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Diaguita and Aconcagua Music

José Pérez de Arce

Zusammenfassung

In prähispanischer Zeit existierten in Zentralchile die Kulturen der Diaguita und Aconcagua. Neuere Forschungen führen sowohl aus organologischer Sicht als auch aufgrund der musikalischen Kontexte (Bibliographie und Ethnographie) zu einem besseren Verständnis ihrer Musikkultur. In diesem Beitrag werden die prähispanischen Relikte nach organologischen Kriterien untersucht und die technologischen Merkmale einiger neuer Funde beschrieben. Im Anschluss daran wird die bibliographische Forschung besprochen, wobei neue archäologische Erkenntnisse sowie die Diskussionen zur frühen Kolonialgeschichte und den prähispanischen Relikten erörtert werden. Abschließend werden die erhaltenen Daten mit rezenten Traditionen verglichen, was zu einem Ausblick auf die regionalen Unterschiede in der Musikkultur führt.

The Aconcagua and Diaguita cultures developed in pre-Hispanic times in Central Chile (Fig. 1), roughly beginning in the year 1000, extending through the Inca period (ca. 13th–16th century) and ending with the Spanish conquest in the mid-16th century. From both cultures we know of some fragmentary evidence of music activity and some relationship with present day local traditions, which we have published in various articles in which I extend what was available in previous bibliographies.¹

Until recent years only seven musical instruments from Aconcagua culture were described. In 2010 we began a research with Francisca Gili² and today we know of 61 ‘*antaras*’ (11 of them only by bibliographic description), 22 ‘*pifilkas*’ (two only by bibliography), two ‘*piwilkawé*’, 13 ‘*pifilkas acodadas*’, three ‘*piwulka*’, one ‘globular flute’, one possible ‘*tutuca*’, five metallic pyramidal bells and three representations: two ‘*kena*’ representations, and nine singers. We visited many museums and personal collections and made scans of some of the instruments, which made our understanding of the organological aspect of the instruments more evident. Also we accessed the specialized bibliography that gives us a better un-

derstanding of the cultural context, and, through the new trend of archeological findings learned what happened in these societies, and related these findings with ours, improving the understanding of the musical past. Finally, the study of present day traditions linked with the pre-Columbian past permits the spatial relationship between these traditions to be defined, giving a better understanding of how they relate to this past. These three aspects of our research will be described below.

1 Pre-Hispanic Remains

In Central Chile and Norte Chico climate permits only nonorganic material to survive. Fortunately for us, ancient cultures made a great effort to make musical instruments of stone, which we have divided into several types:

1.1 ‘*Antara*’³

We call this a kind of pan flute with ‘complex tubes’, with two internal sections of different diameters, which allows a ‘torn sound’ to be produced;

¹ See the references of Pérez de Arce 1988 to 2002b, as well as: Pérez de Arce 2004a; Pérez de Arce 2004b; Pérez de Arce 2005; Pérez de Arce 2011a; Pérez de Arce 2011b; Pérez de Arce 2012; Pérez de Arce (forthcoming); Pérez de Arce – de la Cuadra 2012.

² 2010 Música Aconcagua y Diaguita: Sonidos Prehispánicos de Chile Central y Norte Chico, Fondo de Fomento de la Música Nacional, FONDART (8199-K). In the text I skip all mention of specific archeological material for simplification and also because all this information is included in the related articles and figure captions.

³ We put names in quotation marks to distinguish organological typologies from vernacular names (see, for example, Pérez de Arce 1997a). As these names are methodological inventions (although we tried to have some root in local names) they are treated as scientific denominations. Using the Sachs-Hornbostel system of classification for musical instruments, expanded to include South American typologies (Pérez de Arce – Gili 2013), ‘*antara*’ is SH 421.112.211.12 (we use SH to denote the Sachs-Hornbostel system).

this is a well-known instrument for us.⁴ In Aconcagua culture we find two different types of ‘*antara*’; one of them we called ‘classic’, which reflects the most refined craftsmanship, and the other we called the ‘Mapuche’ type, because it shows Mapuche influence, is rougher, heavier, and produced with less craftsmanship. All of them lack decoration. Diaguita ‘*antara*’ show a greater variation in size and their external appearance includes decoration, so it is more difficult to group them into definite typologies. The craftsmanship here is not as developed as in Aconcagua ‘*antara*’, but shows a high level of skill both in external design and in organological design related to the acoustics.

Of the classic Aconcagua ‘*antara*’, some show a developed internal structure and a general design that reflects an interesting level of craftsmanship that we have described as ‘acoustic excellence made in stone’ (Fig. 2).⁵ Contrasting the works of Roberto Velázquez⁶ on stone craftsmanship in pre-Columbian Mexico with our findings, we can conclude that they were constructed with the best knowledge and experience, reaching the very limits of what stone craftsmanship permits, with walls between adjacent holes of 0.7 mm, and a perfectly aligned tube construction. The acoustic technology was developed to a high degree of refinement, obtaining perfect ‘torn sounds’ even of the most rare and preferred *catarra* type. But it should be noted that this astounding and difficult stone technological ability does not influence the acoustical achievements that can be reached using material like wood, which is much easier to work, which means that stone was not chosen because of its acoustical properties. Also, this astounding technological ability does not serve to gain public recognition, because it cannot be seen, unless the instrument broke. Fortunately for us, we have the opportunity to study a group of 25 broken Aconcagua instruments from a private collection in San Felipe, which also permits us to understand the existence of some specialized places where these craftsmen worked. They had a high level of specialization with refined knowledge of stone craftsmanship, acoustics and design, and invested an enormous amount of time. Their knowledge seemed to have been shared only by those who knew the clues of it craftsmanship. All this data, plus other information gathered from bibliography, speak to us of an elite, a school of ‘*antara*’ artisans like a secret society that extends to the group of musicians, forming a subgroup in society that controls local rituality. Aconcagua ‘*antaras*’ were made only with a specific red type of *combarbalita*, a local stone imported from the Illapel zone 180 kilometers away. In contrast, adjacent regions had a different stone color preference for their musical instruments: mainly black or white

soft stones were selected for Diaguita ones, and southern Mapuche society chose green soft stone as their preferred material. Today we do not know an ethnographic technique of stonework; similar flutes are made of wood, with a very different technology. Only one wooden specimen is known from Central Chile, found at La Serena thanks to very special conservation conditions, showing what perhaps was a mode of extended typology of instruments that was easier to construct and thus more easily to achieve by local groups.

Archeological finds from the Bellavista (Aconcagua river) and Carrascal sites inside Santiago city show that the ‘*antara*’ is related to special individuals, different from their contemporaries, as shown by their unique funerary features linked with the political and religious elites of the time. I interpreted the Carrascal instrument as largely used by a lineage of ‘*antara*’ that with the death of a 10–12 year old male child. From northern Atacama and northwest Argentina similar instruments shows a relationship to special rituals linked with human decapitation, the feline, and *vilca* hallucinogenic intoxication. There is a strong possibility that these same types of rituals reached Central Chile, adapting regionally to each cultural substrata, the ‘*antara*’ being part of this movement.

We also find two very special ‘*antaras*’ made of ceramic (Fig. 3) that were not designed for sounding, but merely as a miniature representation of real instruments. This finding contrasts very strikingly with the general restriction we observe, from Atacama to the south, of flutes made of ceramic; we have no pre-Hispanic evidence of a single ceramic flute in all that region,⁷ a finding that contrasts vividly with the wide, extended use of ceramic for constructing flutes that pervades the rest of the Andes. This strange situation poses many unresolved questions, such as why ceramic was avoided for flute construction, since its use for jars, bottles and other utilitarian objects was perfectly well known. What relation has this avoidance of ceramic with the consistent use of stone for flutes, almost unknown to the rest of the continent?

⁴ Pérez de Arce 1988; Pérez de Arce 1989; Pérez de Arce 1992b; Pérez de Arce 1995b; Pérez de Arce 1996; Pérez de Arce 1997c; Pérez de Arce 1998; Pérez de Arce 2000a; Pérez de Arce 2000b; Pérez de Arce 2002b; Pérez de Arce 2002c; Pérez de Arce 2004b; Pérez de Arce 2012; Pérez de Arce (forthcoming); Pérez de Arce – de la Cuadra 2012.

⁵ A detailed description of this ‘*antara*’ typology is in Pérez de Arce 2012.

⁶ Personal communication 2012. See also Velázquez 2008.

⁷ A few globular flutes of ceramic from the Mapuche region (Pérez de Arce 2008) are probably from post-Hispanic times. The only ceramic flute found in our region comes from abroad, as explained in the following.

1.2 ‘Pifilka’⁸

This instrument is similar to an ‘*antara*’, but with only one complex tube.

Aconcagua instruments are similar to ‘*antaras*’ in organological design (complex tube, permitting the ‘torn sound’) and formal design (tall, one handle, stylized figure) (Fig. 4). The color of stone follows the same regional differences as in the ‘*antara*’ type, which speaks to a unity of concept for both ‘*antara*’ and ‘*pifilka*’.

Diaguita instruments have different lengths that range from 200 to 44 mm. The shortest perhaps pertain to another category because they do not share some of the general ‘*antara-pifilka*’ characteristics; they have no loop for hanging, use another type of stone, and clearly produce a different range of sounds. There is a possibility that these instruments are older, relating to the previous Molle culture, something that perhaps can be clarified with future finds.

1.3 ‘Piwilkawé’⁹

This is a flute with one simple tube (only one diameter). We find only one semiarid desert specimen. This sole find does not permit us to consider it as a regional typology (it could have been brought from another region, for example).

1.4 ‘Pifilkas Acodadas’¹⁰

Poorly described in bibliography, this special kind of flute shows a general aspect that resembles a smoking pipe. This same ambiguity between flute and smoking pipe we find in Mapuche pre-Hispanic organology¹¹ and relate it to the shamanistic world, where smoking is a very important feature, as is music. During our investigation we discovered that the ‘*pifilka acodada*’ has an interesting and complex interior structure (Fig. 5) whose acoustical function is still not known to us. The whole group is not so well defined in terms of organological or formal characteristics as the ‘*antara*’ and ‘*pifilka*’ instruments, but there is more variety in form. A few have one or two holes, probably for fingering. Almost all of them come from the semiarid desert, and probably only one is from the Central Valley; we lack definite date clues for allocating them to a certain cultural period.

1.5 ‘Pivulka’¹²

This are flutes with one simple tube provided with fingering holes. The three known instruments do not correspond to a single typology; they differ in

size, form and number of holes. One of them resembles the small Diaguita ‘*pifilka*’, but with three carefully carved holes (Fig. 6). Another one has a very strange profile, perhaps dating from colonial times. This lack of similar typological features probably relates to individual cases, perhaps unrelated to the rest of the local instruments, perhaps brought from abroad. Their sound production is not easy, and they have a very high-pitched tone.

1.6 ‘Globular Flute’¹³

There is only one flute made of ceramic, found near Ovalle. Clearly it was constructed to be sounded, in contrast to the ‘*antara*’ previously described, and it also differs from all other organological and formal features found locally, but corresponds to *Cuzco Policromo* typology found at the center of the Inca empire, in Machu Picchu and Sacsahuamán.¹⁴ It is a beautiful globular flute painted with brown and red over sepia (Fig. 7).

It is the only known Inca musical instrument in Chile and shows a very distinct organology, with symmetrical fingering. Its being found in Ovalle, an important Inca administrative center in the midst of Diaguita territory, speaks to the strong bonds that Inca people had at this time with the Diaguita from these valleys, as shown by archeological evidence.¹⁵ We are tempted to suggest that the importance of this beautiful flute resides in its use in administrative, bureaucratic, social and ritual activities that Inca people perform in a private way, preventing them from being seen by local common people.¹⁶

1.7 ‘Tutuca’¹⁷

This is a simple bone tube only 70 mm long. It can be interpreted as a ‘*tutuca*’, a kind of flute evidencing Mapuche organology.¹⁸ Although this is not a definite statement, this possibility opens a completely new perspective on local organology, and it is the first object to be described as this specific type of instrument.

⁸ SH 421.111.21 (Pérez de Arce – Gili 2013).

⁹ SH 421.111.221 (Pérez de Arce – Gili 2013).

¹⁰ SH 421.111.21 (Pérez de Arce – Gili 2013).

¹¹ Pérez de Arce 2008.

¹² SH 421.111.221 (Pérez de Arce – Gili 2013).

¹³ SH 421.13 (Pérez de Arce – Gili 2013).

¹⁴ Valcárcel 1934, 29; Izikovitz 1935, 297.

¹⁵ Cornejo 2010.

¹⁶ A detailed description of this object will appear in a separate article.

¹⁷ SH 423.121.11 (Pérez de Arce – Gili 2013).

¹⁸ Pérez de Arce 2008.

1.8 'Pyramidal Rattle'¹⁹

A series of tiny copper bells found at different archaeological excavations in semiarid desert permit us to describe them as existing throughout the Diaguita period, from early Diaguita times to Inca domination. Requiring movement for sounding, they probably were ornaments on garments. One of them has a copper clapper, a strange feature for the local organology that was known only through 'cencerro' type bells with many clappers, widely distributed to the north of the territory discussed here.

2 Iconography

The representations related to music are of two types: one is the 'kena' musician representation. The other is the 'singer' type.

One flute player, very schematically modeled (only the mouth, nose, eyes and rudimentary arms) on a ceramic vessel, is on an instrument with four finger holes, (which implies a total of five notes). Making an inference from regional knowledge of ancient flutes we suppose it represents a 'kena' type of flute, characterized by a notch at the upper side, being the most widely known longitudinal flute all over the Andes. Another strange figure modeled on a big open jar depicts an anthropomorphic figure whose arms hold something that very schematically resembles a flute. On its back it has a skeletal animal, arms and legs extended, whose head is lost.

The 'singers' are bottles in the form of anthropomorphic figures with wide-open mouths. The discovery of many of these 'singers' permits us to recognize a typology that changes in detail but maintains a principal attribute, a big open mouth. Some Diaguita specimens are fully painted, with their clothing, hairstyle, ornaments and facial markings representing women. The Aconcagua ones are much simpler, lacking painting and body details, insinuating only ears (like animal ears), nose and mouth, some with only the mouth (Fig. 8). This seems to refer to a northern tradition (in the rest of the Andes we sometimes find similar type of representations) that lost less important details while going south, until only the main one was maintained, the big open mouth.

3 Bibliographical Research

From recent archeological bibliography we can now have a clear perspective of how to interpret the previously described finds.

In terms of time, we can now refine our understanding of changes over time, from the Inca

period, the latest and thus the best preserved, to the previous Aconcagua and Diaguita period. For those dated farthest back in time it is impossible to describe with certainty any find, but we guess there are many instruments that can come from earlier times, as stated above.

From Inca times we have previously described the ceramic ocarina, and from early Spanish conquest literature we can reconstruct the use of a special *runa tinya* type of drum made with the skin of defeated enemies. It was used to produce some of the war sounds that enter our territory at the beginning of Inca domination, among the strenuous sounds produced by hundreds of voices, drums, trumpets, flutes and the clash of weapons. The well-described Inca ceremonies of war²⁰ give room to extended singing in which all victories were exalted and the defeated peoples were exposed to public humiliation.

But most interesting is the posterior melting of traditions, in which Inca people show a delicate balance of dominion versus cooperative situations, resulting in strong development of their own local tradition, influenced by this new type of input, generating a complete revolution in all artistic senses and achieving an astounding wealth in terms of cultural development. The great imperial rituals had a positive impact on all newly conquered regions, some preserved part of which are the great myths that were sung and related to the origin of Incas and the world. The meeting of all the different traditions from the empire in the main rituals held at its capital, Cuzco, permits for the first time an incredible variety of music, instruments, languages, styles of dance and ornaments at the same place for the first and last time in history. The use of gold and silver, used strictly by only the highest hierarchies, marked the new social divisions.

Inca administration of one of the biggest empires of the world, the one with the greatest extent of ecological, biological, cultural and idiomatic variations,²¹ produces a profound change in all regions, making it possible for all these differences to come into contact through the new facilities represented by the Inca road. All this organizational work is expressed in the drum symbol, reflected in what we have called the 'drum metaphor', this

¹⁹ SH 112.113 (Pérez de Arce – Gili 2013).

²⁰ Fully described in an *Al Sonido del Sol* article, to be published in the near future.

²¹ South America represents one of the most diverse regions of the world in terms of ecosystems, of genetic richness and diversity, of genetic human heterogeneity (González-José 2003, 273) and of linguistic diversity. On this continent there existed almost half of the linguistic stock of the world previous to European conquest (González-José 2003, 272–273; Peláez 2001, 23).

being the ancestral instrument responsible for the coordination of group music in the entire area, with definite and precise norms of use and function. The drum is an example of Andean authority that shows firm and simple control, with no trace of coactive or dominant elements but instead expecting to be followed without imposition, without being noticed. It is a metaphor of the Andean chief, in the same manner as the *chino* orchestra is a metaphor of local societies. The extended and intense labors of construction, of growth in agricultural and other aspects of local activities give room to an explosive growth of the festivities that accompany all of them, as part of the *mita* system of retribution, in which the Inca empire shows a unequalled wealth, providing great quantities of food, drink, ritual gifts and ornaments, transforming the whole region into a splendid proliferation of musical practices.²² The strengthening of certain deeply rooted Andean principles, such as the concept of 'pair', was well shown by the newly arrived orchestras of 'sikus'²³ (cane pan flutes), in the structure of instruments, in the structure of orchestras, in musical organization and in musical function, all of which probably has a great impact on which we know today as *chino* orchestras. The textile tradition was also greatly influenced by the thinking roots of Andean culture, which also pervades all musical aspects of life.²⁴ The new agricultural techniques imply a strengthening of the concepts of time and calendar rituals. Hill worship strengthens the rituals linked with them, whose most outstanding were *capacocha*, human sacrificial rituals atop the highest mountains all over our region.

Previous to the Inca period, the separate Diaguita and Aconcagua cultures developed the '*antara*' and '*pifilka*' instruments as part of a great Andean tradition.²⁵ Musical representations of the 'singers' type are also from this period.

The other organological typologies, such as '*pifilka acodada*', '*piwilkawé*', '*piwulka*' or '*tutuca*', have not been fixed temporally, and they perhaps pertain to this same period as well. The earliest dated examples are some metallic bells or rattles found in an Animas-period funerary context. Many Diaguita instruments have carved drawings on their surfaces, representing some of the most well-known icons of ceramic painting of the same period.

There are some other instruments that, although we lack any archeological evidence, we can deduce from indirect sources, such as bibliographic, ethnographic or archeological sources from other regions: drums, large cane trumpets, short trumpets for signaling, perhaps some small flutes made of vegetal material, and gourd rattles.

We can also argue that the *baile chino* tradition clearly originated in this period, with its wide array

of sensorial aspects merged to give room to great experiences that include the use of hallucinogenic substances and the trance state. They probably are a part of the group labor that, although not so massive, intense and frequent as in Inca times, must have organized the core of musical activities of the society. Mining, water conduction, agriculture, house construction, etc. and communal festivities such as competence, marriage, birth and mortuary rites shape time with music.

Ethnohistoric descriptions show us the particularities of local variations: the semiarid north is expressed in a profound hieratic, mystic and serious expressiveness, while central valleys show a more dynamic situation, a more aggressive attitude towards competence.

The different languages and dialects spoken at that time divided the territory into the different northern valleys (Copiapo-Huasco, Elki, Limari), each having a separate *cacan* idiom or dialect, and the southern ones (from Choapa southward) having a Mapuche language. The mountain people had another language, spoken in two dialects, *Allentiac* and *Millcayac*, and perhaps other dialects were spoken by coastal fishermen. In Copiapo the *Kunza* language also was used in commerce with *Likan Antay* people from Atacama.

We lack any material evidence of musical activity previous to the year 1000. Society was much simpler, with differences between Molle in the semiarid desert and Bato and Llolleo in the Central Valley. Previous to the beginning of our era there was an extended period called archaic, for which we have some artifacts that seems to be of ritual character, like Huentelauquen geometric stones and Taltaloid stone flint, whose outstanding perfection allow us to think of a parallel ritual equivalence in terms of music, singing, dance and other vernacular ritual characteristics.

4 Present Day Traditions Linked with the Pre-Columbian Past

During our project we also studied scattered examples of present day traditions that seem to have links with the pre-Columbian past. Some of them were collected by oral tradition, but most are preserved as living traditions, away from touristic or

²² To be described fully in a separate article.

²³ SH 421.112.2 (Pérez de Arce – Gili 2013). There are hundreds of species of 'sikus' in the Andean region, regional variations of the main cane panpipe typology.

²⁴ This complex theme will also be developed in a special article.

²⁵ See Pérez de Arce 2004b.

mainstream influences. All musical rituality is in the hands of men: women are mainly dedicated to the contextual ornamentation, food and general organization. The study of such data permits us to make a preliminary plan of different regional musical styles of ritual festivities.

The main vernacular musical tradition, for our perspective, was the *bailes chinos*, a flute orchestra that is remarkable for its musical particularities, with complex timbre polyphonies with no melodic, harmonic or rhythmic intention (in the European sense), but with an extremely developed timbre structure, use and function, all of which are characteristics of clearly pre-Hispanic origin. The Aconcagua tradition was the best known previously to us,²⁶ with a wealthy tradition represented by many groups and festivities that extend from the Aconcagua valley in the south (Pachacamita, San Roque, San Esteban, Chacalles), where the most developed *chino* ritual tradition is preserved, to the Petorca Valley (La Ligua, Cabildo) in the north. The flutes are made of wood, in some regions with great 'ears' protruding from their sides; groups are formed with numerous pairs of flutes, two small drums and a large one, with a definite style of music that reaches its highest level in the competence moments, and with a well-defined and strictly formatted style of singing. South of the Aconcagua valley this tradition is now lost, except for the small Lora location in the Mataquito valley, with a tradition that conserves a unique mix of the previously detailed Central Chilean tradition characteristics with some southern Mapuche ones, as shown in their instruments, their dance and some ritual practices.

There is another northern *baile chino* tradition that uses cane flutes, orchestras with a balanced number of drums and flutes, a slow style of dance and a more diluted tradition of singing. Although not so developed in musical terms as the Aconcagua tradition, it is still a strong tradition with a definite mark of identity in all its details. The Limari and Elqui valleys represent the most important representation of this tradition. In the territory that includes the Choapa valley to the south, connecting with the Aconcagua tradition, and in the Copiapo valley to the north, we find the same tradition but weaker, also showing some minor local variations.

The second main musical tradition is *canto a lo poeta* (poet singing), a style of singing with strictly fixed compositional and interpretative norms, based on a Spanish style of verse named *décima*. The complex relation between melodies, poetry and musical accompaniment creates multiple styles, each of which characterizes a region (valley, village, family domain, etc.). The accompaniment is done with the Spanish guitar, played in a local

way that uses a five-string concept of tuning that varies widely from one local style to another, and uses a distinct *rasgeado* style of chord production, also with local variations. Some local variations include some degree of independence between chord production and melody that give more importance to the rhythmic pattern of *rasgeo*, a finding that has some degree of relation with pre-Hispanic musical traditions.²⁷ The most developed tradition is today located in the Maipo valley, where the use of a *guitarrón chileno* or *guitarra grande*, a local variation of the guitar with a special 25 chord structure and a ritual use that comes from a mixed indigenous and Spanish tradition, is still conserved.²⁸ It is the most complicated and developed stringed instrument ever created in vernacular American traditions, and it shows a unique timbre structure and use, different from any other known musical cultural tradition. Here also the most refined style of sung melodies is used. South of the Maipo tradition we find the Cachapoal valley (Santa Cruz), which shows a local singing technique with a lot of glissando, and then the style dissolves to the south. To the north of the Maipo tradition we find the Aconcagua valley, and from there the Quilimari valley and the Choapa valley (Illapel, Salamanca), where simpler melody styles of singing are developed in each valley and locality with its own style, and the northern Copiapo valley (Copiapo, Tierras Amarillas), with a different influence of *colla* and previous Atacama traditions.

Seeing all these variations extended over the territory one can observe some cluster styles that mark deep differences between the southern and northern sectors. The main style shows a striking resemblance to the archeological Aconcagua and Diaguita traditions. We suppose that the main factor responsible for this resemblance lies in the local conservation of traditions.

The *guitarrón* and the *chino* examples from the central valleys of Chile represent two types of achievements that reach the highest level of perfection in their respective musical features, both holding a strong harmonic-based structure of vernacular origin. This find, linked with the above described excellence showed by pre-Hispanic '*antaras*' from the same region, tell us of an interesting regional musical development that has been maintained for more than 500 years against all difficulties in the most heavily disturbed region of our country. This

²⁶ Pérez de Arce 1992b; Pérez de Arce 1993; Pérez de Arce 1994; Pérez de Arce 1995c; Pérez de Arce 1997a; Pérez de Arce 1998; Pérez de Arce 2000a; Pérez de Arce 2002b; Pérez de Arce 2011a; Pérez de Arce 2011b.

²⁷ See Pérez de Arce 2004a.

²⁸ SH 321.322.1 (Pérez de Arce – Gili 2013). Pérez de Arce 2003; Pérez de Arce 2004c; Pérez de Arce 2007.

confirms our previous finding of a very deep conservative trend of Aconcagua tradition,²⁹ although the official historical description claims that none of the pre-Hispanic traditions survived colonial times.

Also of great importance is that now there is a possibility to trace a link between regional differences and different past cultures and subcultures.

This is a great step toward general understanding of the cultural diversity of our country.

²⁹ Pérez de Arce 1989; Pérez de Arce 1992a; Pérez de Arce 1992b; Pérez de Arce 1993; Pérez de Arce 1994; Pérez de Arce 1995c; Pérez de Arce 1996; Pérez de Arce 1997a; Pérez de Arce 1998; Pérez de Arce 2000a; Pérez de Arce 2011a.

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Fig. 1 Map of South America showing the area where our investigation was done, including the Diaguita and Aconcagua zones (drawing by José Pérez de Arce).



a



b

Fig. 2 a. 'Antara', five side views. Aconcagua culture, Hacienda Bellavista, San Felipe. 327 mm × 82 mm × 17 mm. *Combarbalita* stone, polished, with very thin walls. Little hole on one tube. Drawn on the surface, the locations of the four complex interior tubes, whose lengths are 196 mm, 227 mm, 244 mm, and 275 mm. Easy sound production. Museo Chileno de Arte Precolombino MAVI 0073. – b. 'Antara' fragment, five side views. Aconcagua culture, estero Lo Campo, potrero W de la parcelacion El Ingenio, San Felipe. 14 cm × 7.5 cm × 2.1 cm (Hermosilla – Pavlovic – Castelleti 1999). Outlined in black on the surface, the locations of the four complex interior tubes. The broken condition permits measurement of the inner stone walls, some of them measuring only 0.7 mm thick. F. M. Collection IV11. (Photos by Francisca Gili).



Fig. 3 Ceramic 'antara' representation. The three tubes are very small and impossible to play. One handle (broken). 64 mm×35 mm×7 mm. Museo Arqueológico de La Serena 2474 (photo by Francisca Gili).

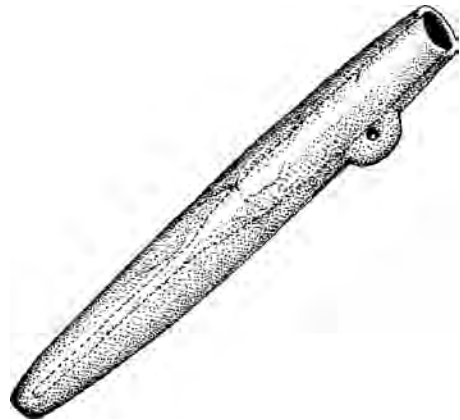


Fig. 4 'Pifilka'. Vichuquen. Gray stone. 280 mm×45 mm. One complex tube (Medina 1952, 302. 419; Pérez de Arce 1982). Museo Nacional de Historia Natural 3806 (drawing by José Pérez de Arce).



— 1 cm

Fig. 5 'Pifilka acodada'. Fundo La Viñita, Paihuano, Elqui. Stone, carved drawings all over the surface. Outlined in white on the surface, the location of the interior tube, with one fingering hole at the bottom. In the upper square photo the interior rough cavity can be seen, with heavy grooves whose acoustic purpose is yet to be tested. 70 mm×66 mm×29 mm. Museo Fonk 57 (photo by Francisca Gili).



a



b

Fig. 6 a. '*Pivulka*', three fingering holes; if viewed from the top side they are equidistant and form a triangle. 44 mm × 15 mm. Black stone. The tube has a narrow section at the middle, and wider ends. From a side view they are at different positions. Museo Regional de Atacama 1381 (photo by Francisca Gili). – b. The same '*pivulka*' played by Francisca Gili. The small size of the instrument, as seen in the photo, makes it difficult to play. It gives a very high pitched sound (photo by José Pérez de Arce).



Fig. 7 'Globular flute'. Estadio Municipal de Ovalle. Ceramic, painted cream background with red and black lines. 87 mm × 45 mm. It has one central opening for blowing and two openings at both sides for fingering. This permits three tones to be obtained with a symmetrical movement, a common central Andean technique almost unknown in our area. The shape, the material, the ornamentation and the organological conception are also foreign to our area. Museo del Limari (photo by José Pérez de Arce).



a



b



c



d

Fig. 8 a. 'Singer'. Painted ceramic, from the Inca period, Diaguita culture. 70 mm × 45 mm. Museo La Serena 929 (photo by José Pérez de Arce). – b. 'Singer'. Ceramic, probably from the pre-Inca Diaguita culture. 45 mm × 25 mm. Museo La Serena 9843 (photo by Francisca Gili). – c. 'Singer'. Ceramic, Aconcagua culture. 75 mm × 80 mm. Museo Chileno de Arte Precolombino, MAVI 848 (photo by Francisca Gili). – d. 'Singer'. Ceramic, Aconcagua culture. 80 mm × 69 mm. Museo Fonk 57 (photo by Francisca Gili).