and characteristics, the site was proposed to have been one of the Tiwanaku administrative centers in the Azapa Valley, assuming that the hierarchy of circum-Titicaca settlement structure participated in the colonial regime (Berenguer and Dauelsberg 1989; Kolata 1982). Furthermore, the mixed presence in the storage pits of sea and farm products, as well as an array of other products associated with both sides of the Andes (e.g., fish, algae, shellfish, corn, bean, coca leaf, cucurbit, chili, cassava, potatoes, lucumas, and tropical bird feathers, among others), was considered evidence for the kind of reciprocal and redistributive economy that concentrated goods at San Lorenzo and other sites for the resident settlers but also to be shipped via llama caravans to the altiplano.

As AD 1000 approached, Tiwanaku was able to maintain regular access to agricultural and maritime production in the Western Valleys as far north along the coast as the modern city of Arica, whether via colonial populations or local coastal groups. Interest in the extraction of copper minerals enhanced maritime traffic oriented toward producing prestige goods (Berenguer and Dauelsberg 1989:177). Scant Maytas Chiribaya ceramic evidence on the coast (i.e., in Camarones, Iquique, and the Loa River mouth and Taltal) would establish a basis for this argument (Núñez 1984).

However, later confirmation of a strong affiliation between Maytas and the Western Valleys (Espoueyes et al. 1995) led to the proposal that it was not this population but in fact the “Cabuza colonizers [whom] worked out a way to continue sending llama caravans [loaded with products] to the altiplano” (Berenguer 2000:55). Acceptance of a new Maytas origin also required disassembling the interpretive framework upon which Maytas materials have been associated with fishing equipment and maritime products (Focacci 1982) in the absence of Tiwanaku or Loreto Viejo evidence: association of the sparse data known to have belonged to the coastal region during the Middle Period, particularly material found in Playa Miller 9 cemetery.

Such materials were previously used as evidence to claim the existence of an efficient structure that articulated, through local and intermediate levels, the coastal communities with the vertical complementarity system of the altiplano settlements. This avoided greater investment in permanent state installations required for direct control.


More recently, studies focused on the artifacts—especially ceramics and textiles—and archaeological contexts (Chacama 2004; Uribe 1999; Uribe and Agüero 2001, 2004) have shown that Cabuza and Maytas cannot be understood using the logic of a regime of altiplanic colonies. A similar assertion has already been proposed by Goldstein (1995–1996), who, after a survey of the Azapa Valley, did not detect settlements representing altiplanic installations of the importance of those in Moquegua (Peru), where state and colonial intervention has been demonstrated in the Osmore Valley (Goldstein 1989; Knudson 2004). Rather, the Arica settlement pattern reflects local behavior that took form during the Formative period, becoming more salient and complex only toward AD 1000 with the San Lorenzo town (Muñoz 2002). This view is largely shared by Sutter (2000), who conducted a bioanthropological study focused on the dental genetic markers. Sutter observes population continuity for the Azapa Valley from the Archaic Period until the moment of contact with the Incas. He points out that populations with a different dental pattern did not settle in the valley or that, at least, they were insufficient to cause genetic changes that could be identified in his analysis. Thus, the cultural process of the Azapa Valley seems to be continuous and endogenous, and although it admitted certain foreign biological and cultural elements (Rotthammer et al. 2003), these would not have been sufficiently important to cause radical structural changes. These latest investigations have, therefore, provided points of view and archaeological evidence that contradict the thesis of altiplanic colonies settled in the Azapa Valley during the Middle Period (Chacama 2004).

Taking into account this evidence, two alternative models are currently under consideration as explanations of Tiwanaku presence in northern Chile's Western Valleys. Study of the stylistic and contextual behavior of pottery and textiles of the Cabuza and Maytas Phases especially has been approached from new interpretive frameworks that stress local dynamics and their specific political and ideological consequences (Berenguer 1998; Chacama 2004; Rivera 2004; Uribe and Agüero 2001, 2004). Without a doubt, this has been influenced by advances in investigations in the Titicaca and the Moquegua regions (Albarracín-Jordán 1996; Goldstein and Owen 2001). Also important are developments within Chilean archaeology employing new analyses of former materials, using a systematic and specialized methodology that focuses on artifacts and associations, together with a new chronological framework supplemented by a large quantity of absolute dates (Chacama

2004; Espouey et al. 1995). This new perspective allows investigators to overcome the center and periphery model proposed by Kolata (1982), with its extreme economic determinism derived from the verticality model combined with caravan exchange, that reduced all relations to strategies of colonial government and systems of patronage managed from the altiplano center (Berenguer 2000; Berenguer and Dauelsberg 1989; Rivera 2008).

In the new perspective, Cabuza ceramics are seen, technologically as well as stylistically, as very different from both Tiwanaku and Maytas. Furthermore, their frequency is greater in relation to scarce altiplanic pottery and even larger in relation to Maytas Chiribaya materials (Uribe 1999). However, Maytas Chiribaya, along with Cabuza, is part of a local technical and stylistic tradition, while Tiwanaku pottery is clearly foreign and more closely related to the ceramics and region of Moquegua (Uribe 2004b). All of the cultural units appear distant from one another in terms of funerary space and are almost never associated, suggesting ceremonial practices characteristic of the production of cultural identity and political expressions typical of diversified cultural traditions (Uribe 2004a). On the other hand, although weavings show a local background with significant time depth (Cassman 1997), it is also possible to distinguish diverse technical and stylistic traditions that are linked to ceramics of Cabuza, Maytas Chiribaya, and Tiwanaku in a different way (Agüero 2000; Uribe and Agüero 2001, 2004), highlighting the predominance of the local over the foreign to express relations, ~~whether they be to high-land or coastal areas.~~

In Azapa, during the Middle Period, Tiwanaku elements were integrated into the formative textile tradition. The results include the following: variability in the number of wefts and a particular pattern of bands using colors similar to those of Tiwanaku; a tendency toward square forms in tunics and bags, which in Cabuza would be trapezoidal; **warp-faced** and **weft-faced** decoration, as well as **loop-stitch** embroidery; and, apart from tunics, a scarcity of other textile garments in funerary contexts. When they are present, *inkuñas* (rectangular or slightly trapezoidal cloth 40 to 50 cm on a side, used in modern rituals by Aymara speakers, including bundling coca leaves) have no edge finishings or are finished with narrow cord wefts or in **loop-stitch** embroidery; bags have three decorated bands with red, yellow, and blue floating warps over a red background, the same as the belt bags, which include more green and blue, with finishings in simple loop stitch. Minkes (2005) has recently proposed the unity of the Ilo-Tumilaca/Cabuza style, reaffirming


the artistic  social closeness of the Osmore and Azapa Valleys. Furthermore, and more or less simultaneously, a second set of garments associated with Maytas Chiribaya pottery (Uribe 1999) reveals strong stylistic affinity with the Chiribaya textiles of Osmore (Minkes 2005). This tradition continues in Arica until Inca times. It is characterized by the use of the colors purple, maroon, white, yellow, and green; trapezoidal forms, except for *inkuñas*; belt bags; tunics with lateral bands; figurative decoration achieved with complementary warps in *chuspas* (bags with shoulder strap, usually for coca), *inkuñas*, and belt bags; and the inclusion of other garments, besides tunics, in the funerary contexts (Agüero 2000). Rare decorated weavings related to Tiwanaku are finally reduced to plain or striped *inkuñas*, repaired tunics, and blankets with loop stitches along the edges and bands on the sides or on the body (Uribe and Agüero 2001, 2004). In fact, in the Azapa Valley, we registered only two textiles with figurative iconography (fish and felines) in the site of Azapa 3. Overall, the small numbers of textiles used as iconographic media are surprising. Instead, they mainly display geometrical motifs such as meanders and rectangles with centers, in loop stitch.<sup>2</sup>

In view of these data, direct links with Titicaca become increasingly diffuse, and what is more relevant is the variety of local dynamics that played out diachronically through diverse connections among complex cultural spaces. Regional stylistic referents now become important, each representing its own local social and economic contradictions, in accordance with the styles and ideologies employed by archaeologists to identify cultural entities. These diverse and differentiated processes moved between altiplanic and Moquegua Valley communities in an early Cabuza Phase (AD 500–800) but later saw the predominance of coastal groups in the second Maytas Phase (AD 800–1200), during which some local traditions strengthened while others weakened under the hegemonic influence of the main south-central Andean center of the time, Tiwanaku. For this same reason, it is reasonable to confirm the contemporaneity of many styles, especially at the moment of Tiwanaku's greatest height, now more precisely dated to AD 800 (Espouey et al. 1995).

According to this different perspective, which in a way picks up old discussions in the archaeology of Arica (Daelsberg 1972–1973; Munizaga 1957; Núñez 1972–1973), what is more suggestive and coherent are models that make reference to the prominence of local processes and ideological mechanisms for managing the evolution of their own social complexity. This seems more

probably what had been taking place since the Formative Period within the Western Valleys of the north of Chile. Thanks to this current framework, we reconsider the situation of Tarapacá in the southern portion of the Western Valleys subarea.

### Tiwanaku in Tarapacá

To the south of Camarones, in the southern part of the Western Valleys, a different archaeological zone begins (Figure 10.1a,b). This landscape is composed of four areas that influence the character and type of the human settlements (Schiappacasse et al. 1989:202–204). The highest altiplanic Andean steppe, with grass, wetlands, basins, and interior salt flats, is bordered by an inclined plane that descends to the west, with about 23 ravines, between the Camiña and Loa Rivers, which interrupt their course as they pass through the endoreic alluvial basin known as the Pampa del Tamarugal. This flatland terminates in the west with a steep cliff that drops to narrow beaches forming the so-called coastal desert. On the coast  itself there are freshwater flows at certain points (Iquique, Bajo Molle, Punta Gruesa, Patillos, and Cádiz, among others) that were essential for human settlements.

Initially, the cemetery studied in Pisagua by Uhle was thought to affirm an eloquent manifestation of Tiwanaku in the littoral of Tarapacá, which he assigned to the “Tiahuanaco culture between A.D. 500 and 800” (Uhle 1922) based on evidence that, at that time, was new for the region. The interpretation seemed to be supported by physical features that differed from those of preexisting people, suggesting gradual demographic mixing that created the “Tiahuanaco Atacameño” Period (Núñez 1965, 1984).<sup>3</sup>

Even though evidence for Tiwanaku in Tarapacá is still very scant, it was soon proposed that during the Maytas Phase—contemporarily with the Coyo Phase in San Pedro de Atacama—altiplanic people had attempted to colonize some of the valleys, oases, and littoral, including the Loa River area. Presumably the objective was uniting a highland periphery with a more distant ultraperiphery across the high desert (Berenguer and Daelsberg 1989:167). In support of this idea, Berenguer and Daelsberg allude to evidence in several sites such as Tarapacá 1, Tarapacá 40, and Pica 8 in the valleys and low oases, as well as Yungay Bajo in the Pampa del Tamarugal, Pisagua, Bajo Molle, Los Verdes, Patillos 1, and Cádiz 3 on the coast. They point out that the scarcity of Tiwanaku material may be due to a bias in



archaeological research or, rather, to the characteristics of the phenomenon in that region.

During the 1970s and 1980s, scholars accepted the existence of a polity called Pica Tarapacá. From the valleys and oases of the Pampa del Tamarugal, it controlled coastal sites, such as those mentioned above, by establishing colonies (Moragas 1995; Núñez 1984:276; Sanhueza 1985). Llama **caravanning** was the strategy used to integrate different ecological zones following a network of roads marked with geoglyphs across the pampa. The roadways would have been dotted with settlements and cemeteries such as Yungay Bajo (Núñez 1984:404; Sanhueza 1985). This proposal derives largely from the vast Pica 8 cemetery, where remains were identified that must have originated in the altiplano, the rainforest, the coast, the Arica Valleys, and the Loa River Valley (Núñez 1984), suggesting Tiwanaku relations. To explain the findings, Núñez refers to two mechanisms of interaction: (1) an undefined type of **biethnic** barter and (2) an intrusive proto-verticality among the local populations.

The first mechanism, barter between different cultural groups, would involve select Tiwanaku elements immersed in local contexts but without the introduction of bioanthropological features of highland peoples. Exchange would have taken place with the arrival of caravans without need for occupation by settlers or even well-established markets and certainly without implying greater political commitments. Because of this, Cabuza and Maytas specimens would be rare, and Loreto Viejo ceramic would be absent. A few but very fine weavings would stand out as a sumptuary expression of this exchange (Berenguer and Dauelsberg 1989), such as those found in the site Tarapacá 40, in the ravine of the same name (Núñez 1982).

In the case of the second mechanism, exchange would be explained by the verticality model, including colonizing enclaves, whose remains would appear primarily in local funerary contexts, forming sectors of special interments. Evidence for this comes from Pica 8, where 254 bodies were recovered with an important predominance of Pica Tarapacá contexts, chronologically placed between AD 1000 and 1250 (Núñez 1976). At the center of this site, Sector G is distinguished by 16 flexed and extended bodies presenting tabular oblique cranial deformation diagnostic of altiplano populations, with turbans evocative of the Tarapacá 40 formative contexts and associated with local Charcollo ceramics. One of the bodies had a tunic bearing Tiwanaku iconography that has been interpreted as an indication

that “the group of colonists resided along with the local population, making offerings with Tiwanaku items that linked them directly to Altiplanic centers” (Núñez 1984:249).

This evidence implied Tiwanaku colonial settlement in Tarapacá that was contemporary with Late Regional Development times. In turn, this dating seemed validated by similar processes in Arica during the San Miguel Phase, corresponding to the first moment of the Late Intermediate Period. The Tiwanaku settlements would remain there until AD 1200 as part of a process shared across the Western Valleys and encompassing the desert littoral (Moragas 1995). Nevertheless, it is clear there is no evidence for such intrusive settlers down to the mouth of the Loa River, even though Latcham (1938) proposed their presence toward **the** interior in Ancachi, near Quillagua (see Figure 10.17).

For their part, in coastal contexts of Tarapacá, supposedly assigned to Cabuza, Maytas, and even to Loreto Viejo, some **four-cornered** hats, tunics, and tapestry bands have been identified (all of them strictly *ariqueños*), along with objects of the psychotropic kit linked to corn cultivation, fishing, and copper artifacts, diagnostic of typical agro-maritime populations. With regards to these, in Cãnamo 3, a cemetery group distinguished from the rest has been identified with high rates of child mortality. It was argued that an advanced altiplanic party, traveling in **balsa boats**—as represented by a miniature model excavated there—was poorly adapted to desert conditions of the coast, accounting for the high rate of child mortality (Núñez 1979b; Núñez and Moragas 1977). Even though excavation contexts contain mainly fishing equipment, the site was classified as Tiwanaku based on the discovery of a textile decorated with the “split eye” **motif** and of instruments of the psychotropic kit, **plus a date of AD 760** (Núñez 1976). **Four-cornered** hats, thought to be emblematic of high-ranking settlers, decrease in the Tarapacá coastal sites, at least relative to numbers in Arica. All these data have led to a reevaluation that Tiwanaku does not appear to have controlled this territory in accord with the classic verticality model but rather through some variant in which littoral enclaves from Arica and other more southern valleys were established using boats for transportation (Berenguer and Dauelsberg 1989:169). Consequently, the limited Tiwanaku evidence for Tarapacá seems best dated around AD 1000, suggesting that just as the Late Intermediate Period was taking shape, the high Andean state held sway over these territories, either directly or indirectly.

After several years of systematic work in Tarapacá, our present objective is to explore current interpretative proposals and advance understandings of local prehistory. We would like to discuss the previous proposals, taking into account not only economic but also social and political relations, adding to the discussion a consideration of the historic background related to the emergence of the Pica Tarapacá society that appeared at exactly this moment. We have proposed that the societies of the Late Intermediate Period or Pica Tarapacá Complex were formed by historically different groups, including coastal, low valley, and pampa communities, inhabitants of the high ravines or *serranos* and altiplanics. They formed economically and socially independent but closely related and complementary units, who defined identities and distinctive practices in domestic and public contexts (Uribe 2006). Within this framework, cultural heterogeneity would have its background in each of the local developmental trajectories, interweaving previous experiences with those of cultural frontiers in the Western Valleys, the altiplano, and Atacama. Economic interactions seem to have played an important role in hybridization, but domestic or family management is implied, surely sanctioned in local public spaces (Uribe and Adán 2005). Therefore, more than being a response to the management of great lords in charge of social dynamics, who are not apparent in the material record, collective decisions determined privilege, manifestations of power, and expressions of hierarchy (Uribe 2006).

Cultural dynamics such as those of the locals and foreigners might have their origin in the social diversity and complexity that characterized this territory and its populations in pre-Hispanic times. This would explain the presence or absence of Tiwanaku in the local sphere and would open new alternatives for understanding the Middle Horizon of the south-central Andes.

### Reevaluation of Tiwanaku Materials of Tarapacá

A variety of cemeteries in Tarapacá have provided evidence identified as Tiwanaku, but this consists mainly of objects belonging to the psychotropic kit as well as textiles. In Tarapacá 40 and Pica 8 in the interior valleys, Yungay Bajo at Pampa del Tamarugal, and Bajo Molle, Patillos 1, Los Verdes, and Pisagua on the coast, textiles as well as elements of the psychotropic kit support the notion that Tiwanaku identity had a fundamental role in regional cultural development. For example, statements about textiles affirm an important number of Tiwanaku textiles, textiles linked to Tiwanaku, four-cornered hats,

and polychrome textiles with expansive motifs. A sample of assertions regarding objects belonging to psychotropic kits includes implements with Tiwanaku iconography and snuff trays of Tiwanaku type for inhaling narcotics. However, it seems apparent that this generic approach has favored the traditional model by hiding the real implications of the evidence, as well as its importance.

Tiwanaku style has been identified by the resemblance of motifs and/or figures to those on stone sculptures from the Titicaca Basin. Snuff trays of the Tiwanaku style are made mainly out of wood and decorated with seven themes—including the “sacrificer”—and 33 motifs (Torres 1985) by incision, low relief, or carved in the round. For its part, the Tiwanaku textile style is principally characterized by tunics, blankets, bags, *inkuñas*, and headbands. Techniques emphasize the following: (a) created in woven fabric using an interlocked tapestry technique to produce modularly organized figures that have referents in Tiwanaku stone sculpture; (b) decorated with loop-stitch embroidery in seams, openings, and edges, creating iconography related to Tiwanaku III and IV; and (c) warp-faced weavings with banded decoration (Oakland 1986). This last variant is present mainly in the Western Valleys, including most of the textiles of the Chen Chen cemetery in Moquegua (Site M1), coming from contexts dated mainly between AD 700 and 1000. The weavings are usually monochromatic and rectangular, with a continuous weft. Additionally, there are Cabuza and Maytas textiles described in previous works (Agüero 2000; Uribe and Agüero 2001, 2004). In Tarapacá, in addition to the above, there are trapezoidal tunics with polychrome lateral bands and curved or straight warp borders. Sometimes they have side embroideries mainly in loop stitch, although satin-stitch embroideries occur as well. There are *chuspas* and belt bags decorated with complementary and floating warps, as well as striped domestic bags (small to large sacks) (Agüero 2007). Bearing in mind these materials, we will evaluate each as it relates to Tiwanaku presence in the Tarapacá region.

First of all, in Tarapacá 40B,<sup>4</sup> mortuary contexts present flexed bodies in bundles, covered with wool turbans and blankets, accompanied by ceramic miniatures, textiles and basketwork, vicuña fleece, Algarrobo pods, corn, quinoa, beans, and dried octopus (Núñez 1970). From this section of the cemetery and related to an occupation of the Caserones hamlet dated between AD 400 and 600, three quadrangular tunics associated with men bear Classic Tiwanaku iconography. One is woven in tapestry and the other two represent the warp

face technique. The first one (T3/SM) was found under a tunic typical of the regional Late Formative dated to AD 660 (Oakland 2000). It is 106 cm wide and 113 cm long, weft faced, and decorated in interlocked tapestry, reproducing the “meander” or “belt” of the Tiwanaku Sun Gate with bird head appendages at the ends (Agüero et al. 2004), in eight 4-cm-wide vertical stripes. Every stripe has 30 modules in each face, every one of which is defined by the inclination of the meander, marked by double warps and particular combinations of red, green, petrol blue, yellow ochre, and light blue. In turn, the areas without decoration are white. Also, it presents a red stepped design on the chest (Figure 10.2), which makes it different from a similar tunic published by Young-Sánchez (2004:52). The second tunic (T5/SS) is warp faced, 121 cm wide and 67 cm long, with green and blue bands all over (Figure 10.3). Along the armholes, a “personage with anthropomorphic profile” was embroidered in loop stitch, similar to the figures of Tiwanaku’s Sun Idol (Agüero et al. 2004), which is repeated four times on each side and on each face. The warp edges finish in the red weft-faced technique, similar to the tunics of the Late Formative, although thinner (Agüero and Cases 2004). It has a date of cal. AD 420 obtained by Oakland (2000). The data and illustrations published by Oakland

affirm the existence of a third tunic (T3/SS) that we did not find, with a date of cal. AD 370, and which shows a loop-stitch embroidery at the bottom of the neck slot that depicts the front-face figure of Tiwanaku’s Sun Gate, along with profile birds around the armholes.

These three garments represent a very small percentage (1.66 percent) of a partial sample of 180 textiles registered from this site, which are grouped into two main sets: (a) offerings of miniature pieces such as tunics and blankets and (b) funerary trousseaus that include textiles with multiple wefts or with one continuous weft, with warp faced as well as warp and weft faced, and even twined blankets. Hybrid techniques appear such as tunics with the lower section weft faced (Agüero et al. 2005). In conclusion, Tarapacá 40 seems to contain mostly local and formative mortuary contexts.

The Tiwanaku textile from Pica 8, which has been repeatedly referred to (Berenguer and Dauelsberg 1989; Núñez 1984), is a 103-cm × 103-cm square weft-faced tunic that has been quite highly repaired (T7/SG). The decoration was made with interlocked tapestry organized in four vertical stripes, two wide stripes near the center and two narrow stripes along the edges. On the wide stripes, a lone figure appears representing an “anthropomorphic profile personage with feline attributes” (Agüero et al. 2004). It is displayed in four modules in each stripe on both sides of the tunic, alternating so it faces in opposing directions, and colored light blue, blue, pink, reddish brown, dark brown, and brown (Figures 10.4 and 10.5). Undecorated spaces are beige. This anthropomorphic figure is especially interesting because according to the stylistic seriation we have proposed (Agüero et al. 2004), it combines early features (e.g., intertwined fangs and belt) with other features appearing only later, such as the standing position of the icons on the Sun Idol, the hooked nose, and a quite rectilinear style that we have not observed in the classic textile representations (Uribe and Agüero 2001, 2004). The context, dated between cal. AD 968 and 1270 (Núñez 1976) contains Pica Charcollo ceramics and a tunic typical of the Late Intermediate Period of the region, all of which suggests that it was woven in the Western Valleys copying Tiwanaku textile models. That is what Minkes (2008) proposed for a trapezoidal tunic with iconography similar to this Tiwanaku-style piece, which was associated with Chiribaya pottery found at the mouth of the Osmore Valley (see also Conklin 1983).

In our inventory of Pica 8, other less known garments display Tiwanaku iconography. One of them corresponds to a rectangular warp-faced tunic (No. 0800),

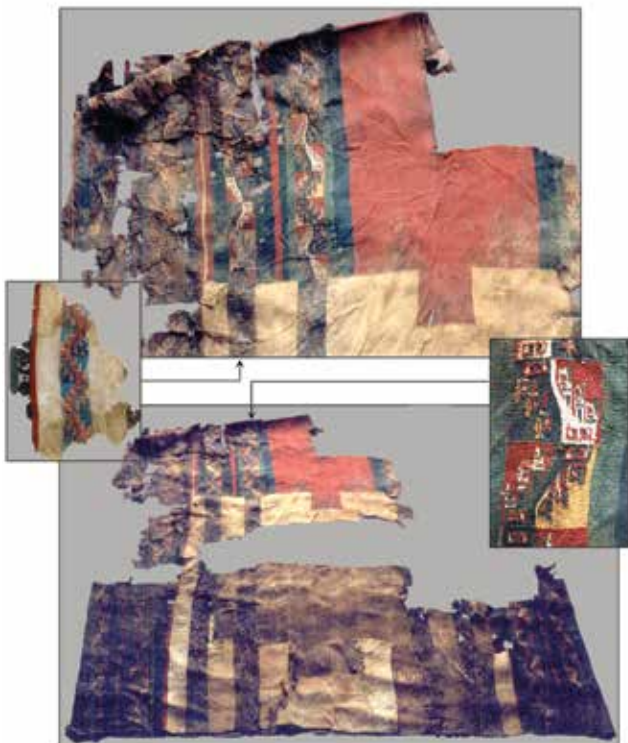


Figure 10.2. Tunic T3/SM from Tr-40B. Tiwanaku style.



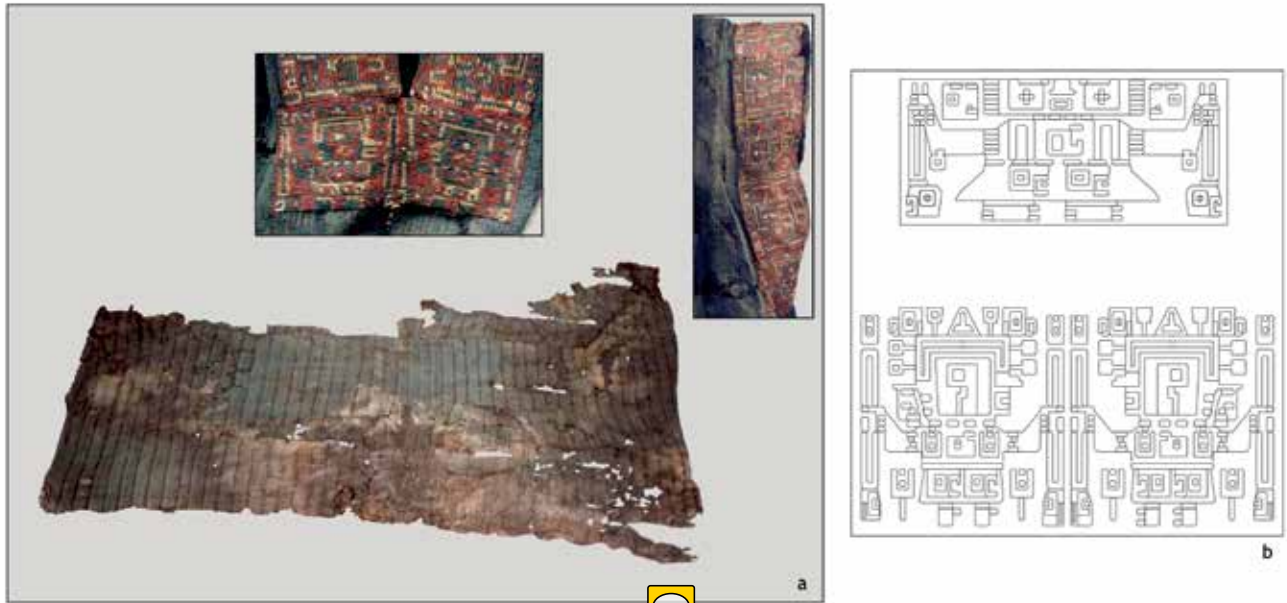


Figure 10.3. Tunic T5/SS from T-40B. Tiwanaku style.



Figure 10.4. Tunic from Grave 7, Section of Pica 8. Tiwanaku Provincial style.



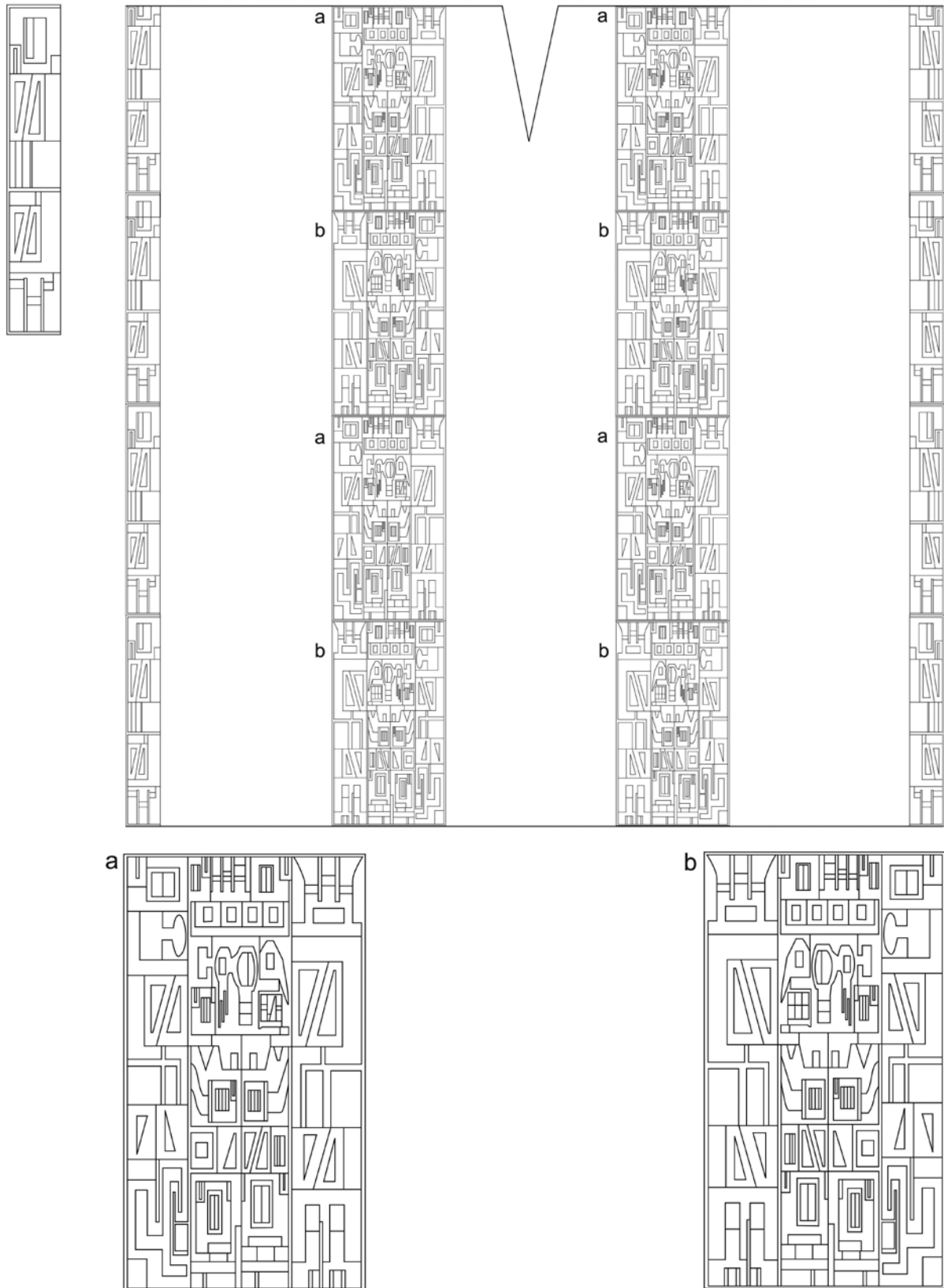


Figure 10.5. Drawing of the tunic from Grave 7, Section of Pica 8. Detail of the module motifs.

without context, that has side seams embroidered in loop stitch creating anthropomorphic faces in profile followed by a rectangular body. This represents a good example of a Western Valleys version of Tiwanaku weaving (Figure 10.6). Another piece is also a rectangular warp-faced beige tunic (No. 13.1.457, T52/SI) with satin-stitch embroidery side seams, creating a 6-cm-wide stripe that repeats a module with a diagonal, steeped, and quadri-partite square on each side (Figure 10.7a). Oakland defines this design as part of the Tiwanaku textile style; however, the embroidery technique is not Tiwanaku, suggesting that it is of local manufacture, probably from the highlands of Tarapacá or the Rio Loa area, judging by its association with ceramics from those regions (Taltape and Ayquina styles from the altiplano and Atacama, Late Intermediate Period) and by the embroidery technique (Agüero 2007). There is also a small weft-faced bag (No. 1116, T42/SI; Figure 10.7b) with circular warp, decorated with undulating vertical lines and rhombuses with centers enclosed within vertical bands, created with interlocking and eccentric tapestry. It is similar to Bag No. 3416 from Mojocoya (Cochabamba, Bolivia), classified as Tiwanaku Provincial by Oakland (1986). Since the circular warp technique

relates it to the Tiwanaku style, it was probably made in the Cochabamba Valleys and is best assigned to that Provincial-style variant.

Importantly, of the 210 textiles registered at Pica 8, including tunics, blankets, loincloths, bags, belt bags, *inkuñas*, and a bichrome four-cornered hat, almost all correspond to styles of the Western Valleys of Arica and Tarapacá. They are characteristic of the Late Intermediate Period and the end of the Middle Period in Azapa (Agüero 2000, 2007). Only four garments can be classified as Tiwanaku Provincial style, a total of 1.9 percent. They probably come from the highlands of Tarapacá, the Cochabamba Valleys, and the Osmore Valley. In addition to this, and together with the complete absence of Tiwanaku pottery,<sup>5</sup> Núñez (1969) stresses that objects belonging to the psychotropic kit are minimal, which is confirmed by Catalán (2006), who registered only one variety of spatula, either in bone or wood, which shares features with those from the Atacama territory.

On the coast, related to the water supply at Bajo Molle, several cemeteries have been registered (Bajo Molle, Bajo Molle 1, and Molle La Portada). All are, according to their contexts, assignable to the Late

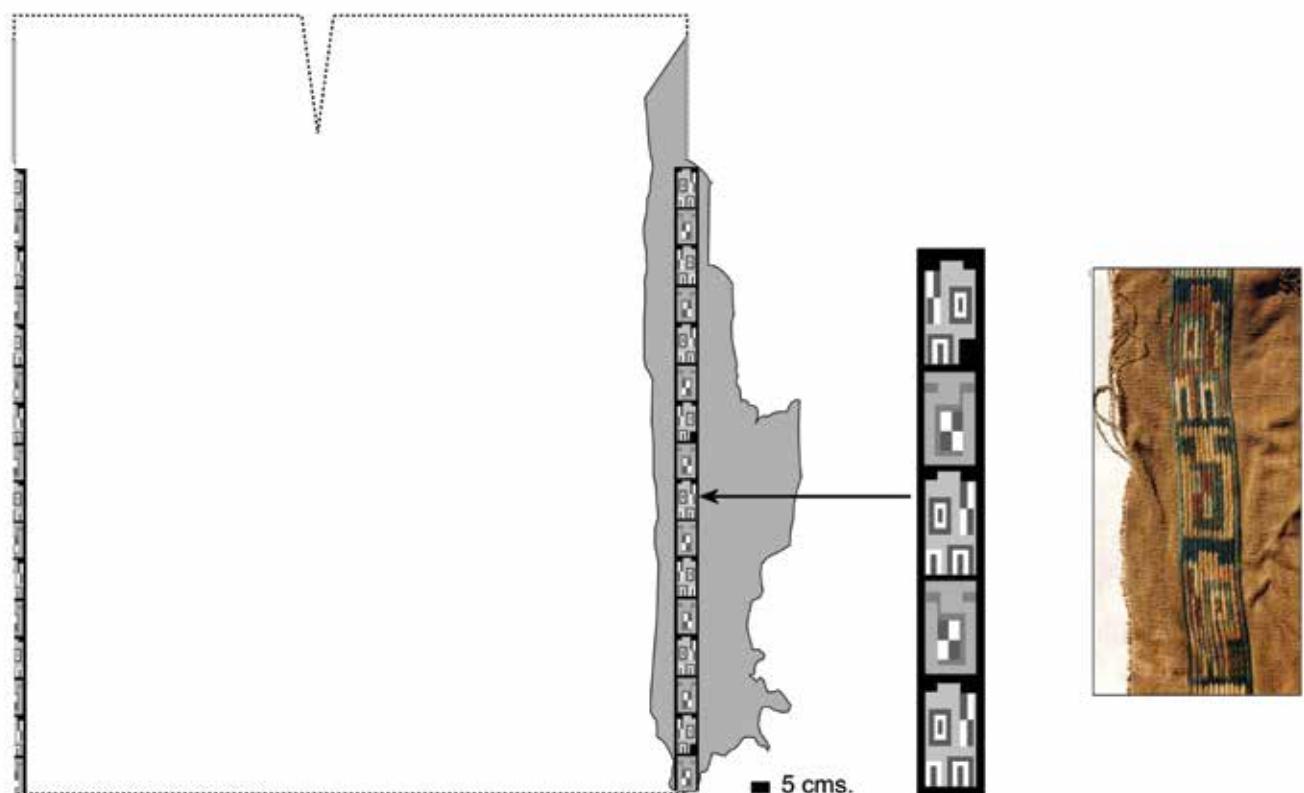


Figure 10.6. Tunic 0800 from Pica 8. Tiwanaku Provincial style.

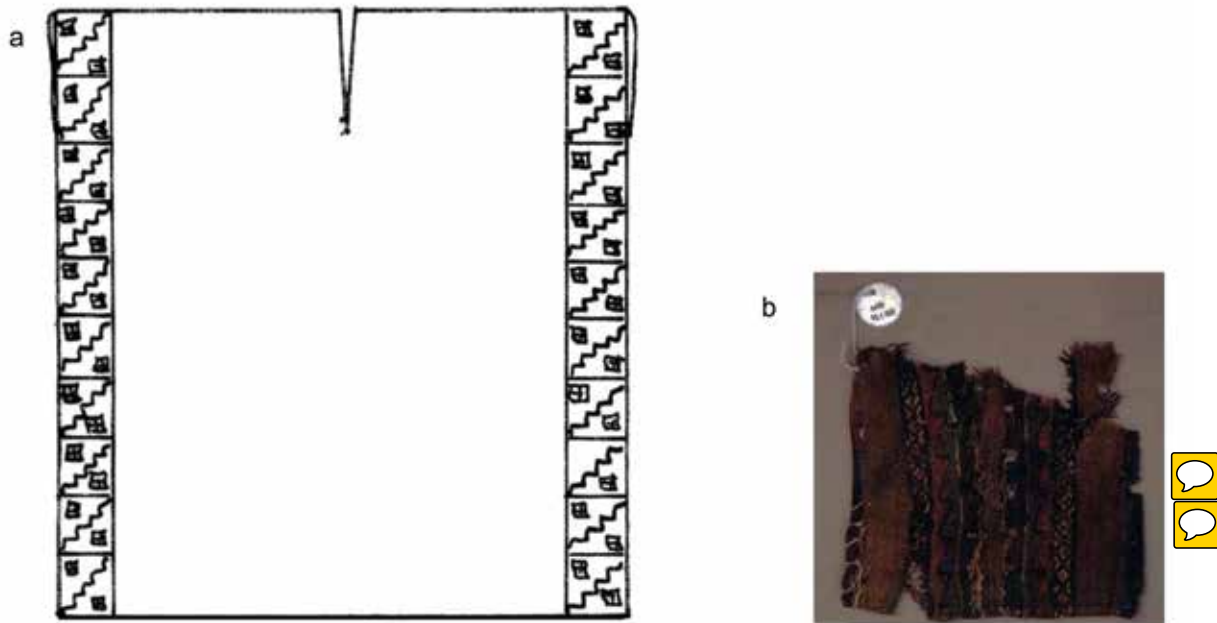


Figure 10.7. Textiles from Pica 8: (a) Tunic 13.1.457, Tiwanaku Provincial style; (b) Bag 1116 from Pica 8. Tiwanaku Provincial, Cochabamba Valleys style.

Intermediate Period and regarded as representing a single style (Moragas 1995). The bodies were laid back, with their legs flexed and covered with red pigment from the knee to the ankle, as well as covered with totora mats, seaweed, and white feathers of ocean birds. Ceramics are scarce, consisting of Pica Tarapacá styles (Charcollo and Chiza) and some of the San Miguel style from Arica. Also occurring are little boxes, spindles and spindle whorls, combs, harpoon heads, oars, couplers, projectile points and shafts, tops or *trompitos*, weights, *desconchadores*, and fragments of sea lion skin rafts. Furthermore, Moragas indicates that there are snuff trays and tubes, one of them decorated with a condor carving. By the time of her study, Catalán (2006) could not find this snuff tray (for which there are no drawings or pictures either), so she counted only four tubes and one cylindrical-conical bone mouthpiece, similar to wooden ones from Atacama.

Regarding the textiles, Moragas (1995:71) adds that the cemetery presents “Tiwanaku features that Ulloa has described for the Cabuza Phase, along with other evidence from Regional Development times. Among them is a four-cornered hat of natural colors and geometric designs (Figure 10.8), which displays a certain affinity with the polychrome hats of Arica that are associated with local ceramics of Azapa as well as with Tiwanaku V to VI styles. These are placed chronologically between AD 800 and 1000 and appear on the Peruvian coast, as well as in the Rio Loa Valley (Sinclair 1998). These

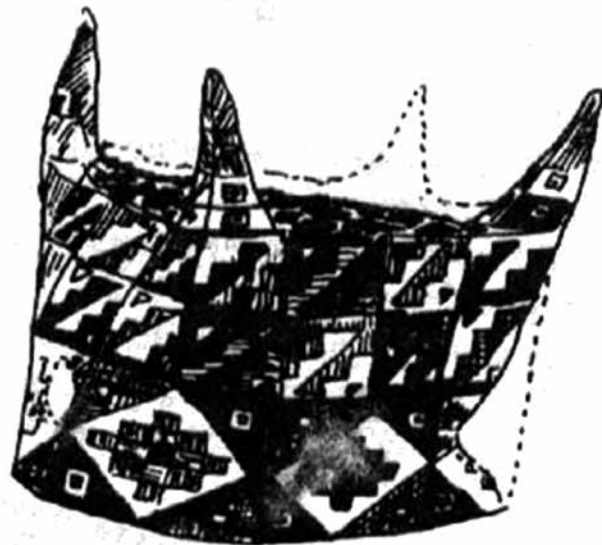


Figure 10.8. Four-cornered hat from Bajo Molle. Tiwanaku Provincial style. Drawing taken from Moragas (1995).

hats, which in bichrome varieties extend into the Late Intermediate Period, were manufactured with the cow hitch technique (*doblo enlace anudado*), which is the same as the hats covering formative turbans from the Tarapacá 40 (Oakland 2000) and Patillos cemeteries. All this leads us to question the Tiwanaku origin of these pieces, as well as their representations in other media. An example is a wooden figure with a cap of the four-corner type found in the Pica Tarapacá contexts of Yungay Bajo (Berenguer and Dauelsberg 1989; Sanhueza 1985).

Another textile from Pica Tarapacá de Yungay Bajo, which at the time was classified as Tiwanaku, is a tie-dyed tunic, associated with a date of AD 1258 (Moragas 1995:72). However, the mortuary context contains elements assignable only to the Late Intermediate Period. Indeed there is no convincing reason to assign the tie-dyed technique to Tiwanaku as it has antecedents in archaic and formative coastal contexts of the north of Chile (Cases and Agüero 2004).

In sum, we can affirm that the total of 33 textile garments analyzed from Pica Tarapacá de Yungay Bajo fall into styles of the Western Valleys of the Late Intermediate Period (Agüero 2007), whereas at least one of five artifacts of the psychotropic kit is related to the oases of San Pedro de Atacama. However, the nature of this carved snuff tray is unclear.

Further south, in the Los Verdes cemetery, Pica Tarapacá contexts and some “Tiwanakoid” materials, together with tabular oblique cranial deformation, led to the suggestion that contacts with the interior must have taken place at the beginning of the Pica Tarapacá complex (Núñez 1984; Sanhueza 1985). This also seems to be indicated by textile motifs occurring on belt bags, *inkuñas*, *chuspas*, domestic bags, “net bags,” tunics, hairbands, and cords that correspond to styles of the Western Valleys, but Tiwanaku influence is certainly inconclusive. In fact, Núñez (1984:276) also identifies local coastal elements such as red paint on a mummy bundle and offerings, pelican skins, interments of isolated skulls, sea lion skin shoulder trays, and breast plates. He also mentions Pica and Chiza and San Miguel pottery along with *keros* bearing llama designs as well as equipment for the consumption of hallucinogens with Tiwanaku iconography (Moragas 1995:73), which could not be found at the time of restudy.

The mortuary site of Patillos 1, located 70 km south of Iquique, would have also been inhabited by a population related to the Pica Tarapacá Complex, to judge by their mummy bundles wrapped in tunics, flexed bodies, harpoon heads, bows, projectile points, copper fishhooks, atlatl hooks, corn, polychrome textiles, and Pica Tarapacá ceramics (Núñez 1965, 1969), which greatly resemble pottery from Bajo Molle. Moragas (1995) describes this same pottery in the similar proportions for Bajo Molle. Among the textiles, she highlights tunics of natural colors decorated on the edges, polychrome bags and belts with hooks and rhombuses, bags in “velvet” technique with hooks and triangles, and *inkuñas*. However, the author also points out differences between Bajo Molle and Patillos in that the latter has

more metalwork (gold, malachite, and copper). She also mentions carrying trays, leather bags, cucurbits, fishing weights, a sea lion skin helmet, couplers, combs, flat baskets, little boxes, cane cases, bone spatulas, snuff trays, and inhalation tubes. The discovery of an *algarrobo* wood snuff tray (*Prosopis* sp.), with a handle carved in the round representing the “sacrificer,” along with a bag with geometrical motifs, led Núñez (1969) to place the site between AD 700 and 1450 and to point out that inhaling of snuffs must have spread along the coast in the first centuries of the Pica Tarapacá Complex. Although these objects were not found during restudy, good drawings show a standing character carrying a headdress decorated with a neckshield that had malachite inlay (Figure 10.9), dressed with a decorated belt, an ax in the right hand, and a severed head in the left hand held in front of the chest below the chin (Núñez 1969:84–86). The snuff tray is part of a local context described in detail by Núñez and is very similar to one from Quitor 5 (No. 2196–98) at San Pedro de Atacama (Torres 1985:Figure 15). The small bag, according to the drawing (Figure 10.9), seems to have been made with a piece of Tiwanaku tapestry (Núñez 1969:87). Unfortunately, Catalán (2006) could not find this snuff tray either, but she indicates that objects from psychotropic kits from this site include tubes, spatulas, and cylindrical-conical mouthpieces, similar to those of Atacama.

For our part, we registered 48 garments from Patillos 1, all fragmentary, two of which represent poorly preserved four-cornered hats. One was reused as a bag, and the other is so highly repaired that its original shape cannot be determined. These garments were probably created during the regional Formative and kept in circulation until later times, although surely stripped of their original meaning. Consequently, Patillos 1, just like Bajo Molle and Los Verdes, would represent an early moment of the Late Intermediate Period corresponding to a local development of Pica Tarapacá with interaction networks bounded by Arica and Atacama, within a framework markedly coastal in character (Agüero 2007). Therefore, Tiwanaku-looking objects could be related to the borders, not local presence of or even direct contact with Tiwanaku culture.

Regarding Cádiz 3, a tube and one flat-shaped spatula with no structural difference between blade and handle (Catalán 2006) were recorded, but none of the possible “textile work associated with Tiwanaku,” which unfortunately does not appear in this collection (Moragas 1995; Núñez 1979b; Núñez and Varela 1967–1968:24).

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Author answer: Problem with figures. I need to see the text with figures. Did you get Figure 4?

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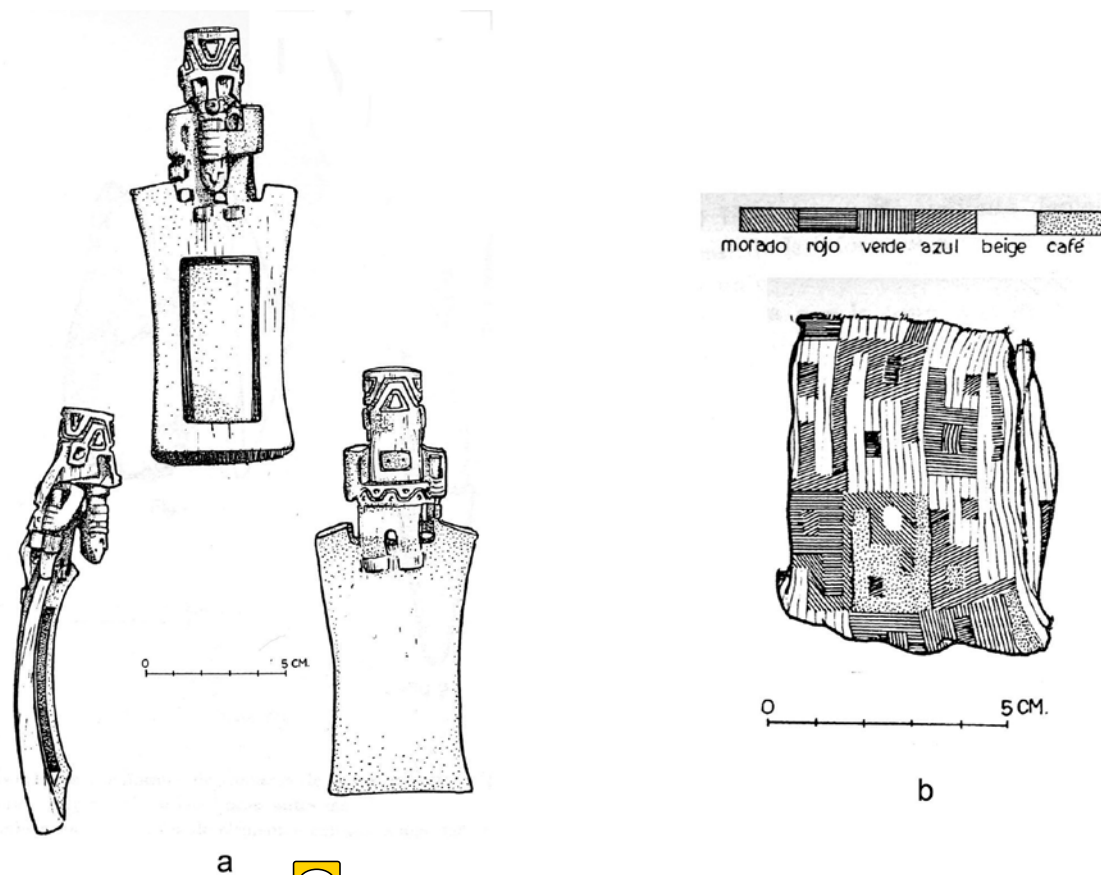


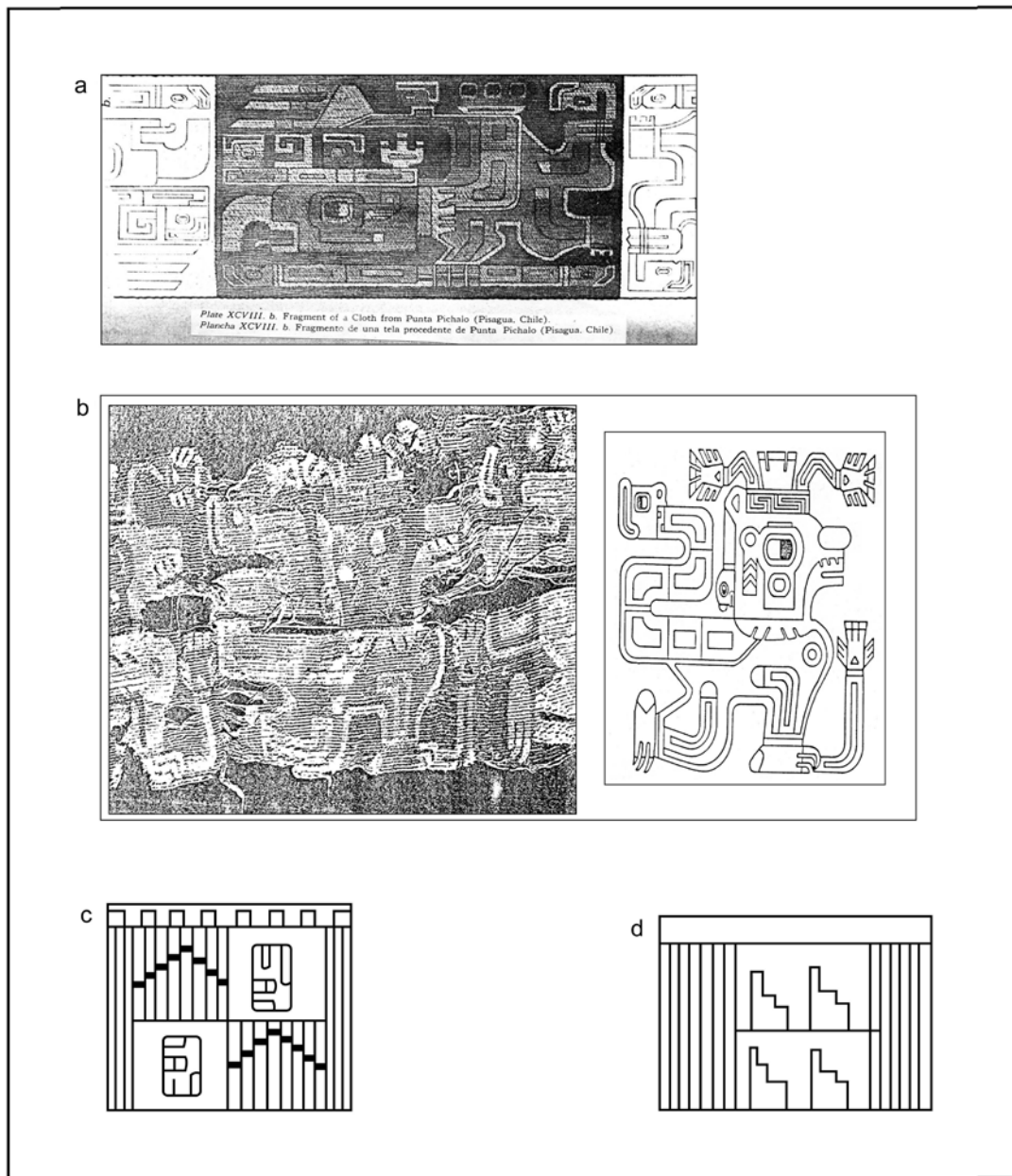
Figure 10.9. Snuff tray with “sacmcer” and bag from Patillos 1, both Tiwanaku style. Drawings taken from Núñez (1969).

Finally, for the Pisagua sites (north of Iquique), we have noticed certain confusion regarding the provenance of the Tiwanaku evidence. Four sites have been assigned to the Middle Period in this locality, with four relevant contexts: (a) a stratum of the “Punta Pichalo Cave,” with litter and burial grounds, excavated by Uhle (1922), who placed it chronologically between AD 800 and 1300; (b) Cemetery C, also excavated by Uhle (1922); (c) a cemetery in Pisagua studied by Junius Bird (1943), which is cited as Cemetery 3 (Conklin 1983); and (d) the “Black Refuse,” corresponding to Bird’s (1943) Stage 4.

It has been said that evidence obtained by Uhle in Pisagua corresponds to “trophy-heads, polychrome four-cornered hats and characteristically Tiwanaku textile work” (Núñez 1968:170). Significantly, snuff trays are present, with flat, fork-shaped handles, as well as feline-shaped handles carved in the round (Catalán 2006; Uhle 1915). However, according to Catalán’s analysis, they do not present Tiwanaku features. From Punta Pichalo, a textile with a “profile avian figure” is mentioned (Conklin 1983:Figure 24)<sup>6</sup> that was published by Posnansky (1957:Plate XCVIII). Apparently,

this must be part of a tunic obtained in Pisagua by Uhle, along with a polychrome four-cornered hat, published long afterward by Schaedel in 1957 (in Núñez 1965). According to Núñez, the motif would be repeated in three 7-cm-wide vertical bands (Figure 10.10a). Oakland (1986) describes two weft-faced bags from Punta Pichalo (but part of the textiles from Arica) that measure 13 × 14 cm on average, with circular warp and decorated with interlocked tapestry depicting four modules of hooks and stepped blocks on each face (Figure 10.10c,d). One bag has two modules with feather representations and two with the profile of a human head in their center, with a long nose and split eye (Figure 10.10c). Unfortunately, we lack information indicating whether these objects came from the cave, Cemetery C, or even Uhle’s “Protonazca” (the “Black Refuse”), which has contexts similar to those of Tarapacá 40 (Quevedo and Agüero 1995).

We are also ignorant about which of the two cemeteries excavated by Bird (1943) corresponds with “Cemetery 3,” source of a 5.5-cm-wide interlocked tapestry headband (T4, Grave Lot 22/5833) that is decorated with a “profile feline” repeated linearly eight times (Figure 10.10b). The

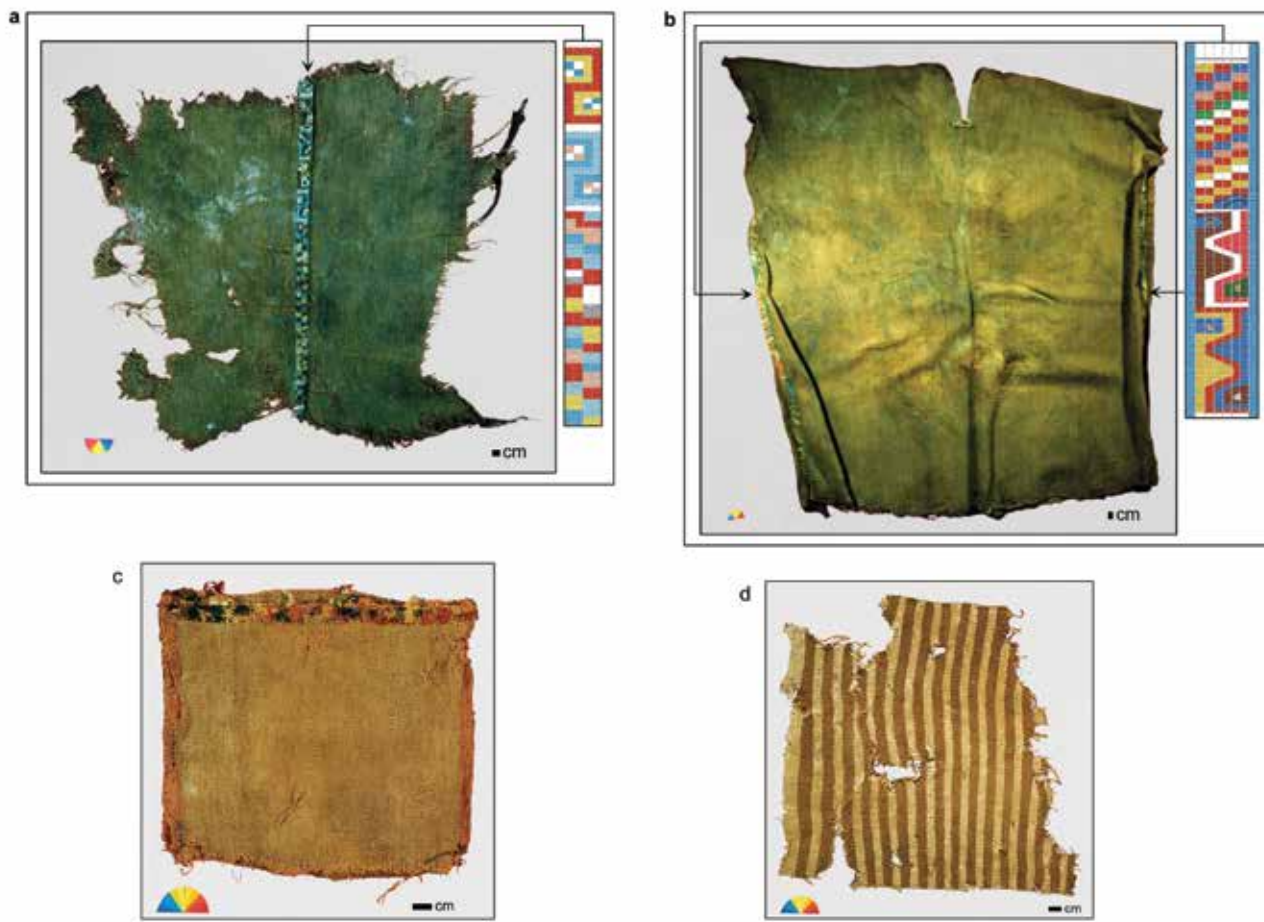


**Figure 10.10.** Tiwanaku-style textiles from Pisagua: (a) bird (drawing taken from Posnansky [1957:Plate XCVIII]); (b) feline (drawing taken from Conklin [1983:39, Figure 24]); (c) Bag T10 from Punta Pichalo; (d) Bag T9 from Punta Pichalo. Drawings c and d based on Oakland (1986).

context includes wooden snuff trays, bone instruments, fine basketry, and remains of a human head with a tapestry headband decorated with zigzag motifs (Conklin 1983) of a type that has been registered along the entire Tarapacá coast during Formative times (Rivera 2004).

We studied the collection from this cemetery, called “Tiahuanaco” by Uhle (1922), determining through our analysis that most of the textile garments correspond to Western Valleys styles, whereas only four (3.70 percent) could in some way be related to an actual Tiwanaku style

(Agüero 2007, 2009). First is a warp-faced trapezoidal tunic (No. 2453), with side loop-stitch embroideries that create a “meander” and squares (Figure 10.11a). Second is a Tunic No. 3006, which is similar to Tunic No. 0800 from Pica 8, but with multiple wefts and stepped side embroideries of profile faces (Figure 10.11b). This weaving also evokes examples from Chen Chen, or M1, in the Moquegua Valley (Uribe and Agüero 2001, 2004). Third is a small square warp-faced bag (No. 2489), with loop-stitch embroideries in the upper part that create



**Figure 10.11.** Tiwanaku Provincial-style textiles from Cementerio C of Pisagua: (a) Tunic 2453; (b) Tunic 3006; (c) Bag 2489; and (d) Inkuña 2466.

a line of rectangles, each with a center (Figure 10.11c), and the *Inkuña* No. 2466 with brown and beige bands, similar to those from the Azapa 71 site but without embroidery (Figure 10.11d). Although it is true that all display decorative techniques and motifs associated with the Tiwanaku textile style, they also present structural features (such as the technical characteristics of the woven media) that suggest that they were produced in the Western Valleys. Thus, they might best be related to Tiwanaku Provincial of Moquegua.

The rest of the textiles from Uhle's excavation totals 108 garments, including tunics, blankets, loincloths, bags, belts, one *inkuña*, and one "frontal adornment," as well as hats, helmets, slings, and "net bags," corresponding to fabrics like the ones in Pica 8 and the Cabuza Phase. Two other weavings of cotton probably come from the Peruvian coast (Agüero 2007, 200-98). Thus, it is possible to assign these materials to the final stages of the Middle Period in Azapa and the beginning of the Late Intermediate Period in Tarapacá. The small

number of pieces that can be assigned to the former reveals strong bonds with local expressions during this time. The quality of the garments—in contrast with the coast of Iquique—suggests a close relation with the Pica oasis, which signals great importance for the mouth of the Camiña River in the mobility and economics of the period. As pointed out by Schiappacasse and colleagues (1989), the ravine of the Camiña River probably represented a zone of cultural and temporal transition between the Arica Culture and the Pica Tarapacá Complex.

## Discussion

Considering the foregoing discussion, we can now safely state that only nine objects found in Tarapacá definitively belong to the Tiwanaku style. Of these, three are tunics from Tarapacá 40. Others include a snuff tray and a bag from Patillos 1. Also belonging to the Tiwanaku style are a tunic, two bags, and one headband from Pisagua (Table 10.1).

**Table 10.1.** List of Tiwanaku-style objects found in the Tarapacá region.\*

Site	Register	Institution	Reference	Object	Material
1. Tarapacá 40	T3/SM	UAP	Oakland 2000	Tunic	Textile
2. Tarapacá 40	T5/SS	UAP	Oakland 2000	Tunic	Textile
3. Tarapacá 40	T3/SS	UAP	Oakland 2000	Tunic	Textile
4. Patillos 1	1817	?	Núñez 1969	Snuff tray	Wood
5. Patillos 1	1821	?	Núñez 1969	Bag	Textile
6. Pisagua	T-3	MNHN?	Posnansky 1957 Conklin 1983:9	Tunic	Textile
7. Pisagua, Punta Pichalo	T9	MASMA?	Oakland 1986	Bag	Textile
8. Pisagua, Punta Pichalo	T10	MASMA?	Oakland 1986	Bag	Textile
9. Pisagua, Cemetery 3	T4 22/5833	Museum of American Indian	Bird 1943:269 Conklin 1983:10	Headband	Textile

MNHN = National Museum of Natural History; MASMA = Museo Universidad de Tarapacá San Miguel de Azapa; UAP = Universidad Arturo Prat.

\*We only provide the reference for the objects that have been reviewed in the bibliography.

These objects with Classic Tiwanaku iconography are embedded in local contexts, at least in the cases where they were collected archaeologically, indicating a local Late Formative Period placed chronologically between cal. AD 370 and 760, according to the calibrated dates cited by Oakland (2000) and Núñez (1969). Considering our analysis, they would be related to the Omo Phase of Moquegua, where two garments are known with figurative iconography related to Tiwanaku IV (Conklin 1983; Goldstein 1989). All these pieces are so standardized that they suggest manufacture in a single production center, probably Tiwanaku itself, where megalithic sculptural models were visible. We propose that their occasional presence in local contexts is due to constant formative mobility, which characterized Tarapacá since the Archaic Period, promoting contact, circulation, and transfer of goods and ideas without the need for foreign population movements or an external system of caravans. Taking into account the absence of enough exotic evidence and the lack of a homogeneous identity in the Formative (Agüero et al. 2005), social changes experienced were not the result of the direct altiplano movement or influences of the Arica's Alto Ramirez Phase (Rivera 2004; Rivera et al. 1995–1996).

In addition, another nine objects come from contexts that belong to the first half of the Late Intermediate Period, from the sites Pica 8, Bajo Molle, and Cemetery

C from Pisagua, which can be linked to the textile variants developed in secondary centers of the Moquegua and Cochabamba Valleys. These are assigned to a Tiwanaku Provincial style (Oakland 1986), that is, those pieces whose media have been made with local technology or reinterpret Tiwanaku textile programs (Table 10.2). This supports our conviction that a particular process connected the Formative of Tarapacá with the neighboring valley borderlands during the Middle Horizon but not with influences from a center of diffusion such as Tiwanaku itself.

In several publications, we have pointed out that Tiwanaku did not produce textiles with figurative designs in the Western Valleys. What developed at the local level instead was textile production aimed at everyday use (Uribe and Agüero 2001, 2004). It is very likely that all these garments were woven in the low valleys for purposes that differed from those that carry Tiwanaku state iconography. We believe that these textiles reveal another dimension of the Tiwanaku style, more domestic and less elitist, which also include pieces in dovetailed tapestry. Furthermore, as demonstrated by the date for the tunic from Pica 8, these textiles should belong to a later period, related to phases Tiwanaku V and VI (editor's note: Tiwanaku 1 and 2 in the chronology proposed most recently by Janusek) when Chen and Tumilaca, already imbued with textile understandings of the lowlands,



**Table 10.2.** Tiwanaku Provincial-style objects found in the Tarapacá region.

Site	Register	Institution	Reference	Object	Material
1. Pica 8	T7/SG	MCHAP		Tunic	Textile
2. Pica 8	0800	UA		Tunic	Textile
3. Pica 8	13.1.457	UA		Tunic	Textile
4. Pica 8	1116	UA		Bag	Textile
5. Bajo Molle	s/n°	MRI	Moragas 1995	Four-cornered hat	Textile
6. Pisagua, Cemetery C	2453	MNHN		Tunic	Textile
7. Pisagua, Cemetery C	3006	MNHN		Tunic	Textile
8. Pisagua, Cemetery C	2489	MNHN		Bag	Textile
9. Pisagua, Cemetery C	2466	MNHN		Inkuña	Textile

MCHAP = Museo Chileno de Arte Precolombino; UA = Universidad de Antofagasta; MRI = Museo Regional de Iquique; MNHN = Museo Nacional de Historia Natural.

especially of the Western Valleys, as correctly observed by Minkes (2008) in the Osmore Valley. In this way, the populations of Tarapacá would not have had direct contact with the people of Tiwanaku. Rather, they would have experienced influence through intermediary groups from other regions, such as those in Azapa, but without the kind of more intensive interaction that appears to have taken place in Azapa. Textile styles in Tarapacá were never permeated by Tiwanaku; indeed, Tiwanaku textiles are always easily distinguishable from local garments in Tarapacá. Catalán (2006) observes the same situation through the study of the objects that belonged to the psychotropic kit and concludes that in light of such limited representation of altiplanic material culture, contact with Tiwanaku must have taken place indirectly and through neighboring populations. No direct alliances with groups from the altiplano are implied by textiles or psychotropic objects. The same can be affirmed for ceramics, which do not show any altiplanic influence during the Formative or in the first half of the Late Intermediate Period (Uribe et al. 2007). Our recent studies in the Tarapacá ravine reveal that barely 0.40 percent of the pottery can be assigned to the Middle Period, corresponding to no more than five fragments of Cabuza, Chichas, and perhaps Tiwanaku origin. This seems a clear reinforcement for relations with Tiwanaku via secondary links and rather later in time as well (Uribe 2008).

In short, Berenguer and Dauelsberg (1989:168) were correct when they affirmed that “on the desert littoral there is a good number of Tiwanaku textiles, most of them linked to Cabuza and Maytas contexts.” However, in fact, the large majority of the textiles to which they refer would have been produced in the Western Valleys. In this respect, careful study of the technology of artifacts, their iconographic representations, and their stylistic expressions, carried out with the archaeological collections of Tarapacá during recent years, provides important new understandings of contextual and chronological behavior in the past. We also advocate an understanding of local processes in terms of themselves, where the connection with the Middle Horizon would be marginal and dependent on regional dynamics of Late Formative times, which currently are inadequately studied.

## Conclusion

The results of the present study reveal only a small number of Tiwanaku objects in our study region. Furthermore, it has undertaken stylistic, cultural, and chronological redefinition of the objects as well as the archaeological sites of Tarapacá relevant to the Tiwanaku issue. Expanding on these new insights, we engage the critical discussion of models proposed to explain the presence and character of Tiwanaku in northern Chile, proposing

a different kind of interaction that was not necessarily altiplanic. In fact, we believe that the circulation of the relevant goods answered mainly to local dynamics rather than to the interests of the Lake Titicaca political center. Processes of culture change followed regional paths of integration and not an altiplano political agenda. In this manner, the long Formative Period, which in Tarapacá spans from the end of the first millennium BC until the onset of the Late Intermediate Period, was not as affected by the coexistence of altiplano and valley populations in Tarapacá as it was by the movement of objects, particularly those of Tiwanaku and Provincial Tiwanaku styles, responding to populational contact with intermediaries of diverse local varieties outside the nucleus. This may be seen among those settled in the Western Valleys of Azapa and Moquegua, assigned to phases Omo (IV), Chen Chen (V), and Tumilaca (VI), precisely when the regional development of this territory, known as the Pica Tarapacá Cultural Complex, was starting to develop toward AD 900.

In contrast to traditional explanations of diverse regional developments in the late south-central Andes, Tiwanaku stylistic presence was not the result of mechanisms such as vertical control and long-distance caravanning, which assume a central role for the civilizing effect of the altiplano, or of economic complementarity, respectively. Rather, leaving the centralist conception of the altiplano aside, we propose—in agreement with part of the claims of Berenguer (1988) and Rivera (2004)—that the Tiwanaku issue must be understood within a system of beliefs and political formations that find their explanation in the local interests that were confronted, with their own social contradictions, and not in the interest of an expansive state. In this regard, the role of the altiplano might have been similar to that of a mirror in which local contradictions were only reflected and given meaning and expression. But local situations were resolved through performance on their own ceremonial stage (Inomata and Coben 2006). Unlike San Pedro de Atacama and Arica, Tiwanaku in Tarapacá was one of many players, but not the central argument.

In closing, we reiterate what we have proposed on the basis of our own investigations throughout the region, especially exploration of social complexity in Tarapacá. We must understand its origin and dynamics through local processes from within, not as direct and singular effects instigated by high Andean civilizing centers. More appropriately, our attention has been called to the great diversity of histories and materialities that make up the south-central Andes.

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### Notes

- 1 For a recent chronological discussion about the Middle Period in Arica, see Korpisaari *et al.* (2014).
- 2 For a study of four-cornered hats, see Sinclair (1998).
- 3 This interpretation is based on an erroneous reading of Uhle's texts. In Punta Pichalo Cave, over the early deposits, Uhle identified other later deposits. He referred to both in the following way: "Big cave near Punta Pichalo, 20 m. asl. Tiwanaku and Atacameño Culture (800–1300 A.D.)." Contextualizing this, Uhle believed that the Tiwanaku Period was formed by two components: (1) a formative component (Protonazca and Chavín), responsible for the architecture, the styles of their main industries, the Aymara language, and profile figures and (2) the Atacameño component, which would pass on stepped figures. For this reason, Tiwanaku would have been originally restricted to the Titicaca Basin and the Tiwanaku Valley, expanding in its "Epigonal" stage to more distant regions such as Cochabamba. The Atacameños, on the other hand, would have expanded to Peru and Bolivia before Tiwanaku. Therefore, the representatives of the "Protonazca" Period would have been a branch of the Atacameños, due to the similarities between their cultural material and that of Calama (Uhle 1922:71).
- 4 When we analyzed them, the Tarapacá 40 materials were stored in the Astoreca Palace of the Universidad Arturo Prat (UAP), Iquique. Some decontextualized garments were recorded in the University of Antofagasta and the San Miguel de Azapa Museum. The Pica 8 collection is located in the Anthropological Research Institute of the Universidad de Antofagasta (UA). Some garments coming from this site have also been found in the Regional Museum of Iquique, the Museum of Calama, the Museo Chileno de Arte Precolombino (MCHAP), and the University of Chile (UCH). The collections from the coast of Iquique are kept in the Museo Nacional de Historia Natural (MNH), but their contexts are not documented. The materials from the Pisagua Cemetery C are stored in the National Museum of Natural History (MNHN), Santiago.
- 5 It is only possible to identify a couple of Cabuza and Maytas Chiribaya pieces (Zlatar 1983), which undoubtedly have their origin in Arica.

- 6 According to Conklin (1983), it should be in the [National Museum of Natural History](#) in Santiago, but there is no register of this piece.

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