Toolkits and Cultural Lexicon: An Ethnographic Comparison of Pottery and Weaving in the Northern Peruvian Andes

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Abstract: The findings of an ethnographic comparison of pottery and weaving in the Northern Andes of Peru are presented. The project was carried out in villages of the six southern provinces of the department of Cajamarca. The comparison was performed taking into account two parameters: technical uniformity or diversity in 'plain' pottery and weaving, and presence or absence of lexical items of indigenous origin - both Quechua and pre-Quechua - in the vocabulary of both handicraft activities. Pottery and weaving differ in the two observed domains. On the one hand, pottery shows more technical diversity than weaving: two different manufacturing techniques, with variants, were identified in pottery. Weaving with the backstrap loom (telar de cintura) is the only manufacturing technique of probable precolonial origin in the area, and demonstrates remarkable uniformity in Southern Cajamarca, considering the toolkit and the basic sequence of 'plain' weaving. On the other hand, weaving nomenclature clearly retains more Quechua and pre-Quechua terms than pottery vocabulary, and also shows more lexical diversity, in spite of the aforementioned technical uniformity. In order to explain these differences, the distinct distribution and dynamics of pottery and weaving production must be taken into account: while pottery is concentrated in some specific and specialized villages, weaving is disseminated as a household activity throughout the region, especially in rural areas.

Keywords: Pottery, weaving, toolkits, cultural lexicon, Andes, Cajamarca, Peru, 21st century.

Resumen: Presentamos los resultados de una comparación etnográfica de la textilería y la alfarería tradicionales en los Andes norteños del Perú, en localidades de las seis provincias sureñas del departamento de Cajamarca. La comparación se establece sobre la base de dos parámetros: la uniformidad o diversidad de la técnica utilizada para productos 'llanos', y la presencia o ausencia de términos quechuas y prequechuas en el vocabulario artesanal. Observamos que alfarería y textilería contrastan en los dos aspectos evaluados. Por un lado, la alfarería presenta mayor diversidad técnica que la textilería: mientras que en alfarería hemos identificado dos técnicas de manufactura distintas, con variantes internas, el tejido en telar de cintura es la única técnica de manufactura de probable origen precolonial, y es bastante uniforme, a juzgar por el conjunto de herramientas y la secuencia básica del tejido llano. Por otro lado, la nomenclatura textil retiene claramente más términos quechuas y prequechuas que el vocabulario alfarero, y muestra mayor diversidad léxica, a pesar de la mencionada uniformidad técnica. La explicación de este contraste debe partir por atender la distinta distribución y dinámica de la producción alfarera y textil en el territorio investigado: mientras que la alfarería se concentra en algunos poblados muy definidos y especializados, la textilería está diseminada como una actividad doméstica por toda la región, especialmente en las zonas rurales.

Palabras Clave: Alfarería, textilería, herramientas, léxico cultural, Andes, Cajamarca, Perú, siglo XXI.



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Introduction

This article presents the results of an interdisciplinary project that documents and analyses the techniques and lexicon of pottery and weaving in the southern provinces of the department of Cajamarca, in the Northern Andes of Peru.¹ Our research questions are the following: (1) Do pottery and weaving differ with respect to the possibility of retaining lexicon of indigenous origin? (2) If so, how is this difference explained? (3) Is it possible to relate the distribution and diversity of pottery and weaving techniques of probable precolonial origin with the research on indigenous substrata languages in the analyzed region?

In this project, an archaeologist and a linguist worked together in the Cajamarca provinces of Contumazá, San Miguel, San Pablo, Cajamarca, Cajabamba, and San Marcos, which cover the southern area of the department of Cajamarca (going westeast). We present a preliminary analysis of the similarities and differences between pottery and weaving in this zone, focusing on 'plain' products (see a detailed definition of this concept in section 3). Although our data were mainly collected in the mentioned provinces, throughout the text we will also refer to information we have each gathered previously from different points across the Northern Peruvian Andes (see Map 1).

This article is structured as following: after the introduction, in the second section, we present a review of the literature that addresses the linguistic landscape of the region, both in precolonial and colonial times, and the weaving and pottery studies that are relevant for our problem. In the third section, we explain our methodology and our comparative criteria. In the fourth section, we describe the remarkable technical diversity of pottery in Southern Cajamarca, while in the fifth section we address the diversity in the terminology of traditional weaving (backstrap loom) and its technical uniformity.

Pottery, weaving and language history in the Northern Peruvian Andes

Currently, the Northern Peruvian Andes are almost full Spanish-speaking areas, with the exception of the Quechua 'enclaves' of Chetilla and Porcón, located in the province of Cajamarca (department of Cajamarca); some localities in the province of Bambamarca (department of Cajamarca); the town of La Macañía in the province of Pataz (department of La Libertad); the districts of Incahuasi and Cañaris in the province of Ferreñafe (department of Lambayeque); and Penachí in the province of Salas (department of Lambayeque).

¹ With 'Northern Andes of Peru' we mean the region that extends from the provinces of the so-called 'Callejón de Conchucos' in the south, to the more northern province of the highlands of Cajamarca (Cutervo) in the north. The eastern boundary would be formed by the Marañón River, while the western one would be defined by the slopes of the Andes in the departments of Piura, Lambayeque, La Libertad, and Áncash. Thus, the region includes the highland provinces of Cajamarca, Piura, Lambayeque, La Libertad, and Northern Áncash.

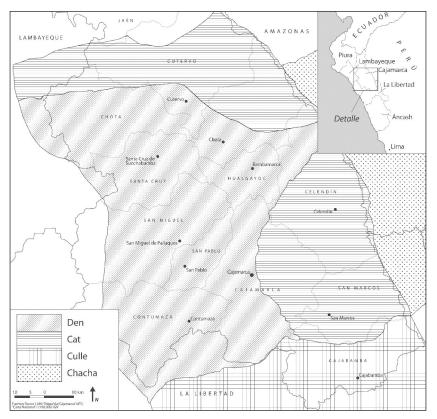


Map 1. Localities of the Northern Peruvian Andes mentioned in the article (map: Martha Bell, Ardilla Maps).

These latter districts are dialectally linked to some Quechua-speaking localities of the Cajamarca provinces of Cutervo and Jaén, and, according to recent accounts, also to the town of Chilcapampa, in the district of Huarmaca, province of Huancabamba (department of Piura).² There is a strong possibility that these 'enclaves' are relicts of

² On Cajamarca and Lambayeque Quechua, see Cerrón-Palomino (1987: 238-239), Quesada (1976: 27-28), Adelaar (2004: 186; 2012). On La Macañía, Vink (1982). On Chilcapampa, *El Comercio*, 3/8/2013, A-20. We thank Willem F. H. Adelaar for giving us a copy of Vink (1982).

a wider area of Quechua diffusion. Middendorf stated, at the end of the 19th century, that "the Indians of the surrounding region [of Cajamarca] speak the old language of the country, and many of them have no knowledge of Spanish", but in the city itself "only the lower classes of the population understand Quechua" (Middendorf 1973: 129-130). Adelaar (2012) stated recently that Cajamarca varieties of Quechua can be conceived of as the outcome of the northwards military expansion of the Huari during the Middle Horizon. While based on meticulous dialectal and historical linguistic analysis, the success of this hypothesis still faces the lack of sound criteria for linking linguistic statements and precolonial archaeological material. An important force for the colonial diffusion of Quechua in the region were probably the efforts of the Catholic authorities towards evangelization, as has been stated for the Amazonia (Cerrón-Palomino 1987: 344).



Map 2. 'Pre-Quechua languages' in the Northern Peruvian Andes according to Torero (1989) (map: Martha Bell, Ardilla Maps).

Krzanowski & Szeminski (1978) conducted pioneering research in the direction of our interest, by identifying the linguistic diversity of the toponymy in the Northern Peruvian Andes along the basin of the Chicama River, in the current department of La Libertad. Although on some occasions their suggestion of the morphological isolation of geographic names proved incorrect, overall they managed to identify a clear presence of the extinct Culle language in the region. Following this research, Andean linguistics have been able to make progress on the identification of the territory corresponding to that language, also due to toponymy, mainly analyzed by Adelaar (1990) and Torero (1989), as well as with the examination of colonial and post-independence documentary sources. Besides Culle, the existence of other languages in the Cajamarca region was claimed on the grounds of toponymy. Taking into account the characteristic ending components of geographic names, Torero (1989: 229-238) named den and cat two idiomatic sources apparently distinct from Culle, which were disseminated in partially complementary areas throughout the Northern Andes, with the modern department of Cajamarca as their core zone (see Map 2). Although both Culle and these hypothetical languages have become extinct, being overcome by Quechua or by Spanish, they have left traces in the lexicon. Northern Andean Spanish shows a series of items of indigenous origin that do not correspond to Quechua. In the case of Culle, this influence has also affected the grammar, especially the phonology, and some specific but noteworthy units of morphology, e.g., the augmentative -enque, as in fuertenque 'very strong', sabienque 'very wise', chinenque 'big girl', and the diminutive -ash, as in cholasho 'little boy', behasho 'little baby', and gatasho 'kitten' (Andrade 2012: 188-193, 202-208).

Identifying the lexical fields to which the majority of the indigenous non-Quechua words in the Spanish of the Northern Peruvian Andes correspond is an open question. With this broad objective in mind, we aimed at assessing the extent to which the handicraft fields of pottery and weaving were conservative, i. e., to what extent they are activities capable of retaining Quechua and pre-Quechua terms. As both activities likely imply precolonial knowledge and techniques, and are strongly associated with rural and peasant-agricultural life in the region, we identified them as suitable candidates for this examination. In addition, it must be said that in almost all the territory of Cajamarca, La Libertad, and the northern section of Ancash, the so-called basic lexicon has been overridden by Spanish. Thus, we thought that examining cultural lexicon could aid in the reconstruction of the linguistic landscape prior to the dissemination of Spanish.³

³ We define 'basic lexicon', as suggested by Swadesh (1953), as the set of words more stable and resistant to borrowing among the lexicon of different languages, while 'cultural lexicon' is the set of words more culturally-attached, and, therefore, perceived as less stable and more subject to borrowing between different languages. For a recent, empirical approach to such distinction, see Tadmor, Haspelmath & Taylor (2010).

In the aforementioned work, Krzanowski & Szeminski (1978) did not only analyse the toponymic distribution in order to identify linguistic areas, but also addressed handicraft activities in the region, more specifically, pottery. This was possible because two years before, Krzanowska & Krzanowski (1976) had published a detailed report on the pottery town of Caulimalca (Usquil, Otuzco province, department of La Libertad), which allowed them to suggest the presence of Coastal Chimú-Inca traditions in the highlands (Krzanowski & Szeminski 1978: 37). Five years later, Krzanowska (1983) published a detailed inventory of pottery techniques and villages with potters in the Andes. These three studies not only synthesized previous research dating back to the end of the 19th century, but also set up a new interdisciplinary stage (archaeology, ethnography, and linguistics) that constitutes the basis for our exploration.⁴ Broadly speaking, we can signal two features of the ethnography performed by archaeologists in towns with Andean potters. First, given their aim of documenting continuities and changes, they were remarkably careful to record pottery terminology, although they gave less attention to tools (see various examples in Ravines & Villiger 1989). Secondly, research was commonly focused on specific towns. Hence, detailed comparisons were rarely performed (such as the one accomplished by Krzanowska 1983). Even in more recent decades, the few cases of regional research, such as Sillar (2000) on Cuzco and Bolivia, have shown little interest in toolkits. Only when scholars recognized the value of techniques as cultural indicators, a more systematic study of tools and their names began to be undertaken (see Ramón 1999: 228-230; 2008a: 63-93; 2008b; 2013). This recent interest on pottery artifacts is not limited to the Andes; see a comparable work for Niger in Gosselain (2010). In our research, we are interested in regional differences in both pottery terminology and weaving nomenclature.

As for weaving, in the mid-seventies, Varese collected the names of the tools of the backstrap loom or 'waist loom' (*telar de cintura*) in different regions of Peru (Varese 1963-1964). Although he did not address the weaving techniques, this work provided lexical information on Monsefú (department of Lambayeque), Chota (department of Cajamarca), Huancavelica (department of Huancavelica), Suyo (department of Cuzco), Ichu (department of Puno), and the Pauti river (in the Gran Pajonal zone). There was no effort to link the terminology of Chota with a specific indigenous linguistic source, but the author clearly stated that, in Cajamarca, Spanish "has replaced almost totally the vernacular language. Nevertheless, the names of the different parts of the loom preserve interesting *linguistic traces*", such as *cungallpus*, *putij*, and the Quechua terms *illahua*, *kallua*, and *minikero*

⁴ Two of the three mentioned works (Krzanowska & Kraznoswki 1976; Krzanowska 1983) were published in Polish; hence, their diffusion among Andean scholars has been scarce. We are grateful to Andrzej Krzanowski for giving us the Spanish translation of the first work. Interdisciplinary approaches are a key feature of historical research on material culture from scholars of Eastern Europe, which was still part of the Soviet sphere in those years.

(Varese 1963-1964: 337, our emphasis). Larco Hoyle (2001) also provides ethnographical information on weaving of the highlands of the department of La Libertad and its nomenclature, in dialogue with Mochica coastal iconography on this matter, without specifying his area of study. Andrade (2011) offers a preliminary account of the backstrap loom nomenclature in the Northern Peruvian Andes that is based on data collected in the district of Agallpampa (Otuzco province, department of La Libertad). This work assesses the possibility of relating weaving nomenclature with indigenous substrata languages, without addressing the technical processes.

Literature aimed at examining the traditional textiles of the Northern Peruvian Andes from an ethnohistorical point of view also record the weaving lexicon (Fernández López 2007; Meisch 2007). The primary concern of these works is to analyze technical processes and outcomes as precolonial survivals. Besides the backstrap loom terminology, the two aforementioned projects also record Quechua and pre-Quechua terms related to the design of traditional straps (fajas), the main focus of their analysis. Castro de Trelles' work (2013) on colonial textile workshops (obrajes) in the provinces of Santiago de Chuco and Huamachuco (department of La Libertad) focuses, among its contemporary concerns, on the pedal loom (telar de pedal), of Hispanic origin, and not on the backstrap loom, although it also registers the nomenclature of the latter and provides a textile glossary. From a sociologic point of view, Quiroz, Rivas & Guerra (1977) present a general view of textile production in San Miguel de Pallaques (San Miguel province, department of Cajamarca), and they address technical aspects of weaving, and register its nomenclature. Nevertheless, none of these approaches links the lexical and the technical dimensions in their main research questions. Thus, there is a gap in the study of Northern Peruvian Andean weaving that still deserves a comprehensive ethnographic analysis, such as the ones devoted to Bolivia by Arnold & Espejo (2013) and to the Ecuadorian Andes by Rowe, Miller & Meisch (2007).

The detailed inventory of Rowe, Miller & Meisch (2007) also deals with language matters. These researchers highlight four facts relevant here. The first two facts have to do with lexicon, the latter, with technique. Firstly, they acknowledge the marked variability of weaving terminology in the region (2007: xvi, 43); secondly, they signal the possibility that many of these words relate not to Quechua but to the indigenous languages spoken before Quechua diffusion (2007: xiv, 43). The authors go further to relate some of these words with specific linguistic substrata, such as Puruhá, Cayambi, and Cañar (2007: 45-46). Furthermore, they suggest that "tracing words and some technical features could also reveal pre-Inca borders or migrations produced afterwards" (2007: xiv), but they do not perform this exercise themselves. With respect to technology, the authors explain that in contrast to the Northern Peruvian Andes, in Ecuador weavers are mainly men (2007: xiii, 14-16), and they show differences in the shape of the Ecuadorian and Peruvian looms. Regarding this point, they suggest the existence

of a Peruvian-Ecuadorian frontier that ran parallel to the narrowing of the Ecuadorian Andean valley at the border with Peru (2007: 2).

A point worth stressing is the lack of scholarly work, in the Andes as a whole, aimed at developing a comparative account of the processes and techniques involved in pottery and weaving, to say nothing of the related vocabulary. Thus, our study stems from an interdisciplinary tradition of Andean studies, derived from linguistics, ethnography, and archaeology, and it is innovative in two senses: first, in its objective of performing the aforementioned comparative analysis, and second, in its assumption that analyzing lexicon in dialogue with techniques can be productive for studying Andean languages, culture, and history in a more comprehensive fashion.

Methodology

Our ethnographic method has four basic components: (1) informed site selection, (2) open-ended interview scripts, (3) parallel interviews, and (4) definition of comparison parameters between pottery and weaving. During the informed site selection (component 1), we started by identifying, at a regional scale, where pottery and weaving are practiced. We then narrowed our focus to examine several specific towns in more detail. For example, in the district of San Miguel de Pallaques (San Miguel province), after a series of interviews, we were able to select the village most suitable for our goals: the hamlet of Jangalá (half an hour walking from the city), where two pottery techniques are performed and weaving is practiced in the traditional rural way. In the province of San Pablo, we decided to work in the village of Cuzcudén, also known as Mangallpa, a locality with a strong pottery tradition. In the province of Contumazá, we observed handicraft activities in two localities: Totorillas (weaving) and Santiago (pottery). In the province of San Marcos, we chose the town of Socchagón (weaving and pottery), after discarding the more popular Pomarongo, and we performed a short visit to Cursqui (pottery). In the province of Cajabamba, our observation of weaving was concentrated on the locality of Pingo. In the province of Cajamarca, our work on pottery focused on Mollepampa and Shudal, while the weaving observation was carried out in the town of Cumbico, in the district of Magdalena.

An open-ended interview script or questionnaire (component 2) helped us to plan the dialogue with our interviewees, yielded comparative material, and made 'organized improvisation' possible, i. e., to address topics not previously planned but always related to a thematic core (the basic guideline derives from work in pottery, Ramón 2008a: 385-389). As an example of 'organized improvisation', if during an interview, a potter started to talk about his beliefs on dreams, we could ask him about the meaning of oneiric activity about pottery. The parallel interview technique (component 3) allowed us to compare visual and verbal testimonies about material culture. We paid specific attention to recording styles and techniques used to produce objects, as well as to how these

activities were explained. For example, we observed and photographed how a weaver of Totorillas, in the province of Contumazá, made a bedspread, and afterwards, we asked her to explain the process. Both versions were not always identical, but they enriched each other. In the case of weaving, we examined graphic and audiovisual material with two renowned weavers of San Miguel de Pallaques, in order to confirm technical similarities and distinctions between the different zones, and to adequately infer the basic sequence for technical comparison (see Acknowledgements).

Taking into account our previous fieldwork in the Northern Peruvian Andes (Andrade 2011; Ramón 2008a; Ramón & Bell 2013) and specifically in the Cajamarca region (Andrade 2010), we preliminarily concluded that the most suitable ground for establishing comparisons between pottery and weaving was, firstly, the existence of one or more broad manufacturing techniques of probable precolonial origin in the area, and, secondly, the type of products usually known as 'plain' in both activities (products made by olleros and tejido llano). In the case of pottery, plainware is defined as domestic items usually employed for food and beverage preparation or storage. These pots are more frequently undecorated than decorated, with the exception of pottery produced with molds that already include decoration. In this latter case, decoration does not imply an extra step or additional tools, but it is already included in the basic procedure and toolkit. In the case of weaving, we narrowed our target to products without designs that are elaborated with traditional looms. These products are usually consumed by the household members and are not intended for external purchase. Previous research shows diversity even in this type of textile goods, in the productive sequence, in the toolkit, and in the broad manufacturing technique employed (Andrade 2010; Rowe, Miller & Meisch 2007). This focus also has the advantage of allowing observation even in those localities without a strong tradition of weaving with designs or labores (e.g., Cajabamba).

Technical diversity in pottery manufacture

In the Northern Peruvian Andes, pottery manufacture is characterized by its technical diversity, that is, the variety of ways of making vessels that are employed in the different villages with potters in the region. Generally, each of these villages has a predominant manufacturing technique, which, in turn, is linked to a specific toolkit and to morphometric and stylistic features of the final products. For instance, following the previous criteria, in the highlands of the department of Piura, four different ways of manufacturing pottery vessels were identified (Ramón 2008b). A similar situation was found in the highlands of the department of La Libertad, where potters use three different manufacturing techniques: (1) paddling (*paleteado*) with a thick wood paddle and a stone, occasionally helped with the feet, in Huacaday (Otuzco, Otuzco province); (2) the horizontal bivalve mold, usually with decoration, in Caulimalca (Usquil, Otuzco)

province); (3) paddling (*paleteado*) with an incised wood paddle and stone (both smaller than those used in Huacaday), while supporting the vessel on a raised base made of a wood pole with a flat top of stone, in Sanagorán (Sanagorán, Sanchez Carrión province). Additionally, in the village of El Alto de Mollepata, also located in the department of La Libertad, but on the border with the department of Ancash, a similar technique to that of Caulimalca is practiced, albeit with slight variations, such as adding pre-firing painting (Ramón & Bell 2013: 601, 604). In all of the above cases, potters learn to make pots using one manufacturing technique (usually in adolescence) and continue to use this same technique throughout life. In other words, they are trained to use a specific toolkit, not to practice pottery in an abstract sense.

Southern Cajamarca shares all the features mentioned above, including the diversity of pottery manufacturing techniques. To begin, in the southwestern part of the department, two technical groups can be identified, one characterized by the presence of a horizontal bivalve ceramic mold (Jangalá, San Miguel province) and the other by the wooden paddle and stone anvil, aided by the feet (Cuzcudén, San Pablo province). In both villages, potters are men (Figures 1 and 2). In central Cajamarca province, there are potters who use several manufacturing techniques, including: paddling with an anvil stone, bivalve plaster mold, plaster casts, and even the potter's wheel. This range is especially apparent in the village of Mollepampa, located on the outskirts of the city of Cajamarca. Potters of both sexes live in this village (Figure 3; Ravines & Villiger 1989: 95-104). In the southeastern part of Cajamarca, technical diversity was also observed. For example, in the village of Socchagón (Chancay, San Marcos province), male and female potters employ the paleteado with mallet (mazo) and stone, but, unlike their Cuzcudén colleagues, they rest their vessels on an elevated surface (which can be a chair, or a cloth over the legs) for much of the production process (Figure 4). Near Socchagón in the lower Chancay valley, there is another village with potters, Cursqui, where the traditional technique is *paleteado* with a wooden paddle and a stone anvil, complemented by a pot being turned upside down and covered with a cloth where the vessels rest. Thus, overall, in Southern Cajamarca there are diverse villages with manufacturing techniques that can be clustered into two main groups: paddling with an anvil stone and bivalve horizontal mold, which, in turn, can be subdivided into variants (Figure 5).



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Figure 1. Cesáreo Medina filling the mold. Jangalá, San Miguel province (Photo: Gabriel Ramón Joffré).

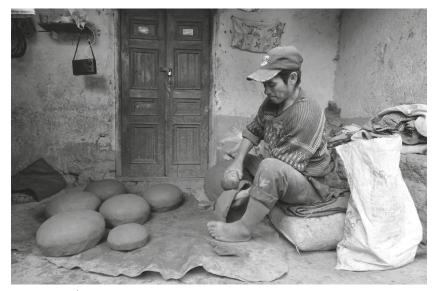


Figure 2. Óscar de la Cruz shaping the bottom of the vessel with the mallet. Cuzcudén, San Pablo province (Photo: Gabriel Ramón Joffré).



Figure 3. María Santa Huaccha Cachi filling the bottom of the mold. Mollepampa Alta, Nueva Cajamarca, Cajamarca province (Photo: Gabriel Ramón Joffré).



Figure 4. Raimundo Cotrina paddling the bottom of the vessel. Socchagón, San Marcos province (Photo: Gabriel Ramón Joffré).



Figure 5. Cajabamba market stall with pots of different origins (Photo: Gabriel Ramón Joffré).

As for the nomenclature of the tools within this technical diversity, the first thing to note is the overwhelming presence of the Spanish language. Although in many cases these toolkits have large numbers of items, it is difficult to find terms for the objects in other languages. A good example is the toolkit of Raimundo Cotrina Paz from Socchagón, who allowed us to observe him potting. The following chart presents his tools by types and citing their names according to his indications (Chart 1, Figure 6):

Tools	Types		
Chungo	For the upper part, for the bottom, for the upper part (big), for the bottom (big), for the upper part (small), for the bottom (for jars and pitcher)		
Golletero			
Malla			
Cuchillo	For the neck		
Palito	For the beak of the jar		
Cuadreador	For everything		
Palmeta	For the upper part (6), for the bottom (2)		

Chart 1. Nomenclature of pottery tools in Socchagón, San Marcos province, department of Cajamarca.

For the manufacturing technique of bivalve horizontal mold, the presence of Spanish is also significant in the nomenclature of tools. For example, in Jangalá (San Miguel province), the main tools are the molds, the badanita (small piece of leather), the chungo (round stone), knives, and sheep leather for the base (tools of the potter Cesáreo Medina). Among these, one of the notable exceptions would be *chungo*, which is the stone used as an anvil against the paddle or mallet. The word chungo comes from the Culle language (Adelaar 1989: 87) and has been adopted generally in the Spanish of the region with the meaning 'round stone'; it is not an exclusive term used for pottery. Other indigenous language terms related to pottery production can be found in areas slightly beyond this study's focus area. First, in some villages of Southern Cajamarca, the Quechua term mito was used to refer to a type of raw material (Druc 2013: 318, 325). Second, sometimes, some steps of the production process have Quechua names; e.g. in Socchagón (Chancay, San Marcos province) there is a phase called *llushpiadito* (<*llushpi* 'shining') and the enshangada or tying of vessels up in groups (in Spanish terciar 'to make groups of three'), whose root seems common with shanga-ishanga 'circular hanging basket'. In Cursqui (Chancay, San Marcos province) this activity is known as enrungar (<rungo 'round-shaped basket for carrying pots', and this from 'spherical'), and in the same locality, when pots are not sufficiently cooked, they are said to be chawas 'raw'. Third, the same applies to some types of vessels produced in the villages visited, such as *urpo* and *payka*, which even change names depending on where they are purchased. However, these exceptions do not change the main pattern of the overwhelming presence of the Spanish language in tool nomenclature.



Figure 6. Toolkit of Raimundo Cotrina Paz, Socchagón, San Marcos province (Photo: Gabriel Ramón Joffré).

Lexical diversity and technical uniformity in the backstrap loom

Previous research, based mainly in the highlands of the department of La Libertad (Andrade 2011), suggested that weaving with a backstrap loom is an activity with potential interest for studies aimed at reconstructing the language history of the region, as Varese (1963-1964) had forecasted in his pioneering article. During the fieldwork performed in Southern Cajamarca, this proposal was confirmed. The different names of the backstrap loom tools (Figure 7), in the six provinces of Southern Cajamarca, are compared in Chart 2. In Figure 7 the names are given in English.

As we see in Chart 2, there are some names that are identical throughout the southern provinces of Cajamarca (items *d*, *e* and *h*), and it is worth noting that these are terms of Quechua or Quechua-Aymara origin in cases *d* and *e* (*kallwa*, Quechua, and *illawa*, Quechua-Aymara), and of uncertain indigenous origin in case *h* (*cungallpo*).⁵ Other items show an indigenous lexical root in some provinces, but in the remaining ones, a Spanish option is widespread (items *b* and *i*). Only one has a Spanish root exclusively (item *j*), while tools *a*, *c* and *f* show variability between different indigenous options.⁶ The two names for item *a* come from a Quechua source, and they apply to the same tool, highlighting its function in the case of *aparina* (lit. '[object] for carrying'), and the part of the body where it is placed in the case of *siquicha*, *sequicha* ('little base, little backside').

⁵ But see note 9 for a discussion on a possible Quechua etymology for *cungallpo*.

⁶ We discard item *g* in this analysis because its presence is not common throughout the zone, it has merely an auxiliary function, and it lacks lexical interest (it has not even a 'name', besides the generic word *palo* 'stick').

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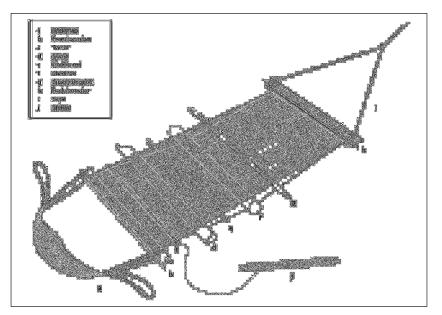


Figure 7. The backstrap loom in the southern provinces of Cajamarca (model of Jangalá, San Miguel province) (drawing: Claudia Delgado).

Locality (Province)/ Tool	Totorillas (Contu- mazá)	Cuzcudén (San Pablo)	Jangalá (San Miguel)	Cumbicos (Caja- marca)	Socchagón (San Marcos)	Pingo (Caja- bamba)
(a)	Siquicha	Siquicha	Sequicha	Aparina	Aparina	Aparina
(b)	Pie de cabra	Cungallpo	Cungallpo	Cungallpo	Cungallpo	Cungallpo
(c)	Tipe, tipina	Chana	Chana	Tipe, tipina	Tipe, tipina	Tupu
(d)	Kallwa	Kallwa	Kallwa	Kallwa	Kallwa	Kallwa
(e)	Illawa	Illawa	Illawa	Illawa	Illawa	Illawa
(f)	Saj, saque	Saj, saca	Putij, putig	Shongo	Shongo	Shongo
(g)	Palo	Palo	Palo	Not used	Not used	Not used
(h)	Cungallpo	Cungallpo	Cungallpo	Cungallpo	Cungallpo	Cungallpo
(i)	Soga	Chamba	Chamba	Chamba	Chamba	Soga
(j)	Tramador	Tramador	Trama	Tramero	Tramador	Tramero

Chart 2. Names of the tools/components of the backstrap loom in the southern provinces of Cajamarca (the tool column matches the letters of Figure 7).

These are different forms of labeling an object within the same language. In case *c*, we observe also two different Quechua options (*tupu* 'brooch' and *tipi-tipina* '[object] for pinning'), along with a non-Quechua name (*chana*). Non-Quechua options are also *saj-saque-saca* and *putig-putij* for tool *f*, while *shongo* is the Quechua name for the same instrument in the southeastern provinces. *Shongo*, which means 'heart', can be applied, in Quechua, not only to human and animal bodies, but also to the inner part of trees and woods. Since tool *f* was traditionally made of the inner part of a cactus, named *sango*, the name can be explained straightforwardly as a case of metonymy. In contrast, we ignore the meaning of *chana*, *saj-saque-saca*, *putig-putij*, as well as *cungallpo* (items *b* and *b*) and *chamba* (item *i*), which are not of Quechua origin, but we can relate them to the pre-Quechua indigenous substrata identified by previous accounts (Adelaar 1989 and 2004: 401-405; Torero 1989).

Variability in the names for items i and f is worth noting if we take into account the clear similarity of the weaving toolkit throughout the six provinces analyzed. In contrast with pottery, only one manufacturing technique of probable precolonial origin is performed in the area, namely, backstrap loom or *telar de cintura*. In other regions, as the Ecuadorian Andes, the backstrap loom coexists with other manufacturing techniques, such as the vertical loom (Rowe, Miller & Meisch 2007, chapter 1). Thus, in technical matters, uniformity appears as the main feature for weaving in Southern Cajamarca, although there are areas with remarkably complex and diverse production.7 Even with regards to the backstrap loom toolkit itself, there is an element absent in the whole area which is present in the neighboring highlands of La Libertad and Ancash, as observed in Agallpampa, Otuzco province; San Ignacio, Otuzco province; Santiago de Chuco province; and Tauca, Pallasca province (Andrade 2011; Fernández López 2007; Castro de Trelles 2013; Andrade 2012: 129-131). This element is an auxiliary pointed stick, named *roque* in Agallpampa, which the weaver usually keeps in her pocket or tucks behind her ear until it is required in the weaving process. This stick, made of wood or of an animal bone, has the function of strumming the warp yarns before passing the shuttle through the shed, in order to keep them in order and avoid irregularities in the fabric while it is being formed (Figure 8). In Southern Cajamarca this function is performed with the hands of the weaver with a characteristic piano-like movement of the fingertips. Hence, we have a general absence in the backstrap loom toolkit that distinguishes the whole area from the neighboring zones to the south, and also from the Ecuadorian Andes to the north (Rowe, Miller & Meisch 2007: 18).8 The Ecuadorian

⁷ For instance, the anthropologist Haydeé Quiroz has identified seven different weaving techniques within the backstrap loom only in San Miguel province (personal communication, 12/09/2014).

⁸ This is not to say that the spread of this stick is uniform in the remaining Andean zones. It has been reported for several regions of Bolivia (Arnold & Espejo 2013: 99-103), for the island of Taquile, Puno (Huamán Carhuaricra 2009: 31, 77), for Cuzco (Rowe 1978), for Apurímac (Andrade 2011: 58),

toolkit has an additional item that is absent in Southern Cajamarca: a roller bar that is inserted near to the front loom bar in order to secure the warp (Rowe, Miller & Meisch 2007: 18). In their diagrams of the "Peruvian-style backstrap loom", Rowe, Miller & Meisch (2007: 15) seem to assign this roller bar also to the Peruvian toolkit, but we have not observed it in Southern Cajamarca, nor in any other locality of the Peruvian Andes.

Regarding the backstrap loom toolkit, only two formal differences were observed within the analyzed area, the first between the village of Totorillas (Contumazá province) and the hamlets of the remaining five southern provinces of Cajamarca, and the second between the village of Socchagón (San Marcos province) and the remaining five hamlets. Firstly, the ends of the back loom bar are rounded in Contumazá, with a sort of narrow neck that holds the rope that sustains the whole loom to a tree, beam or post. In the other five villages, the ends of this rod show a zig-zag style that helps perform the same function (Figure 10). In these five provinces, the form of the front and the back loom bars is identical, though the former is usually narrower than the latter; in Contumazá, only the front loom bar shows the characteristic zig-zag style. It is noteworthy that the name of both rods is the same in the five remaining provinces (cungallpo), while in Contumazá only the back loom bar bears this name, in spite of its different, rounded form.⁹ In Contumazá, the front loom bar is named using the Spanish phrase *pie de cabra* ('goat foot'), which gives a good description of its angular shape. A second minor distinction in the toolkit was found in Socchagón (San Marcos province). In spite of the markedly rural profile of this locality, its shuttle shows a semi-industrial style, resembling the one used in the pedal loom (naveta in Spanish). In the remaining five localities, the shuttle is formed by a stick around which the weft is rolled (Figure 9). Although this contrast is suggestive of technological transfer in the case of Socchagón, no pedal loom workshops were found currently functioning there, as they were, for example, in the provinces of Cajabamba (village of Machacuay) and Cajamarca (village of Porcón).

and for Huancavelica (Varese 1963-1964), but it is absent in the Huánuco area (Mendizábal Losack 1990: 151). Three names have been registered for this tool throughout the Andes: *roque-ruqui-ruque* (from Southern Quechua *ruk'i*), *chocche* (perhaps from Central Quechua), and *wich'uña* (from Aymara).

⁹ The form of the Contumazá item reinforces a possible etymology for *cungallpo* based in the Quechua root *kunga* (*<kunka* 'neck'). A remark by Larco Hoyle (2001: 186) about the *cungas* or 'necks' of this item in the highlands of La Libertad – where it follows the zig-zag style of Jangalá – also seems to support this idea; however, it is not clear in this passage whether he is quoting the words of the weavers or if he is speaking figuratively. We are grateful to archaeologist Sergio Barraza Lescano for pointing out this possibility to us. The same rounded form of the back loom bar was described for the Huánuco area, where the corresponding name is *hana shimpa* 'upper braid' (Mendizábal Losack 1990: 148, 229; Weber et al. 1998).



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Figure 8. Roque, an item absent from the Southern Cajamarca toolkit. The picture was taken in Agallpampa, Otuzco province, department of La Libertad (Photo: Gabriel Ramón Joffré).



Figure 9. The shuttle in Socchagón (San Marcos province) and in Jangalá (San Miguel province). Jangalá (right) represents the remaining five villages (Photo: Gabriel Ramón Joffré).

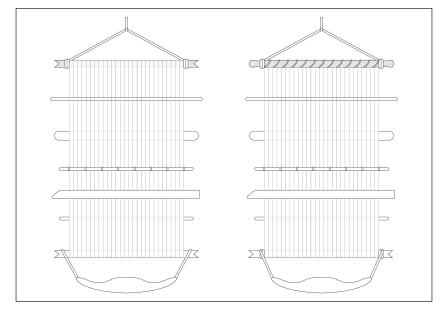


Figure 10. Formal variation of item *b* between Totorillas (Contumazá province) in the right and Jangalá (San Miguel province) in the left. Jangalá represents the remaining five villages (drawing: Claudia Delgado).

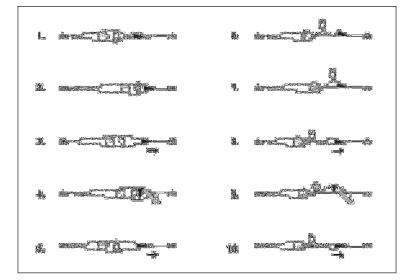
There is also relative technical uniformity regarding the productive sequence of plain weaving with the Southern Cajamarca backstrap loom (but see note 7 regarding more complex textile production). In 'macro' terms, there are different broad stages that recur throughout the region: *torcido* (spinning), *ovillado* (making of the ball), *urdido* (warping), *entablado* (setting the warp in the loom), what we can call 'strict weaving' or 'weaving in the strict sense', and *acabado* (final adjustments). We must add the complex step of *escogido* (selection) in the case of weaving with *labores* (designs). In this step, the weaver signals, with thread, in successive secondary rods (*illahua-queros* or *illahuas de labor* 'design heddle rods'), the separation of the warp treads that will form each row of the design; thus, she will be able to repeat the whole design without having to reselect the warp threads in each new occasion. This step is not performed in the different localities that we analysed, hence, it was not useful for comparison matters.¹⁰ In order to make the

¹⁰ Nevertheless, we must highlight that the stage of *escogida* should be taken into account in further research about weaving technique in Southern Cajamarca, since it seems to be a relevant differential feature in comparison with the backstrap loom of the Southern Andes. As a matter of fact, weavers that have interacted with their peers from Cuzco state that the latter do not select the warp threads with *illahua-queros* or something similar, but that they do it manually, in each occasion that the design is iterated. On the other hand, they reported that in Chota (a central province of Cajamarca, renowned

comparison feasible at a 'micro' level, we focused on the stage of 'strict weaving' for a plain weave, i. e. without designs. Thus, we were able to observe a sequence of ten basic and two intermediate steps that are common throughout the six southern provinces of Cajamarca. The basic sequence is presented below, with the premise that the first thread of weft has already been passed. The description uses the English translations of tool names, due to the previously mentioned variability in this nomenclature. For additional clarity, in Figure 11 we diagram the position of each tool during the different steps.

Firstly, (1) the shed rod (a rounded rod traditionally made of the trunk of an agave) is moved close to the heddle, so that the warp threads that were in the upper face pass down and vice-versa, a crossing movement that is essential for the process. In order to initiate this crossing, the Southern Cajamarca weaver uses her fingertips to strum the warp threads firmly, in a piano-style movement - the action is named sobar 'to handle' or *tablear* 'to beat with a plank' in local Spanish. Thus, an empty, triangular space will be formed between the crossed faces of the warp through which the sword (kallwa) fits. Secondly, (2) the sword is introduced through this empty space, and (3) it is beaten towards the weaver, so as to stretch the weave that is being formed. In this step, the weaver bends slightly backwards so as to help produce this tension. (4) The shuttle is passed for the first time - the action is called echar trama 'throw out shuttle' in local Spanish – through the shed, an empty space formed by putting the sword in a vertical position between both faces of the warp. In the meanwhile, the weaver holds the recently formed lines of the weave with the thumb and the forefinger fingertips, so as to ensure that the fabric is not overstretched or excessively loose, hence guaranteeing the regularity of the selvedges (the borders of the fabric). (5) The sword is turned down again to a plain position and is beaten towards the woven edge. (6) The heddle rod is lifted up with one arm and, thus, one face of the warp goes up, while other tools carry the other face down. This forms an empty triangular space for the sword to pass through. In this step, the weaver leans forward so as to loosen the tension of the set. (7) The sword is passed again through the triangular empty space, and (8) it is brought towards the weaver in order to beat and adjust the fabric. The weaver leans slightly backwards in order to stretch the weaving. For a second time, (9) the heddle is passed through the shed that is formed by putting the sword in a vertical position between the two faces of the warp. As before, the weaver holds the last threads of the fabric with her fingertips, taking care that it is not excessively tight or loose. Finally, (10) the sword is turned again to a plain position, and the weaver beats the woven edge with it in direction of her body.

for the quality of its traditional textiles), another technique of *escogido* is found – the selection of the warp threads with a metallic wire. With this technique, the weaver can pass different color threads of weft in the same row, instead of only one, as in traditional *escogido*. We thank Iris Huangal and Barbarita Mendoza for this information.



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Figure 11. Position of the different tools in the basic sequence of plain weave (drawing: Claudia Delgado).

This series of ten steps is repeated successively until the entire fabric is woven.¹¹ It is only interrupted by two intermediate steps between the 'macro' and the 'micro' level: (1) the adjustment, via small nails, of the tenter, a narrow stick of reed that holds the woven fabric underneath and guarantees uniformity in the width of the weave, and (2) the rolling of the woven fabric and the consequent adjustment of the backstrap to the waist of the weaver, so as to have an adequate distance between her body and the working area.¹² Both the ten 'micro' steps and the two intermediate activities previously described recur in the six visited provinces. There are, certainly, some minor differences that do not break this uniformity. However, two distinctions are again worth mentioning: the method used to put the sword in vertical position in steps (4) and (9) is with the sharp edge facing up in Socchagón (San Marcos province) and Cumbicos (Cajamarca province), while in Jangalá (San Miguel province) and Totorillas (Contumazá province), the sharp edge faces down. According to the weavers, this variation does not indicate a

¹¹ This sequence is very similar to the one described by Rowe, Miller & Meisch (2007: 20) for the Ecuadorian Andes, that has nine steps, and to the one registered by Mendizábal Losack (1990) for the Huánuco area.

¹² Both intermediate steps are radically different in the Ecuadorian Andes: the successive adjustment of the working area is achieved in Ecuador by means of a different element – a roller rod –, while the tenter, in the Ecuadorian case, goes over the woven fabric, not underneath (Rowe, Miller & Meisch 2007: 17-19).

functional advantage. Secondly, the tools that help lift up the heddle rod in step 6 are the shed rod with the sword in San Marcos, Cajamarca, and Cajabamba, while in the three remaining provinces an auxiliary rod is used along with the shed rod (item *g*, Figure 7), while the sword is always kept near the weaver. These differences can be deemed as details that do not break the broad uniformity of the sequence.

If a handicraft technique can be defined as a function of (a) its toolkit and (b) the basic sequence followed to produce its artifacts, and if we recall that the backstrap loom is the only indigenous manufacturing technique found in the region, it can be stated that weaving in Southern Cajamarca is marked by relative technical uniformity. This fact contrasts remarkably with the variability found in the toolkit nomenclature, which points to a high stability in this portion of the cultural lexicon. An explanation suggested previously for this contrast stems from the fact that, in the Northern Andes, weaving is mostly a feminine activity (Andrade 2011: 65), and, as Andean linguistics tradition suggests, women in the Andes tend to be "the most loyal gatekeepers of the native languages and cultures" when a process of language shift is in course, even when nothing else can be done to stop language death, as in the case of Mochica (Cerrón-Palomino 1995: 193; 2004: 98). However, this suggestion is not compatible with the observation that in the Ecuadorian Andes weavers are mostly men, while the toolkit terminology is equally conservative as judged by the presence of indigenous terms, some of them possibly of pre-Quechua sources (Rowe, Miller & Meisch 2007: xiii-xiv, 14-16, 43, 45-46). Thus, an explanation not based mainly on gender must be sought in order to account for the aforementioned contrast on a regional scale.

Discussion

The nomenclature of loom parts in Southern Cajamarca shows a pronounced variability despite the existence of only one manufacturing technique of probable indigenous origin – the backstrap loom – and the relative uniformity of the 'plain' weaving sequence. In the backstrap loom, the same tools and functions were found, but with different indigenous names, which in several cases were non-Quechua. This information moderately supports the hypothesis that postulates the presence of idiomatic substrata different from Quechua for the study region. In Southern Cajamarca, we found lexical evidence in favor of at least one additional idiomatic substratum. Here, the case of *saque-saj-saca* versus *putij-putig* could support the existence of two different pre-Quechua linguistic backgrounds in Cajamarca besides Culle, as was originally suggested by Torero (1989). Nevertheless, this may be also interpreted as the result of lexical variation within the same language, such as was observed in Quechua terminology by cases like *aparina* and *siquicha*, the names used for the backstrap.

In the case of the pottery from the central part of the Conchucos region in the department of Ancash (between the villages of Chinlla, province of Asunción, and

Llumpa, Mariscal Luzuriaga province), a zone corresponding to the variety of Quechua known as Conchucano, there are three names for the same tapping tool: kutana ('rapper', based on the function), tukllu ('mushroom', based on the form) and brokishu (from the Spanish broca and Quechua suffix -ishu, characterized as derogatory) (Ramón 2013: 79; for -ishu, Julca Guerrero 2009: 40). Can we use this evidence to apply a similar interpretation to the textile terminology variation in Southern Cajamarca? In other words, does the case saque-saj-saca versus putij-putig show two ways of referring to the same instrument within just one indigenous language? Given the limited information on this hypothetical language, which is restricted to place names and documentary evidence, it is still impossible to postulate precise meanings for these terms, beyond their function as elements of a craft nomenclature that is presumably precolonial. However, the geographical distribution of both terms is strikingly fragmented. In the present state of our knowledge, however, we are not able to advance beyond the simple observation of this variation. Nevertheless, it can be stressed that saque-saj and putig-putij integrate, alongside with cungalloo and chana, a Cajamarcan indigenous vocabulary different from Quechua and Culle in the textile field. Further research into the cat area, as Celendín province (see Map 2), would be advisable to clarify this point. It is worth noting, in any case, that in a region almost entirely dominated by the Spanish language, indigenous terms of this lexical subsystem remain stable, as pointed out by Varese (1963-1964: 337). This goes hand in hand with the situation of northern Potosí, where Aymara is being subsumed by Quechua and this latter language, in turn, is in a diglossic situation with Spanish. In that case, however, it happens that in traditional weaving Aymara terms prevail (Howard 1995: 159-161).

In Southern Cajamarca, technical diversity in pottery stands out more than lexical diversity. As noted, the evidence collected in previous years (Ramón 2008a) shows that each village with potters can be characterized by a specific technique. However, Southern Cajamarca poses a challenge, showing villages like Mollepampa, where two techniques are practiced; Jangalá (San Miguel province), where, despite the prevalence of the mold technique, there is also a potter working with a different technique; and Cursqui (San Marcos province), where although paddling is identified as the traditional technique, a potter also uses the potter's wheel and the mold. The advantage of comparing results from pottery and textile production lies in their differences. While the textile evidence suggests the presence of different linguistic substrata, it is harder to argue the same using pottery lexical evidence. A complementary methodology would be to reconstruct pottery technical areas – that is, to identify how villages with similar production techniques are geographically distributed in Cajamarca - and establish their relationships with areas corresponding to linguistic substrata. The correlation between technique, culture and potentially language has often been assumed in the Andes as a classification principle, but has never been demonstrated.

How should we explain the discrepancy between the degree of conservatism of the ceramics and textile terminologies in Southern Cajamarca? An observation about the distribution of the production sites of both activities provides a key to interpreting this situation. Miguel Rodríguez Sánchez, a native of Ichocán (San Marcos province) and a current resident of Cajabamba, as well as an expert on the region and a local museum manager, stated: "Nowadays [textile craft] is a general horizon, but a center, as in the case of pottery, I have not seen [...]. Textile craft is familiar, there is no center" (personal communication). While textile production is a widespread activity, pottery is restricted to certain parts of the region, concentrated in specific villages. This is consistent with our previous observations in different parts of the Northern Peruvian Andes (Ramón 2008a; Ramon & Bell 2013). The differential distribution of the centers of pottery and textile manufacturing implies different strategies of production and distribution of raw materials, different scales of production, greater or lesser intervention from complementary agents (local and/or foreign intermediaries), and greater or lesser interaction with external consumers. This contrast between the pottery and textile networks can explain the variable imposition of Spanish on the names of craft tools. In cases such as those described by Rodríguez, textiles are made for consumption but not for exchange. Therefore, the technical vocabulary from the substrate language could be preserved more easily, while the opposite would happen with pottery, which is nearly always sold or exchanged in different linguistic scenarios, a context that would trigger the use of Spanish (and previously Quechua) as a 'lingua franca'. This explanation avoids falling into essentialism, such as the supposed 'feminine conservatism', which is associated with the fact that the textile industry in the northern Peruvian Andes is usually performed by women. Rodriguez's observation also allows us to relate our hypotheses with forms of social organization of the craft and its regional distribution.

The comparative study of pottery and textiles in Southern Cajamarca shows that the contrast between technical variability and lexical conservatism can only be adequately explained in a regional scale. In addition, distinctions within the whole cultural lexicon should be made, regarding the stability and resistance to borrowing of some lexical fields. There are cultural lexical fields, such as weaving, which may be sources of data to obtain lexical information from extinct indigenous languages, and thus contribute to better understandings of the language and cultural history of a region. In the case of the Northern Peruvian Andes, where indigenous languages are almost entirely overridden by Spanish, with the exception of a few 'enclaves' of Quechua, it is crucial to identify which lexical fields can help to recover some traces of the old substrates.

Identification of the lexical fields useful to recover these traces requires a detailed ethnographical knowledge of the region under study. The examination clearly shows the utility of combining lexical studies with a detailed observation of the technical processes. In the case of textiles, for example, it would be insufficient to record the

names of the loom tools exclusively, not only because this would have restricted the overall understanding of the textile craft, but because it would have also meant the loss of important lexical information. For instance, the narrow stick of reed that holds the woven fabric underneath and guarantees uniformity in the width of the weave (Figure 7, instrument *c*) is called *tipe, tipina, tupu, timbe* or *chana* according to the locality. This instrument, which is unappealing from a functional point of view, was overlooked in previous records (for example, in Varese 1963-1964), despite the interesting variability of its indigenous nomenclature. Only a detailed observation of the technical processes led to consider the presence and function of this tool, and to recover the corresponding lexical data.

Conclusions

A relationship between the indigenous loom terminology and ancient linguistic substrates from the northern Andes was assessed. Although this relation can be identified in the area comprised by the Culle region and Southern Cajamarca as a whole (Andrade 2011), it cannot be stated among the six Cajamarca provinces that formed the area of study. If words derived from Quechua or Spanish within the loom terminology are removed from consideration, it is possible to isolate a non-Quechua, non-Culle indigenous substrate in Cajamarca, in which a sharp variation is observed. Although noteworthy, this variation cannot be explained as an outcome of two different language sources as Torero (1989) stated; however, at least one indigenous substratum different from Culle and Quechua still holds. In contrast, no similar relationships were identified between the terminology of traditional pottery and ancient linguistic substrates of Cajamarca.

A sharp contrast between pottery and weaving was observed regarding the two parameters under study: while pottery shows more technical diversity and a less observable presence of lexical items of indigenous origin, weaving is technically more uniform, but its nomenclature retains lexical items of pre-Quechua languages. This contrast should be explained in regional terms and according to the various networks of production and distribution involved in each of these activities. Finally, the contrast shows that the conservatism of the cultural lexicon may vary by type of activity. Identifying potential lexical areas for maintaining Quechua and pre-Quechua terms is important for extending the investigation of multilingualism in the Andean past, as well as the legacy of the now extinct indigenous languages, like the non-Quechua languages of Southern Cajamarca.

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References cited

Adelaar, Willem, F. H.

- 1990 En pos de la lengua culle. In: Cerrón-Palomino, Rodolfo & Gustavo Solís Fonseca (eds.): Temas de lingüística amerindia. Lima: Consejo Nacional de Ciencia y Tecnología/Gesellschaft für Technische Zusammenarbeit (GTZ), 83-105.
- 2004 *The languages of the Andes.* With the collaboration of Pieter Muysken. Cambridge, U. K.: Cambridge University Press.
- 2012 Cajamarca Quechua and the expansion of the Huari state. In: Heggarty, Paul & David Beresford-Jones (eds.): Archaeology and language in the Andes. A cross-disciplinary exploration of prehistory. Proceedings of the British Academy, 173. New York: The British Academy, Oxford University Press, 197-217.

Andrade Ciudad, Luis

- 2010 Contactos y fronteras de lenguas en la Cajamarca prehispánica. In: Kaulicke, Peter, Rodolfo Cerrón-Palomino, Paul Heggarty & David Beresford-Jones (eds.): Lenguas y sociedades del antiguo Perú: bacia un enfoque interdisciplinario. Boletín de Arqueología de la PUCP, 14. Lima: Fondo Editorial de la Pontificia Universidad Católica del Perú, 165-180.
- 2011 El léxico del telar de cintura en la sierra norte del Perú. In: Adelaar, Willem F. H., Pilar Valenzuela Bismarck & Roberto Zariquiey Biondi (eds.): *Estudios sobre lenguas andinas y amazónicas. Homenaje a Rodolfo Cerrón-Palomino.* Lima: Fondo Editorial de la Pontificia Universidad Católica del Perú, 53-72.
- 2012 *El castellano andino norperuano: contacto lingüístico, dialectología e historia.* PhD dissertation. Lima: Pontificia Universidad Católica del Perú.

Arnold, Denise & Elvira Espejo

2013 *El textil tridimensional: la naturaleza del tejido como objeto y como sujeto.* La Paz: Instituto de Lengua y Cultura Aymara.

Castro de Trelles, Lucila

2013^{2}	Los tejedores de Santiago de Chuco y Huamachuco. De cumbicus a mitayos, obrajeros y mineros. Lima:
	Minera Barrick Misquichilca.

Cerrón-Palomino, Rodolfo

1995 *La lengua de Naimlap (reconstrucción y obsolescencia del mochica).* Lima: Fondo Editorial de la Pontificia Universidad Católica del Perú.

Druc, Isabelle

2013 Tradiciones alfareras en el valle de Cajamarca y cuenca alta del Jequetepeque. Bulletin de l'Institut Français d'Études Andines 40: 307-331.

Fernández López, Arabel

2007 El anaku, la lliklla y las fajas sara y pata: supervivencias inca en la comunidad de San Ignacio de Loyola, Sinsicap-Otuzco. In: La trama y la urdimbre. Textiles tradicionales del Perú. Lima: Universidad Ricardo Palma/Instituto Cultural Peruano Norteamericano (ICPNA), 149-159.

Gosselain, Olivier

2010 Ethnographie comparée des trousses à outils de potiers au sud du Niger. Bulletin de la Société Préhistorique Française 107: 667-689.

Howard, Rosaleen

1995 "Pachamama is a Spanish word". Linguistic tension between Aymara, Quechua, and Spanish in Northern Potosí (Bolivia). *Anthropological Linguistics* 37(2): 141-168.

Huamán Carhuaricra, Angelina

2009 Tejemos nuestra vida. Testimonios sobre el arte textil de Taquile. Lima: Instituto Nacional de Cultura.

Julca Guerrero, Félix

2009 *Quechua ancashino. Una mirada actual.* Lima: care-Perú/Fondo Editorial del Pedagógico San Marcos.

Krzanowska, Roma

1983 Peruwianska ceramika ludowa. *Etnografia Polska* 27: 173-201.

Krzanowska, Roma & Andrzej Krzanowski

1976 Garncarstwo ludowe w dolinie Alto Chicama w pólncnym Peru. *Etnografia Polska* 20: 185-214.

Krzanowski, Andrzej & Jan Szeminski

1978 La toponimia indígena en la cuenca del río Chicama (Perú). Estudios Latinoamericanos 4: 11-51.

Larco Hoyle, Rafael

2001 [1938] Los mochicas. Vol. II. Lima: Museo Arqueológico Rafael Larco Herrera.

Meisch, Lynn A.

2007 *Fajas sara:* supervivencia de una tradición textil inca en el norte del Perú. In: *La trama y la urdimbre. Textiles tradicionales del Perú.* Lima: Universidad Ricardo Palma-Instituto Cultural Peruano Norteamericano (ICPNA), 183-191.

Mendizábal Losack, Emilio

1990 *Continuidad cultural y textilaria en Pachitea andina*. Lima: Consejo Nacional de Ciencia y Tecnología (CONYTEC).

Middendorf, Ernst W.

1973 [1895] Perú. Observaciones y estudios del país y sus habitantes durante una permanencia de 25 años. Vol. 3. Lima: Universidad Nacional Mayor de San Marcos.

Quesada C., Félix

- 1976 *Gramática quechua: Cajamarca-Cañaris.* Lima: Ministerio de Educación-Instituto de Estudios Peruanos.
- Quiroz, Haydeé, Elena Rivas & Gladys Guerra
 - 1977 *La artesanía textil de San Miguel de Pallaques.* Lima: Universidad Nacional Mayor de San Marcos, Seminario de Historia Rural Andina.

Ramón, Gabriel

- 1999 Producción alfarera en Santo Domingo de los Olleros (Huarochirí, Lima). Bulletin de l'Institut Français d'Études Andines 28: 215-248.
- 2008a Potters of the Northern Peruvian Andes: a palimpsest of technical styles in motion. PhD dissertation. Sainsbury Research Unit for the Arts of Africa, Oceania & the Americas. Norwich: University of East Anglia.
- 2008b Producción alfarera en Piura (Perú): estilos técnicos y diacronía. *Bulletin de l'Institut Français d'Études Andines* 37: 477-509.
- 2013 Las fuentes del estilo: distribución regional de canteras y técnicas alfareras en Conchucos (Áncash, Perú). Bulletin de l'Institut Français d'Études Andines 42: 49-90.

Ramón, Gabriel & Martha Bell

2013 Re-placing plainware: Production and distribution of domestic pottery, and the narration of the pre-colonial past in the Peruvian Andes. *Journal of Anthropological Archaeology* 32: 595-613.

Ravines, Rogger & Fernando Villiger (eds.)

1989 La cerámica tradicional del Perú. Lima: Los Pinos.

Rowe, Anne Pollard

1978 Prácticas textiles en el área del Cusco. In Ravines, Rogger (comp.): Tecnología andina. Lima: Instituto de Estudios Peruanos, 369-398.

Rowe, Anne Pollard, Laura M. Miller & Lynn A. Meisch

2007 Weaving and dyeing in highland Ecuador. Austin: University of Texas Press.

Sillar, Bill

2000 Making pots and constructing households: an ethnoarchaeological study of pottery production, trade and use in the Andes. BAR international series, 883. Oxford: J. and E. Hedges.

Swadesh, Morris

1953 Archaeological and linguistic chronology of Indo-European groups. American Anthropologist 55(3): 349-352.

Tadmor, Uri, Martin Haspelmath & Bradley Taylor

2010 Borrowability and the notion of basic vocabulary. *Diachronica* 27(2): 226-245.

Torero, Alfredo

1989 Áreas toponímicas e idiomas en la sierra norte peruana. Un trabajo de recuperación lingüística. Revista Andina 7(1): 217-257.

Varese, Stefano

1963-1964 Nomenclatura de algunos telares indígenas del Perú. *Folklore Americano* 11-12: 335-342. Vink, Hein

1982 Léxico del quechua de Macañía (Pataz). Leiden. Ms.

Weber, David, Félix Cayco Zambrano, Teodoro Cayco Villar & Marlene Ballena Dávila
1998 Rimaycuna. Quechua de Huánuco. Lima: Instituto Lingüístico de Verano.