In Andean cognition the embodiment of the past is different from many other ways to spatially relate the position of the body to time. This epistemology is for instance expressed in the Quechua word ñawpa, which signifies that the past is “in front of us;” it is known and can be seen. Seeing and knowing the past in this way reverberates within the historical ecological argument that the present is contingent with the past and is explicitly reflected within the contributions to this volume. “The Past Ahead: Language, Culture, and Identity in the Neotropics” forms a collection of reworked papers originally presented in shorter format by archaeologists, anthropologists, and linguists at the research symposium “Archaeology and Society in Bolivia” organized at Uppsala University by the editor. The volume includes chapters by Jan-Åke Alvarsson, Lisbet Bengtsson, Roger Blench, Sergio Calla, Christian Isendahl, Carla Jaimes, John Janusek, Adriana Muñoz, Heiko Prümers, Walter Sánchez, Per Stenborg, Juan Marcelo Ticona, and Charlotta Widmark examining a series of different aspects of agriculture, complex societies, identities, landscape, languages, and urbanism in the highland and lowland Neotropics that all highlight the significance of the past in the present.
Contents

Introducing the Past Ahead ............................................................................................... 7
Christian Isendahl

The Role of Agriculture in Explaining the Diversity of Amerindian Languages ..................... 13
Roger Blench

Undercover: Mimicry and Clandestine Identities of the Past ........................................... 39
Per Stenborg

Why Go Back to the Old Ways? Bilingual Education and Ethnoregenesis among the ‘Weenhayek of the Bolivian Gran Chaco .......................................................... 59
Jan-Åke Alvarsson

Urban Aymara Speakers in Bolivia and the Processes of Culture and Identity Formation ............................................................ 79
Charlotta Widmark

Bolivians in Gothenburg: The Archaeological and Ethnographic Collections at the Museum of World Culture ................................................................. 93
Adriana Muñoz

Understanding Tiwanaku Origins: Animistic Ecology in the Andean Altiplano .................. 111
John W. Janusek

El Proyecto Lomas de Casarabe: Investigaciones arqueológicas en los Llanos de Mojos, Bolivia .......................... 139
Heiko Prümers
La cerámica de dos montículos habitacionales en el área de Casarabe, Llanos de Moxos .......................................................... 161
Carla Jaimes Betancourt

The Whispering Winds: The Sacredness of Walking in the Andean World .................................................................................. 185
Lisbet Bengtsson

Cruzando paisajes, transitando caminos: El ramal Inca de Sipe Sipe hasta Inkachaca (Cochabamba, Bolivia) ........................................ 207
Walter Sánchez Canedo

Cultivating the Yungas: Notes on Current Farming at Rasupampa and Tablas Monte ................................................................. 229
Christian Isendahl, Juan Marcelo Ticona, and Sergio Calla Maldonado
Introducing the Past Ahead

Christian Isendahl

Contact details
Department of Archaeology and Ancient History
Uppsala University
Box 626
SE-751 26 Uppsala
Sweden
christian.isendahl@arkeologi.uu.se

This volume forms a collection of papers that emanates from a research symposium on “Archaeology and Society in Bolivia” organized by the editor at Uppsala University on September 27–28, 2008. The purpose of the meeting was to bring together scholars interested in the prehistory, history, and society of Bolivia and its neighbors, to exchange data and research experiences, discuss interpretations, and investigate the potential for future collaborations. The symposium was organized on the occasion of two Bolivian Ph.D.-dissertations being publicly defended at the Department of Archaeology and Ancient History. On September 26, Marcos Michel (Universidad Mayor de San Andrés, La Paz [UMSA]) successfully defended a dissertation on pre-Columbian settlement patterns on the Bolivian Altiplano, “Patrones de asentamiento precolumbia del Altiplano Boliviano: Lugares centrales de la región de Quillacas, Departamento de Oruro, Bolivia” (Michel 2008). John Janusek (Vanderbilt University, Nashville) was the opponent and offered a sharp assessment of Michel’s work. Walter Sánchez (Universidad Mayor de San Simón, Cochabamba [UMSS]) followed the next day, defending his research on social change and cultural landscapes of the valleys and Yungas of Cochabamba in the dissertation “Inkas, ‘flecheros’ y mitmaqkuna: Cambio social y paisajes culturales en los Valles y en los Yungas de Inkachaca/Paracti y Tablas Monte (Cochabamba-Bolivia, siglos XV–XVI)” (Sánchez 2008) which was critically examined by the opponent Clark Erickson (University of Pennsylvania, Philadelphia). Apart from its academic goals, the research symposium in a sense marked an intellectual celebration of our Bolivian colleagues; a ritual closure of the stellar achievements that those five years of research studies at Uppsala and in the field in Bolivia had produced. As the assistant supervisor of both Marcos Michel and Walter Sánchez I must take this opportunity to thank them for these years of stimulating intellectual interactions and for the friendships these forged.
The meetings joined together scholars from Argentina, Bolivia, Finland, Germany, Great Britain, Sweden, and the United States in different roles: Ph.D.-dissertation defendants, dissertation opponents, committee members, and paper presenters. At the symposium, 13 scientific papers were presented by anthropologists, archaeologists, and linguists, including Jan-Åke Alvarsson (Uppsala University), Lisbet Bengtsson (University of Gothenburg), Roger Blench (Kay Williamson Education Foundation, Cambridge), Clark Erickson, Alf Hornborg (Lund University), Christian Isendahl, Carla Jaimes (German Archaeological Institute), Marjut Jalkanen-Mäkelä (Helsinki University), John Janusek, Marcos Michel, Adriana Muñoz (Museum of World Culture, Gothenburg), Heiko Prümers (German Archaeological Institute), and Per Stenborg (University of Gothenburg). An invitation to contribute a text to the proceedings was extended to all participants in the meetings, and this volume is the final product. Nine presenters answered the call to rework their papers for publication. In addition, Walter Sánchez and Charlotta Widmark (Uppsala University; and member of Marcos Michel’s doctoral committee) contributed a chapter each to this book, thus totaling 11 chapters, the present introduction excluded. Contributors were free to compose their chapters in either English or Spanish. As the organizer of the meetings and the editor of this book, I am most grateful to all contributors.

Marcos Michel’s and Walter Sánchez’ doctoral studies at Uppsala University formed part of a larger cooperation framework between Uppsala and Bolivia burgeoning in the early 2000s and made possible by Sida’s (the Swedish International Development Cooperation Agency) major program to support higher education in Bolivia at that time. UMSA offers a good undergraduate program for the Licenciado-degree in archaeology, but there is no archaeological Ph.D.-training program at any university in Bolivia. Five archaeologists and anthropologists affiliated with UMSA and UMSS took the opportunity to pursue their doctoral dissertation work at the Department of Archaeology and Ancient History in Uppsala: Raúl Meneses, Marcos Michel, David Pereira, Virginia Sáenz, and Walter Sánchez. Vicky Sáenz was the first participant of the Ph.D.-training program to earn the doctoral degree at Uppsala University, defending her dissertation on “Symbolic and Material Boundaries: An Archaeological Genealogy of the Urus of Lake Poopó, Bolivia” (Sáenz 2006) in November 2006. Per Stenborg was the faculty’s opponent and offered a critical reading and discussion of Sáenz’ dissertation research. Part of the department’s engagement with Bolivian archaeology, particularly through the efforts of Frands Herschend, Paul Sinclair, and myself, the September 2008 symposium was the second international scholarly meeting at Uppsala University. The first was a workshop organized by Frands Herschend in August 2005, bringing together Swedish, Finnish, and Bolivian archaeologists, anthropologists, and historians with a research interest in the archaeology and early history of Bolivia to “compare notes” and explore common ground for potential future institutional educational and research cooperation. The meeting was highly valuable as a networking event by providing an opportunity to discuss training needs and research priorities. As I write this in early 2012, the depart-
ment’s involvement in Bolivian archaeology is steadfast, with continued Ph.D.-training support and research cooperation in Cochabamba (see Isendahl et al., this volume).

As the late great Frank Zappa once remarked, to organize a series of independent works into a whole and in an order that follows some kind of “conceptual continuity” is a most delicate issue. This is as true when it comes to book editing as it is in the world of music, and in particular with an eclectic series of papers such as this. Similar to the concern of ordering, there is the dilemma of titling an edited collection of papers that does justice to all its parts. Choosing to refrain from paraphrasing any of Zappa’s overtly imaginative titles such as “We’re Only in it for the Money,” “200 Motels,” or “Joe’s Garage,” which to greater or lesser success could perhaps have been used to describe some realities of being a fieldworking archaeologist, anthropologist, or linguist, the title of this book—“The Past Ahead: Language, Culture, and Identity in the Neotropics”—has an underlying meaning that many readers will immediately recognize. It is a reference to the embodiment of the past in Andean cognition that is different from many other ways to relate the position of the body to time, and which for instance is expressed in the Quechua word náwpa and cognate terms (Bengtsson 1998:121). Náwpa signifies that the past is “in front of us;” it is known and can be seen. Similarly, the Quechua term for the future—qhepa—places the future “behind us;” where we cannot see it (see Bengtsson 1998 for a great treatment of the concepts of time and space in Quechua). “Seeing” and “knowing” the past in this way nicely reverberates within the historical ecological argument that the present is contingent with the past (e.g., Balée 2006; Crumley 1994) and is reflected in many different ways within the contributions to this volume.

In Chapter 2, historical linguist Roger Blench critically examines the thesis—argued by Peter Bellwood among others—that many language phyla have expanded as a result of the development of agriculture and consequent demographic growth. Providing an excellent overview of the diversity of language phyla in present-day Latin America, the explanatory models proposed to account for their distribution, and the available evidence that may substantiate or invalidate these hypotheses, Blench argues that a diversity of drivers is necessary to account for the global pattern of language distribution and suggests that plant domestication in the Neotropics was a response to demographic growth rather than a cause of it.

In Chapter 3, archaeologist Per Stenborg discusses the dynamics of the social construction of identities as a political strategy. Drawing on a case study of Inca expansion into the southern Central Andes, Stenborg introduces the term “mimicry”—borrowed from biology—to analyze the construction of clandestine identities as a strategic response against political control and cultural domination. Emphasizing local agency and intentionality, the approach offers a thoughtful and innovative incipient heuristic framework that cautions against simplistic notions of material culture as identity markers and provides a highly useful analytical model for understanding cross-cultural interactions.
In Chapter 4, anthropologist Jan-Åke Alvarsson explores the historical processes over the 20th century that led to a phase of ethnoregenesis among the ‘Weenhayek of southern lowland Bolivia in the early 2000s. Based on extensive fieldwork in the Gran Chaco and drawing on Bateson’s work on cybernetics and Ahearn’s agency-concept, Alvarsson’s historical ethnographic analysis of the socio-political dynamics of cultural identity construction clearly demonstrates how the ongoing process of ‘Weenhayek ethnoregenesis is intrinsically linked to changing attitudes towards the past.

In Chapter 5, anthropologist Charlotta Widmark similarly applies a constructivist perspective on the formation of ethnic identities as an on-going process, investigating the dynamics of the social construction of culture and identity in relation to historical and socio-political contexts. Studying processes of identity transformations among bilingual Spanish and Aymara immigrants to the urban zone of La Paz over the last two decades, she discusses the complexities and paradoxes of ethnic identities among indigenous societies within the “pluri-national” discourse in contemporary Bolivian society.

In Chapter 6, archaeologist Adriana Muñoz presents an overview of the extensive collections of ethnographic and archaeological artifacts from Bolivia held at the Museum of World Culture in Gothenburg, Sweden, and discusses some of the social and political ramifications of these collections. She investigates the potential role of these objects to contribute to new forms of cultural and historical understanding, appreciating the significance of these for people today, in particular as multi-vocal carriers of individual and social memory. Muñoz offers an insightful contextualized perspective on museological issues in a globalized world that reaches far beyond simplistic quick-fix repatriation solutions.

Archaeologist John Janusek examines the origins of urbanism in the Lake Titicaca Basin of the Bolivian Altiplano in Chapter 7, focusing on the social processes and practices that gave rise to Tiwanaku as the primary center in the south-central Andes during the late first millennium AD. He introduces the term “animistic ecology” to describe how emerging urbanism depended on the construction of monuments that in their spatiality, materiality, and iconography animated and referenced perceived hierophanies in the landscape—sanctified natural forces, celestial cycles, and terrestrial features—and legitimized the location of political power to the urban center. The animistic ecology at Tiwanaku as described by Janusek is an excellent case of how historically-based social constructions of ceremonial landscapes form powerful political tools (see Isendahl 2011).

In Chapter 8, archaeologist Heiko Prümers outlines the results from archaeological excavations at two habitational mound sites with monumental architecture at Loma Mendoza and Loma Salvatierra, in the area of Casarabe in the Llanos de Mojos of the Bolivian lowlands. Prümers’ investigations are highly significant not least since excavated archaeological data from habitation sites in the lowlands is very poor (to be contrasted with the quite rich agro-archaeological evidence of pre-Columbian landscape transformations such as ridged fields, drainage canals, and causeways [e.g., Erickson 1980, 1995, 2006, 2008]). The excavated data that
Prümers presents demonstrate a succession of habitation platforms dating from AD 500–1400, with a particularly rich record of burials. Although most of these lack grave offerings, one tomb at the Loma Salvatierra site contained offerings that indicate the burial of a “chieftain,” according to Prümers providing the first direct evidence for pre-Columbian social stratification in the Llanos de Mojos.

In Chapter 9, archaeologist Carla Jaimes offers a detailed and well-illustrated study of the ceramic evidence from the excavations directed by Prümers at Loma Mendoza and Loma Salvatierra. Reporting on an attribute analysis of more than 40,000 ceramic sherds, Jaimes proposes—on the basis of technological attributes, decorative elements, and morphological variables—a sequence of five distinct ceramic phases for this area of the Llanos de Mojos. Despite notable functional, temporal, and regional variation, she finds no major changes in manufacturing technology over time, arguing that this indicates long-term ceramic continuity. The sequence of chronological phases Jaimes outlines in this chapter forms an important and highly useful frame of reference for further archaeological analyses of pre-Columbian ceramics of lowland Bolivia.

In Chapter 10, archaeologist Lisbet Bengtsson picks up on the theme of Andean animistic epistemologies introduced by Janusek in Chapter 7. Arguing that fragments of pre-Columbian cosmology has survived until present time, she offers a vivid narrative of how perceptions of space and landforms as expressed in myths and toponyms in the Peruvian Central Andes carries historical information important for understanding the multi-dimensional ordering of landscape in the past, with a particular reference to the role of traveling and communication networks as cognitive matrices.

In Chapter 11, archaeologist and sociologist Walter Sánchez further explores the role of communication systems in the Bolivian Central Andes, presenting a case study of one of the main pre-Columbian roads used by the Inca State to connect three biogeographic zones: the Altiplano, the mid-altitude valleys, and the Yungas. Much similar to Bengtsson, he demonstrates the potential of visual narratives as an important resource for integrated archaeological interpretations of multi-dimensional biogeophysical and cognitive ontologies of landscape.

Drawing on a series of interviews with smallholders, archaeologists Christian Isendahl, Juan Marcelo Ticona, and Sergio Calla report local agricultural practices and agronomic knowledge systems in the Yungas of the Bolivian Central Andes in the final Chapter 12. The data presented provide an important baseline for assessing the function and use of a pre-Columbian agrosystem in this area initially reported by Walter Sánchez (2008). This work forms part of an agro-archaeological research cooperation project involving Swedish and Bolivian archaeologists that marks a new phase of scholarly partnership between Uppsala University and Bolivian colleagues.

Acknowledgements. Thanks are due to the late Mr Bo Westman and Dr Jan Lundius of Sida/SAREC (the Department for Research Cooperation of the Swedish International Development Cooperation Agency) for their engagement in facili-
tating the involvement of the Department of Archaeology and Ancient History in Bolivian archaeology. The production of this book has been generously supported by Sida. I am most grateful to Adriana Muñoz and Per Stenborg for translating several abstracts and captions in this volume into Spanish and to Göran Wallby for graphic design and layout.

References


The Role of Agriculture in Explaining the Diversity of Amerindian Languages

Roger Blench

Contact details
Kay Williamson Education Foundation
8 Guest Road
Cambridge CB1 2AL
United Kingdom
rogerblench@yahoo.co.uk

RESUMEN

El papel de la agricultura en las explicaciones para la diversidad de las lenguas amerindias

Las lenguas de las Américas representan una situación única desde en una perspectiva global. Comparados con las leguas del Viejo Mundo, ellas se dividen en un gran número de phyllos (filos), no relacionadas entre sí. Eso resulta problemático, tomando en cuenta las fechas relativamente tardías generalmente aceptadas para la población humana del Nuevo Mundo. Aquí se citan algunos estimados tempranos de Bernabé Cobo acerca el número de idiomas en las Américas. Varias hipótesis han sido presentadas para explicar esta situación, generalmente estos da gran importancia a la expansión demográfica propulsada por agricultura. En esta contribución algunos de aquellos modelos explicativos son revisados con la sugerencia que una diversidad de operadores es necesaria para dar cuenta del patrón global de distribución de lenguas. Las tablas presentan los opiniones actuales sobre filos de lenguajes de las Américas, dividiendo estos en cuatro categorías, aislados, filos pequeños, filos grandes esparcidas y grupos densos e expansivos asociados a la agricultura. Fechas actuales para la agricultura en los Neotrópicos pueden tener una antigüedad de 10,000 AP. Los argumentos lingüísticos para asociar la reconstrucción de cultivos con expansión de filos esta presentados y lleva a la conclusión que también casos bien establecidos pueden ser cuestionados. El trabajo sostiene que se debe dar más peso a las fechas más tempranas de la intrusión humana en las Américas. Crucialmente, parece como si la relación entre agricultura e expansión lingüística puede ser a opuesta a la hipótesis común; que la domesticación fue una respuesta, no una causa, de crecimiento demográfico.
The absurd theories which have been advanced and gravely defended by men of learning and acuteness respecting the origin of the Indian races are hardly worth even a passing reference… When men sit down crammed with scattering items of historical information, abounding in prejudices, and teeming fancies, to the solution of questions respecting whose conditions they know nothing, there is no folly which they are not prepared to commit (Whitney 1867 [quoted in Campbell 1997:99]).

Introduction

*Claims about agricultural expansions in prehistory*

Associated principally with archaeology are a number of questionable claims concerning the antiquity of language phyla and the driving force of their expansion. This idea has a long history within Indo-European studies, but has most recently been associated with the work of Peter Bellwood who has energetically propagated the notion that many language phyla expanded as a result of the development of agriculture and consequent demographic growth (e.g. Bellwood 2005; Bellwood and Renfrew 2002). Such models may be valid in a small number of specific cases, for example the Tai-Kadai languages (Blench 2011) or Nilotic (Blench 2006:83; see also Blench 2007), but attributing this hypothesis a more global explanatory power is questionable. The difficulties of validating it in many situations (e.g. Wichmann 2002) have not deterred those making claims for it. The problem for linguists is that it rarely addresses language evidence directly and indeed, in many cases, the actual data appears to contradict the model. At the same time, linguists do not always present their results in the most accessible way and sometimes offer reconstructions that are chronologically improbable or culturally unrealistic.

Linguists also frequently disagree, rather forcefully in some cases. The case of Sino-Tibetan springs to mind: Matisoff (2003) has advocated a coherent tree-like structure implying a relatively recent dispersal and a primary branching of the Chinese languages, whereas Van Driem (2005) believes this is not supported by the evidence and that a very large number of individual groups must be postulated, whose present relationships are undetermined. No wonder many archaeologists and linguists on the margins of the debate simply shrug their shoulders in disbelief over the rigour of historical linguistic models. One region of the world where disagreement has been particularly acute is the Americas; the dates for first settlement, the classification of languages and the role of agriculture in the expansion of particular phyla are all controversial. This paper looks at the general pattern formed by languages in the Americas and the particular difficulties of explaining the nature of phyllic expansions. It examines the evidence for individual language phyla, where agriculture has been suggested as an engine for their evolution and summarises the linguistic evidence.
**Is it necessary for there to be any engine of language phylum expansion?**

It might be asked whether it is necessary to adduce any motive for language phylum expansion other than natural population growth. The answer is that in most parts of the world, the dominant language phyla are manifestly recent. Indo-European, Pama-Nyungan, Austroasiatic, Austronesian, Kartvelian, Mixe-Zoque and Mayan are all relatively tightly knit phyla which have clearly expanded recently, eliminating much prior diversity. “Recent” in this context refers to the last 8000 years, with phyla such as Austroasiatic—previously considered to be of great antiquity—now redated to as recently as 4500 BP (Sidwell and Blench 2011). By contrast, phyla such as Nilo-Saharan and the Trans-New Guinea phylum are likely to be much older. In Drake et al. (2010), Blench argues the Nilo-Saharan must be associated with the “Green Sahara,” i.e. at 10,000 BP, and Pawley (2005) that the Trans-New Guinea phylum is associated with the rise of vegeculture, i.e. not less than 8000 BP.

This is one factor that makes a link with the rise of farming credible; what driving force would be behind this population growth and settlement expansion if not agriculture? If agriculture is ruled out then opponents of the hypothesis must present an alternative; close-knit language phyla do not exist simply by chance. Examples of such alternatives might be superior military organisation linked with expansionist ideologies, new technology (metals, maritime techniques, the bow and arrow, or even innovative lithics), climate or environmental change leading to new resource availability, changes in health status and religious and social ideas. These may not be unrelated to intensification, and some, such as the introduction of metals, might only account for the expansion of subgroups of language phyla. Some of these are more easily tested against archaeological and linguistic data than others.

**Demographic expansion versus cultural transmission**

The language/farming dispersal hypothesis is associated with the hypothesis of demographic expansion, “demic diffusion” in the language of its advocates, but a reinvention of the notion of migration that has had a strongly negative stereotype with many archaeologists. In principle, this is realistic; we know that in the early stages of the evolution of agriculture, farmers move regularly, sometimes in large circular patterns, to allow for the regrowth of fallow, but often pioneering new areas of untilled land. Similarly, pastoralists or fishermen may depend on a resource in a particular area for some time, but the year it fails they explore new territory and their movement patterns and dispersal often change irrevocably. Nonetheless, it is clearly also true that language can spread independently of mass migration; most Americans today have not inherited culture by direct transmission from English-speaking forebears, but by assimilation and diffusion. Similarly, many Chinese populations today were clearly formerly speakers of languages of other phyla and have gradually “become” Chinese over the millennia.
This is not to question the reality of demographic expansions; they clearly occur. However, the relationship with a subsistence strategy has to be demonstrated on a case by case basis. This is not difficult when the populations and their languages expand into uninhabited territory or occupied only by foragers. It would be eccentric to question the reality of demic expansion in the case of Polynesian or Bantu. But this is not an issue to be resolved unambiguously. When people move, artefacts and ideas also migrate, but proving demographic expansion would require the sort of large scale quantitative analysis and sampling unlikely to be available for most parts of the world. Where there are numerous well-dated settlement sites, and it is possible to make numerical models of population increase over time, a credible case can be made for expansion. However, even for a generally accepted expansion such as Austronesian, almost all archaeological sites in island Southeast Asia are caves rather than open-air sites, which do not provide direct support to the model, as they are linked to specialised subsistence strategies, such as hunting. Most reasonable onlookers would accept clusters of villages moving and spreading with characteristic new types of material culture as a priori evidence for this type of migration.

In linking archaeology to linguistics, it is not enough to demonstrate the reconstructibility of agricultural terminology to a proto-language. Although it is a common assumption that such reconstructed terminology implies agricultural expansion, agriculture may be the consequence of cultural change, not its cause. Moreover, where agriculture is preceded by the management of landscape or faunal resources, these are often difficult to distinguish linguistically.

**Methodological issues**

What preconditions are required for there to be a reasonable a priori link between the expansion of a language phylum and agriculture (or indeed any other subsistence system, such as fisheries or pastoralism)? The answers may seem obvious, but most published models do not clearly adhere to them. They are:

1. That there be an incontrovertible phylum.
2. That the phylum be sufficiently large for useful conclusions to be drawn from historical linguistic reconstruction.
3. That the internal structure of the phylum is generally accepted and from this that some assessment of the homeland and general direction of migration is available.
4. For reconstructions to exist for a significant number of items including those of an ecological nature that broadly support the outline in 3.
5. That reconstructions exist of the principal crops, trees, livestock species or other subsistence items relevant to the hypothesis.
6. That reconstructions exist of items suggestive of farming rather than just gathering wild relatives of the crops.
That well-dated archaeobotanical materials exist that correspond to the reconstructions in areas roughly coincident with the proposed homeland.

That no other competing hypothesis be available to explain the data equally well.

The following numbered paragraphs expand on these individual points.

1. Broadly speaking, language phyla can be divided into those which are almost universally accepted, those which are debatable and those which are not proper phyla, but merely geographical groupings. New World examples of those universally accepted are Eskimo-Aleut, Mayan, Na-Dene, Uto-Aztecan, Arawakan, Tupian and Cariban. In the debated category are Penutian and Hokan. In addition, there are macro-phyla, bundlings of multiple phyla, most notably Nostratic (Eurasiatic) (Bomhard 2008; Greenberg 2002), Papuan (Wurm 1982) and Amerind (e.g. Greenberg 1987). These are not widely accepted by the linguistic community and, even if real, would have a time-depth too great to admit significant cultural reconstruction.

2. Not all language phyla are large; Eskimo-Aleut, Witotoan and many other groupings in the New World have just two or three members and thus cannot be reconstructed to any great time-depth, since linguistic diversity within a phylum is indicative of age. Even if agriculture, herding or fishing can be reconstructed for their proto-language this does not provide much useful information since we know that these methods of subsistence are older than any hypothetical date emerging from the reconstruction process.

3. The internal structure of most language phyla is debated to some extent. For some phyla, disagreement is so serious that uncontroversial reconstruction is impossible. Arawakan is a good example of a phylum where there are significant disagreements over its membership and internal classification. The significance of this is that there can be no convincing reconstructions of a proto-language without a hierarchical structure. The languages have to be part of a dendrogram with intermediate nodes between languages spoken today and the postulated proto-language, for only then is it possible to establish sound-correspondences to support particular models of diversification. Linguists can extract common forms (i.e. likely abstractions based on synchronic attestations) but these are not the evidence required for the reconstruction of prehistory.

4. If there is a dataset of proposed reconstructions then items of significance for ecology and subsistence should be a small proportion of a large dataset which will mostly include more common lexical items. Regular reconstructions of common items increases confidence in more specialised lexemes.
5. To demonstrate that a phylum or subgroup is associated with true farming as opposed to foraging it is not enough to reconstruct crop names. Where crops are domesticated from indigenous species, then the name often is transferred from the gathered wild plant to the cultigen with no evident linguistic discontinuity. For example, it is claimed that “wheat” can be reconstructed in proto-Indo-European, but wild wheat can be gathered almost throughout the range of its proposed homelands.

6. One of the problems of reconstructing only crop names is that the terms are likely to have been applied to the wild relatives of the cultigen, prior to domestication. To be sure that farming is implied, it is useful to have such terms as “field,” “furrow” or the names of agricultural tools as well as plant names.

7. The density of archaeobotanical materials is highly variable, for reasons that have to do with aridity, soil type or resources available to archaeologists. Archaeobotany in the New World has typically been highly dependent on preservation of macro-remains in arid environments. In Africa and Southeast Asia, where soils are typically acid and much of the continent humid, the introduction of flotation at excavations has transformed the picture of ancient crop repertoires (Castillo and Fuller 2010). Recent and considerable advances in starch grain analyses offer particularly promising results in understanding early Holocene plant use in the New World (e.g. Piperno 2011).

Amerindian languages and dates for the settlement of the Americas

The settlement of the Americas continues to be a major puzzle to students of prehistory. To linguists (and increasingly geneticists, e.g. Nelson et al. 2008), the extreme diversity of languages looks as if an extremely old date must be assigned to this, something on a par with Australia or Melanesia. But archaeology is stubbornly resistant to such a retroduction. For a long time, Clovis points were held by North American archaeologists to be the earliest evidence for human occupation and these seem to be no earlier than 12,500 BP. Many archaeologists, especially in North America, still accept the Clovis dates as the main date for the settlement of the Americas, and even where the Clovis primacy is rejected, “Palaeo-Indians” are still deemed to be of similar age (Roosevelt et al. 2002). But early, unfluted, lanceolate El Jobo-like points have also been recovered at Monte Verde in Chile. The Pre-Clovis occupation at Monte Verde has been dated to at least 12,500 BP (Dillehay 1997; Meltzer 1997). In contrast, throughout South and Central America, much earlier dates are part of public discourse, with 30,000 BP commonly featuring in maps of the settlement of the region. The consequence has been that any site which appeared to be older than Clovis was routinely subjected to intensive skepticism, and of course no procedure is ever perfect. The dating of sites
such as Meadowcroft (19,000 BP), Cactus Hill (15,070 BP) and Bluefish Caves" in Alaska (at least 14,000 BP) is commonly questioned. Direct dating of coprolites at 5-Mile-Point caves in Oregon has recently given a date of 12,300 BP (Gilbert et al. 2008). Even sceptical authors such as Roosevelt et al. (2002) admit to earlier dates for Alaska. Fagan (2004) provides a somewhat perplexed account of these controversies but finds it difficult to accept “unimpeachable” early dates. All in all, given the accepted dates for early domesticates, the sheer abundance of sites now claiming to predate the Clovis barrier and the astonishing diversity of languages in the Americas, continued adherence to later dates is now problematic.

These contradictions might be resolved in a number of ways:

1. The conservative archaeological dates are correct and Amerindian languages have diversified more rapidly than any other comparable region of the world and produced a highly atypical result.
2. Amerindian languages have been faultily classified and they do fall into a restricted number of larger phyla which would then be quite compatible with late dates. This view is associated with the classification of Joseph Greenberg (1987).
3. Some early archaeological dates are indeed correct and the settlement of the Americas is significantly older than current models allow.

Since the consensus of the linguists who have looked at the classification of Amerindian languages is that by and large they fall into a pattern of isolates and small phyla, this view will be adopted here (e.g. Campbell 1997; Mithun 1999; Kaufman and Golla 2000; Adelaar and Muysken 2004). Even so, there is much to be explained. Why are isolates so numerous in comparison with all other continents? Why are Amerindian languages so phonologically and syntactically diverse (in contrast to Papuan and Australian for example)? And why are there no very large phyla, comparable to Niger-Congo or Austronesian, composed of hundreds of languages?

Amerindian language groupings

As far back as the seventeenth century, European authors have commented on the diversity of Amerindian languages. Bernabé Cobo (1979), writing in 1653, estimated there were upwards of two thousand languages (not an unlikely estimate for pre-Columbian America), and furthermore proposed they must all originate from a single migration and have differentiated in situ (Cobo 1979:40). He demonstrated this with a comparison of Quechua and Aymara, which he considered

---

1 Bluefish Caves represent a good example of that research findings that do not “fit” conventional theories are denied additional funding. Excavation has restarted in 2008.
2 See also a valuable review of sites and dates at http://www.jqjacobs.net/anthro/paleoamericans.html.
related and to have differentiated from a single original mother-tongue. Linguists do not now consider Quechuan and Aymaran to belong to the same phylum, but long periods of mutual influence are responsible for numerous surface similarities. It is surprising how historians of linguistics have ignored this early insight into language diversification, while the insights of the later Father Gilij into Arawakan and Cariban are now regularly cited. Cobo also argued that spoken languages differentiated faster than written ones, although he gave no estimate of the time-depth of New World languages.

Father Cobo’s insights were not followed up for several centuries, until the first major attempt to classify Amerindian languages was undertaken at the end of the nineteenth century. Classifications of Amerindian languages, with the exception of Greenberg’s (1987) have emphasised the difficulties of establishing any very large-scale phyla (e.g. Loukotka 1968; Kinkade and Powell 1976; Campbell and Kaufman 1980, 1983; Witkowski and Brown 1981; Kaufman 1990; Campbell 1997; Mithun 1999). This paper will take the “mainstream” view that the consensus of linguists is correct and there are very many isolates and small phyla. Amerindian languages can be roughly divided into four categories:

1. Isolates. Many languages in ones or twos with no evident relatives.
2. Small phyla with 3–7 members, reflecting a recent diversification.
3. Large, widely extended families with members scattered over a large area, often close to extinction and with very small populations.
4. Large, numerous and territorially broad groups, all of whose members seem to have practised agriculture.

In the case of category 4, it is important not to read present distributions into the past, especially in the case of the Amazon. More and more archaeology is coming to light to suggest the “primeval” rainforest was anything but that, and complex societies with elaborate agriculture may have existed in many places (e.g. Denevan 1992; Balée and Erickson 2006; Heckenberger et al. 2008; Woods et al. 2009; Pärssinen et al. 2009). The reasons for the collapse of these societies and the appearance of low-density foragers are debated, although the spread of Old World pathogens prior to the physical presence of Europeans was clearly a major factor. So a region which appears today to be home to scattered and fragmentary

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living language isolates</td>
<td>48</td>
</tr>
<tr>
<td>Extinct language isolates</td>
<td>27</td>
</tr>
<tr>
<td>Living small phyla</td>
<td>32</td>
</tr>
<tr>
<td>Extinct small phyla</td>
<td>9</td>
</tr>
<tr>
<td>Large, geographically dispersed phyla</td>
<td>13</td>
</tr>
<tr>
<td>Larger New World phyla forming territorially coherent blocs</td>
<td>12</td>
</tr>
</tbody>
</table>
Agriculture and language expansions

Introduction: the genesis of agriculture in the Americas

The idea that there was a relation between the language phyla of the Americas and agriculture goes back to Spinden (1915) who, however, had no evidence for correlations with particular phyla. The modern consensus is that agriculture originated independently in the New World, apparently several times. Major reviews of the relevant archaeobotanical data can be found in Piperno and Pearsall (1998) and Iriarte (2007). The most ancient evidence for incipient plant domestication is in the Cauca valley in Peru where the corozo palm (*Acrocomia* sp.) and arrowroot (*Maranta* sp.) are dated to c. 10,000 BP (Piperno and Pearsall 1998:199–203), equivalent to the earliest dates in other regions of the world, such as the Near East and New Guinea. Isendahl (2011) dates the domestication of manioc to between 10-9000 BP in the Brazilian Cerrado. Dillehay et al. (2007) give evidence for domestic peanut (*Arachis hypogaea*), squash (*Cucurbita* spp.), cotton (*Gossypium* spp.) and manioc (*Manihot esculenta*) on the western slopes of the northern Peruvian Andes between 9240 and 5500 BP. Ranere et al. (2009) and Piperno et al. (2009) show that maize (*Zea mays*) was present by 8700 cal. BP in the Central Balsas Valley of tropical southwestern Mexico. Phytolith data...
also indicate a preceramic presence of domesticated squash, possibly *Cucurbita argyrosperma*, of the same period. Shortly after this, sites produce cucurbits and lesser-known plants such as leren (*Calethea alluioa*) and bataua (*Oenocarpus* sp.).

Smith (1997) documents domestic pumpkin (*Cucurbita pepo*) at much the same horizon. Starch grain analysis has also produced exceptionally rich data for root crops (e.g. Piperno and Holst 1998; Piperno et al. 2000; Piperno 2006). Piperno (2011) provides a convenient summary of the latest results and bibliographic references.

The reasons for the genesis of agriculture have been much debated, but with no very conclusive result (Piperno and Pearsall 1998:10–30). However, it is clear that there is no relationship with population density as has been posited elsewhere in the world; human populations were extremely sparse at this period. There is also no relationship with urbanism; cities appear first in Peru at 5000 BP (Shady...
and Kleihege 2008), and appear to reflect abundant marine resources rather than agriculture, which is anyway significantly earlier (Dillehay et al. 2007). Indeed it seems that incipient agriculture did not produce any sort of dramatic shift in human social and economic organisation, nor is there evidence to link it with the expansion of specific language families at this early period.

Iriarte (2007:Figure 9.3) identifies at least four locales in South and Central America where agriculture may have begun independently: (1) Central America; (2) Colombia, Ecuador and NW Peru; (3) Brazil; and (4) Bolivia and coastal Peru. How independent these were in reality is open to discussion. For example, Zarrillo et al. (2008) report domestic maize in southwestern Ecuador 5300–4950 cal BP, which they attribute to diffusion from the sites in south-eastern Mexico, which are some 4000 years older (see also Pohl et al. 2007 for the Mexican evidence). To the Central and South American sites may be added at least one North American zone, the east-central region (Smith 1992a, 1992b, 2006). The North American case is particularly interesting as it is late (2500–1500 BC) and many of the domesticates, such as sumpweed (*Iva annua*) and chenopod (*Chenopodium berlandieri* ssp. *jonesianum*) are now no longer cultivated. Hart et al. (2004) observe that the bitter *Cucurbita pepo* may have been originally domesticated as a fishing float, rather than as a food plant. Fritz (2007) notes that strong academic pressure for the early mound-builders to be farmers may have led to an over-emphasis on agriculture. It may be that only when maize reached the area (as late as 1000 AD) did farming become the basis of subsistence. Similarly, in Peru at the coastal site of Caral, the first urban centre in the New World, there is evidence for the domestication of cotton and gourds, not apparently for direct food consumption but to assist in fish production (Shady and Kleihege 2008).

All of this suggests a different profile for early agriculture in the New World. Far from accompanying a social and demographic revolution, it remained a low-level adjunct to economies that were still essentially focused on foraging. Low populations and abundant resources meant that foraging persisted into the historic period in many areas, and the economic returns were heightened by intensive landscape management (Peacock and Turner 2000). As a consequence, it may be difficult to argue for any strong link between incipient agriculture and the expansion of language families, *even if* domestic plants and animals are reconstructible to a proto-language. Piperno (2011:462) argues that the “appearance of large sedentary and nucleated villages, which postdates 6000 BP throughout the Americas, should no longer be considered a necessary backdrop for the occurrence or recognition of effective and productive agriculture in the Americas.”

It may well be that the language spread and the much later intensive agriculture are related, and that these in turn are related to the development of urbanism and centralised religious practice. With the development of Caral-Supe on the Peruvian coast around 5000 BP (Shady and Kleihege 2008) the pattern for urbanism in the New World was established, and this was associated with a particular type of centralised religion. These early cities could depend on abundant foraged resources rather than agriculture, but once populations expanded beyond
a certain density, intensive agriculture similarly begins to evolve. The next section considers the arguments as they have been advanced for particular Amerindian families.

Reconstructions of agriculture in particular language families

General
Reconstructions of proto-languages in the Americas are usually carried out by linguists, not agricultural historians, and often without a view to the reconstruction of economic prehistory. As a consequence, linguists have not always chosen the species prehistorians would regard as of most interest and occasionally reconstruct terms for species which are introductions from elsewhere, casting doubt of the veridicality of their reconstructions. As a consequence many apparent reconstructions for “manioc” or “corn” probably reflect no more than widespread loanwords. Furthermore, the evidence offered for published reconstructions is often tenuous in the extreme.

Methodologically, it is important to take into account the distortions in our image of the language situation in the New World as a consequence of the depredations following European conquest. The dry coast of Ecuador, Peru and Chile are the sites of large complex settlements, and highly significant in the genesis of urbanism in the Americas. With the exception of the fragments of Moche, we have no idea what languages were spoken in these regions in the pre-1500 era. Despite the abundant macro-remains testifying to a flourishing agriculture, the absence of linguistic data makes it impossible to determine the relationship between language and subsistence in this region.

In the case of Chibchan in Central America, Wheeler (1972) proposed a reconstruction for “corn/maiz,” while Constenla Umaña (1981, 1990) reconstructs a variety of terms both for agricultural practice and for specific crops. Given the internal diversity of the group, various authors have placed its origin 6–5000 BP, making it one of the earliest New World agricultural expansions. Given the location of Chibchan, it is very tempting to correlate it with the preceramic horizons at the Aguadulce Shelter site in Panama, dated between 7000 and 5000 BP (Piperno et al. 2000). Assemblages extracted from plant milling stones show starch grains identifiable as manioc (Manihot esculenta), yams (Dioscorea spp.) and arrowroot (Maranta arundinacea). The artefacts also contain maize starch, indicating that early horticultural systems in this region were mixtures of root and seed crops.

Waltz and Wheeler (1972) linguistically reconstruct *achiote*, chili, coca, corn, cotton, cultivated clearing, manioc, plantain (although this is evidently a transferred term), sweet potato and tobacco for proto-Tucanoan, a repertoire sufficiently large to suggest that agriculture was essential to its speakers. Price (1978) includes tobacco, manioc and maize as proto-Nambiquara while excluding yam and gourd. Whistler (1977) reconstructed plant and animal names for part of Penutian (in itself a controversial hypothesis) and found nothing suggestive of
agriculture. Mithun (1984:271) specifically discusses the question of whether agriculture can be reconstructed for Iroquoian and concludes that it cannot. However, she notes that agricultural terminology is found in proto-North Iroquoian (i.e. excluding Cherokee).

Mayan

The Mayan languages form a phylum with 69 members spoken in Mexico and Guatemala. Speakers of the geographically defined lowland Mayan languages have brought fame to the family as a whole through their spectacular stone architecture and their writing system. Campbell (1997:165) mentions the agricultural inventory of Mayan specifically and extensive cognate sets can be found in Dienhart (1989). Table 3 shows a list of reconstructions for crops in Proto-Mayan. Apart from crops, many terms relevant for agriculture such as tools and field names can also be reconstructed, as well as specific food types. Kaufman (1976) argues that a date of >4000 BP must be attributed to proto-Maya. Xincan, a language isolate spoken in southern Guatemala, has been shown to have borrowed all its agricultural terminology from Mayan languages (Campbell 1978).

Otomanguean

Otomanguean was spoken between southeast Mexico and Costa Rica although its eastern outliers are now extinct (Swadesh 1960). There are no living Otomanguean languages outside Mexico, but the extinct Subtiaba was formerly spoken in Nicaragua, and its closest relative, Tlapanec, is still spoken in Mexico. Prior to the definition of Otomanguean proper, Longacre and Millon (1961) reconstructed proto-Amuzgo-Mixtecan specifically with a view to identifying

Table 3. Proto-Mayan crop reconstructions (Brown and Wichmann 2004; Søren Wichmann, personal communication). – Reconstrucciones de cultivos Proto Maya (Brown and Wichmann 2004; Søren Wichmann, comunicación personal).

<table>
<thead>
<tr>
<th>Proto-Mayan</th>
<th>Gloss</th>
<th>Proto-Mayan</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>('ix-)-'ii'm</td>
<td>maize</td>
<td>maa'y</td>
<td>tobacco</td>
</tr>
<tr>
<td>'aak'aach'</td>
<td>(female) turkey</td>
<td>matzati'</td>
<td>pineapple</td>
</tr>
<tr>
<td>'ajan</td>
<td>ear of corn</td>
<td>Mulul</td>
<td>jicara, guacal</td>
</tr>
<tr>
<td>'alaq'</td>
<td>domestic animal</td>
<td>nooq'</td>
<td>cotton</td>
</tr>
<tr>
<td>ch'oop</td>
<td>pineapple</td>
<td>'oong</td>
<td>avocado</td>
</tr>
<tr>
<td>'iihk</td>
<td>chili pepper</td>
<td>Palach</td>
<td>turkey</td>
</tr>
<tr>
<td>'iis</td>
<td>sweet potato</td>
<td>Pitaq</td>
<td>corn cob</td>
</tr>
<tr>
<td>'is-k'um</td>
<td>a kind of gourd</td>
<td>q’ohq’</td>
<td>gourd, squash</td>
</tr>
<tr>
<td>'it'aaq</td>
<td>greens, cabbage</td>
<td>Sakiil</td>
<td>squash seed</td>
</tr>
<tr>
<td>johm</td>
<td>jicara, guacal</td>
<td>siik’</td>
<td>cigar, tobacco</td>
</tr>
<tr>
<td>keenaq'</td>
<td>beans</td>
<td>tz’ihn</td>
<td>yucca</td>
</tr>
<tr>
<td>k'uhtz</td>
<td>tobacco</td>
<td>tzoq’</td>
<td>male turkey</td>
</tr>
<tr>
<td>k'u hm</td>
<td>calabash</td>
<td>Tzuh</td>
<td>gourd, squash</td>
</tr>
</tbody>
</table>
the subsistence modes of its speakers. Longacre and Millon (1961) and Rensch (1976) reconstructed a large number of crop names for proto-Otomanguean. The following crops have credible proto-forms: avocado, bean species, cacao, chili, maguey, maize, sweet potato (or *camote*?), squash, cotton and tobacco. In addition, terms that point to processing and cooking are also reconstructed, including maize dough, *metate* (grindstone), oven and *pulque* (maize beer).

Hopkins (1984) has connected the spread of Otomanguean with the evidence for agriculture in the Tehuacán horizon (5000–2300 BC) in the Tehuacán Valley in southeast Mexico (Byers 1967). Its culture history has attracted considerable attention and there are competing reconstructions of its hypothetical past (Josserand et al. 1984). Winter et al. (1984) sound a sceptical note: the scattered direct evidence for early crop domestication in Central America cannot make it certain that agriculture was the engine of the Otomanguean dispersal. Nonetheless, if the reconstructions implying cooking and food preparation are accepted, then a correspondence between true agriculture and the spread of Otomanguean is credible, although the link with the Tehuacán horizon remains to be fully confirmed.

The *Uto-Aztecan* controversy

*Uto-Aztecan* is a family of languages stretching between southern United States and southern Mexico and including the language of the Aztecs. Its southern branches are fully agricultural and seem to have been this way for a considerable period of time. However, speakers of the northern (Numic) branch were foragers at the period of European contact. Earlier arguments (e.g. Fowler 1972) supposed that *Uto-Aztecan* was originally a forager phylum, but Bellwood (1994, 1997, 2001, 2005 and elsewhere) and others (e.g. Hill 2002) have turned this argument on its head and supposed that this *was* an agricultural expansion from Mesoamerica into southwestern United States. They argue for “devolution,” i.e. the return of Numic-speakers back to foraging on the grounds that the archaeological evidence can be interpreted as indicating abandoned maize agriculture. Bellwood and Oxenham (2008) summarise recent developments, which point to the appearance of storage pits and maize cobs by 2100 BC and irrigation canals by 1500 BC (Mabry et al. 2008). In support of this, Hill (2008) has argued that speakers of proto-Kiowa-Tanoan must have borrowed maize vocabulary from Northern *Uto-Aztecan*. Opposed to this, Campbell (2002) argues strongly that the linguistic case is weak and archaeological evidence rather tenuous. An interesting study not cited by these authors is Beals (1932), who surveyed the evidence for agriculture among Northern *Uto-Aztecan* speakers as part of a broader comparative ethnology. Beals concludes that most of these peoples were principally foragers who supplemented their subsistence by occasional maize cropping. In other words, although these populations have technically made the transition to farming, domesticated plants played only a minor role in their diet. Evidently, reading back ethnographic evidence into the remote past is fraught with problems. Nonetheless, it should serve as a caution when arguing for farming as the “engine” of *Uto-Aztecan* expansion even if its speakers practised some cultivation.
Cariban
The Cariban language phylum is widespread across northern South America, from the mouth of the Amazon River to the Colombian Andes and from Maracaibo (Venezuela) to central Brazil. Cariban languages are relatively close to each other, with 20–30 still currently spoken. Villalón (1991) has made a strong case for the Cariban expansion as being essentially “trading and raiding” rather than agricultural although an absence of published reconstructions means that the interpretation of Carib prehistory is rather inconclusive. Meira and Franchetto (2005) show that the Southern groups are quite coherent and there is no argument for a southern origin of Cariban based on diversity.

Arawakan
The Arawakan languages are spoken from the eastern slopes of the central Andes in Peru and Bolivia, southward into Paraguay and northward to the north coast of South America and their extension into the Caribbean is thought to be recent (Aikhenvald 1999). Arawakan is the largest family in the Americas in respect to the number of languages and geographical coverage. It has been the subject of a number of puzzlingly contradictory linguistic reconstructions (e.g. Noble 1965; Matteson 1972; Payne 1991), partly because the affiliation of languages such as Arauan and Harakmbet is unsettled. Payne’s version includes at least some agricultural terms, but the evidence remains ambiguous.

The cultural reconstruction of Arawakan has a long history, beginning with Schmidt (1917). Lathrap (1970, 1973) offered an early synthesis of Arawakan and Oliver (1989) an interpretation of the pottery which inadvertently proposed an upside-down version of the expansion (i.e. from south to north). Williams (2003) has proposed a link between the so-called Timehri petroglyphs and Arawak expansion and Heckenberger (2002) a cultural model that links them to the Barrancoid ceramic complex of the Amazon. Indeed, the range of papers in Hill and Santos-Granero (2002) provides useful updates on various aspects of the Arawakan expansion. However, these models do not cover the whole Arawakan-speaking area. Hornborg (2005) has proposed ditching the traditional migrationist model in favour of modern ethnogenesis. While this may play well in anthropology seminar rooms, it seems very unlikely to be true in the Amazon, a vast region cut through with waterways, providing almost ideal conditions for actual migration, not just the conceptual space for a trading network. Curiously, Hornborg does not reference any linguistic work on Arawakan, something of an omission since the whole concept is a linguistic construct. Suffice it to say that the diversification of Arawakan subgroups points to a classic pattern of language splits, likely to arise from the breakup and migration of individual populations, and shows no features which might characterise it as a trade language. Trade languages typically have extensive loanwords, and fixed phonological forms that indicate constant contact between subgroups, rather than the regular phonological change characteristic of language diversification following geographical shift.
Synthesis

Table 4 shows the New World phyla where agriculture is common synchronically among speakers and where at least some agricultural vocabulary has been reconstructed to the proto-language. None of this should be taken as evidence for prehistory; agricultural terms do not necessarily imply that agriculture was a force for demographic expansion. If, for example, the Arawakan expansion was driven by improved watercraft and a trading ideology, manioc (which reconstructs to proto-Arawakan) would have been carried to each place where the Arawaks settled, without this reflecting demographic pressure.

Summary and conclusion

The pattern of languages in the New World is quite unlike any other continent, for reasons that remain unclear. The large number of isolates clearly points to a date of first settlement considerably earlier than that admitted by the North American archaeological establishment, and more in line with the dates of 20–25,000 BP regularly put forward by linguists and geneticists. The abundant food resources, both aquatic and hunted on the plains and in forests, must have encouraged very rapid migration and may well explain widely dispersed non-agricultural phyla.
such as Algic. The resultant isolation of individual groups may well have accelerated language change, making for a faster loss of mutual inter-comprehensibility.

Unlike parts of the Old World, plant domestication seems not to have been directly associated with demographic increase until a much later period. Plant domestication may have been initiated for variety of reasons, many unconnected with food production. In turn, the argument concerning the relationship between agriculture, demographic growth and the expansion of language phyla seems to be poorly supported by the evidence from the New World. As a consequence, there is also no necessary connection with either the genesis of states and urbanism, although in some cases, such as the Maya, the correlation seems to be a good one. In many areas, agriculture continued to be an occasional resource to supplement a largely foraged diet into historic times. Conversely, large-scale expansions of language phyla occurred among groups with no record of ever practising agriculture, most notably the Na-Dene in North America. This must be connected with either resource availability or, more likely, improved technology making possible more effective exploitation of existing resources. The introduction of the bow and arrow into the New World must have had major consequences for increasing the capacity of plains hunters, although we do not know at what period this occurred (Rogers 1940).

However, with the domestication of key starch staples such as maize or manioc, agriculture does become important in changing social and linguistic patterns (for detailed examples from the history of maize, see Staller et al. [2006]). Such a correlation appears, somewhat imperfectly, with the rise of complex states with powerful religious ideologies, for example in the case of the Maya, the Uto-Aztecs and the Quechua/Aymara. Once ceremonial activity increases and more time and resources are expended on ritual specialists, this imposes a requirement for a more regular and reliable source of starchy staples. Thus there may well be a substantial time gap between the first evidence for domestication and the development of a crop as a major staple. The irony is thus that the sequence implied by the Bellwood/Renfrew model may well be inverted; the imposition of a central ideology stimulates the intensification of agriculture (i.e. a transition from casual cropping to true domestication and phenotypic selection) and demographic growth then follows.

With these caveats, a hypothetical history of the New World leading to the current linguistic mosaic can be reconstructed as follows:

1. Hunters walk and paddle across from Siberia >15,000 BP. They people the Americas at extremely low population densities and probably diffuse initially down the Pacific Coast.
2. Dispersal of forager communities allows for extreme language differentiation leading to preponderance of language isolates.
3. Technological innovations (microblades, bow and arrow, blowpipe) and rich huntable resources lead to large-scale expansions of forager language groups.
Domestication of cultigens begins in scattered locales by 10,000 BP for a variety of purposes, including food, but does not initiate major socioeconomic or linguistic change because of the abundance of foraged resources.

By 5000 BP the development of urbanism and centralised religious ideologies require greater population densities, spurring the domestication or improvements of key starch staples. At this point, certain groups expand significantly and small groups are assimilated.

Continuing low population densities in many regions allowed language barriers to persist and an absence of very large polities meant that language levelling was only of limited importance at the era of European contact.

The pattern of languages in the Americas remains perplexing and unlike any other continent. Part of the difficulties arises from standard archaeological models requiring a late migration from Siberia. A combination of a continuing flow of foraging populations from the Old World, abundant food resources spread over a vast area and simple historical contingency all play a part in explaining the synchronic pattern. If, for example, the Americas had been allowed to continue out of contact with Eurasia for further millennia, it seems possible much larger states would have developed and many more language isolates would have been assimilated. The documented disappearance of languages in the Quechua/Aymara zone is evidence for the nature of this process. The challenge of synthesising archaeology and language into an integrated narrative has begun.

Acknowledgments. This paper has been extracted and developed from a section of a much longer paper covering the peopling of the New World, presented in various forms in Lyon, Uppsala and Canberra. I would like to thank the audiences in these different places for their helpful comments. Thanks to Christian Isendahl, Cecil Brown and Søren Wichmann for going through the paper and correcting various errors.

References


Undercover: *Mimicry* and
Clandestine Identities of the Past

Per Stenborg

**Contact details**
Department of Historical Studies
University of Gothenburg
Box 200
SE-405 30 Gothenburg
Sweden
per.stenborg@archaeology.gu.se

RESUMEN

Encubierto: *Mimetismo e*
identidades clandestinistas en el pasado

Las identidades constituyen componentes fundamentales de la vida social. También constituyen un concepto de mucha ambigüedad. En el presente trabajo se define “identidades” como construcciones sociales, formadas por medio de relaciones y procesos interpersonales. Dos aspectos de identidad son de interés principal. Primero la auto-definición usada por individuos y grupos en la interacción con algún tipo de ambiente. Segundo en este contexto, es el uso de identidades para categorizar, agrupar y sistematizar el ambiente (permitiendo la identificación de otros).

Aquí presentamos un modelo de identidades que se establecen bajo las circunstancias prevalentes en zonas fronterizas con estados coloniales. Se ha prestado una atención particular a los grupos de posiciones intermediarias entre diferentes sistemas sociopolíticos.

El concepto *mimetismo* (concepto prestado de la biología), está usado para explicar algunos casos de informaciones contradictorias acerca de las poblaciones que existieron en zonas fronterizas en los Andes centro-meridionales durante los siglos XVI y XVII. Finalmente, se discuten posibles formas de comprender los esfuerzos actuales por restaurar las identidades pre-coloniales.
Introduction

Identities are fundamental parts of human life; they are a necessity for interpersonal as well as intercultural relations and serve as resources and instruments for coping with a wealth of situations. This paper employs a definition of human identities as social products, created through social processes and relations. Suggesting that existing models of human identity are inapplicable for understanding long-term social processes by the confines of expanding states, an alternative model is outlined below.

Departing from historically known cases in the southern Central Andes, this paper applies a perspective in which these kinds of long-term processes are interpreted as parts of the human struggle with changing socio-political conditions. The variety of meaning associated with the concept “identity,” makes it a difficult term to use with precision. In this paper, mainly two aspects or uses of identity are of immediate interest. The first is that of identity as a self-concept used by individuals or groups in their own interaction within some kind of environment. This includes self-concept and self definitions that may serve as bases for someone’s claim to rights and authority, acceptance of duties, etc. A second aspect of identities is their use for categorizing, grouping and placing others into some kind of system. In many ways our actions are directed and influenced by how we expect others to be and act—our ideas and prejudices about individuals belonging to certain categories of people. In dealing with others, such categorizations serve as guidelines and simplify numerous interpersonal situations. There is an inherent conflict between our self-concepts and others’ conceptions of us. Hence, there will always be a gap between these perceptions. The width of the gap and the gravity of the conflict are nevertheless related to socio-political situations and contexts (e.g., it is likely to increase in times of rapid change and political upheaval). In addition, this paper attempts to relate the discussion of historical examples to contemporary issues, such as the recognition of the rights of indigenous and minority populations. The European conquest of South America had disastrous consequences for Amerindian populations in all parts of the continent. Hence, there are good reasons for studies of contact and colonial periods to highlight the unrighteousness, the abuse and the cruelty of colonization. This paper will, however, focus on a particular aspect related to various forms of colonization and conquest: How such events and processes may alter the pre-conditions for construction of group identities and the consequences such changes will have. Although relations of power undeniably dominated the course of events during episodes such as the Inca expansion or the European conquest, any analysis halting at such an assertion will fail to provide a thorough account of the socio-cultural processes involved.

The importance of perceiving populations marginalized by colonialism as agents possessing wills, intentions and concerns of their own, not as mere subservient, subordinated to the wills and power of the colonizer, is stressed. It is argued that a concealment of one’s cultural or ethnic identity must not imply
the abandonment of former identities, but might—conversely—involve an attempt to avoid deeper alterations concerning identity and self-concept (or “self” in a more psychoanalytical vocabulary). The concept of mimicry is employed as a metaphor for the sheltering of real or original identities beneath the cover of imitated and simulated ones, thus referring to the use of this term in biology. Alternations between seemingly incompatible identities and “credentials” may be one way of coping with serious threats against identity and self-definition. This goes far beyond the basic observation that social and ethnic designations are highly conditioned by the socio-political setting in which they are applied or claimed.

Rather than perceiving Amerindian societies as passive recipients of external influences and demands, the aim here is to regard them as societies possessing the innate ability for change, development and reformation.

The colonizer’s definitions and descriptions of indigenous cultures and ethnic contexts tend to lump these together within broad ethnic, cultural or political designations (for instance a term such as “Indian”). In many cases it was the group with which the colonizers had the greatest direct contact (often assuming the function as “middle-men” between the colonizers and other groups) which served as the definition—or norm—for the population within a much wider area. In this manner, colonialism came to obscure the differences that existed between different indigenous populations. It is nevertheless important to remember that dynamic qualities are found in practically all social and ethnic constructions. Identities are constructed and communicated in relation to other beings and groups. Significant changes regarding the relations to other are therefore likely to affect the outcome of such “identity work” (i.e. the content of identities, as well as in the ways identities are presented). Conquest and colonization necessitate re-evaluations of individuals’ and groups’ positions in and relations to the surrounding world. As the status and conception of a collective change, the implications of belonging to that collective will also change.

The Quechua in Santiago del Estero

The present and historically known distribution of languages of the so-called Quechua language complex relates to several historical processes and events. Today various languages referred to as “Peripheral Quechua” (also termed Kechua or Quichua) are found particularly in the outskirts of the area once covered by the Inca State. In Northwestern Argentina, the Santiago del Estero Quechua language is spoken by approximately 150,000 people (Kaufman 1994:65), all of them bilingual.

Attempts to explain the existence of a Quechua-speaking enclave in Santiago del Estero have focused on three historical circumstances. The first is the Inca expansion of the late 15th and early 16th centuries. Chroniclers of the 16th century mention “Indians dressed like those of Peru” in the Tucumán area (Lorandi 1984:323; see also Stenborg 2002:253). This piece of information indicates that,
although the chroniclers could relate these populations to those in the central Inca territory, they did not identify them as “being Inca.” The existence of categories such as *incas de privilegio* (cf. Bauer 1992:31), suggest that groups loyal to the Inca authorities may have developed Incanized identities. González and Pérez (2000:133n) called attention to the description of Quechua as a lingua franca in Northwestern Argentina in the 17th century, as well as to the preservation of local native languages (e.g., Kakana). An interesting claim is that males seem to have spoken and understood Quechua better than females.

The second historical explanation pays attention to the fact that in the 17th century, Quechua—through decisions by the Council in Lima—became one of four Native languages accepted as mission languages (the other three were Nahuatl in Mexico, Guarani in Paraguay and Aymara on the Bolivian Altiplano). None of the Native languages of the northwest Argentinean territory (e.g., Kakana, Tonocoté and Lule) were accepted for evangelization (Granda 2002:41; Levillier 1946:9; Rosenzvaig 1997).

A third explanation is the Spanish use of Quechua-speakers as guides and servants during the time of exploration and early settlement in Northwestern Argentina (Granda 2002:41). Archaeological evidence suggests that an intensification of processes of cultural assimilation occurred during early post-contact times (Stenborg 2002).

While acknowledging the validity of these factors I would like to outline a model of explanation that ascribes a stronger importance to local social strategies. Northwestern Argentina was affected by Inca colonialism during a late stage in the expansion of the state. The geographical extension of the Inca state and the degree to which populations within its borders were integrated into the state system are still controversial issues. In general terms, however, most scholars seem to agree with Rowe (1946) that the southwestern border of Tawantinsuyu roughly coincided with the boundary between the Andean highlands and the lowlands further east. The area of present Santiago del Estero, situated in the lowlands east of the Andes, would thus not have been directly subjected to Inca colonization.

Natural borders between “eco-regions” are likely to become the loci of interaction and exchange between different socioeconomic systems and groups. In Northwestern Argentina such patterns may have emerged during the Archaic (500–200 BC) and Early Formative (200 BC – AD 700) periods (Núñez Regueiro 1978; Núñez Regueiro and Tartusi 1999; Tartusi and Núñez Regueiro 1993, 2003). Communication across borders separating different ecological regions—acknowledged as of critical importance for the economy in later prehistory (e.g., Murra 1972)—is also likely to have been a driving force for socio-cultural development in a long term perspective.

If the claim that the male population of Northwestern Argentina spoke Quechua better than females by the time of European contact is correct, this may be a result of a cultural order where men managed the main part of external relations.
The South Central Andes at the time of European contact

The area of present Northwestern Argentina was at the time of early European contact inhabited by a variety of Amerindian populations. In the valley region of the present provinces of Catamarca, Tucumán and Salta (especially the Calchaquí Valleys), Spanish sources frequently mention a population called Diaguitas associated with a language called Kakana (now extinct). East of this region lived lowland populations, among them the Lules and the Tonoctés.

In an important work Lorandi (1980:151–160) pointed to the often vague character of “ethnic” designations in 16th and 17th century sources. Concerning the northern part of Northwestern Argentina (presumably today’s provinces of Salta and Jujuy), early Spanish sources mention a hostile Native population referred to as the “Juríes.” Over time an interesting shift concerning the geographic associations and general description of the Juríes are found in the written record. The earliest source (Fernández de Oviedo y Valdés 1885:263 [1549]) describes the Juríes as a raiding population. These Juríes were held responsible for the depopulation of vast regions:

And it should be known that from the borders of Collao and Pariah and Aulaga, Tupissa and Xibixuy to the Straits of Magellan, there is (or goes) a very rough mountain range of sierra, of unknown origins, uninhabitable, and in some parts of which (specially concerning the mentioned provinces) began to assemble some thieves and robbers, whose children grew up and increased there. /.../ They left no safe secluded road, nor a night to sleep in calmness to such a degree that it became imperative for the miserable afflicted that remained in the villages to abandon their mother country and the nature of their homes and depopulate the land. /.../ antique buildings of populations can be seen ruined and destroyed by the juríes already mentioned of the mountain ranges of the sierras, who assaulted them and devastated all (Fernández Oviedo and Valdés 1885:263–264 [1549]; translation by the author).

From this statement alone one can get the impression that the term Juríes referred to a social class rather than an ethnic one. It appears clear, however, that the Juríes were known already by the Incas (Stenborg 2002:229) and existed as a recognized
entity also in pre-Columbian times. Lorandi (1980:152) noted that the accounts of Diego Almagro’s expedition (1535–36) through the southern part of the former Inca State also mention the presence of Native groups that were newcomers (Mossos in Quechua) according to older Native populations. This may explain why later documents associate the Juríes with the lowland areas of present-day Santiago del Estero, eastern Tucumán, Catamarca and Salta. It appears that the Juríes, or at least a part of the Jurí population, by the time of Spanish contact were residing in the Andean highlands (Quebrada de Humahuaca, the Jujuy Valley and the Salta Valley), some 250 km northwest of their known homelands in the lowlands of present Northern Argentina. Juríes are also mentioned in connection with areas even further north, for instance Tarija in present-day Bolivia. Lorandi (1980) further notes a tendency on the part of the Europeans to confound the Juríes with other “fierce populations” encountered in the southern Andean highlands during the 16th century, among them the Mojos-Mojos in Cochabamba, Bolivia.¹ There are good reasons to assume that the attraction of the riches of the Inca system, often transported along the roads of the Andes, was a contributory cause behind the emergence of this situation.

Referring to the first foundation of San Miguel de Tucumán at Ybatin in 1565 (San Miguel de Tucumán was moved to its present location, northeast of Ybatin in 1685), Pacheco (1885 [1569?]) stated that:

Las provincias de Tucuman, Juries y Diaguitas han tenido muchos y diversos gobernadores de que será muy largo de dar relación del subcesco de cada uno dellos, y esta en otra daré á V. S. a particular quenta.

Hay en estas provincias tres ciudades pobladas por diversos gobernadores, las cuales son Santiago del Estero en los Juries y San Miguel de Tucuman, que participa de servicio de Diaguita y confines de Juríes, y la ciudad de Nuestra Señora de Talavera, que también son indios Juríes, aunque diferentes de lengua y en alguna manera en la nación y vivir se diferencian en el traje (Pacheco 1885:137 [1569?]; italics in original)

The provinces of Tucuman, Juries and Diaguitas have had many and diverse governors, of whom it would be very long to give an account of their succession, and this I will give Your Highness in another particular statement.

In these provinces there are three cities ruled by diverse governors: which are Santiago del Estero in the Juríes and San Miguel de Tucuman, under which serve the Diaguita and the borders of Juríes, and the city of Nuestra Señora de Talavera, which are also inhabited by Indians Juríes; although different in language and in some

¹ Lorandi (1980:153) indicates the possibility that these Mojos-Mojos were groups with their origin in the tropical rainforest region, perhaps pertaining to the Arawak-Mapurean language stock. According to Kaufman (1994:59) the Moho or Mojo linguistic group pertains to the southern outlier branch of the southern division of the Arawak-Mapurean linguistic stock. Some small languages that by the time of European contact appeared interspersed with highland languages—such as the Uru and Chipaya languages in the Aymara area of present Bolivia—have by some been classified as Arawakean, while others reject any relationship between the Uru and Chipaya or with any of the large language stocks (Kaufman 1994:65).
way in their origins and lifestyle, they are also different concerning their clothing (Pacheco 1885:137 [1569?]; translation by the author).

Pacheco’s use of the terms Juríes and Diaguitas is somewhat confusing. In the case of the Juríes, the geographical and ethnic applications of the term seem out of accord as neither language nor culture are held to have united the populations referred to by this term.

The term Juríes is more rarely occurring in later documents. In some cases the Juríes are assumed to allude to a population later referred to as Tonocotés (the term Tonocoté is first mentioned in 1574). The written record also associates a population called Lule with the lowland areas of Northwestern Argentina. The relation between the Lules and the Tonocotés is not clear since the term Lule-Tonocoté also appears in later documents. In most cases, however, the Tonocotés were described as a sedentary population practicing a kind of agriculture resembling the ridged or raised field agriculture of for example Llanos de Mojos, while the Lules were characterized as a semi-sedentary or even nomadic group of hunter-gatherers (e.g., Bibar [1558] quoted in Berberian 1987:178). If the terms Lule and Tonocoté are designations for the groups earlier referred to as Juríes, it may also explain some of the inconsistencies concerning the information on the language and culture of the Juríes. Some authors, such as Rydén (1936) and Willey (1946), have discussed the relationship between the non-farming Lule-Tonocotés mentioned by 18th century-sources and the group of agriculturists referred to as Tonocotés in the documents from the contact-period, arguing that certain ethnohistorical information speaks against the assumption that the two terms refer to one and the same people. The suggestion that abandonment of agrarian subsistence in this case was a consequence of colonial exposure seems, however, quite reasonable (Noli 1999:455; Schreiter 1934:56). The Lule-Tonocotés may well have represented, as the name would suggest, the fusion of two formerly separate groups associated with different economies—the farming Tonocotés and the non-farming Lules.

Somewhat at odds, Bibar [1558] made a distinction between a sedentary agrarian population referred to as Juríes (Xuries) and the non-cultivating Lules (Ules):

Siembran estos indios de esta manera: que desque viene el río fuera de madre en invierno, sale dos o tres leguas de madre, y depues se torna a su ser. Queda toda esta tierra empantanada, y allí siembra. Y acontece estar un maíz para coger e otro en bersa y otro en leche./.../ Tienen los pueblos cercados de una muy fuerte palizada, a causa de una gente comarca que se dicen “Ules.” Y esta gente no siembran, sino sustentanse de algarrobas y de chañares y de caza que tienen mucha. Son dados a ladroncios, y vienenles a hurtar las comedias ques maíz y frísoles y zapallos y maní. Y estos Xuries los temen (Bibar [1558] quoted in Berberian 1987:178).

These Indians cultivate in this way: in the winter, when the river overflows two or three leguas and afterwards returns to its river-bed, all this soil is left flooded, and there they sow. And there grows a maize to harvest, another one green and one as sprouting. /.../ The villages are surrounded by a very strong wooden palisade be-
cause of some people of this region called “Ules.” And this people do not cultivate, but live on algarobo and chañar and much hunting. They are inclined to stealing and come to steal the food, which is maize and beans and pumpkins and peanuts. And these Xuries fear them (Bibar [1558] quoted in Berberian 1987:178; translation by the author).

Comparing with other sources it must be concluded that Bibar employed the term Juríes with reference to the lowland population called Tonocotés by other sources, while the characterisation of the Lules appears to be in accordance with earlier description of the Juríes. Quite probably then, the term Juríes was originally used to designate the lowland populations (including those later called Tonocotés, Lules and possibly others as well) in general, while at a somewhat later stage distinctions between “lifestyles” (in particular concerning the degree of sedentariness and forms of subsistence) were being recognized by the Europeans, entailing a somewhat refined terminology. The name Juríes was probably derived from the Quechua word for the Ñandu Rhea americana, “Suri,” suggesting it may have been a term used by the Incas in referring to populations by the southeastern border of the state, rather than an endonym. If Fernández de Oviedo’s and Valdés’ proposition that a lowland population such as the Juríes were present in the Andean highlands in the early 16th century does not simply stem from a confusion of terms, then this presence was most likely related to the expansion and subsequent collapse of the Inca system. In trade and other dealings with the Incas, the ability to communicate in Quechua must have been a great advantage. It seems therefore quite possible that the existence of an exclave of Quechua speakers in present Santiago del Estéro may be an outcome of events that presupposed an “external” interest in the goods and resources offered by the state system, besides the wielding of power by colonizers and their representatives. The alleged presence of Juríes in the highlands may have been a manifestation of such interest. Knowledge of Quechua may have had considerable economic significance for autonomous populations maintaining themselves beyond state control.

Lost languages—lost identities?

As a consequence of the disappearance of the Tonocoté language, linguistic research is of limited assistance for establishing the historical relationships between the populations mentioned by historical sources. We may note that while Ottonello and Lorandí (1987) include the Tonocotés (with Mataco, Mataguayo, Véjoz, Guisnay, Chorote, Maká, Chulupí, Mbalá and Matará) in the Mataco-Mataguayo linguistic family, Campbell (1997) makes no clear distinction between Tonocoté and Lule (see below), although the latter language forms a proper linguistic unit together with the Vilela language. Campbell thus probably refers to the Tonocoté language as described by Machoni de Cerdeña (1877 [1732]), who studied the so-called Lule-Tonocoté language of the 18th century. By contrast,
Storni (1946) regards the Tonocoté (or Toconoté) as a Quechua-language. The research concerning the linguistic affiliation of the Tonocotés thereby elucidates the lack of substantial information about this and many other Native populations of pre-colonial Northwestern Argentina. In the case of the Chané population, by some authors associated with the Tonocotés, the process of change apparently involved the adoption of the Guaraní language. The importance of acknowledging that bi- and multilingualism may have been a quite common phenomenon in prehistoric times should be emphasized (Trask 1996).

Information concerning the Lules, the other principal population of lowland Tucumán, Salta and western Santiago del Estero mentioned by early colonial sources is by no means less complicated. The Lules have on linguistic basis often been associated with the Vilelas, who lived further northeast (in northeastern Santiago del Estero and Chaco). There is, however, more substantial knowledge on the Lule language than the languages discussed above. Jesuit father Antonio Machoni de Cerdeña compiled data on the vocabulary and art of the Lules (or Lules-Tonocotés) of the early 18th century (Machoni de Cerdeña 1877 [1732]). The Lules and Vilelas are considered to have been culturally related but linguistically divided. The motive for treating the Lules and Vilelas as a unit is nevertheless linguistic; their languages are the only members of the Lule-Vilela linguistic stock. The Lules, as well as the Vilelas, have been divided into numerous sub-groups (Lozano 1873 [1745]:94). A report claiming that the Lule language was still spoken by five families in 1981 (Campbell 1997:194) is clearly a mistake; other authors agree that the Lule language became extinct by the late 18th century. It has been suggested that the Lules may formerly have occupied a region further north but were pushed southwards by the expanding Matacos. Somewhat analogous, then, to the situation of some Arawak-speaking tribes further north (e.g., the Piros and the Campa/Matsigenca), the Lules may have occupied a position between nomadic and semi-sedentary populations of the lowlands to the east and north (e.g., the Mocovíes and the Matacos) and more sedentary populations of the western lowlands (e.g., the Tonocotés and the Sanavirónes) and the highlands (the Diaguitas). Their lifestyle, therefore, would have reflected their adaptation to this intermediary situation. It is apparent that the term “Lules” covered a relatively heterogeneous body of people:

---

2 Concerning the early colonial period, the Tonocotés have sometimes been divided into two main groups. The first group has been associated with the Chané, considered to have been a population originally belonging to the Arawak/Mapurean linguistic stock. The populations belonging to the other main group of the Tonocotés are believed to have adopted Quechu as their mother tongue and to have been allies of the Incas (see Storni 1946:471–472). Chané presumably belonged to an Arawak-speaking branch reaching present-day Bolivia and Argentina about 2300 BP, settling in Gran Chaco and parts of the present Argentine provinces of Salta and Jujuy. By the 14th and 15th centuries, Guaraní-speaking populations (referred to as Chiriguanos by the Incas) are believed to have settled in the same region, attaching the “older” Arawak-speaking population (called Chané by the Chiriguanos) to their socio-cultural system. Eventually, the Chiriguano-Chané (Ava-Guaraní) relationship evolved into a shared cultural hybrid (Ottonello and Lorandi 1987:112).

3 It is possible that Campbell in this note has confused the Lule and Vilela languages; the latter is still being spoken by a few families in the Chaco province, Argentina.
...la nación que llaman Lules, esparcida por diversas regiones como alárabes, sin casa ni heredades, pero tantos y tan guerreros ... con ser una misma gente toda, tiene diversas lenguas, porque no todos residen en una misma tierra (Bárzana 1885:LIV [1594]).

...the nation they call Lules, scattered among diverse regions like alárabes, without houses or belongings, but so many and so warlike ... being all the same people, they have diverse languages, because all do not reside on one sole ground (Bárzana 1885:LIV [1594]; translation by the author).

This last piece of information may indicate that the Lules tended to adopt certain traits (in this case primarily language) from their various neighbouring populations, which may also partly explain how a hybrid culture (Lule-Tonocoté), emerged within a century-and-a-half of Spanish colonial rule. Similar capabilities of absorbing particular aspects of other cultures without losing cultural identity are frequently attributed to Amazonian populations (e.g., Gow 2002; Heckenberger 1996; Schmidt 1917; Viveiros de Castro 1992). One situation, thus, that may be predicted to require adaptive skills from leaders—as well as from the population in general—is that of occupying an intermediary position between politically or economically strong neighbours. Focusing the role of particular individuals, Metcalf (2005) have stressed the importance of “go-betweens” during the colonization of Brazil. In this context I would like to introduce the concept of mimicry. It is reasonable to assume that mimicked cultural identities may lead an outside observer (e.g., a chronicler, public servant or explorer) to misapprehend the cultural affiliation of a population in a manner somewhat analogous to how a predator is deceived by the protective mimicry (the camouflage) of a prey. Both the “hidden” and the mimicked identity may, however, be considered to be “true” (the hidden identity as a clandestine and secret identity, and the mimicked identity as that of a person’s or a group’s self-defined, “official,” or “outward,” identity). In another context (Stenborg 1998), I have discussed some of the reasons why quite contradictory conclusions concerning the ethnic and cultural identities of past people may arise from analysing different kinds of information (e.g., interpretations based on written historical records in comparison with those based on the material archaeological record). The existence of “stratified” identities would be an additional explanation for the observation that one and the same population may be perceived very differently depending on what kind of sources we use. It is also a question not only of our perceptions, but also of our interpretations. A common feature in border areas (in many cases used as diagnostic elements for reconstructing the location of the border itself) is the appearance of material forms displaying features of both the local and the colonizing culture. In Northwestern Argentina this phenomenon is represented by pottery styles such as Casa Morada Polychrome and Belén Inca, both combining Inca and local traits, and Caspincango pottery, which apart from Inca associations also has been interpreted as an imitation of 16th century European metalwork (Serrano 1958). If we turn the
orthodox perspective that interprets the distribution of Inca traits in pottery in terms of administrative decrees, influences, “incanization” or acculturation upside down, it is possible to suggest that they are also materializations of policies employed by the populations living in the border zones and their leadership.

Gow’s discussion of the social relations between the Piro and Campa/Matsigenca in southwestern Amazonia (Gow 2002:165) suggests that material culture, language and transmission of ethnic identity may follow quite dissimilar trajectories within the frames of the same intercultural processes. Gow, citing Viveiros de Castro (1992), notes that group identities may be founded on (often hostile) relations to other groups, rather than on an inherent social order. Thus, the adoption of numerous cultural traits must not be accompanied by the merging of identities and the dissolution of borders. Across the Amazon, somewhat similar conditions accompanied the formation, in historic times, of the Xinguano multi-cultural complex (Heckenberger 1996:252–267).

Research on Old World states and empires, notably the Roman Empire, has increasingly come to emphasize the role of local populations and elites for the shaping of the relationship and interaction between the state and local populations (e.g., Blagg and Millet 1990:3). Although this may seem a banal statement, it is often overlooked in the debate on the Inca State. It is important to recall that processes occurring outside an area under state control essentially are local processes, depending on the conditions and the relations emerging in that particular area (e.g., Bloemers 1990; Trow 1990). Moreover, as I have discussed elsewhere (Stenborg 2002:72–76), traits of material culture and architectural elements often spread into an area to be conquered well before the actual territorial expansion. This process, probably simplifying and increasing the speed of later political and economic expansion—admittedly not a border phenomenon in any absolute sense—displays the active role of local populations and elites in the diffusion of cultural traits and in the so-called “hybridization” of culture.

While European and Inca agencies alike have had strong impact upon the shaping of the written record of the 16th and 17th centuries, other parties are well-nigh invisible. Archaeologists working with corresponding time-periods should be keen not to repeat—or increase—the imbalance underlying the representations of the written record. It is a vital task for archaeologists to counteract and, as far as it is possible, rectify this bias.

From invisible to extinct: approaches to non-European culture

While we must be careful not to underestimate the disastrous outcomes of European intervention in the Americas, there are some dangers involved in the “catastrophism” approach that need critical examination. Todorov (1982) and others (e.g., Thomas 1994) have revealed the apparent denial of Amerindian cultural
qualities reflected in the writings of early European colonial sources. The often paradoxical accounts of cultural, political and religious properties of the populations met with by the European explorers, conquerors and missionaries leave the reader yearning for a more unbiased description of the peoples and societies populating the Americas by the time of European arrival. An implicit consequence of the “catastrophism” approach is, however, that neither modern Indian culture, nor the most discerning historical account, can serve as anything close to reliable sources concerning pre-contact conditions. Hence, “post-colonial” reasoning runs the risk of producing its own version of Eurocentrism. If Indian cultures either vanished or changed beyond recognition as a consequence of European-Native interaction, then, apart from some sketchy information derived from the fragmented archaeological record, there is little hope of improving our knowledge of them. One danger of this position is that it might result in a continued denial of the qualities of Native American culture (e.g., “albeit the populations of Native America did indeed once possess cultures this makes little difference today, since, due to their disappearance and change, we have missed the chance of ever getting to know them”).

An alternative stance is to suggest that—even in cases where ethnic and linguistic continuity seem low—cultural traits are likely to survive, in many cases integrated into new cultural settings. Restall (2003:121) discusses the satiric character of 16th century festivals in several parts of Latin America (the most famous case being the 1539 Corpus Christi celebration in Mexico). This kind of phenomena displays a cultural ability to handle the difficult experience of European conquest and its consequences.

In cases where “tradition” is being consciously repressed by the Native populations themselves the difficulties of completely incorporating a foreign “model of being” becomes evident. Roosens (1989:109) noted that, albeit having internalized anti-Indian postures, the Aymaras of Turco yet feel that “the world of the devil, of pre-Columbian Indian culture, still lives in them to a degree, and thus they are not yet completely what they should be.” In the same context, it might be worth noting that the integration of “foreign” elements may have quite remarkable consequences. Thus, in Roosen’s view, the Chipaya’s (Uru) adoptions of elements of Aymaran and Spanish culture have implied a survival of cultural traits that no longer form part of neither Aymaran nor Spanish-American culture (Roosens 1989:110–111). The point that what we usually term “culture” (or sometimes “tradition”) is the outcome of numerous successive reinterpretations and re-mouldings, rather than a definite “content” passed through generations (i.e. “enculturation”), is developed below. The low self-esteem held by the Aymaras of Turco may be seen as a sad evidence of the human capacity to internalize the attitude of oppressors.

These are some of the reasons why the dispersion of “cultural traits” such as, norms, markers of fellowship and solidarity (including domains of material culture) and even language associated with a dominant population cannot adequately be defined as the outcome of the interests and strategies of that population alone.
To a certain extent these phenomena involve considerations and strategies on the part of the “receiving” populations. Relations of power obviously trigger these developments, but their unfolding also reflects the agency of populations of the border regions and their struggle to cope with the prevailing situation.

The case of the Urus is worth further consideration. The Urus are mentioned in written sources from the late 16th century and are usually described as poor, primitive and generally incompetent (Orlove 1991, 2002; Sáenz 2006; Wachtel 1986, 1990). They are associated with an aquatic lifestyle and economy, including fishing, hunting birds and other animals that live in the water-districts of lakes Titicaca and Poopó, as well as gathering wild plants. This “characterization” of the Urus is also frequently contrasted with neighbouring populations, in particular the Aymaras, who were herders and farmers and are generally described as far more developed, “civilized” and reasonable (Sáenz 2006:48). The Urus, presumably because of their alleged poverty and “incompetence,” were to a great extent exempted from obligations such as taxpaying and military service in the Inca state as well as in the later Spanish colonial system (Murúa 1946 [1590]). The main reason for this appears to have been considerations of the difficult economic situation of most Uru populations.4

During the Chaco War between Bolivia and Paraguay in the 1930s, “non Uru-people” are said to have attempted to convince and even bribe Uru leaders to include them in the Uru collective, whereby they would escape the obligation to serve in the war (Sáenz 2006:61). The advantage of being identified as Uru in that particular situation is self-evident.

A model for the social processes by the confines of expanding states

This model focuses on the conflicting interests among populations situated by the borders of expanding economic and political systems. On the one hand this kind of system is likely to attract populations living near its outer limits (indeed this interest was manifested by the Guaraní penetration into southeastern Inca territories in the early 16th century (Alconini 2004; Means 1917; Métraux 1948a, 1948b; Nordenskiöld 1917; Parejas Moreno 1979; Saignes 1985:27). On the other hand it threatens the independence, identity and lifestyle of autonomous populations. Seen from the periphery, the Inca or any other large scale economic system, constitutes a phenomenon that combines the danger of subjugation and assimilation with the prospects of wealth (at least for some; cf. Spalding 1984:79). Native

4 In his Descripción breve de Toda la Tierra del Perú, Tucumán, Rio de La Plata y Chile, first published in 1605, Reginaldo de Lizárraga depicted a meeting with a person defining himself as “Uru.” This encounter took place in Arequipa and the Uru, who according to Lizárraga was serving in a Tambo (a kind of resting station along the Inca road), asked Lizárraga to buy him some bread. Lizárraga told him to buy his own bread, but got the reply that: “I will not be allowed any bread because they (or the person in charge) know me: I am Uru” (Lizárraga 1909:539). Apparently, Uru identity involved an extremely low, almost stigmatized, social position.
societies confronted by expanding states are, according to Ferguson and Whitehead (1992:17), left with three main alternatives: to resist conquest, to collaborate or to escape. In many cases, however, strategies are likely to combine more than one of these options. What looks like collaboration or submission, seen in the perspective of the State, may, from the local point of view constitute a strategy of resistance. This, again, may be thought of as corresponding to the mimicry phenomenon described in evolutionary biology.

A group’s position vis-à-vis the border (a “border” that most likely shows only limited stability—partly because, in most cases, the border is political and hegemonic rather than territorial) will to a great extent determine what strategies will be available to them. The process of conquest comprehends various stages of integration: for instance indirect contact, direct contact, encapsulation and incorporation (Ferguson and Whitehead 1992:7). Therefore, strategies and positioning are likely to alter through time. Gradual withdrawal from advancing colonizers is a likely response to the threat of being subjugated. Bearing this in mind, it is still useful to compare the situation on one side of the border with that on the other side.

Somehow ending up inside the state border, the desire to defend one’s identity from dissolving may take various forms. In situations where diversification is considered to threaten state interests the expression of such differences are likely to result in repression (for instance in the case of young expanding states), resorting to mimicking is a logical response, or strategy. Interpreted in terms of negotiation, it may on the surface look like an acceptance to adapt and integrate. As a strategy, however, this imitation may actually serve to protect the identity and to avoid deeper alteration. As a strategy of defence it offers some protection against autonomous neighbouring populations by signalling ties to a powerful authority. Mimicry, according to this model, implies the intentional echoing of certain socio-cultural traits for the purpose of concealing that which is to be protected, viz. the perceived internal, or “proper,” identity or “self.” Thus, the mimicry would be designed to protect the identity (or self) from dangerous enemies by displaying attributes of something that the enemy feared (in biology known as Batesian mimicry, after Bates [1862]). Alternatively, mimicry may delude the enemy into recognizing the mimic as an expression of support and attachment. In the short run the hidden identity may, at least by the subject, be easily separated from the mimic. In the long run a development towards a hybrid culture and cultural identity is likely to occur, unless the conditions that brought about the need for protection vanishes. These processes certainly exceeds the boundaries between different dimensions of identity (e.g., individual and collective identities), elucidating the usefulness of considering all human identities as fundamentally different aspects and expressions of our existential needs of identification, affiliation and at the same time of individuality and uniqueness (cf., Stier 1998). As identities are dependent upon interpersonal and intergroup interplay, differences between internal and external esteems and definitions are always present.
Such differences become greater and often more problematic during periods of upheaval and unrest.

Outside the border, a position predominantly characterized by indirect and direct contact with the state, freedom of choice concerning how to cope with the situation is far greater. The use of *mimicry* may here principally aim at receiving a share of the wealth circulating inside the system. An intermediary position between the state and other populations situated outside the state border is often highly beneficial. By adopting certain attributes of the dominating culture of the state, usually possessing a high socio-political status, various advantages may be obtained. Being associated with political (or mythical) power is usually an advantage. In order to establish and maintain a middleman position mastery of language as well as of cultural codes and systems of meaning are vital qualities. Notwithstanding the use of identities in communication with a colonizer may, as shown by the Uru example, involve claims of affiliation with other ethnic groups, rather than implying the mimicking of traits of the colonizer. An example from Northwestern Argentina is that of the Cafayates who resided in the Quilmes area. The Cafayates probably moved to the Quilmes area from a region further south (presently the province of Catamarca) to elude Spanish conquest. They thereby came under the protection of the politically powerful Quilmes population, and integrated with the Quilmes through intermarriage. This area was successfully defended against Spanish conquest for 130 years. Following the eventual Spanish defeat of the Quilmes, the Cafayates stressed their “foreign” origin, in all probability to avoid the punishment that awaited the Quilmes population due to their persistent resistance (Lorandi and Boixadós 1989:324–329).

Lacan (1979) defines *mimicry* as travesty, camouflage and intimidation. He further underlined the difference between *mimicry* and adaptation, arguing that while adaptation adjusts the organism to environmental demands, *mimicry* does not. It seems reasonable to understand biological *mimicry* as a particular form of adaptation, applicable to particular (and changing) situations (e.g., situations involving certain threats, such as that from particular predators), rather than to the environment in general. More important was Lacan’s observation that *mimicry* exhibits something, in the sense that it is distinct from what may be called “itself” that is being camouflaged by it. In line with the general argument here, this description of *mimicry* approaches the notion of a “false” external self, designed as a protection against a hostile environment.

---

5 In biology, mimicry phenomena are divided into, among other, (e.g. Pasteur 1982):
A. *Batesian mimicry*, in which the mimic resembles a model that is poisonous or otherwise dangerous or unpleasant (to eat) and has a warning coloration.
B. *Mullerian mimicry*, in which two or more poisonous or dangerous species have similar pattern in order to reinforce the warning.
C. Various other types where the mimicry is not for protection; for instance it may allow the mimic to prey or parasite on the model (termed aggressive mimicry).
Resurrected cultures and identities

Today, the political trend towards increasing recognition of the rights of autochthonous populations seems to persuade and encourage many native groups to reconnect to their ethno-cultural origins. “Subaltern,” repressed and invisibilized populations may thereby regain status and recognition. As a consequence of centuries of oppression, the cultural and ethnic “contents,” their components and their meanings have—to a greater or lesser extent—to be reconstructed from existing historical and anthropological knowledge. Identities may, in the course of time, become extinct, be resurrected, reinterpreted or recycled. This process may not differ so much from other “identity-work” as may appear at first sight—any establishment and maintenance of identities based on a common past involves, in itself, a constant remodelling of this past and a reinterpretation of its “truths” and implications. Moreover, the content and implication of any cultural or ethnic identity is bound to change over time. Therefore, questionings of the authenticity of resurrected identities cannot be based on demands of great continuity or extreme conservatism. Such an argument would imply an understanding of culture as cast in an unchangeable mould, rather than as a dynamic construction that is constantly being redefined and remodeled (see Stenborg 2002:6–16, 250–256). Traditions and “cultural manuals” are, thus, reinterpreted and rewritten through history, their content—partially or entirely—accepted, “modernized” or refuted (see also Fletcher 1977, 1984).

Regarding identities as constructions is not the same as to deny their legitimacy. Identities constitute prerequisites for acting and communicating, and as such are vital for human life. If we recognize culture and ethnic identity as social products, developed through contacts, communication and socioeconomic processes, then any attempt to capture “the essence” of a culture or a purely ethnic phenomenon is likely end up with an empty cage. Although ethnic characters and culture may appear as “facts” or realities, they are social constructions (albeit constructions with concrete and material outcomes). They have been (and continue to be) created, transformed and reinterpreted as part of socio-cultural processes. The importance that we attach to cultural and ethnic identity is only intelligible as an expression of our need of identity, self-esteem, survival and belonging. It is also this interlacement with some of our fundamental needs that makes our relation to questions of identity all the much more complex and delicate, also in academic contexts.

The long-term perspective presented above has some interesting implications for the interpretation of contemporary historical developments. Recognition of indigenous rights can be comprehended as a removal of the conditions that once brought about the need of protecting identity. However, the removal of the threat will not result in a recreation of the pre-colonial situation, or a reversal of colonial history. Reestablishing clandestine identity is certainly not simply a question of putting off one’s armor. Instead, the post-colonial situation is something new, unlike any colonial and pre-colonial situation. The colonized and the colonizer
have undergone changes and the establishment of new forms of coexistence will, in turn, demand further redefinition of identities. The new setting also differs significantly from any pre-colonial or colonial settings.

As an additional consequence of repression, persecution and attempts to integrate indigenous populations in the national states certain identities have become abandoned. The recent recognition of indigenous rights has allowed for the resumption of such identities and also spurred the launching of projects with the purpose of rescuing and preserving traditional cultures and ways of life. Similar kinds of projects are becoming more and more common in various parts of the world. Concerning cultural contents such efforts may run the risk of becoming conservative in a literal sense, paying little attention to the innovative and progressive qualities of culture(s). The interpretative model used in this paper calls attention to the operative capacities of all human populations. Culture and ethnicity are dynamic and innovative phenomena. Traits and elements may be interchanged, borrowed, rejected or abandoned. The time-scales and durations of these events and processes affects their outcome, among other things whether their character will remain that of mimicking, or lead to more permanent transformations and alterations of identity and culture.

References


Fernández de Oviedo y Valdés, Gonzalo 1855 [1549]. Historia General y Natural de las Indias, Islas y Tierra – Firme del Mar Océano, por el Capitán Gonzalo Fernandez de Oviedo y Valdés, Primer Cronista del Nuevo Mundo. Tercera parte (IV), D. José Amador de los Ríos (ed.). Madrid: Imprenta de la Real Academia de la Historia.


Lozano, Pedro 1873 [1745]. Historia de la Conquista del Paraguay, Río de la Plata y Tucumán I (Colección de Obras, Documentos y Noticias Inéditas o Poco Conocidas). Buenos Aires: Imprenta Popular.


Why Go Back to the Old Ways?  
Bilingual Education and Ethnoregenesis among the ‘Weenhayek of the Bolivian Gran Chaco

Jan-Åke Alvarsson

Contact details  
Department of Cultural Anthropology and Ethnology  
Uppsala University  
Box 631  
SE-751 26 Uppsala  
Sweden  
jan-ake.alvarsson@antro.uu.se

RESUMEN

¿Por qué volver a las maneras antiguas? Educación bilingüe y etnoregenesis entre los ‘weenhayek del Gran Chaco boliviano.

Los ‘weenhayek parecen haber vuelto a sus maneras antiguas. Esto fue evidente durante un festival de cultura de 2004 cuando se vio vestimentas y música tradicionales, comidas y bebidas típicas, artefactos clásicos y letreros en el idioma ‘weenhayek. Por un período de medio siglo, todo esto había estado ausente en el escenario público. Este cambio drástico en cuanto a la expresión cultural nos presenta una cuestión general, la de formación de identidad, eso es etnogenesis, tanto como la reformulación de identidad cultural, eso es etnoregenesis.

El problema formulado se refleja en el título: ¿Por qué “olvidaron” los ‘weenhayek su identidad cultural en los años 1970? Y, ¿por qué volvieron a evocar su identidad antigua en la última fase del milenio pasado? ¿Cuáles son los factores detrás de esta estrategia cambiada? Y, ¿que modelos teóricos pueden ayudarnos en entender este juego con identidades alteradas?

El punto de partida teórico se encuentra en la “teoría de sistemas” de Gregory Bateson, y en particular en las cibernéticas del mismo y el flujo de comunicación en un sistema social complejo. Esto se combina con la idea de agencia colectiva como propuesta por Laura Ahearn como una capacidad de actuar mediada socio-culturalmente. En tal perspectiva, la actuación aparentemente confusa de los ‘weenhayek viene a ser comprensible.

Introduction

In southern Bolivia (Fig. 1), the ‘Weenhayek people, traditional foragers,1 have returned to their old ways, at least symbolically. During a cultural festival in 2004 this was openly and publicly manifested with traditional outfit, old songs, and signs in the ‘Weenhayek language. For around half a century their music and language had been muted. Their traditional clothing had been gone even longer. The reason for this switch in attitude towards their own heritage raises questions about the formation of ethnic identity—ethnogenesis as well as ethnoregenesis—in general.2

The problem and theoretical points of departure

The problem posed in this article is reflected in the title: Why did the ‘Weenhayek “forget” about their ethnic identity in the 1970s—and why did they decide to revive it after the turn of the century? Which are the factors behind this obvious change in direction—and what theoretical models might help us explain this joggling with ethnic characteristics?

My theoretical point of departure in this article is found in a combination of systems theory, and in particular in Bateson’s reflections on the cybernetics of the self and the “communication flow in a complex social system” (Bateson 1972:309–337)3 as well as the idea of “collective agency” as identified by Laura Ahearn as the “socioculturally mediated capacity to act” (2001:112).

The ethnographic basis for my argument is taken from recurrent fieldwork periods in the Gran Chaco over the last three decades, complemented with interviews and comparative material from colleagues in other, similar areas.

---
1 For an extensive account of the ethnography, especially social, political, and economic organization of the ‘Weenhayek, see Alvarsson 1988.
2 I define “ethnogenesis” as the ethnic birth of a people, the phase when they are becoming aware of a separate identity with ethnic undertones. Once this has happened, it cannot happen again. Thus, I reserve the term “ethnoregenesis” for a cultural revival, when something associated with “old ways,” etc., is taken back. See Alvarsson 2007 for a more detailed discussion of the matter.
3 It is obvious that I do not intend to draw any parallels between the “error,” “pathology,” or “therapeutic” processes among the alcoholics in Bateson’s study and the ethnoregenesis among the people I write about. My interest is in the transformation of (unconscious) epistemologies only. Beside Bateson, I also find theoretical inspiration in the works of Miller (1975), Burr ridge (1978), Fernandez (1969), Giddens (1979), Goodenough (1963), Johansson (1992), Rappaport (1971), and Stromberg (1986).
The “Pacification Phase” (1900–1970)

Apart from occasional visits by traders and seasonal work migrations up to the Andes, the ‘Weenhayek people were fairly “isolated” up until the 19th century (Alvarsson 1988:15–28). This implies that even though they had a good and most often first-hand knowledge of other cultures, of civilizations like the Inca empire for example, they maintained a sovereign and independent culture in their traditional habitat. In the beginning of the 20th century, however, outside influence gathered momentum and finally culminated in the Chaco War, 1932–1936, which ended their socio-political liberty.

Already around 1915, however, a decisive incident took place; in the oral history of the ‘Weenhayek it has been called La Matanza de Algodonal (“The Algodonal Massacre”). In this incident, Bolivian soldiers invited a number of ‘Weenhayek to a so-called “reconciliation party” in a fort at Algodonal on the Pilcomayo River. Although there was some suspicion, the majority was taken by surprise when soldiers suddenly appeared around them, firing their rifles until all but a few were dead (Alvarsson 1993:53–55). In the narratives of the event that I have recorded, this event was laden with strong symbolical overtones, and even though ‘Weenhayek narrators stressed the courage of the survivors, the incident somehow also
marked the first sign of powerlessness in the presence of White colonization. In the words of Gregory Bateson, this was probably the first sign of “impotence in the system” (1972:313).

During the Chaco War, two decades later, this military inferiority was accentuated even more. Accused of dealings with their close ethnic relatives in Paraguay, the ‘Weenhayek were stripped of all weapons and restricted to living in concentration camps for long periods, while the Whites and other indigenous groups fought the war. Strong signs of acculturation marked the ‘Weenhayek of the Villa Montes area after the war: poverty, serfdom, and alcoholism (see Alvarsson 2002:118).

In 1943, a Swedish woman missionary, Astrid Jansson, appeared in Villa Montes. Gradually, she gained the confidence of the Amerindians by living among them and taking their side in the ongoing conflicts with the Whites and the Creoles. Simultaneously, other Scandinavian missionaries worked in northern Argentina amongst groups closely related to the ‘Weenhayek. In 1949, missionary work changed from mere “participation” to a type of more active “development work,” including missionization. However, neither of these types of missionary work led to the conversions that the missionaries had hoped for (Alvarsson 2002:117, 283).

During the 1940s (and well into the 1950s), the Bolivian authorities demanded that all Amerindians should learn Spanish—and only Spanish. It was prohibited to use Amerindian languages in any public context. In religious services and at school only Spanish could be used. In combination with the persecution of traditional religious activities, the nation state gave clear indications to ethnic minorities, like the ‘Weenhayek, that they were supposed to undergo some kind of change, i.e. to assimilate, to become respected citizens.

For this period I suggest the label “Pacification Phase” as the ‘Weenhayek were disarmed, pacified, subdued, and reduced from active agents to passive recipients of Western culture with a most limited scope of power. Somehow, around 1970, this changed, however, and a noteworthy religious movement played a part in restoring the ‘Weenhayek into active agents. (For a discussion of power, see Foucault 1988:92; for historical conditions, see Alvarsson 2002:291–292, 2003b:209–210).

The “Denial Phase” (1971–1985)

In the beginning of the 1970s, there were suddenly reports of a remarkable religious transition among the ‘Weenhayek Indians of the Bolivian Gran Chaco—a “Pentecostal revival,” as it was called by outsiders. As we have noted, Swedish missionaries had been working among this people for thirty years with very limited success. This time, however, according to missionary sources, no representative for the mission was involved in the aforementioned “revival.” It was something entirely indigenous and autochthonous. ‘Weenhayek—and most probably also Wichi—evangelists were preaching and praying in the villages and miracles were said to happen. Sick people were reportedly healed instantly. People saw signs in
the sky and, within a short time, almost all ‘Weenhayek Indians converted to a type of Pentecostal Christianity. After some time, it was estimated that around 85% of the ‘Weenhayek population professed themselves to be “Pentecostal believers” (Alvarsson 2003b).

When I arrived on the scene in early 1976, just a few years after this religious movement had taken place, the vast majority were all Pentecostal Christians and regularly took part in the church services. The ‘Weenhayek produced indigenous evangelists, prophets, and healers. Almost overnight, the socio-culturally and religiously resistant ‘Weenhayek had been transformed into a missionary “showcase,” for they were indeed, in the eyes of the foreign religious agents, good Pentecostals: filled with the Holy Spirit, teetotalers, regular churchgoers, and explicitly professing the Christian faith.

At this time, however, ‘Weenhayek activism did not include cultural revitalisation. In line with the teachings of the early missionaries, la vida vieja (“the old life,” i.e. ‘Weenhayek traditional culture), and in particular their religious (“heathen”) past, was frowned upon, if not prohibited. To subsist from traditional handicraft and fishing was considered acceptable, but using the ‘Weenhayek language, for example, was seen as a symbol of backwardness.

On the front wall of the ‘Weenhayek church building in Villa Montes, a pioneer missionary had painted a sign with a quote from the Bible: Vosotros que en otro tiempo no erais pueblo, pero ahora sois pueblo de Dios, 1 Pedro 2:10 (“Ye, which in time past were not a people, but are now the people of God,” 1 Peter 2.10). This quotation seemed to underline the idea that the ‘Weenhayek during la vida vieja (“the old life”), were not a “people,” but that they had, through la vida nueva (“the new life”), become a “real (civilized) people,” a people of divine confirmation, a “people of God.”

Several times when I interviewed old ‘Weenhayek Christians, as late as the mid-1970s, they told me about “the old ways” with pleasure, until they suddenly remembered: “No, that’s part of la vida vieja, we should not talk about it!” This sudden remorse reflected the fact that talking about the “good old days” in the ‘Weenhayek language might have been accepted, but as an echo of something from the missionaries’ teachings, when speaking Spanish, the old life was not to be mentioned—unless, of course, it was used as an example of how bad things were before the change.

In the late 1970s, the Summer Institute of Linguistics made a survey of the language groups in northern Argentina and concluded that the “Mataco Vejoz”4 were “Estimated 80% monolingual” (Grimes 1984:79) which should be read: “80% of the Mataco speak the Mataco language only; while 20% are bilingual in Spanish as well as Mataco.” My estimates for the ‘Weenhayek roughly coincide

---

4 The ‘Weenhayek were formerly called “Mataco,” which is still used as an overall term. The Mataco were formerly divided into three groups, the ‘Weenhayek being the “Mataco-Noctenes,” while the “Mataco Vejoz” was considered the largest dialect group (nowadays called Wichí). This division has been severely questioned and today scholars count to more than 20 different dialect groupings (see Braunstein 2003).
with those for the “Vejoz” except for the ratio between monolinguals and bilinguals. Without being entirely aware of what criteria the survey group used for establishing “bilingualism,” I nevertheless believe that the number of “bilinguals” among the ‘Weenhayek was considerably higher than 20%.

In the 1980s, however, one could note a rapid increase of bilingualism. Spanish gained a higher status among the ‘Weenhayek, especially among the more urban population who increasingly sold handicraft to Creoles and Mestizos. Even though the mission in Villa Montes had started linguistic work, the first contacts with Indianist organizations in Bolivia had taken place, and international pressure started to influence the monolingual policies of the Bolivian government, the status of the ‘Weenhayek language was still extremely low. Thus many young and middle aged ‘Weenhayek officially denied that they spoke the language. To my surprise (and disappointment), I could have answers like *Yo no hablo el idioma* (“I do not speak the language”) to questions about language use or particular idioms.

The status of Spanish increased even further when contacts with CIDOB (* Confederación Indígena del Oriente Chaco y Amazonia de Bolivia, Unidos y Organizados *) and other Indianist organizations became more established in the late 1980s. Then Spanish was used as a *lingua franca*, that is as a means of communication between the different Amerindian groups, peoples that the ‘Weenhayek easily associated themselves with because of their common cultural heritage and shared exposed situation in the Bolivian society.

As there was no education in the ‘Weenhayek language at the time, the official discourse—especially the one for use in dealing with the Bolivian society in general—was heavily hispanicized. In a way, Spanish and ‘Weenhayek were used in a *diglossia* way (cf. Trudgill 1974:116). Linguist and educationalist Carol Benson has explained this further, stating that: “[the] concept of diglossia [is employed for] bilingual communities, where two languages are in use but in different domains and with different prestige values” (Benson 2003:69, my emphasis).

This situation is confirmed also from the closely related Wichi: “Throughout the region, the Matako language is in a diglossic situation, being subordinated to the regional Spanish used by the Wichi as *lingua franca* in non-familiar environments, both with non-indigenous and indigenous people belonging to other linguistic groups and among individuals speaking other Matako variants. Usually men are bilingual and fluent in the regional Spanish, while women speak it with greater difficulty” (Braunstein 2003:19).

Up until the 1990s, the denial of ‘Weenhayek identity and knowledge of the ‘Weenhayek language was a most common strategy for adult ‘Weenhayek. Due to the situation of ethnic discrimination in Bolivian society, most adults tried to conform more and more with the dominant Mestizo culture, including speaking Spanish in all “official” situations.
The “Rehabilitation Phase” 1985–1999

In a way, this phase of ethnic and linguistic rehabilitation started unofficially already in the mid-1970s with linguistic work on the ‘Weenhayek language, and a local museum at the ‘Weenhayek school in Villa Montes, inaugurated in 1979 (Fig. 2). More publicly, however, this was manifested through the first bilingual class at this particular school, directed by young trainee teacher Dominguina Ayala in 1984. Texts in ‘Weenhayek followed suite.

For a long time, Swedish teacher missionary Gunvor Claesson supplied the teachers with mimeographed material that was tried in the classroom and then revised. In March 1993, the first reader produced by her, designed for Grade 1, was printed and used. It was called: *Inaatahayhi ‘Nootshänhay, Cartilla del Idioma Mataco—Noctenes*. A teachers’ manual accompanied the publication. Later the

---

5 The linguistic work was initiated by the present author in 1997 and then continued by Kenneth Claesson of Stockholm University in 1982. The small *Museo ‘Weenhayek* was inaugurated in 1979 as a result of my own ethnographic collections in the 1970s. Parallel collections were provided for *Museo de Etnografía y Folklore*, La Paz and *Göteborgs Etnografiska Museum*, Gothenburg, Sweden that probably holds the best early collections of ethnographic material from the ‘Weenhayek thanks to Erland Nordensköld.
same year, her husband, linguist Kenneth Claesson published a compilation of traditional tales from the ‘Weenhayek in the vernacular (Claesson 1993).

In November 1993, Sida (the Swedish International Development Cooperation Agency) granted a five-year project for the training of bilingual teachers and production of teaching material among the ‘Weenhayek. A month later, my book on ‘Weenhayek culture in Spanish, Yo soy ‘weenhayek, was published in La Paz (Alvarsson 1993). Slightly later, in the beginning of 1994, the second reader, adapted for Grade 2, was printed and launched.

Simultaneously, Kenneth Claesson worked with a small commission of old and young ‘Weenhayek men, with the intention of translating the New Testament into ‘Weenhayek. In 1992 a first portion of the ‘Weenhayek Bible was printed, something that immediately gave the language another status, that of a “written one,” important in the local situation. When the whole New Testament was dedicated on March 29, 2003, this became a major event in the history of the ‘Weenhayek, involving different local and national authorities and representatives from Sweden and Finland, the two countries supporting the project.

These were (more or less) internal changes within the ‘Weenhayek community even though they were caused by input from the outside. However, the external situation also changed a great deal during this period. From the 1970s to the 1990s, the situation had become notably different. In the 1970s no-one, except some of the more dedicated missionaries, could care less about an Amerindian people. They were seen as, and treated as, the pariah of Bolivian society. Even relatively low status groups like the Quechua and Aymara treated the ‘Weenhayek as salvajes (savages). In the 1990s this was all different. Successively a series of NGOs (Non-Governmental Organizations) appeared with money from Europe for precisely Amerindians—and preferably hunters and gatherers rather than agriculturalists, as the former were considered more “natural,” more “original,” viewed in a light of cultural romanticism.

Thus it was suddenly of interest to have Amerindians around. They were not treated any better in society, racism still prevailed, but they were now the specific target of international development aid. Simultaneously, an ambitious program of the Bolivian government to grant land rights for the ‘Weenhayek (prompted by lobbying from the Swedish Mission and subsequently pressure from the Swedish and the Finnish governments) resulted in a new Decreto Supremo, No 23,500, officially declared on May 19, 1993. This resolution gave sovereignty over a large portion of their traditional territory to the ‘Weenhayek. Some old, established Creoles with cattle farming were allowed to retain their land for grazing. However, the ‘Weenhayek were granted the right to gather traditional forest foods and to take firewood also from these areas.

---

6 In Bolivia at the time, when talking Spanish, people distinguished between un dialecto hablado (a dialect [just] spoken) and un idioma escrito (a written language). The former was supposed to be inferior and the latter more “developed” and thus superior. All Amerindian languages were conventionally dismissed as “dialects.” The fact that the New Testament, a recognized literary classic, was published in a language thus implied that the “dialect” somehow had developed into a “language.”
Two aspects were especially important. The schools in this area could now be reorganized as Escuelas Bilingües ‘Weenhayek, i.e. as bilingual schools under autochthonous ‘Weenhayek supervision. This allowed for an expansion and intensification of the already initiated program of bilingual education, and the employment of ‘Weenhayek teachers. The second aspect was the right to regalías (local taxes) from the oil companies working in what was declared ‘Weenhayek territory. Any type of natural resource found in the ground still belonged to the state, but the “owners” of the land gained the right to a small percentage of the profit.

As we have seen above, in 2003 the ‘Weenhayek New Testament was inaugurated, and that same year a small hymn-book was published. In 2004 and 2005 several other young teachers had their exams and in 2008 there were also one lawyer and a professional in administration. In 2006, in total some 40 bilingual teachers were working in almost all villages in ‘Weenhayek territory.

Parallel to this process, the “pro-indigenous” organization CIDOB repeatedly encouraged the ‘Weenhayek to take political action and organize themselves. The model, developed among the Bolivian Guaraní, with caciques, and in particular a cacique general, i.e. a president with executive power, appealed very little to the acephalous ‘Weenhayek (Alvarsson 1988:129) and caused more problems than it solved. However, the very idea of being a “sovereign nation” with a “president” was important to the ‘Weenhayek.7

In 2000 the first regalías were given to the ‘Weenhayek by the oil companies. This resulted in a housing project in Capirendita, and in a series of new problems, especially accusations of corruption in the local leadership. In spite of internal problems, it was increasingly clear that the ‘Weenhayek now had another socio-political situation in the local society than they had ever had before.

The “Ethnoregenesis Phase” (2000 and onwards)

As we have seen, at the turn of the millennium, the ‘Weenhayek people had gained social prestige. Even in politics this was becoming increasingly obvious. In 2004, Martín Sánchez was the first ‘Weenhayek ever to run for mayor of Villa Montes. He lost, but he gained a surprisingly large following—also among Whites.

7 In 1992, after some adjustments of the organization developed among the Guaraní, Silberio Rívero Pérez from Capirendita was elected the first Capitán Grande for what, at the time, was called the CWP (Comunidad ‘Weenhayek de la Provincia del Gran Chaco). On August 10–11, 1993, the next version of the organization was created, the OCWP (Organización Capitanía ‘Weenhayek del Pilcomayo). On December 8 the same year the Tapiete people were included in the organization and the name was changed to ORCAWETA (Organización Capitanía ‘Weenhayek-Tapiete). On the same occasion, José Pajayis López from Capirendita was elected to be the first Capitán Grande for this new organization. On January 28, 1994, the ORCAWETA established its new regulations. In 1998, severe commotion resulted in a split within the ORCAWETA. The members finally dethroned the old president and elected a new one, Lucas Cortez. In 2004, the present Capitán Grande, Federico Salazar, was elected.
Naturally, this also influenced the use of the ‘Weenhayek language. While Spanish became more and more accessible to young ‘Weenhayek, through better education at the bilingual schools and through access to computers and the internet, the fear of using ‘Weenhayek in public successively vanished. In the ears of the speakers as well as the listeners (the Bolivian Mestizo), the ‘Weenhayek language was much more on a par with Spanish than ever before.

We have mentioned the role of the bilingual schools in teaching better Spanish, but we have not yet touched upon the role of these schools in promoting the ‘Weenhayek language as a medium for instruction. The role of this language, after the switch in 1984, suddenly upset the old bipolar, diglossia situation in which ‘Weenhayek was seen as something related to the past and Spanish as something more related to the present. Before this, many parents tried to speak to their children in Spanish; some of the children, especially in Villa Montes, received only Spanish names (the two protagonists in education and politics, mentioned above, are typical examples).8

In traditional ‘Weenhayek education, the Amerindian language had a key role. This was the language used in games, in formal instruction (like speeches and rituals), in informal education (early participation, encouragement from peers and adults), and, not least, in narrative enculturation (stories and myths), with the famous ‘Weenhayek trickster, Thokwjwaj, as a negative and humorous example (see Alvarsson 1982; Wilbert and Simoneau 1982).

When the Bolivian school system was imposed upon the ‘Weenhayek in the 1950s, a number of things were new and strange to the pupils. The system was alien: to sit down and listen quietly without interfering. The temporal structure was alien: go to school every day. The language of instruction was alien: Spanish instead of ‘Weenhayek. The discipline was alien: the pupils were suddenly forced to do things—if not, they received punishments! In school they also had alien role models: condescending, arrogant Whites who despised everything that ‘Weenhayek culture stood for. Finally, they were taught an alien cosmology that differed notably from what they had learned at home.

The first obvious effect of bilingual education was that the established roles of the two languages were immediately upset. ‘Weenhayek was now used as the medium of instruction, which distorted the previous roles of the two languages. ‘Weenhayek became a language that in use and character differed very little from Spanish, that could do more or less the same things as Spanish.

Other side-effects included parents more engaged in school matters, allowing their children to attend school more regularly, as well as inclusion of the cultural heritage in education. Thus, parents, as well as children, noted that ‘Weenhayek clothing and dances, as well as games, were included in school activities and presented at public events. This pride in ‘Weenhayek heritage was most certainly derived from the work of missionaries and anthropologists (the museum estab-

---

8 Neither Dominguina Ayala (now a supervisor in education), nor her relative, Martín Sánchez (who has twice run for mayor in Villa Montes) possess any ‘Weenhayek names. For the importance and significance of ‘Weenhayek names, see Alvarsson 1997, 1998.
lished in 1979 might have been the first, palpable sign of this), but it was now integrated into school activities by the bilingual teachers. This repeated display of pride in ‘Weenhayek heritage was most certainly a precursor to the cultural festival in 2004.

The cultural festival as a symbol of ethnoregenesis

On November 19 to 20, 2004 the organizations of the ‘Weenhayek people arranged their first cultural festival ever. They called it FESTIWETA, an acronym for Festival Indígena ‘Weenhayek y Tapiete. As an anthropologist who had worked almost 30 years among them, I was invited as an honorary guest.

Cultural festivals are certainly not new, neither to Bolivia nor Argentina—the countries where the ‘Weenhayek and the Tapiete live. Peoples with a more outspoken ethnic identity, well defined within the national society, have held them for decades. So the idea as such has been present for a long time. However, there had never before been a cultural festival among these two neighboring hunting and gathering peoples of the northern Gran Chaco.

Plans for this cultural festival were initiated in early 2004. Financing was secured from NGOs and oil companies in the Gran Chaco. Attractive posters were printed and information diffused. Representatives from different ethnic groups in Bolivia were invited to sing, dance, and participate. Festival grounds were arranged at the ORCAWETA headquarters, just across the Pilcomayo River from Villa Montes. People from the neighboring villages and towns were invited to display and sell handicraft.

On November 19, 2004, and in the presence of some one hundred people, the festival was inaugurated by the recently elected capitán grande (the President of the ORCAWETA), Federico Salazar. He expressed his pleasure about being able to receive special guests for this occasion, about the people who had already come, and his wishes that this festival would be of importance for the ‘Weenhayek and the Tapiete peoples. Then he invited representatives from the local authorities to speak. Finally the festival was declared opened.

The area around the ORCAWETA office had been arranged as a market place. Women from the ‘Weenhayek villages close by, were standing behind tables displaying traditional handicraft like the knitted ilicas (shoulder bags), fabricated from the fibers of the caraguatá plant, baskets made from palm leaves, and a series of other articles (Fig. 3). A few men had vending tables as well. They sold medicinal herbs, most of these in plastic bags with small, handwritten labels attached to them (Fig. 4).

One woman sold jwaat'i’ (algarroba beer). The jwaay9 fruits were ripening fast and this was the traditional season for algarroba beer. This beer was the sole food item of the ancient ‘Weenhayek parties. It was filling, nutritive, and appreciated

9 The algarroba is the fruit of the white algarrobo tree (Prosopis alba) ripening among the first fruits of the yakyp season (the “fruit season”). It is greatly appreciated for its taste and for its high con-
Figure 3. ‘Weenhayek handicraft at sale at the 2004 cultural festival, FESTIWETA (photo by Jan-Åke Alvarsson). – Artesanía ‘weenhayek en venta durante FESTIWETA, el festival de cultura ‘weenhayek en 2004 (foto de Jan-Åke Alvarsson).

for its high content of protein and alcohol. When we tasted the beer, however, it was unfermented, and this was most certainly an adaptation to the anti-alcohol policy of the Swedish Mission. The organizers of the festival had to balance between the different parties of interest to make it possible. The serving of alcohol on the premises, were it “traditional” or not, would have barred the mission from supporting the festival.

Among the dozen or more tables we could not spot any Tapiete table. In this context, the ‘Weenhayek is the dominant group with some 3,000 members in Bolivia only. The Tapiete is a much smaller group, possibly numbering only some 50 to 100 people in Bolivia. The rest lives in Argentina and in Paraguay. (In the following I therefore refer solely to the ‘Weenhayek unless otherwise indicated).

At night there was a picture show and then a series of musical performances. First there was a group from the Andes singing Andean folk music and presenting saludos (greetings) from their home town. Later there was a beautiful dance tent of sugar which makes it a perfect choice for brewing of beer, the jwaati’ mentioned in the text (Alvarsson 1988:58, 170–171, 211–213).

---

10 I was invited to show a series of photographs taken by early ethnographers and missionaries in the area. I have collected and digitalized a series of photographs taken by Eric von Rosen (1921), Erland Nordenskiöld (1910), Rafael Karsten (1932), Alfred Métraux (1946), and some early Swedish Pentecostal Missionaries. The CD is kept at the educational center in Villa Montes, but this was the first time ever that the photographs were displayed in public.
performance by a group of young Guaraní women, dressed in their traditional, colorful tipois.

The main ‘Weenhayek attraction this evening was a group from Capirendita performing old chants (Fig. 5). Two men shook their calabashes and sang in a most traditional way. There was no doubt that what they produced was well founded in the musical tradition of their people.

The most interesting part for me as an anthropologist, however, was the way they were dressed. I have seen pictures from recent events where ‘Weenhayek leaders have appeared in what I would call “quasi-traditional” clothing, but this was the first time I saw them “live.” One of the men, Gregorio Bautista, was dressed in a type of shorts made of caraguatá fibers, much in the style of the llica shoulder-bags. They appeared very different from the original deer skin loin cloths used in the past.

The t-shirt-like top that he was wearing was also more similar to the bags than to the traditional, classical mail shirts worn by ‘Weenhayek warriors in the past. The cap was made of wool and was woven rather than knitted, like the original head bands were. It had feathers, but also unorthodox tassels made of wool. As far as I could see, the traditional shell discs had been replaced by larger, more visible discs—made of plastic!

Afterwards there were several other performances, but to me, this one became a symbol of the “re-ethnification” or the “ethnoregenesis” of the ‘Weenhayek. Something had clearly happened in the 30-year period that I could survey. The Mataco of the Gran Chaco had definitely been transformed into the ‘Weenhayek.

Theoretical aspects

The description and analysis of societal change have been carried out within different academic disciplines, e.g. in history, sociology, missiology, gender studies, as well as in cultural anthropology. For a long time, these studies had something in common in that they focused on structure. In social anthropology, for example, “social structure” was a key issue for decades. This focus is notable also in my presentation above when I mention reforms in Bolivian society, wars between nations, as well as changing attitudes within NGOs, etc. that have affected the ‘Weenhayek. However, even though I obviously place this study in a social and

---

11 This was how I called my doctoral thesis on this people in 1987, published as Alvarsson 1988. At the time, this people was known as “the Mataco” by scholars and locals alike. In the early 1990s, the ‘Weenhayek people did not want to recognize the term “Mataco” as an ethnonym anymore. They felt that it was associated with the past somehow, with an imposed identity—and with revisionism as regards the meaning. In academic Spanish, its etymology has usually been associated with montaraces (“forest people”). But the ‘Weenhayek associated it with the Spanish verb matar (“to kill”) and thus “Mataco” with “killers” or “assassins,” something they were not ready to accept anymore. Thus the (older) indigenous ethnonym ‘Weenhayek was introduced also in Spanish. Today there is no official sign that does not feature ‘Weenhayek on it (most often also spelled right).

12 The activities continued in much the same pattern the following day, with (little attended) expositions and sales in the daytime and (much attended) musical performances at night.
cultural perspective, and I believe that such a view is essential for our comprehension of what happened, to me this is not enough. As a cultural anthropologist I am want also to explore agency, as introduced by for instance Anthony Giddens.\textsuperscript{13}

Through the contributions by, among others, Fredrik Barth (1969), and later Giddens (1979), the previously skewed perspective has been somewhat corrected. The individual is no longer seen as entirely steered by her or his culture or societal organization. In line with a particular current within history, sometimes referred to as “personal history,” anthropology has acknowledged that there are unique contributions by particular individuals with a distinct personality. Fredrik Barth (1969) called one type of these people “entrepreneurs”—strong individuals who could exploit the discrepancies between two adjacent spheres. Scott Erickson (1996) used the terms “gatekeepers” and “mediating brokers” in his study of an immigrant church for precisely the same type of characters.

In line with many other anthropologists, however, I feel the need to broaden the use of agency from that of a few “Great Men,” as implicated in personal history and in the mentioned studies by Barth and Erickson. Therefore, I intend to use the concept as something that may be exercised by all individuals, men and women alike. Thus I, somehow, hope to contribute to the exploration of the social nature of agency.

There is a slight, but nonetheless significant, discrepancy between the terms “action” and “agency,” however, that Barth does not sufficiently distinguish. According to more recent interpretations by Laura Ahearn (2001), we take “action” to represent results of a person’s free will, while “agency” is defined as her or his “socioculturally mediated capacity to act” (Ahearn 2001:112). Thus, on the one hand, I distinguish between instinctive reactions (like the twinkling of an eye) and conscious acts (like eating because of hunger), and on the other hand between “action,” regulated by a conscious response to e.g. personal needs irrespective of the socio-cultural context, and a conscious or unconscious act, governed by what the actor perceives to be socially acceptable, or culturally defined.

As I see it, the ‘Weenhayek responded actively to the increasingly threatening social situation in the area in the 1970s, and took a step towards integration—but not assimilation—by responding positively to the new religious movement, the “revival.” Here, they displayed collective agency, as I define it, in deciding to take up a variant of Christianity that was not that of the oppressors, i.e. Catholicism, but something that was still acceptable to the surrounding world, i.e. Pentecostalism. According to a classical “structural” approach, the outcome should have been Catholicism. To understand the different response, we must therefore include collective agency; “collective” not least because the ‘Weenhayek responded collectively to the movement.

Defined thus, we may also stop at “the temporality of agency” (Ahearn 2001:119) as we can see how the “agency” of the ‘Weenhayek changes over time,

\textsuperscript{13}The core of the theoretical argument about the transformations in ‘Weenhayek culture is essentially the same as in Alvarsson 2003a, even though religious conversion was the focus there, whereas cultural adaptation is in focus here.
from the 1940s when they seem to avoid contact, to the 1970s when they try to integrate, and to the 1990s when they start to display cultural discrepancy. Even though the unwillingness to become assimilated is common for all three phases, the agency varies notably: from avoidance to denial, and from there to display of cultural difference.

To explore what goes on “under the skin” of collective agency, however, I believe that we need to turn to cybernetics and systems theory, as these are presented in Bateson (1972). “Cybernetics” has been defined as “the [comparative] study of communication flow in a complex social system” (Bateson 1972:317). In this particular case I interpret “complex social system” as “larger than a single ethnic group,” i.e. the ‘Weenhayek (note that I do not use this as a synonym for “structure”).

The basic rule of this approach, according to Bateson (1971:244), is that the comprehension of a phenomenon is possible only if one studies it in the context of all the completed orbits relevant to it. The emphasis is on the observation of these orbits, and it is an implicit expectation of this theory that these units will show mental characteristics, as the mental qualities are immanent in the system. Conventionally, mental qualities are supposed to be enclosed beneath the “skin of an organism,” but the orbits referred to within systems theory are not comprehended within a “skin” (Bateson 1971:244, 1972:319). Bateson states that “mind is immanent in the larger system—[it consists of] man plus environment” (1972:317).

The advantage of Bateson’s model for our analysis is that his particular definition of “mind” as a phenomenon or an apparatus larger than the individual self, allows us to treat cultural adaptation not only as a series of individual choices—as is usual in this kind of analysis—but as a social process, a process that affects the group as a whole. This adaptation or change may be regarded as “societal” as well as “individual,” by introducing a new way of understanding its configuration.14

Thus, in this context, I see cultural adaptation or response, be it on an individual level or a collective one, as a result of accumulated information, featuring new elements introduced into the system. This exponential reaction of the system may be seen as an adaptation to an altered situation, much in line with the discussion of collective agency above. In contrast to researchers influenced by “culture romanticism,” I argue that adaptation of “foreign” elements might well be interpreted as a local attempt to “revitalize” traditional culture, just as much as a sign of prostration from massive cultural or religious imperialism.

Having stated this, it is necessary to state that while I use Bateson’s ideas on the transformation of unconscious epistemology to cope with a new situation, I draw no parallels whatsoever between the “error,” “pathology,” or “therapeutic” processes (1972:310) among the alcoholics in Bateson’s study and the transformational processes among the ‘Weenhayek. The basic difference is that while the alcoholics in Bateson’s article struggle with adaptation to (or within) their own society (which itself does not change), these peoples face changes within and outside their own society. This also means that the former move from an unconscious to a more con-

---

14 To Bateson, enlarging this system is in no way peculiar. He states, e.g., that “this difference will be especially important in systems containing more than one person” (1972:332, my emphasis).
scious relation with the outside world, while the latter move from one unconscious (their traditional) relation to another unconscious (adapted) approach. Nevertheless, I have found that the elasticity of systems theory and of Bateson’s model is such that the analysis profits a great deal from applying that model to this considerably different material.

The first question to be asked, of course, is why people choose to change their ethnic expressions (or the symbols thereof) as a strategy in the first place. Why this strategy, when there must be a number of other possibilities? In the case of the ‘Weenhayek, I believe that I can distinguish a pair of important factors that give impetus for change: (a) signs of impotence and deficiency in the system, that is, when the “old” culture can no longer deal successfully with changes caused, for example, by “modern society” and (b) increased outside pressure to adapt to a “modern world.”

Within cybernetics as Bateson defines it, the self “is only a small part of a much larger trial-and-error-system which does the thinking, acting, and deciding” (1972:331). This system includes all the informational pathways that are relevant at any given moment to any given decision. The self—or in this context, the “larger system” of the culture of an ethnic minority—is at any given moment just a false reification of an “improperly delimited part” of a much larger field of interconnected processes (1972:331).

To realize the powerlessness of one’s own culture in a wider context, its impotence before the national state, imperialism, transnational companies, and so on, signifies opening up the system for some type of adaptation, and probably change. This is analogous with the profession of the alcoholic “defeated by the bottle,” who realizes that he can no longer manage the situation (1972:313). According to Bateson, this new-found consciousness is in fact the first step towards change.

In the case of a society, like that of the ‘Weenhayek, an experience of overwhelming defeat, like the Algodonal Massacre that took a great many men’s lives, may be interpreted as an initial shock to the “larger system” caused by something that is conceived of as bigger, more potent, than one’s own society. A series of such shocks or defeats, be they physical or psychological (as in the case of ongoing discrimination and humiliation), will in the end feed so much information about the transformed situation that the whole entity becomes prepared for change.

The information on the globalization, creolization, and so on, of the local situation, together with the experiences of the systems being ineffective in coping with outside threats, produces a new view of reality. Bateson’s reflections on his case study are again valid also for an ethnic minority group: “The myth of self-power is thereby broken by the demonstration of a greater power” (1972:313) and that this is “an involuntary change in deep unconscious epistemology” (1972:331).

If any other alternative than the one at hand is to be conceivable, however, it is necessary that one’s own culture, just like the living conditions of the alcoholic, has been proven totally impotent. To profess a will to change, people who constitute

---

15 Bateson terms this “the larger system—man plus environment” (1972:317, the emphasis is Bateson’s). I interpret this as “man plus his society plus the society surrounding him,” e.g., the nation-state as well as multicultural agencies, transnational companies, etc.
the group need to personally experience the impotence of seeing their world collapsing from military defeat, and describe their situation in terms like the wine-driven alcoholic: “We were powerless over alcohol” (Bateson 1972:313), here, read: “the enemy” or “the nation state.”

Something that is often labeled as a “deficiency” is the phenomenon of drug abuse that, all too often, marks a society under heavy social and cultural stress. People in such a society regularly take on new drugs (like liquor or sniffing glue) or deregulate and expand the rules for using traditional psychotropic substances (like the ayahuasca in some societies of the western Amazon) (Bateson 1972:310–311). Another “deficiency” phenomenon often closely related to conditions of poverty is illness (for example tuberculosis, diabetes, venereal diseases, kwashiorcor, malaria, etc.). These signs of deficiency were evident in the case of the post-War ‘Weenhayek, who were suffering from widespread alcoholism as well as ethnic and racial persecution in the period when the first missionaries arrived.

It is noteworthy that Giddens states that religions or religious alternatives also may be seen as a set of alternative “norms” and “resources” that may play a role in the strategic behavior of “innovators”—which, in turn, could result in a type of alternative power (1979:100–104).

Still another sign of deficiency is that of an awakening perception of solitude when confronting a much larger and powerful oppressor. In cases of open persecution, as, for example, by the nation state, external allies are much needed. In the case of the ‘Weenhayek, the Chaco War in the 1930s signified a rupture in traditional life and an exposure of the impotency of the Amerindian cultures when faced with the national military forces. This was followed by the indiscriminate racism of the 1940s, when shamanic activities were prohibited and persecuted, when the indigenous languages were seen as inferior “dialects” and it was forbidden to speak them anywhere but in one’s house. When the Guaraní (formerly called the Chiriguano) decided to assimilate, the Toba were driven out of Bolivia, and the Tapiete dwindled to almost nothing, the ‘Weenhayek were all of a sudden very much on their own.

This was the situation when the missionaries appeared on the scene and sided with the ‘Weenhayek, thus becoming important (and increasingly powerful) allies. It goes without saying that the allies of the ‘Weenhayek by definition could not be identical with the vast majority of the national population, nor with any of the forces associated with the oppressive State and its agents. The Mission, however, without any ties to the Bolivian state, offered a global network that opened up for the local neophytes: “If you and I are committed to the same thing, we share an almost physical band, we are united in a part of our selves” (Stromberg 1986:13).

It is in this perspective of the “extended larger system” prompting change that we must regard the socio-cultural process that leads up to ethnoregenesis. This change in epistemology implies that the individual, as well as the ethnic minority, may be able to transform the situation in such a way that long-term goals not reachable with the previous epistemology now become attainable. The new strategy offers a force to rehabilitate one’s integrity—without having to submit to the restraints of the cultural substratum, and even enabling the attainment of a better
social status in the local, national, or international scene (Alvarsson 1990:91). This ideal turnover may result in a total transformation of the conception of the established world-order—but still maintain a fiction of absolute cultural continuity.

Concluding remarks

In conclusion, Bateson’s model helps us to see the adaptation, or even transformation, of ‘Weenhayek culture as a voluntary and logical, albeit unconscious, change of epistemology. The change was induced by a sense of impotence and/or deficiency in the cultural system, relating to a changing regional, national, and international context, combined with outside pressure to adapt to a “modern” nation state. The information funneled through all the orbits of this complex system, not least through the system of bilingual schools, has nurtured a new form of cultural adaptive strength that, in turn, has resulted in a recreation of the ideal cultural praxis of the ‘Weenhayek.

References


Karsten, Rafael 1932. Indian Tribes of the Argentine and Bolivian Chaco (Commentationes Humanarum Litterarum, Vol. IV[1]). Helsinki: Societas Scientiarum Fennica.
Urban Aymara Speakers in Bolivia and the Processes of Culture and Identity Formation

Charlotta Widmark

Contact details
Department of Cultural Anthropology and Ethnology
Uppsala University
Box 631
SE-751 26 Uppsala
Sweden
charlotta.widmark@antro.uu.se

RESUMEN
Los aymara hablantes urbanos en Bolivia y los procesos de formación de cultura e identidad

En este ensayo se estudian las formaciones de cultura e identidad como procesos sociales, tomando como punto de partida diferentes perspectivas del proceso de urbanización en Bolivia. Se utiliza una perspectiva constructivista de identidad étnica, como algo que no se puede tratar como dado, sino como algo que se construye en relación a contextos históricos específicos. Hoy, cuando se enfocan las identidades étnicas en Bolivia, es importante reconocer que esas identidades han sido negadas, recordando que identidades étnicas y culturales no son estáticas sino cambian en un constante proceso dinámico. Estos hechos se tratan en el ensayo, en relación a un material empírico que se refiere a migrantes bilingües de español y aymara que residieron en La Paz al final de la década de 1990 (Widmark 2003). Comparando estos datos con observaciones hechas en la década de 2000, se arguye que un entendimiento de los procesos de identificación de los pueblos indígenas en el estado pluri-nacional boliviano, tiene que tomar en cuenta el proceso de urbanización que continúa y el hecho de que los procesos de identificación y articulación de ciertas identidades son representadas en relación a diferentes marcos de identificación, apoyadas por el contexto nacional. En el caso de los aymaras urbanos, sus formaciones de identidad y transformaciones culturales toman lugar en un intercambio entre prácticas y conceptos incorporados y el desarrollo económico, social y político del país, que promuevan ciertos marcos de identificación.
Introduction

It is not always clear who is “indigenous” or not in the Bolivian context. If we take the current President of Bolivia Evo Morales as an example, he is known to the world as the country’s—maybe even Latin America’s—first “indigenous” president. At the time of his election in December 2005 he was not necessarily considered “indigenous” in Bolivia and among people of his own group, or at least his “indigenousness” was not necessarily his most important characteristic when elected. He is a person who considers himself Aymara, even though he does not speak Aymara well (his parents are Aymara-speakers), and his social and cultural values are just as much shaped by his formation within the agro-unionist movement as the Aymara community. Even though some people (with a more essentialist view of ethnic identity) might not see him as an “authentic” (or “pure”) Aymara, this is not considered a problem since most people of Aymara origin consider him their hermano (brother) anyway. In Bolivia, culture, identity, and ethnicity have for long been fluid and negotiable social categories. In the urban contexts of La Paz and Oruro, there are hundreds of thousands of people who share this feature with Morales, some of them emphasizing their Aymara origin, others not. In this essay I discuss culture and identity formation as social processes taking as a point of departure different perspectives of the urbanization process in Bolivia. I use a constructivist approach to ethnic identity, which means that it could not be treated as a given, but as something that is made in specific and historical contexts.

Much of my empirical base for this essay rests on a study in the city of La Paz in the 1990s of two grassroots organizations consisting of people that considered themselves “people with scarce resources” (see Widmark 2003). They represent “urban Aymara speakers” in this essay, a category referring to groups and individuals belonging to the bilingual Aymara-Spanish speaking population in La Paz. In my earlier study I did not specifically focus on people who emphasized their Aymara identity, but on ordinary men and women living in impoverished areas that are first and second generation of urban migrants from the countryside. With some reluctance I called them “urban Aymara,” although I did not take it for granted that everyone identify with the Aymara ethnic group (however, almost all of my informants speak Aymara or have parents who do). Aymara speakers often retain a distinct Aymara or cholo identity that is manifested in different ways depending on the context. This is contradicted by the fact that individuals are freer to choose between different groups and associations in the urban context than in rural areas, and may have access to several alternative cultural frameworks of interpretation. This does not mean that they are free to identify with whatever social category that comes their way. Nevertheless, to the observer it is not always clear who identify themselves as Aymara, and how, when, and why this identification is important.

1 Cholo originally referred to indios who abandoned the traditional markers of indigenous identity to adopt a more mestizo image. With the increasing urban migration, this category has shifted to include urban dwellers of indigenous background who actively pursue economic or political power but retain strong ties to their culture and language of origin.
Over the last decade Bolivia is going through a far-reaching process of social and political change. Issues about cultural, ethnic, and indigenous identities are very much in focus since “indigenous-based politics have lately gained national ground not through promoting ethno-nationalist separatism but by ceding the formerly exclusive category of ‘Indian’ to a pluralist and urban-based project of refounding the Bolivian state” (Albro 2005:433–434). The contentious character of ethnic issues can be illustrated by the political discussions in connection to the country’s new constitution, which was accepted in a referendum in January 2009. The new constitution declares that Bolivia is a pluri-national state that grants the country’s 36 native peoples the right to self-determination, including collective rights to their lands. A week before the referendum a debate arose in Bolivia about the government’s claim that there exist 36 nations of indigenous peoples and that 36 languages will be recognized as official, since this figure was based on an out-of-date study. The government responded that the number of “indigenous nations” was not the point; the important issue was that indigenous peoples’ rights would be recognized and each region have an official indigenous language next to Spanish. Which languages and exactly how many would have to be decided according to the directives of the legislative assembly (La Razón 2009-01-06). These kinds of debates and the future of the “pluri-national state” bring up the question of how we perceive and conceptualize culture and identity. There are difficulties and paradoxes attached to the political will to recognize and support “indigenous peoples’ rights.” For instance, it implies recognizing a certain amount of cultural differences; but if culture is a process and differences change continually, stereotypes may be wrongly reinforced. It is not always clear how different groups’ senses of belonging are experienced, and there is often a difference between ascribed and experienced identity. Institutionalized multicultural policies can easily fall into an essentialized view of culture, which is not least highly complicated in a situation with strong urbanization. Even though Aymara people are usually associated with rural areas, very large numbers do in fact live in cities today. One of the reasons why I have engaged in these questions is that the roles of the urban Aymara population are often unclear or not even mentioned in the multicultural discussion. To pursue a “politics of indigenous identity” is a balance between emphasizing difference and stressing sameness. The activists of these kinds of political movements would declare that they have the same rights as all other citizens although they are in a different position. In relation to the multicultural vision, the position of the urban Aymara speakers is often vague. The vagueness can be exemplified by the way the educational reform was applied in the 1990s; the question of bilingual and intercultural education was discussed almost exclusively in relation to the rural areas. Today, when ethnic identities are in focus in Bolivia, it is important to recognize that ethnic identities have been disregarded, but it is also important to remember that ethnic and cultural identities are not static, but change in an ongoing dynamic process. I want to show and discuss this fact by relating to empirical material on bilingual Spanish-Aymara speaking migrants in La Paz at the end of the 1990s (Fig. 1). Comparing this
data with later observations I argue that an understanding of indigenous peoples’ processes of identification in Bolivia’s pluri-national state will need to take into consideration the on-going urbanization process and the fact that processes of identification and ethnic articulation are enacted in relation to different frameworks of identification.

Identity formation in the urban context

It seems that questions concerning the role of identity and its consequences for power relations become more manifest in the city and in relation to urbanization processes. According to Low (1996), linkages between macro-processes and human experiences become particularly apparent in cities as sites of everyday practice. Several factors spurred the urbanization process in Bolivia, among them the national revolution of 1952–1953, the agrarian reform, the development of rural education, increasing population, and the problems of division of land in rural areas. According to the national census, the urban population increased from 42% in 1976 to 50% in 1992 and to 62% in 2001. All cities in the country are increasing their population, but La Paz and El Alto are the main receivers of Aymara-speaking migrants from mining centers and rural areas.

In seeking to understand identity formation in relation to urban migration one can see it as a continuum with several options. On one extreme of the con-
tinuum there is the idea that migrants will eventually assimilate into the urban Western-influenced way of living (Wirth 1938; Redfield 1955). This was almost taken for granted in the 1970s, when there was a dominating tendency within the social sciences in which migration was interpreted as a process by which peasants adapted to an urban environment; studying how many generations it would take until peasants were assimilated and transformed into a *mestizo* urban population. These images were often followed by urban situations described as a collapse of social ties, fragmentation of the kinship system, and a decline of tradition. The other extreme took as point of departure the idea that a people’s local and cultural origin has such a strong influence that wherever they settle, they strive to re-establish a *modus vivendi* similar to that from which they came (Lewis 1965; Mangin 1970). These views correspond to a more essentialist view of culture and ethnic identity.

In relation to these extremes of the continuum, assimilation or continuity, I have argued that neither of these extreme forms is likely to occur in the La Paz context (Widmark 2003). One view based on a polarized image is that the Aymara or *cholo* populations in the *barrios* (urban neighborhoods) live with a permanent ambivalence; that is, with one foot in each camp. Ideologically, some actors in Bolivia see them as “mixed” cultural expressions, something transient (*pasajero*), not permanent, something that in the long run will disappear. But in my view they represent the creation of new social identities that grow stronger each day as people from the rural areas are rooted in the city and the position of urban Aymara is strengthened. These new identities are formed in a process of emplacement (Englund 2002) which concerns the way migrants live and experience life in a certain place and how their past embodied experiences are used and changed in order to get rooted in the new location.

An overall question concerns the transformation of the culture and identity of urban Aymara speakers in the process of urbanization. I have investigated how bilingual Aymara-Spanish migrants and their children in La Paz experience and express their sense of cultural belonging in relation to their socially and politically subordinated role, and the new spaces opened up through the democratization process (Widmark 2003). Processes of emplacement are certainly complex, and people experience and form identities that combine or balance various points of reference of which citizenship in the state and membership in the Aymara ethnic community—along with gender, age, occupation, and religious affiliation—are highly important. While people use rural practices and traditions as models for many of their activities and preoccupations, these are constantly contested and negotiated in a creative process. At the time of fieldwork in the late 1990s, strategies for survival and social mobility (as well as choices of symbols and metaphors

---

2 The term *mestizo* refers to people of mixed descent who wear Western dress, speak Spanish, and may or may not speak an indigenous language as well. It also refers to an individual who is strongly oriented toward the Spanish tradition but has not reached the upper circles of Bolivian society. In the altiplano, *mestizos* are generally perceived as city or town dwellers, while the peasantry is seen as almost entirely Aymara or Quechua.
of identity) were informed by the marginalized and subordinated position of the group within the socio-economic and political structure of the city and the country. Without going into the existential depths of identity, in my view personal and collective identities are shaped in a dialogue between ascribed, aspired, and experienced identity. Urban Aymara construct a complex identity on the basis of traditional ideals and practices in dialogue with the surrounding environment.

Cultural transformations

An important question concerns different views of culture and which view allows for the most adequate interpretation of the conditions of urban Aymara speakers. I have shown that the different perspectives of culture I refer to oscillate between the perspectives of the bird’s-eye view and the actor’s point of view, as well as between a more static and bounded view and one that is more contextual and processual (Widmark 2003). The static or essentialist view of culture, which can be found in political rhetoric as well as in some anthropological studies, does not seem to fit very well with people’s lived experiences. Since culture is, and was, an important issue in multicultural Bolivia, which one of these views that is embraced has consequences for identity and power relations in Bolivia. Culture as a political instrument and as an analytical tool is one thing, of course, and people’s lived experiences another. Yet, anthropologists’ generalizations are often part of discourses of power, and there is therefore a relation between the analysts’ image and the lived experience on the ground in so far as the applied view of culture affects political decisions.

Concerning cultural transformations, how they should be conceptualized and how they are expressed empirically, theoretical perspectives on identity formation in relation to migration can be located on a continuum in terms of the emphasis that is placed on adaptation on the one hand and cultural continuity on the other, and that neither of these options in its most extreme form is likely to occur in the La Paz context. Harris (1995) points to the ways in which we may conceptualize different knowledges (cultural traditions) and the relationships between them. She identifies six different models of cultural transformation. My position comes closest to a combination of what Harris calls the model of borrowing and the model of innovation and creativity. For instance, when Aymara speakers of the city organize themselves they borrow elements from other traditions. This can be exemplified by the way that the Aymara women’s organization I have studied incorporates elements from Western models for gender equality into their own practices in order to fulfill traditional ideals. Thus, the cultural expressions of the urban Aymara are best interpreted as the creation of “new” social identities, in the sense that emphasis is on the actual locations and relations of urban Aymara. These identities are reinforced by the movements of people from rural areas who are emplaced in the city, but are shaped by the position this group of people occupies in the city and by what areas they have access to.
In the city all inhabitants, irrespective of background, are part of a cultural context in which different values and cultural models are constantly confronted and negotiated. Since some of these can be traced to the Aymara cultural tradition and others to the Latin or Western tradition and others, it would be misleading to portray the urban context in terms of bounded and mutually exclusive “cultures.” The dichotomy of Andean and occidental culture is a cultural framework through which experiences are interpreted and social distinctions made. The polarity is also used as a rhetorical device. Given the conflicting values in the urban context, Aymara identity in La Paz has been characterized as fragmented (Carter 1971; Johnsson 1986). My study shows instead that this identity is more accurately understood as complex. Urban Aymara identity emerges in the juxtaposition between traditional ideals and practices and the values of the dominant society. If anything is fragmented it is not the identities of the migrants but their life situation within the political economy of the Bolivian nation-state. In saying “fragmented,” I refer to a life situation characterized by social and economic insecurity; restricted or capricious possibilities for participating in and influence the decision-making processes that concern their zona, city, and country; and finally, the legacies of an ideology of racism and exclusion that polarizes Andean and Western culture.

Even though I find many of the issues about identity formation and cultural transformation I dealt with in my earlier work to still be valid for the urban context of La Paz, Bolivia is in the midst of a re-structuring process which was spurred by social and political crises that turned more acute in 2000. As far as I know, people’s life situations are still fragmented but there is a political process going on with the aim of changing people’s life conditions. The life situations of urban Aymara speakers have changed during the last five years in terms of participation and political opportunities, but social and economic insecurity prevail for a large proportion of urban dwellers.

A need to negotiate identity

Another important theme concerns the way migrants have been obliged to negotiate identity in relation to the polarity of Andean and occidental culture. From what I have met in Bolivia during the last couple of years I would say that there is still a need to negotiate identity—entrenched racist structures, for example, are not changed overnight—but I think that many times the rules of the game has changed. Urban Aymara are not as marginalized politically as before and discrimination does not occur without notice, as it did in the 1990s.

In the post-colonial and multicultural reality that is and was La Paz and Bolivia, cultural identity is communicated differently in different contexts and the image of one's identity is even consciously manipulated, since identity affects the resources, power, and influence that people have access to. Negotiations take place on many levels, within people’s own group, between Protestants and
Catholics, and between urban Aymara speakers and representatives of mestizos and “whites.” In one context, status symbols and values can be related to a “non-Indian life-style” or to individual achievement. In another context, for example within base-organizations, opposite values rule; values such as equality, justice, and community. In previous work I discuss the ways identity was handled in relation to indigenous movements, the base-organizations people took part in, participation in and sponsoring of fiestas, and gender relations (Widmark 2003).

What are negotiations of identity about, and what is at stake? First, it may be a matter of surviving and a claiming of rights to some kind of resource. In a country with none, or a badly functioning social security system,\(^3\) you either sink or swim. In this highly competitive environment there is a constant struggle over scarce resources, and therefore impression management may be one of the weapons used in this competition. The way you present your group in front of a donor or in relation to a process of community development may have repercussions for the future. The group can be presented, for example, either as an ethnic group or as a group of poor people, or as a microempresa or an Aymara community. Second, negotiations may take place in order to avoid the social stigma attached to indios or cholos, or in order to obtain some respect and recognition. There should be less need for these kinds of negotiations today in Bolivia. Third, social mobility may be perceived as a change of cultural identity in a situation where class and ethnicity are tightly intertwined. Thus, in the sense Bourdieu (1977) uses the terms, negotiations take place in order to get access to economic capital (jobs, salaries, extra benefits), social capital (contacts, patron-client relationships), or symbolic capital (social prestige, respect, power, and influence). The constant struggle over resources and subsequent negotiations, however, limit the individual person. Peers always assess personal choices in relation to what a person want to communicate about his person (this could refer to dress, choice of house, friends, etc.). In the Bolivian context it is important to position oneself in order to gain respect.

It is important to see that the terms of negotiation have traditionally not been set up by the Aymara speakers themselves (neither urban nor rural), even if they consciously or unconsciously take part in sustaining the system. Because of marginalization and discrimination they were subject to before, they had to take part in this “social game” in order to survive and/or pursue some social mobility. Urban Aymara seemed, at the time of my study in the late 1990s, to have a strong consciousness about their marginalized position, even if they often appeared to take on their situation and position in a calm way. The calmness was not stable, however, as the political development of Bolivia has shown.

Another question is whether cultural ambivalence is a hindrance to pursuing self-esteem, because self-esteem is important for the potential to change one’s situation. Before, the terms of negotiation meant, most of the time, that cultural values and practices derived from indigenous traditions were depreciated by both

---

\(^3\) At the time of my study the country had no functioning social security system. This situation is slowly changing, especially in relation to the access to health care.
sides when Aymara speakers dealt with other, non-indigenous groups in society. Within their own group, the value of such practices varied depending on the context. This meant that people had to live with a certain cultural ambivalence or ambiguousness. Scholars have argued that Aymara culture permits a kind of flexibility and double social personality (Carter 1971; Johnsson 1986). But the situation could just as well be that ambivalence and negative experiences create internal contradictions and psychological and social problems for Aymara speakers. The material and political constraints that they are subject to often make it impossible to achieve social and cultural ideals. The prevalence of identity impression management shows that cultural ambivalence often presents a problem, owing to the fragmented life situation people lived in. But the problem of cultural ambivalence is by no means a given; people all over the world develop complex identities in different contexts without resulting in negative ambivalence. With the social and political changes that have occurred in Bolivia during the last decade the depreciating practices directed towards indigenous traditions have diminished, most likely diminishing the possible sense of cultural ambivalence.

The “own group” as a primary point of identification

An important theme that emerged from my earlier work concerns the importance of people’s own group for identification. The study shows that migrants do not conceptualize moving to the city as a big rupture, but rather as a gradual process. Contrary to earlier observations (Albó et al. 1983), the results of my inquiries show that people’s aspirations are mainly focused on the values and practices of their “own” group. Even if migration is part of a striving for social mobility, migrants do not aspire to assimilate the cultural context of the elite but rather to advance (querer avanzar) within their own real and imagined community in relation to their own rules and what matters to their own group. The objectives of advancement may differ from the aims of the national elite or other actors in Bolivian society.

What about Aymara ethnic identity: does this “own group” represent an Aymara community? For the people I worked with in the 1990s, it seemed that in everyday life the sense of belonging to a category of poor people (gente de escasos recursos) was more important than the ethnic sense of belonging. As could be expected, ethnicity was mostly communicated outwards, that is, in relation to other groups and categories. Ethnicity was hardly ever discussed within the group. Even though there had already been a movement in Bolivian public discourse from class rhetoric to a cultural and ethnic rhetoric, urban Aymara dwellers seemed to be more anchored in a class identity as “people with scarce resources.” I could also detect among the people associated with the organizations I studied a kind of dissociated attitude toward indigenous movements. If I would do the same study today, the same people would almost certainly express themselves in relation to a more “ethnic” frame of interpretation.
Culture, identity, and Bolivia’s democratic development

The problem of culture and identity is primarily related to the possibility of a democratic and fair development of Bolivia as a nation-state. At the time of my study the dichotomy of Andean versus Hispanic culture had political connotations, and even if they were presented as mutually exclusive ideal types, what represented the types refers to different points on a continuum. Polarized images were used and manipulated in communication between groups in relation to ideals, principles of organization, social memory, political rhetoric, or actual practices. Poor people in Bolivia strived for material security and recognition more than anything else. Even though some people of Aymara origin had managed to accumulate considerable wealth, this economic position did not necessarily lead to power to influence the social and cultural production of meaning in Bolivia, in Bourdieu’s sense, or equal possibilities to participate in the country’s decision-making institutions.

In the 1990s cultural identity was not as politicized as it became in the 2000s, and the ethnic movements were not unified enough to really make a difference. Even though things are changing, most of the facts I used to explain the lack of ethnic consciousness among urban Aymara speakers in the 1990s are still there and may be valid to a certain extent for the category of urban dwellers I studied. To explain this reality I point, on the one hand, to the fact that indigenous people are in the majority in the country and Aymara speakers represent a large proportion of the urban population, which create a situation in which “indigenousness” do not stand out as the most important distinguishing factor shaping their life (even if it might indeed be so sometimes). The other reason I see is that ethnic boundaries are fluid, which give the impression that there are other possibilities not based on claims of cultural or ethnic recognition that exists for influence and social mobility. A good education in combination with the right contacts can lead to a well-paid job, as in the case of several persons employed by NGOs or the state, or to the possibility of influencing some national political decisions, as in the case of the former Vice-President Victor Hugo Cárdenas. If the ethnic sense of belonging is complex and people have access to different frameworks of interpretation and practices, this will have consequences for the ethnic struggle for justice and make it more difficult to create a unified movement. The ethnic movements and the way anthropology is often pursued in Bolivia give a more essentialized image of Andean culture, which does not correspond to people’s self-image. Self and personhood are transformed in the city; Aymara speakers are not necessarily first and foremost Aymara and may not identify fully with the messages of the indigenous movements. Politically, at the time of my field study in the 1990s, the most attractive options for the urban Aymara were the populist parties that seemed best to represent their interests and recognize their way of living. These parties did not, however, present any political alternatives that would change the political economy of the country. The Aymara ethnic identity, had, until then, been most salient in relation to international donors and tourists.
From what we know today, taken together these factors are obviously not decisive for the ways in which people choose to identify themselves in relation to others. So, what else matters?

Different frameworks of identification

In relation to the new constitution in Bolivia, political and legal rights will be assigned to groups on the basis of indigenous and peasant identifications. Both of the classifications are problematic but here I will take the “indigenous” one as an example. The conceptual basis of “indigenous peoples” has been discussed at length showing that, even if it is used by different actors in society, as an anthropological concept it is highly problematic (Barnard 2006; Kuper 2003). In relation to people’s identifications as “indigenous” in Indonesia, Murray discusses what political risks and possibilities are implied by different frameworks of identification. She argues that “a group’s self-identification as tribal or indigenous is not natural or inevitable, but neither is it simply invented, adopted, or imposed” (Murray 2000:151). She wants to see it rather as a positioning based on historical practices and geographical circumstances, structures of meaning that emerge from patterns of engagement and struggle. The conjunctures that lead to the fact that some groups will identify as “indigenous” are the result of a cultural and political work of articulation. “Positioning” and “articulation” are two important concepts borrowed from Stuart Hall (Grossberg 1996). People may be classified according to different frameworks of interpretation. In the examples of Murray, populations are classified by the state in two different ways—according to two distinct frames of meaning and action (“the indigenous discourse” and “the discourse of development”)—and classified by social and environmental activists according to a third framework of interpretation. “The predominance of a particular frame at a particular time and place depend not upon essential differences between the populations themselves, but upon the regimes of representation or ‘places of recognition’ that preconfigure what can be found there…” (Murray 2000:154). The conditions and conjunctures that enable the articulation of “indigenous” identity are related to competition about resources, explicit group boundaries, entrenched cultural differences, the local political structure, and external interests (such as urban NGOs and international actors).

Using the concept of “indigenous people” as a frame of reference has including and excluding effects. As indicated by Murray (2000:169–170) there are contestations and risks. It concerns how the difference between indigenous peoples and peasants is handled. More vulnerable groups, such as displaced or landless peoples, are generally excluded. The frame fits ambiguously with the way of living in border areas (and may apply to urban Aymara). It may restrict the possibilities of creating broad alliances and arenas of action on the local level.

The frameworks of identification, discussed by Murray, resembles Yashar’s (2005) discussion about changing citizenship regimes in Latin America and the
ways that states privilege certain identities. The point is that there are specific conditions and conjunctures that enable the articulation of “indigenous,” “peasant,” and “ethnic” identities in Bolivia. I do not have the possibility to discuss them at length here; it suffices to mention that in the mid-1990s a new multcultural, pluri-ethnic, and gender sensitive vision of political agency and citizenship emerged, a vision that broke with the long-standing assimilationist paradigm of the early 20th century, and promised greater respect for the country’s cultural diversity (Healy and Paulson 2000). This vision was part of a neo-liberal framework (much reacted against), which little by little is being replaced by the current government’s pluri-national and socialist framework. The current re-valuing process of Andean culture and identity is part of the aims of de-colonization undertaken by the government and social movements.

In this essay I emphasize the processual and fluid character of culture and identity formation, arguing that an understanding of indigenous peoples’ processes of identification in Bolivia’s pluri-national state will have to take into consideration the on-going urbanization process and the fact that processes of identification and articulation of certain identities are enacted in relation to different frameworks of identification. In the case of the urban Aymara, identity formation and cultural transformations take place in an interplay between embodied practices and conceptions, and the economic, social, and political developments of the country that promote certain frameworks of identification. Urban identification in Bolivia is not primarily “ethnic” or “indigenous,” but it is in the urban context that an “ethnic” consciousness emerges. To assume a processual perspective on culture and identity in Bolivia opens up a potential for an inclusive, unifying development of the current conflictive situation.

References
La Razón 2009-01-06. El Número de Etnias no Es Relevante para el Gobierno.
Bolivians in Gothenburg: The Archaeological and Ethnographic Collections at the Museum of World Culture

Adriana Muñoz

Contact details
National Museum of World Culture
Box 5303
SE-402 28 Gothenburg
Sweden
adriana.munoz@worldculture.se

RESUMEN

Bolivianos en Gotemburgo: Las colecciones arqueológicas y etnográficas en el Museo de la Cultura del Mundo

En este artículo se presentan las colecciones Bolivianas que existen hoy en los depósitos del Museo de la Cultura del Mundo (Världskulturmuseet) en Suecia. Así como también se presenta un proyecto financiado por el Consejo Sueco de Artes (Kulturrådet), alrededor de la colección conocida como Niño Korin. La idea del artículo, además de presentar las colecciones es también discutir las posibilidades de éstas incorporando nuevo conocimiento e información y actualizando su significado y sentido en un entorno contemporáneo. Las colecciones de museos pueden contribuir y ser utilizados hoy en día en nuevos contextos; estos objetos llevan información y un sentido que no están muertos, aún significan cosas para muchas personas. Los objetos bolivianos pueden ser los portadores de memorias individuales y colectivas de personas que viven hoy en Bolivia así como también en Gotemburgo. Es un objetivo básico del museo como institución de brindar esa conexión entre los interesados y las colecciones.

Introduction

During the last part of the 18th century and the beginning of the 19th century, there was a frenzy of collecting going on around the world associated with the colonial expansion. During the 20th century the accumulation of foreign objects was sys-
tematized and established in museums in the northern hemisphere (Shelton 1995:6). Ethnographic objects became a goal for collectors, museums and other institutions. Sweden and Gothenburg were no exceptions and many of the collections stored today at the Museum of World Culture in Gothenburg have a strong colonial character.

The Museum of World Culture inherited the collections of the former Ethnographical Museum of the City of Gothenburg. In 1999 the collections were passed on from the city to the state and since then all collections, the staff and the museum library became part of the Swedish government.

Today, around 100,000 catalogue numbers are stored at the Museum of World Culture. The largest amount of objects is from Latin America, with 17% of the entire collection from Bolivia. In 2007 the Bolivian government claimed back these collections. Initially claims were made for just one collection, but owing to the lack of good communication between the counterparts, the repatriation claim was expanded to include all Bolivian collections housed at the museum. In 2009, however, the reclaim was no longer in progress, and today (mid-2011) there is a constructive dialogue between stakeholders.

The first collections coming to Gothenburg from Bolivia arrived in 1916, when Erland Nordensköld became head of the Department of Ethnography at the then Göteborgs Museum.

At the beginning of the 20th century, when much of the Bolivian collections at the museum were brought to Gothenburg, very few Bolivians were living in the city. Today around 2000 people are registered as Bolivian immigrants in Gothenburg, according to Statistics Sweden (SCB).

In this contribution, I present an overview of the Bolivian collections stored today at the Museum of World Culture in Gothenburg and discuss the possibilities of working with Bolivian colleagues and institutions in future collaborative projects.

Bolivian heritage in Gothenburg

The largest collections at the museum are those from Bolivia, representing 17% of the total number of collections at the museum. This material has been collected under different time periods and museological paradigms (Table 1). The first collections were taken to Gothenburg by Erland Nordensköld in 1916. Erland Nordensköld was an important pioneer in Americanist studies in Sweden. He became the director of the Department of Ethnography at the City Museum in 1913 while he was doing fieldwork in Bolivia. After he came back to Sweden in 1915...
the collections began to arrive (Figs 1 and 2). In 1916 alone, 4000 numbers were registered; all of them product of his fieldwork in Bolivia. Erland Nordenskiöld became the first professor of ethnography at what was then Gothenburg College, now University of Gothenburg, which gave him the opportunity to create a school of Americanist research that linked the museum with Gothenburg College (Lindberg 1995). Erland Nordenskiöld made several fieldwork seasons in Latin America. The last of these was in 1927 in Panama, where he together with Sigvald Linné made archaeological investigations in the area of Darien (Linné and Leijer 1929). After Nordenskiöld’s death his students—for instance Henry Wassén and

Table 1. Donators of ethnographical and archaeological materials registered at the Museum of World Culture. – Donadores de materiales etnográficos y arqueológicos registrados en el Museo de la Cultura del Mundo.

<table>
<thead>
<tr>
<th>Collector</th>
<th>Year</th>
<th>Number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rydén, Stig</td>
<td>1930–1952</td>
<td>11,760</td>
</tr>
<tr>
<td>Nordenskiöld, Erland</td>
<td>1904–1914</td>
<td>3,390</td>
</tr>
<tr>
<td>Alvarsson, Jan-Åke</td>
<td>1976–1984</td>
<td>313</td>
</tr>
<tr>
<td>Métraux, Alfred</td>
<td>1929–1932</td>
<td>185</td>
</tr>
<tr>
<td>Posnansky, Arthur</td>
<td>1930</td>
<td>131</td>
</tr>
<tr>
<td>Lunardi, Vic. Apost. Fr.</td>
<td>1939</td>
<td>97</td>
</tr>
<tr>
<td>Exchange with Tucuman (Métraux)</td>
<td>1931</td>
<td>96</td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
<td>90</td>
</tr>
<tr>
<td>Oblitas Fernandez, Edgar</td>
<td>1970</td>
<td>77</td>
</tr>
<tr>
<td>Malkin, Borys</td>
<td>1960–1991</td>
<td>76</td>
</tr>
<tr>
<td>Von Rosen, Erik</td>
<td>1901–1902</td>
<td>60</td>
</tr>
<tr>
<td>Belisario Díaz Romero</td>
<td>1920</td>
<td>59</td>
</tr>
<tr>
<td>Braun, Otto</td>
<td>1930</td>
<td>41</td>
</tr>
<tr>
<td>Jarnald, Vanja</td>
<td>1966</td>
<td>52</td>
</tr>
<tr>
<td>Bought in the US</td>
<td>1973</td>
<td>35</td>
</tr>
<tr>
<td>Hanke, Wanda</td>
<td>1955</td>
<td>31</td>
</tr>
<tr>
<td>Tenz, O.</td>
<td>1928</td>
<td>28</td>
</tr>
<tr>
<td>Selve, Ivar</td>
<td>1911–1967</td>
<td>24</td>
</tr>
<tr>
<td>Bühl, Francisco Bertoldo</td>
<td>1931</td>
<td>23</td>
</tr>
<tr>
<td>Sandström, Gustaf</td>
<td>1928</td>
<td>21</td>
</tr>
<tr>
<td>Buck, Fritz</td>
<td>1930</td>
<td>20</td>
</tr>
<tr>
<td>Salinas, L.</td>
<td>1979</td>
<td>17</td>
</tr>
<tr>
<td>Mariscotti, Ana Maria</td>
<td>1960</td>
<td>12</td>
</tr>
<tr>
<td>Hernmarck, Arvid</td>
<td>1908–1909</td>
<td>10</td>
</tr>
<tr>
<td>Wichström, Bror</td>
<td>1949</td>
<td>9</td>
</tr>
<tr>
<td>Schmidt, Alfredo</td>
<td>1920</td>
<td>7</td>
</tr>
<tr>
<td>Franciscan Missions in Bolivia</td>
<td>1931</td>
<td>7</td>
</tr>
<tr>
<td>Gonzáles Bravo</td>
<td>1930</td>
<td>6</td>
</tr>
<tr>
<td>Gretzer Collection, Hannover</td>
<td>1929</td>
<td>6</td>
</tr>
</tbody>
</table>
Figure 1. Amulet collected among the Chama people by Erland Nordenskiöld at Río Madidi, La Paz, 1913. Photo by Ferenc Schwetz. – Amuleto recolectado por Erland Nordenskiöld entre el pueblo Chama, en Río Madidi, La Paz, 1913. Fotografiado por Ferenc Schwetz.

Figure 2. Ceramic vessel from the site of Perereta in the Mizque Valley collected by Erland Nordenskiöld. Photo by Ferenc Schwetz. – Vasija de cerámica del sitio Perereta en el Valle de Mizque, recolectado por Erland Nordenskiöld. Fotografiado por Ferenc Schwetz.
Stig Rydén—continued to collect materials in Latin America and contributed to the formation of the Bolivian collections at the museum.

Stig Rydén made several seasons of archaeological and ethnographical fieldwork in Bolivia, contributing to the largest collections that the museum have today. Stig Rydén collected himself 10% of the total numbers registered at the museum. Rydén's collections are mostly the result of archaeological fieldwork; he did not specifically collect for exhibition purposes at the museum but mainly for research and education. After his fieldwork in the 1940s at Tiwanaku, around 8000 ceramic fragments were added to the Bolivian collections as research material and for comparative studies (Rydén 1947, 1957). Today, the enormous amount of ceramic fragments is a dilemma, since they have not been exhibited nor studied or used again for educational purposes after Rydén. Stig Rydén’s archaeological and ethnographic fieldwork supported many of Erland Nordenskiöld’s hypotheses about cultural and economic contacts between the lowlands and highlands in South America, which was an important contribution against simplistic but mainstream models positing a notion of Andean civilization versus Amazonian primitive societies that dominated South American archaeology for much of the 20th century. Despite the importance of his conclusions and the cultural artefacts he collected, his contribution to South American archaeology has still not been widely recognised in Sweden and there is a great need to further explore the collections that he brought to Gothenburg.

Many other collections stored today in Gothenburg are acquisitions through museum exchange programmes and donations or gifts from Bolivian scholars, businessmen, tourists and others.

A short overview of the collections

The 17,000 numbers registered with origin from Bolivia are divided into archaeological and ethnographical objects. The archaeological collections are mainly those made by Stig Rydén during several seasons of fieldwork as part of different research projects (Rydén 1941, 1947, 1956, 1957).

The ethnographical objects were mainly collected by Nordenskiöld and Rydén but also by other scholars and contacts that the museum had in South America. Table 2 shows the number of objects collected by Stig Rydén, Erland Nordenskiöld and Alfred Métraux. Métraux was studying in Gothenburg in 1925 and was supervised by Nordenskiöld. Métraux and Nordenskiöld stayed in contact until the latter's death in 1933, and afterward Métraux maintained contact with the museum.

The terminology that has been used to categorise the archaeological and ethnographical artefacts in the collections has not been updated for many years. In the digitalization process of the catalogue and database that the museum has made over the last few years, it has many times been discovered that not only is the nomenclature old-fashioned and out-dated but also that derogative names have often been used to describe people. Also, most of the ethnographical and archaeological material have never been studied, and lack adequate description.
Table 2. Information on Bolivian archaeological collections by province and some major collectors. – Información sobre las colecciones arqueológicas Bolivianas por proveniencia y por los mayores coleccionistas.

<table>
<thead>
<tr>
<th>Province</th>
<th>Alfred Métraux</th>
<th>Erland Nordenskiöld</th>
<th>Stig Rydén</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chuquisaca</td>
<td>117</td>
<td></td>
<td></td>
<td>117</td>
</tr>
<tr>
<td>Cochabamba</td>
<td>1 222</td>
<td></td>
<td></td>
<td>1 222</td>
</tr>
<tr>
<td>El Beni</td>
<td>182</td>
<td>58</td>
<td></td>
<td>240</td>
</tr>
<tr>
<td>La Paz</td>
<td>63</td>
<td>85</td>
<td>1 245</td>
<td>1 393</td>
</tr>
<tr>
<td>Oruro</td>
<td>11</td>
<td>2</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>4</td>
<td>181</td>
<td>3</td>
<td>188</td>
</tr>
<tr>
<td>Sara</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Tarija</td>
<td>1</td>
<td>230</td>
<td></td>
<td>231</td>
</tr>
<tr>
<td>Yacuiba</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

**Niño Korin**

Here I discuss one collection in greater detail. The Niño Korin collection is the first collection that the Bolivian government reclaimed in 2007. In light of the possibility of a repatriation situation, the Museum of World Culture decided to study and update the information around this collection. Resources from the Swedish government were invested in a project aiming to study the collection in detail during 2009.

This particular collection was bought in the 1970s by the then director of the museum, Henry Wassén, from the Bolivian scholar Enrique Oblitas Poblete. The museum paid 1000 US dollars (5200 Swedish crowns) for these objects. It was classified as an archaeological collection from the Tiwanaku Period, i.e. the mid- to late first millennium AD. These objects came from the grave of a male individual interpreted as a “medicine man” owing to the artefacts associated with the remains.

The detailed origin of the material is somewhat obscure. We know that Wassén during a visit to the museum of archaeology in La Paz in 1970, saw the collection from Niño Korin and requested a similar one for the Swedish museum. The correspondence between Henry Wassén and Oblitas Poblete and the latter’s son indicates that something was wrong with the acquisition of the collection. In a letter dated October 25, 1970 Enrique Oblitas Poblete urged Henry Wassén to keep the affair secret:

> Desde luego tengo el encargo especial de indicarle, guarde todo secreto de la forma de adquisicion, asi como de las personas que se prestaron para facilitarle tales objetos, que eran de mi exclusive propiedad y que le facilité a mi hijo, para que consiguiera que alguna persona entendida en la materia los estudiara con el fin anteri- ormente indicado...
No despertar sospechas de que estos objetos hubieran salido del país, ya que esta prohibido y tiene sanción penal y no quisieramos colocarnos en este trance, por lo que le quedamos muy agradecidos por este especial favor que le pedimos.

Of course, I have to make a special request: keep everything secret about the acquisition, including the people who helped to provide the items, which were of my exclusive property and which I provided to my son, so he could find a person skilled in the subject to the study the objects mentioned above…

We must not arouse suspicion that these objects have left the country, as it is now prohibited and is punishable by law and we would not like to put ourselves in any predicament, so we would be very grateful for this special favor we ask (translation by the author).

It was a quite conflictive political period in Bolivia at this time during the dictatorship of Hugo Banzer. Only a couple of years before Wassén bought the collection, the Bolivian army had captured and killed Che Guevara, there was an active guerrilla movement and the unions were putting on strikes and manifestations daily. In several letters, Wassén asked the Swedish ambassador in Peru and the English ambassador in Bolivia about the fate of several people, some of whom were involved in the museum’s acquisition of the collection.

The collection includes 77 objects that were found at Niño Korin (close to Charazani, in the Department of La Paz) in June 1970, in a grave of a “medicine man” (Wassén 1972). Among the most significant objects are a deformed skull of a person under 30 years of age, snuff tablets, textiles, weapons, spatulas and mortar (Fig. 3). Henry Wassén had a fascination for pre-Columbian drug paraphernalia and the collection includes a couple of objects associated with the use of psychotropic drugs. Henry Wassén studied the collection when it arrived in Gothenburg and sent samples for analyses to different laboratories, resulting in the first radiocarbon dates from any collection at the Ethnographical Museum (Wassén 1972). The radiocarbon dates placed the collection in the Tiwanaku Period of the first millennium AD.

**Tiwanaku**

Bolivia is a pluri-national country with around 30 different ethnic groups living together.⁴ Since Morales assumed the presidency of the country, an alternative national project started: the incorporation of the indigenous people into the economic, social and cultural life of Bolivia; the project of a multicultural country, or rather plural national, including rights for the indigenous people. Today Bolivia has the official name of the Plurinational State of Bolivia.

As in most Latin American countries, the boundaries were decided by the Spanish descendent population during the independence period of the early 19th

---

⁴ The largest groups are Quechua (more than 1.5 million people), Aymara (around 1 million) and different Guarani groups (300 000). The Bolivian population consists of around 35% Indians, 30% mestizos and 15% white.
century, and subsequent wars. So, many different nations came together in one national-state project (the Bolivian National Project). In 2005, Evo Morales, an Aymara descendent, was elected president of Bolivia. He is part of the 70% of the indigenous population from Bolivia.

The distant past, the time before the Spanish conquest, became an important icon of synthesis for the different nations in Morales’ political discourse. On January 21, 2006 Evo Morales celebrated the inaugural presidential ceremony not in La Paz (the capital of the country) but in Tiwanaku, one of the important archaeological sites of a pre-Columbian state capital on Bolivian territory (see Janusek, this volume), both feeding on the symbolic value of this place as well as adding to it. His inaugural speech was presented first in Aymara and then translated into Spanish, and he wore traditional and symbolic clothes of the Aymara people.

**Tiwanaku: the site and culture today**

The archaeological settlement at Tiwanaku covers around 400 hectares and is situated on the Andean high plateau of Bolivia, 20 km to the south of Lake Titicaca and 70 km north-west of the capital La Paz. The site has important civic-ceremonial monumental architecture and an extensive agricultural area with irrigation systems. The site of Tiwanaku is surrounded by other important settlements like Wankani, Pajchiri and Khonko—archaeological sites which were investigated by among others Stig Rydén in the 1940s. The artefacts from these excavations are today kept in the museum collections. These sites are related to Tiwanaku, but are not regarded as important. The toponym has lent its name to an early pre-Columbian state that extended from present-day Bolivia into north-western Argentina, northern Chile and eastern Peru. The archaeological remains at Tiwanaku became a Cultural World Heritage site in 2000 (UNESCO 2000).
Following the inclusion of the archaeological site on the UNESCO list the local community at Tiwanaku took over the administration of the archaeological remains, the visitor centre and the field museum from the central government at La Paz. This was claimed to be a response to the way the Bolivian government had administrated the settlement without adequately including the community living in the area. After this conflict, the government created an organization called Comité Interinstitucional de Administración y Gestión del Sitio Arqueológico de Tiwanaku, which included delegates from the Department of Culture, the governor of La Paz, the head of the community at Tiwanaku and a member of the council of mallkus.\(^5\)

Following Morales selection of Tiwanaku as the site of his presidential inauguration, the place has acquired an important value as national icon, but in a new narrative. Tiwanaku has been part of the political historical narrative of Bolivia since it became an independent country, usually associated with a nationalist account. For example, the Gateway of the Sun at Tiwanaku is used as a symbol in many government spaces (Kojan and Angelo 2005:388).

However, previous to Evo Morales’ inauguration, Tiwanaku was associated with a vanished culture of the past that was disconnected from the present and from the current population. Evo Morales assuming presidency at Tiwanaku symbolically reconnected the place and the past with the country’s current population. Thus, in some sense, this official act gave history back to the current Aymara population living there. However, it is interesting to note that Tiwanaku not only is an important symbol for the local Aymara people, but also for other indigenous groups living in Bolivia and in neighbouring countries. Before Evo Morales’ presidency, the idea of a homogeneous country and national culture was part of the political discourse, and the idea of a long and glorious past also involved setting the current indigenous population apart as some kind of relic expropriated from their own past (Mamani Condori 1989).

Bolivians in Gothenburg today

The Bolivian collections spread out at museums around the world took on a new value with the inauguration of Morales’ presidency. From the period of independence in 1825 to the present, it has been important for Latin American elites to maintain good relationships with Europe and the United States, not only economically but also culturally. Often, Latin American intellectuals have been educated at universities in Europe (since the last part of the 19th century) and the United States (after World War II). In regard to the museums and collections, intellectuals and the elite in many cases viewed with pride the large number of Bolivian objects scattered around the world. Similar to Anthony Shelton’s analysis of Mexico (1995), national institutions in Bolivia have used historical and an-

---

\(^5\) Members of the local Aymara or Quechua community.
thropological research to legitimate ideological interpretations of the relationship between the past and the present in a way that marginalises other ethnic groups (Shelton 1995:9). In the construction of national identities associated with the construction of nation states, ethnical groups who were disqualified to be part of the new homogenous nation were expropriated from their own narrative and history, thus becoming “people without history” (Wolf 1982). In the case of ethnographical museums, and especially in the case of the collections at Gothenburg, this same pattern is very clear in the way that cultural objects have been classified, for instance in the separation of archaeological from ethnographic artefacts. History as category does not exist as form of classification of the objects.

Today, the view is very different. With the understanding of a plundered past and the will to re-write the national past, it has become very important to include the multicultural society that Bolivia represents.

According to Statistics Sweden (SCB), around 3000 persons born in Bolivia live in Sweden (700 in Gothenburg). Second generation Bolivians (with at least one parent from Bolivia) totals around 2200 persons, approximately 520 of them living in Gothenburg. In all, about 1200 Bolivians live in Gothenburg.

When the collections started to arrive in Gothenburg in the early 20th century, Latin American countries were still in the early stages of nation building. Bolivia became an independent country in 1825 and as a typical postcolonial creation, the formation of the country was decided without taking the different indigenous national groups living in the territory into consideration. Since the creation of the country, there have been around 200 changes of government between military coups and democratic governments. This political instability has caused emigration waves from Bolivia around the world.

The repatriation question

In 2007 the Morales administration demanded back the Niño Korin collection from the Museum of World Culture. The Swedish government started an inquiry regarding repatriation, with the Ministry of Foreign Affairs in charge of the negotiations with Bolivian authorities. Not curators, museums or even the Ministry of Culture were involved in these negotiations. However, since the response from Sweden was not satisfactory to the Bolivians, the repatriation request was extended to include all collections of Bolivian materials in Sweden. As mentioned above, this accounts for 17% of the entire collection at the Museum of World Culture, clearly a very substantial part of the total holdings.

The curators and responsible personal at the Museum of World Culture realized that the Bolivian collections had not been studied for over 50 years. The knowledge we have about the material is obsolete, impregnated with colonial conceptions and enclosed in scientific paradigms that exclude the knowledge from the original population. Given the immediate possibility of that the col-
lections could be repatriated, the museum decided to form a scientific project to better understand the Niño Korin collection.

A first step was to recognize the ethical aspects of belonging and the rights to the collection—the recognition of to whom the collection belongs and the significance of an historical and emotional link between the objects and people. Another is the legal intra-state aspects of repatriation. Repatriation is a complicated process and the solutions and methods must be different from case to case. One important factor to consider is that it must be on, in some sense, equal terms. In Sweden, there has been a large argument because Swedish museums are setting up a series of conditional demands on the countries to where the objects are repatriated. To some extent, those demands have been seen as an arrogant display of power in respect to the original owners—in respect to de-colonizing practices, decisions must be in the hands of the owners and patronizing attitudes must be avoided. However, the fact is that today, 2011, the repatriation question is largely off the agenda: rather than emphasizing disagreement and rights, both parts are talking in terms of future collaboration for the strengthening of our understanding of material culture and the role of the past in the reformulation of the plurinational state. An exhibition about the Niño Korin project is organized at the Museum of World Culture in 2012, including new interpretations of the collections and also presenting new possibilities of working in the future.

The Museum of World Culture today

In the last decades there has been an intensive discussion about the new role that museums should have in relation to society—especially museums which hold ethnographic collections. Brown (2004:143) points out that the most important issue for museums are cultural equity and equal access. Nederveen Pieterse (1997:133) suggests a dialogical approach. Reviewing the relationship between museums and the countries of origin and their communities is an important issue and many groups are putting pressure on museums worldwide to open up their collections and are claiming back objects regarded as important for local communities.

In the case of Sweden, there has been a very lively discussion, but not so much has happened in practice. The extensive digitalization project that Swedish heritage authorities implemented over the last decennia put the finger on problems of accessibility of museum collections and the new possibilities and potentials of digital archives and web-based virtual displays. In the case of ethnographical collections, digitalization is a technological solution that has made possible to have the information of the collections on the Internet. However, narratives behind the information of the collections, classification systems and knowledge about them have not been updated.

In the case of the Museum of World Culture, many resources have been invested to change how exhibitions are presented and to reinvent the relation between the museum, its collections, exhibitions and the general public. These changes seem
to have been successful inasmuch as the museum today has increased the number
of visitors, particularly younger people, and the relation between the institutions
and their audiences has become deeper in much owing to an extensive program
specifically directed toward the young audience. At the same time, the collec-
tions and collection management have for many reasons been sliding down the
list of priorities, and not so much has happened in this arena over the last few
years. One reason is that when bringing the users, the owners and the collections
together (not only online, but in exhibitions and for research) it has always been
done as part of specific time-limited projects, which means that they are not in-
corporated in the daily practice of the museum nor in the annual budget.6

As an example, the Museum of World Culture tried to develop another kind
of practice in the beginning of its existence, when the museum had funds from
the EU for a project called “Equal” (Lagerkvist 2006). This project produced
results (such as the incorporation of many voices in the exhibition and the ac-
cess to the collection for people from Africa’s Horn living in Gothenburg), some
of which were presented in the “Horizons” exhibition. Since that project, and
based on the results, no further resources have been budgeted for these kinds of
projects. I believe that re-interpretation and re-contextualization of collections
cannot be based on projects—they must be incorporated into the daily work of
the museum. The possibility of making changes in how knowledge around the
collections has been constructed cannot be solved within the frame of projects
with short duration. Instead, a long-term process of reflexion and planning must
be included in the museum budget.

In my view, one of the biggest challenges for the Museum of World Culture
is that there is a fundamental contradiction between the museum’s mission and
its collections. The mission of the museum is to be a place for dialogue, where
multiple voices can be heard and controversial topics can be raised. Exhibitions
must reflect the breadth, depth, variety and dynamism inherent in the concept of
world culture. On the other hand, the collections are mainly from Latin America
and are classified as ethnographic and regarded irrelevant for raising current is-
 issues—they belong to people who are not targeted by the political integration
programs in Sweden.

Updating the knowledge of the Bolivian collections

In the history of museums in Sweden, the production of knowledge around the
collections has always been in the hands of the collectors, scholars and the mu-
seum curators. The information that existed in the communities from which the
artefacts originated was sometimes incorporated but through the voice of the
curator. The relationship between objects, stakeholders, curators and knowledge

6 That said, it is important to point out that the central administration of the Museum of World
Culture in 2010 declared that the collections are going to be one important focus area in coming
plans.
has been unidirectional, and the final voice or the authoritarian voice has always been that of the museum.

Museums are sites of power (Nederveen Pieterse 1997:138) and the production of knowledge is the key to power. Different kinds of knowledge systems are valued differently and the one produced by academia is the only knowledge accepted as “truth,” whereas knowledge from other epistemological paradigms is classified as “traditional or alternative knowledge”—in the best cases. The most interesting point is that, if is not inside western ideological position, knowledge needs an adjective, such as “alternative” or “traditional.”

Taking theories developed over the last decades by Latin American scholars— for instance Aníbal Quijano’s (1980, 2000) deep discussion about modernity and Walter Mignolo’s (2002, 2005) work on de-colonialism—we have at the museum been trying to consider how working with collections can be an arena of dialogue, and how important it can be for institutions today to incorporate other epistemological perspectives; not as “subjective” or “alternative,” but knowledge from another theoretical paradigm. The production of knowledge does not need to be inside one universal paradigm—we must accept that there are other ways to understand and explain the world in which we live in.

One South American example is the Universidad Intercultural Amawtay Wasi (UIAW) of the Indigenous Nationalities and People of Ecuador, with a radical case of epistemic decolonisation of knowledge:

The university was established to be a space of both reflection and action, and grew out of a project of the nationalities and peoples of Ecuador and of all Abya Yala (the Americas). Our university works towards the decolonization of knowledge and is committed to reconstructing the concept and meaning of intercultural knowledge. The UIAW is an intercultural project whose purpose is to serve as a foundation stone in construction of a plurinational state and an intercultural society. Our purpose is to contribute to the formation of human talents that will prioritize an harmonious relationship between the Pachamama (Mother Nature) and the Runa (Human Being), based upon the principle of Sumak Kawsanamanta Yachay, which means “Learning Wisdom and the Good Way to ate of access: Live”. Our university is part of the living web that we weave in the intercultural cosmos (URL: http://www.amawtaywasi.edu.ec/).

Knowledge in this context is produced inside an Andean paradigm of knowledge; it does not necessarily compete with knowledge produced in “western world universities,” since de-colonized epistemologies have no ambitions to be universal paradigms.

One alternative to consider is the possibility to—as Taylor (1995:111) proposes—the decolonization of ethnographic museums, which recognizes the people who produced these collections or their descendants and tries to incorporate knowledge from other epistemological paradigms.

After the Bolivian government claimed back the Niño Korin collection in 2007, the Museum of World Culture got funds from the Swedish government
and had the possibility to update the knowledge around the collections, especially the Niño Korin collection. The first step was to begin a discussion about what is knowledge in the practice of the museum. For this purpose a workshop was organized at the museum in 2009. A number of scholars, museologists, indigenous representatives, etc. were invited to contribute to the debate, among them Walter Mignolo (a de-colonization theorist from Duke University, United States), Walter Quispe (medical doctor and *kallawayas*, see below) and Beatriz Loza (historian from Universidad Mayor de San Andrés, La Paz, Bolivia). Other participants at the workshop included Stefan Jonsson (Södertörn University, Sweden), Klas Grinell (Museum of World Culture), Gloria Esteban (who acted as a link between the museum and the Bolivian community in Hammarkullen, Gothenburg), Sergio Joselovsky (journalist and filmmaker) and people working at the community radio “Radio 19 de Abril” at *Folkets hus* of Hammarkullen (who were involved in part of the process, functioning as liaisons between the museum and the community). The idea of the project was not only to produce new knowledge, but also to create a bridge between the museum and the collections, the interested general public of Gothenburg and international scholars.

Coming back to the Niño Korin collection, it was studied and documented in the 1970s. Radiocarbon, chemical, physical and osteological analyses were made, and in spite of the *kallawayas* named, the knowledge that they could offer was never seriously considered, but simply thought of as myths. From pre-Spanish conquest times to the present, there is an important group of medicine men called *kallawayas*, and a culture of travelling medicine men (healers or *curanderos*). Today, there are around 2000 *kallawayas* who use plants, animals, human products, minerals, amulets and therapy to cure different diseases. *Kallawayas* knowledge is transmitted from fathers and grandfathers to young men and boys. They are respected by the indigenous population of not only Bolivia but all of South America. Their knowledge has been “underground” since Spanish conquest but is flourishing again today.

Their medical knowledge and rituals have been studied for many years (e.g., Bastien 1987; Loza 2004, 2007). In Loza’s work (2007), the *kallawayas* participate as contributors, giving them an active role and not only placing them as objects of study. After centuries of underground work *kallawayas* are organized and openly established in society, offering courses and even sharing knowledge via the internet. In 2003 the “The Andean Cosmovision of the Kallawaya” was declared Intangible Cultural Heritage by UNESCO (UNESCO 2003).

In the process of working with the Niño Korin collection during 2009, Walter Quispe redefined the narrative of the collection. Henry Wassén had classified the material as the tools of a medicine man, described the plants in the collection as drugs and was deeply interested in the use of those plants. He wrote about the *kallawayas*, but he did so in the past tense. The plants in the collection were

---

7 Other spellings include: Callawalla, Callaway, Kallaway, Qollahuaya and Callahuaya.
interpreted as evidence of drug use among medicine men, contextualized as a discourse of the exotic and of “otherness.”

Walter Quispe relates to the objects through an emic perspective of personal experience. The kinds of tools in the collection are still commonly used in his family, some of them have passed through generations. For him, the objects are not simply museological artefacts of the past. Walter Quispe is a doctor trained in medical school, but he studied medicine to have the possibility to be a *kallawaya*, since he would otherwise have been forbidden to practice his skills.

At the workshop in Gothenburg in 2009 Walter Quispe describes the collection as the tools that a doctor needs to meet and treat her or his patients. The objects became the medical instruments needed for treatment, and the plants in the collection are described by him as a herbarium to be used to learn and to teach coming generations of *kallawayas* about their medicinal and therapeutically power. In Quispe’s description, the exotic component disappeared, and the tools and plants became part of a current world of practicing holistic medicine.

For instance, Walter Quispe called our attention to a small object that had been described and catalogued as a bag for coca and made us aware of the colours and the pattern of the bag; this small bag is a *wiphala* (Fig. 4). A wiphala is an Andean symbol, used today as a flag by the Bolivian government and by other actors in Latin America. In many cases today, the *wiphala* is not only used as an indigenous symbol (e.g., as a calendar or flag), but also as an anti-globalization emblem. Over the last few years it has not been uncommon to see the *wiphala* in demonstrations in various cities around South America. The authenticity of the wiphala as an important symbol has been discussed over the last decennia in Bolivia. There are a number of people who detract the *wiphala* as an invented new indigenous symbol, when others support the idea that the *wiphala* and the colours it has been painted in are legacies from the pre-Columbian period. Suddenly we saw that the small bag dated to around 1000 BP had the colours and pattern of a *wiphala*. At that moment it was clear that—as Barbara Kirshenblatt-Gimblett points out (1991:387)—ethnographic artefacts are objects of ethnography; they are created by ethnographers. Until Quispe saw the *wiphala* it was only an ethnographic artefact from the Tiwanaku Period, but then the bag became a symbol relevant to the current world.

Hence, objects do not need to be fixed in in one single static category; they can be reconnected in the current world. For 30 years the Niño Korin collection was a trophy, admired by scholars, reinterpreted and exhibited over the years. Today it is waiting to leave the ethnographic condition and be reinserted in a global discussion.

**Epilogue**

Museum collections can contribute and be utilized *today*; they may carry information and a sense of belonging that are not dead, but still have a strong significance for many people. Jette Sandahl (2005) emphasizes that museum objects are in-
tended to be carriers of our individual and collective memories and heritage and, as such, our identities. In the case of the Bolivian collections in Gothenburg, the current political situation in Bolivia and the dormant demand for repatriation from the Bolivian government confirm that the collections of Tiwanaku mean and signify much more than as archaeological objects of study, often stored and simply “kept for the future” for an indistinct purpose in hard to access storage facilities.

As Carlos Mamani Condori points out: “The archaeological ruins left by ancient cultures are not inert or dead objects: they have a reality which actively influences our lives both individually and collectively... they are the source of our identity” (Mamani Condori 1989:58).

Working with the Niño Korin assemblage gave us ideas of how to work with collections from several perspectives concurrently. Beginning to construct knowledge from another paradigm offers the collections and their moral owners a possibility to have a voice in the construction of museological narratives. Obviously, this is a process with conflicts, since there are many voices and many interests. But it is important to acknowledge that there is not one single solution or option, but to accept the conflict as one way to reinstate the “ethnographical object” in the current world.

Finally, I believe that updating the knowledge-base around the collections must be an act of democracy, and that for this to be possible—quoting the former director of the Museum of World Culture, Jette Sandahl—the institution and its staff must permit themselves to “lose control,” meaning that interpretations and the narratives of the collections concurrently can be in the hands of scholars as well as in the hands of kallawayas.
Acknowledgements. I would like to thank Christian Isendahl and Julia Willén for their comments and suggestions on this text.

References


Understanding Tiwanaku Origins: Animistic Ecology in the Andean Altiplano

John W. Janusek

Contact details
Department of Anthropology
Vanderbilt University
124 Garland Hall
Nashville, TN 37235
United States
john.w.janusek@vanderbilt.edu

RESUMEN

Ecología animista e urbanismo emergente en el altiplano Andino

En este capítulo investigo los orígenes del urbanismo en la cuenca del Lago Titicaca en los Andes centrales del sur, una región de altura que se encuentra en el límite entre Perú y Bolivia. El enfoque se pone en las prácticas y procesos que dieron origen a Tiwanaku como centro primario de la región y finalmente en un centro que influyó grandes áreas de la zona Andina durante el Horizonte Medio de los Andes Centrales (500–1000 d.C.). Específicamente, se pondrá énfasis en las relaciones entre Tiwanaku y Khonkho Wankane (un sitio al otro lado de la Cordillera de Kimsachata), sitio cual fue una fuente de agua y piedra para ambos lugares durante el Formativo Tardío (100 a.C. – 500 d.C.). La construcción y transformación de estos dos importantes centros que funcionaron durante esta fase y últimamente la producción histórica de Tiwanaku como el centro primario durante el Horizonte Medio, producen un cambio en la forma tradicional de entender el urbanismo emergente y la centralización política del pasado de los Andes. La autoridad prehispánica dependió de centros monumentales y encuentros sociales que santificaban un rango de fuerzas, rasgos y ciclos naturales del paisaje. El urbanismo emergente promovía una ecología animista en lo cual el poder sociopolítico dependió de la construcción de monumentos que, mediante su espacialidad, materialidad e iconografía, animaban un rango de rasgos del paisaje y ciclos del cielo, haciéndoles críticos para el bienestar humano. Una ecología animista fue una epistemología pragmática, ritualizada importante para la constitución de relaciones dinámicas e íntimas entre los humano y el medioambiente en el altiplano Andino.
Foundations of authority in the Prehispanic Andes differ markedly from pre-dominant forms of authority in contemporary nation states. Political power was grounded in centers that sanctified and even animated specific natural forces, cycles, and features. These centers made potent visual, proxemic, material, and iconographic references to such forces and features, animating them and rendering them critical to the constitution of human and non-human subjects. Social status crystallized in relation to strategic positioning as mediators in these relations, specifically among those who tended such centers, orchestrated their periodic ritual-political events, measured alignments to key natural features, and “kept time” by tracking complex celestial cycles.

To term Andean cosmology “religious” renders it epiphenomenal to Andean Prehispanic history. Andean communities venerated landscape features and natural cycles precisely because they were considered active animate agents in the world that had influence over human life, productive well-being, and political expansion. Tiwanaku urbanism was grounded in an animistic ecology in which political authority depended on the construction of monuments and urban landscapes that, in their spatiality, materiality, and iconography, animated certain terrestrial features and celestial cycles. Practices of animation sought to ensure the vitality of productive systems crucial to survival at such altitude. An animistic cosmology was a pragmatic adaptation to extreme conditions at particular times and places in Andean culture history.

In this paper, I summarize some of the proto-urban transformations that produced Tiwanaku. I explore urbanism as the production of emergent centers in relation to surrounding environmental features and encompassing forces. The geographical focus is the southern Lake Titicaca Basin of Bolivia, and the historical focus the production of Middle Horizon Tiwanaku from a regional network of proto-urban, Late Formative centers. I focus on centers and not political typologies (that is, tired discussions of chiefdoms versus states, see Abrams 1988; Pauketat 2007; Smith 2003) as a way to bring debates about emergent complexity down to (eminently testable) earth. I argue that emergent urbanism in the Andes produced a political economy that prioritized intimate relations to landscape and “skyscape.”

I focus on Tiwanaku’s emergence as a major Middle Horizon center. Drawing on abundant recent research, I suggest that its early development is best understood in relation to the development of nearby Khonkho Wankane (Janusek 2006; Janusek and Plaza 2006, 2007). During their early histories, Khonkho and Tiwanaku formed something akin to “twin” centers, possibly representing an early highland Andean ritual-political diarchy. By the Middle Horizon, Khonkho Wankane was nearly abandoned and Tiwanaku had emerged as the sole center of an influential imperial polity with its own monumental duality. This chapter explores some potential reasons for these patterns and their transformations.

The time periods covered here include the Late Formative Period (100 BC – AD 500), corresponding roughly to the Central Andean Early Intermediate Period, and the Tiwanaku Period, corresponding with the Central Andean Middle Horizon (AD 500–1000).
Khonkho Wankane

Khonkho Wankane is located in a high, dry plain known as Machaca, on the south side of the Kimsachata range and south of Tiwanaku, and at an altitude of 3,900 meters above sea level (Fig. 1). Life here depends on herding llamas and alpacas as much as it does farming. Khonkho is best known for its four massive carved stone stelae, each of which depicts elaborate mythical narratives in complex iconographic scenes (Figs 2 and 3) (Portugal Zamora 1941). Most occupation at the site dates to the Late Formative Period immediately preceding Tiwanaku’s emergence as a primary center.

Khonkho consists of two artificial earthen platforms that were constructed over a relatively short sequence of construction events early in the Late Formative Period. The primary mound of Wankane was the setting for most of the center’s ritual and residential activities (Fig. 4) (Smith 2009). A number of bounded ceremonial spaces were built in sequence on Wankane over the course of the Late Formative. Khonkho’s earliest space for communal ceremonies was the extensive Main Plaza at the center of the platform, followed shortly thereafter by the trapezoidal Sunken Temple and platform complex attached to its south edge (Fig. 5). Throughout Late Formative 1, approximately 100 BC – AD 300, the inclusive Plaza and more intimate Temple formed a linked pair of spaces that facilitated ritual movement and small-scale processions on the raised platform.
Figure 2. Khonkho Wankane’s Wila Kala monolith, which was broken in two in the early 20th century (photo by Wolfgang Schüler). – El monolito Wila Kala de Khonkho Wankane, lo cual fue partido a los principios del siglo XX (foto por Wolfgang Schüler).

Figure 3. Khonkho’s four monoliths organized chronologically, as determined by stylistic seriation (image by Arik Ohnstad and John Janusek). – Los cuatro monolitos de Khonkho cronológicamente organizado basado en su seriación estilística (imagen por Arik Ohnstad y John Janusek).
The principal north–south axis of movement between the attached spaces is significant. While each wall of the Sunken Temple contains an entrance, the corridor linking the two spaces is the largest and most important. The corridor facilitated the movement of relatively small numbers of people from the plaza down into the more intimate Sunken Temple. It is in this early temple, I suggest, that Khonkho’s stylistically earliest stone stelae, the Portugal monolith, likely stood. Beyond it, the south stone wall is the temple’s most visually elaborate. With high plastered walls, a multi-colored stairway, and an offset fired-brick portal, it was built for communal viewing. The portal likely served as an entrance for ritual spe-
cialists and ceremonial officials. Further, the visual path linking the plaza and its corridor, continuing through the court and its brick portal, framed an impressive view of Mount Sajama in the distance. Sajama today is one of the most significant achachilas, or sacred ancestral peaks, in the south-central Andes.

The unusual trapezoidal plan and off-centered portals of the Sunken Temple facilitated visual pathways that complemented the southward orientation toward Sajama. While preliminary, ongoing archaeoastronomical research points to visual paths through the south portal and toward the initial annual rise of two constellations of significance in the highland Andes (Benitez 2007a, 2007b). From the south entrance, the south portal frames the first heliacal rise of the star of Deneb, a key star in the Andean constellation of Catachillay, historically zoomorphized as a female llama. From the offset west entrance, the south portal frames the first heliacal rise of the dark cloud Milky Way constellation Yacana, also a mythical female llama, and in particular the llama’s eyes, the bright stars of alpha and beta centauri. In both cases, the visual paths occurred around the austral vernal equinox (~September 21), perhaps marking the onset of the highland wet season. Today, both constellations are associated with water and agropastoral production.

Khonkho’s apogee as a regional center occurred in Late Formative 2, approximately AD 300–500. The construction of a Dual-Court platform complex on the west of the main plaza marked the onset of this dynamic phase (Fig. 4). The construction of this new complex marked a critical change in the organization of cer-
emonial space at Khonkho Wankane. The original Sunken Temple was abandoned shortly after this time, but instead of being ritually buried or rebuilt, it was left to deteriorate where it stood. The Portugal monolith that likely stood in its court was vigorously smashed to pieces in what appears to have been an act of ritual killing, and was then interred just off of the upper platform (Ohnstad 2005). The Dual-Court Complex created a firm west boundary for the plaza and established a new axial orientation for the Wankane platform. It emphasized east-west spatial movements across the Main Plaza, and, parallel with a contemporaneous shift at Tiwanaku, the importance of establishing visual relations with solar solstice setting points on the distant western horizon.

If the Sunken Temple housed the Portugal monolith, the two sunken courts of the Dual-Court Complex very likely housed Khonkho’s two other *ex situ* sandstone monoliths, the Wila Kala (“red stone”) and the Jinchun Kala (“eared stone”) (Fig. 6). The two monoliths mirror one another in carving style and iconographic theme, and like the two courts of the Dual-Court Complex, may have been considered twins. Each embodies a massive anthropomorphic personage—the back eroded on the one and the front eroded on the other—wearing minimal “accessory” clothing but bedecked in elaborate, zoned iconographic scenes. The front and back of
the personages present upward-drifting felines or human-like figures. The sides of each are identical, and focus on descending human-like figures with exposed ribs; presumably deceased humans, and possibly mummified persons. Directing the narration of each monolith are serpentine creatures. These are mythical depictions of the neonate catfish that inhabit altiplano streams and lake edges; young creatures in the process of becoming adult fish. Collectively, the scenes present animate earthly and watery beings in generative, cyclical narratives. They depict generative narratives of becoming and transformation; transforming from neonate to adult beings, and from living human persons, through death and mummification, to the Great Ancestors that link together vast communities.

From Khonkho’s initial construction at 1–100 AD, Wankane’s Main Plaza was the primary place for social gathering at the center. It was a massive central space that provided direct access to adjacent intimate temples and ritual-residential compounds. It was, furthermore, the location of the slumped over, in situ monolith of Tata Kala. Tata Kala is the largest of Khonkho’s four sandstone monoliths. Left exposed since Khonkho’s abandonment, little remains of its carved iconography. Yet the monolith clearly embodied an anthropomorphic being decorated with elaborately carved panels, like Khonkho’s other monoliths. The lowest front panel depicted a two-legged “llama impersonator.” Yet bodily elements of the monolith were modeled in three dimensions, foreshadowing later Tiwanaku-period monoliths. Tata Kala still lies slumped over in the Main Plaza. It has become—or perhaps remains—one of the most powerful animate objects, or wak’a, in this part of the Andean altiplano.

Khonkho Wankane instantiated natural processes. The platforms were material icons of the peaks that they celebrated. Constructing them created a local marshy landscape conducive to agropastoral activities. Springs located in the Kimsachata range just north of the site were tapped and the resulting streams were canalized to hug either side of the platforms, creating a marshy channel around the site. Thus, Khonkho’s construction produced a micro-environment especially conducive to pastoralism. The “llama impersonator” depicted at the base of the Tata Kala indexed Khonkho’s productive basis. Meanwhile, an impeccably constructed subterranean canal drained Khonkho’s ceremonial spaces through the Main Plaza, feeding the marsh surrounding the site during the rainy season (Fig. 7). This canal mimicked the streams that carried vital waters down from Kimsachata’s slopes to the center.

Residential life at Khonkho Wankane was integral to the ritual activities conducted in its ceremonial spaces. Activities most important for ceremony were focused in two adjacent bounded compounds, each of which incorporated patio groups comprised of circular dwellings. Each compound incorporated monumental earthen platforms. Early in its history, the south sector of Compound 3 was dedicated to a particularly striking ritual activity (Smith 2009); the transformation of recently deceased humans into bundles and the curation of residual small bones into portable relics. Resident specialists mediated life, death, and the production of sacred reliquaries. This role accords well with the significance of Khonkho’s nearby ceremonial spaces and its monolithic sandstone ancestors.
Early Tiwanaku

Research at Khonkho Wankane affords many insights into the importance of Tiwanaku as an early ritual and political center. Tiwanaku is located across the Kimsachata range in the Tiwanaku Valley. Although little Late Formative research has been conducted at Tiwanaku itself, abundant evidence is present at the site (Lemuz and Bandy 2004). Most Late Formative ceremonial spaces in Tiwanaku were covered, dismantled, or strategically transformed during the Tiwanaku Period. Dwellings and residential spaces lie buried under meters of later occupations.

Nevertheless, remnant structures, objects, and dwellings indicate that Tiwanaku thrived as a center similar to Khonkho Wankane during the Late Formative (Janusek 2006, 2008). In fact, there are many uncanny parallels between the sites. One of Tiwanaku’s earliest ceremonial spaces was a Sunken Temple similar in size, form, and orientation to that at Khonkho (Ponce 1990). The court has a single stairway entrance in its south wall indicating that, as at Khonkho, a southward orientation and visual path formed the court’s principal axis. Like that at Khonkho, the primary entrance to Tiwanaku’s Sunken Temple is offset from the center of the wall, in this case to facilitate a view of Mount Kimsachata to the south (Benitez 2007a, 2009) (Fig. 8). The south entrance is the only extant entrance in the court. Yet visual paths through the entrance from a unique basalt
stone in the north wall of the court, and a carved slab in the west wall, facilitated views to the helical rise of the same portentous llama constellations of Catachillay and Yacana.

Tiwanaku’s Sunken Temple is unique in that its interior walls incorporate at least eighty tenoned stone heads (Fig. 9). All of the heads are human-like, though facial and cranial features vary; some depict deity-like beings with impassive faces and ornate headdresses, others depict skulls with desiccated skin and sunken eye sockets. Because the Sunken Temple continued in use through the Tiwanaku Period, it is unclear whether the heads date to the Late Formative or later. Still, they all face into the intimate courtyard, facing those involved in its rituals, and toward one or more sandstone stelae that stood at its center. These include the Bearded Monolith, carved in the same style as Khonkho’s early monoliths, and the massive Bennett Stela, carved in a later style and placed in the court toward the end of the Late Formative. Both depict anthropomorphic personages, and the bearded personage is decorated with earthly and watery creatures much like Khonkho’s sandstone stelae. If they depict Great Ancestors for the Tiwanaku center, the tenoned heads may depict the lesser, more proximal ancestors of the diverse communities who associated with the center and participated in its rituals.

During Late Formative 2, the Kalasasaya platform was constructed (Ponce 1981). Although later elaboration transformed the earliest version of the platform, excavations indicate that it occupied the east side of the later Kalasasaya, with its own sunken patio and adjacent to the older Sunken Temple. Kalasasaya’s primary entrance was an elaborate stone portal that led people up onto the platform from the east (Fig. 10). Much like the Dual-Court Complex at Khonkho, the primary
axis of sight and movement through the Kalasasaya was now east–west. This shift manifested an important ideological transformation in the region, one tied to the rise of Tiwanaku as a primary urban center.

By Late Formative 2, the Sunken Temple and Kalasasaya temple formed a joint ensemble for ceremonial activity at the early center. The Sunken Temple’s south entrance opened onto an extensive plaza for communal gatherings. This plaza was buried under the later Akapana early in the Tiwanaku Period, at which point a new plaza was built on the Akapana’s west side.

Multiple lines of evidence converge to indicate that Khonkho Wankane and Tiwanaku came to be experienced as twin centers during much of the Late Formative Period. In addition to the Sunken Temple’s Bearded Monolith, Tiwanaku incorporated several other stelae similar in style to those at Khonkho (Fig. 11). In each case, the monolithic stela depicted an anthropomorphic personage, and presumably a Great Ancestor. Excavations in a few sectors reveal Late Formative residential patterns similar to those at Khonkho. These include clusters of circular dwellings bounded by extensive compound walls.

Most telling, the two centers were settled on a precise north–south alignment on either side of the Kimsachata mountain range that divides them (Benitez 2007a, 2007b). Their Sunken Temples share the same longitude (68° 40’ 21”, +/- 1°). Thus, the north–south axis of their respective ceremonial cores was mani-
Figure 10. Kalasasaya’s monumental east entrance (photo by Wolfgang Schüler). – La entrada principal de Kalasasaya (foto por Wolfgang Schüler).

Figure 11. Tiwanaku’s Late Formative “Headless” monolith (photo by John Janusek). – El monolito “Decapitado” de Tiwanaku (foto por John Janusek).
fested at a grander scale in their geographical relation. Given the ample east–west dimensions of the Machaca (48 km) and Tiwanaku (36 km) valleys, the probability of this alignment happening randomly is virtually 0%.

Khonkho Wankane and Tiwanaku were closely inter-connected during the Late Formative. They may have formed “twin centers” that occupied either side of the Kimsachata range that divided them. This range contained the springs and produced the subterranean aquifers that sustained the centers. This range also was the source of sandstone for their monolithic stelae that were carved to depict animate Great Ancestors. During the Late Formative, the Kimsachata range was the source of vitality for the two centers, a theme narrated on the personified monoliths.

Tiwanaku as primary ritual-political center in the south-central Andes

Tiwanaku’s urban transformation, from having been one of two or more major centers during the Late Formative to the primary ritual-political center in the southern Lake Titicaca basin, is difficult to pinpoint chronologically. Most likely, it occurred during the late 6th or early 7th century AD (Janusek 2008; Kolata 1993). What material transformation most fundamentally constituted the rise of the Tiwanaku polity? To address this question, I next examine critical changes in Tiwanaku’s spatiality, materiality, and iconography. I believe these critical changes help us understand the cosmological shifts that produced Tiwanaku.

Spatial transformations at Tiwanaku

The shift from a north–south to an east–west orientation occurred in Late Formative 2, first manifested at Khonkho Wankane in its Dual-Court Complex and at Tiwanaku in the Kalasasaya platform. This shift materialized a new religious ideology and set of ritual practices grounded in new visual paths and pathways of movement through both centers. The rationale behind the transformation becomes clearer when we examine Kalasasaya’s expansion and embellishment in the early Tiwanaku Period.

The Kalasasaya platform was expanded in height and extent (Fig. 12). Platform expansion entailed shoring up old walls, which were built predominantly of roughly-hewn sandstone blocks, and the creation of a new westward extension that has come to be known as Kalasasaya’s “balcony wall.” This wall, we now know, served in part as a solar observatory. Eleven massive, impeccably crafted andesite pillars supported the wall. The remains of a small platform lie some 30 m to the east. Standing on the platform and facing the wall in the evening, a person during the Middle Horizon witnessed the sun setting on the distant horizon. From the platform, one could witness the sunset behind each of the pillars.
at critical times of the annual cycle (Fig. 13). The two outer pillars demarcated sunset on each of the two solstices, the north pillar demarcating the austral winter solstice and the south pillar the austral summer solstice. Between them, every second pillar marked a 30-day countdown of setting suns, and the central pillar marked the sunset on the two equinoxes (Benitez 2009).

Nearby stands the well-known “Gate of the Sun,” what I term the Solar Portal. The portal has become a key icon for Tiwanaku culture (Fig. 14). Its frieze iconography has been interpreted as depicting a 12 month annual calendar (Posnansky 1945), adding the 11 rayed faces of the frieze’s lower serpent band to the central
rayed face of the front-facing deity that stands at its center. Instead, Solar Portal frieze iconography mirrored a temporal sequence of visual paths from Kalasasaya’s balcony observatory. The 11 rayed faces of the Portal’s lower band depict not successive months in a Gregorian calendar, but the 11 recurring sunset points on the western horizon as marked by Kalsasaya’s massive pillars (Benitez 2009). In quintessential Andean fashion, the Portal’s “faces” referred to places more than abstract times, and empirical visual pathways more than calendrical abstractions. It is likely that the Portal once stood over the small platform, serving as both an entrance into the observatory, perhaps limited to a priestly caste of astronomers, and a ready guide for the specialists who kept time in Tiwanaku.

Tiwanaku builders soon initiated several new monumental constructions around the Sunken Temple and Kalasasaya platform complex (Fig. 15). Building on the axiality and visual impression of the Kalasasaya, some took the idea of monumentality to an explosive scale. Early in the Tiwanaku Period, the Akapana was founded just south of the Sunken Temple (Fig. 16) (Kolata 1993; Manzanilla 1992; Vranich 2001). Significantly, its construction blocked the old visual path from the interior of the Sunken Temple southward toward the peak of Mount Kimsachata. If the Akapana covered the Late Formative plaza, a new plaza dedicated specifically to activities associated with the Akapana was constructed on its west side. The Akapana ultimately comprised seven superimposed terraces and climbed nearly 30 m tall. Its principal entrance scaled the structure’s west side from the plaza below, leading ritual participants toward a sunken court on the summit.

A second massive temple complex was built several hundred meters southwest of Tiwanaku’s main architectural group (Fig. 15). Much lower than the Akapana, the Pumapunku platform sprawls over a half-kilometer (Kolata 1993). Like the Akapana, it incorporated a sunken courtyard. The platform covers an extensive
Figure 15. Map of Tiwanaku showing key monuments and excavated sectors (image by John Janusek). – Mapa de Tiwanaku mostrando monumentos claves e áreas excavadas (imagen por John Janusek).

Figure 16. Isomorphic reconstruction of the Akapana, demonstrating its resemblance to the double-jamb depiction of monolithic portals (image courtesy of the Discovery Channel). – Reconstrucción digital de Akapana, mostrando la similaridad de su forma con los diseños de las puertas monolíticas de Tiwanaku (imagen cortesía del Canal Discovery).
Late Formative 2 occupation that remains to be investigated. An extensive stone portico consisting of massive sandstone foundations supporting a series of stone portals bounded the east side of the platform, and joined it to an extensive adjacent plaza to the east. Like Akapana’s principal stairway, Pumapunku’s stairway ascended the platform from the west. In fact, it may have constituted one of Tiwanaku’s primary entrances for pilgrims entering the site (Vranich 1999). The stairway rose from a massive human-built esplanade constructed on the shallow bluff that defines the west edge of Tiwanaku. For people approaching Tiwanaku from the west, the superimposed esplanade and platform create an impressive monumental effect. Once people reached the Pumapunku, the stairway funneled them up onto the platform, through a narrow corridor and into a paved sunken court. On the way, they caught a glimpse of the peak of Mount Illimani, another powerful achachila in the south-central Andes.

The terraced platforms Akapana and Pumapunku were built as human-made icons of mountains (Kolata and Ponce 1992). Their terraced form figuratively domesticated natural mountains while ritual processions into and out of them made visual references to the powerful, ancestral peaks that they materialized. Like the life-giving streams that flowed from mountain glaciers and springs, Akapana and Pumapunku—building on the Khonkho Wankane platform before them—were fitted with elaborate drainage canals. The drains carried seasonal rainwater from ceremonial spaces down onto and through lower terraces. Water movement would not only have been visible, but also distinctly audible to ritual participants. Furthermore, Pumapunku was located near a spring, the endpoint of a subterranean aquifer that originated in the Kimsachata range.

Massive wrought platforms such as Akapana and Pumapunku incorporated sunken courts as central inner sancta. If Sunken Temples once formed the key spaces for profound religious experiences, they now evoked ancestral chthonic vitality in complement to the natural forces inherent in mountain peaks and celestial bodies. The rituals conducted in different types of ceremonial spaces emphasized complementary elements of Tiwanaku’ reformulated cosmology. Specifically, Tiwanaku’s religious spatiality meshed an ancient cult focused on the earth and its aquatic life-giving qualities, with an emergent cult oriented to the sun and daytime celestial observations.

As temple complexes became increasingly extensive and intricate, carved stone portals formed doorways leading through various gradients of built ritual space. A key innovation during the Tiwanaku Period, they are known exclusively from Tiwanaku itself. Architectural analysis indicates that most opened into narrow chambers (Protzen and Nair 2002), instilling a sense of mystery, disorientation, and esoteric power as a person entered increasingly sanctified spaces. Portals are commonly represented as decorative icons on the stone sculptures that decorated ceremonial complexes.

The nested forms of the Akapana and Pumapunku mimicked in form the nested molding of a typical portal. Thus, the temples themselves served as metaphorical “portals” that facilitated rapport with the powerful forces inherent in
ancestral environmental features and elements that human groups sought to channel toward their own ends. Ritual pathways through the temples, entered via stairways that rose up onto a high platform that facilitated views of the Illimani, and then back down into a sunken inner sanctum, facilitated religious experience in a new key. Sprawled over a horizontal landscape like mountain peaks, these temples mediated the natural forces of the earth and sky.

*Transformations in monumental materiality at Tiwanaku: sandstone and andesite*

The stone construction of monumental structures made reference to potent natural features and forces. The use of stone facings, revetments, stairways, and pavements afforded ceremonial complexes a sense of mass and permanence. Megalithic stones were quarried from hills and mountains, the natural features the temples symbolically domesticated and whose immanent productive power they sought to appropriate. In consecrating sacred temples of stone, Tiwanaku builders sought to appropriate the generative forces of nature. Yet the use and working of stone changed significantly in relation to other transformations in monumentality. Most notable was a shift in emphasis from sedimentary sandstone to volcanic andesite, and throughout Tiwanaku’s apogee the combined use of the two lithic materials (Janusek 2006, 2008).
During the Late Formative, monumental construction at Khonkho Wan-kane and Tiwanaku consisted of red sandstone and smaller quantities of other sedimentary and volcanic rock. Their early Sunken Temples are key examples. The monolithic personages housed within these early structures also consisted of sandstone. Red sandstone derives from quarries in the Kimsachata range between Khonkho Wankane and Tiwanaku (Janusek et al. In press.; Ponce et al. 1971). The color made reference to visible bedrock in the mountains, and may well have invoked blood, the fluid that affords life for llamas and humans. Red was also the ground color for most Tiwanaku ceremonial vessels, potent material vehicles for the fermented liquids and foods that fueled Tiwanaku’s lively feasts (Fig. 17) (Janusek 2003).

Sometime during Late Formative 2, craftsmen learned to quarry and hew massive blocks of andesite into exquisitely carved pilasters, portals, and monoliths. Quarrying and working andesite required an entirely new body of technical expertise (Protzen and Nair 2000). Andesite derived from quarries located on the edges of the southern portion of Lake Titicaca. Our research indicates that most andesite derived from quarries located at Mount Ccapia, an inactive volcano west of Tiwanaku (Janusek et al. In press). Many unfinished blocks still lay on the shores of the lake, both below Mount Ccapia and across the lake, at the site of Iwawe, a port site where blocks were taken off of rafts and hauled overland to Tiwanaku (Fig. 18). If Kalasasaya materialized the increasing importance of solar observations, it also emphasized the increasing importance of volcanic stone in Tiwanaku’s monumental construction. A visual path westward through Kalasasaya’s east doorway offers a clear view of mount Ccapia, the source of the massive pilasters that supported its west balcony.

Sandstone blocks were hauled to Khonkho and Tiwanaku from quarries in the nearby Kimsachata range; andesite blocks were rafted from more distant quarries across the lake and then hauled overland to Tiwanaku. An important aspect of andesite’s materiality was its bluish-gray color, which was likely as meaningful as sandstone’s bright red hue. The color, I speculate, conjured the color of Lake Titicaca specifically, and the life-giving properties of water more generally. It may be significant that name “Titi Kaka” translates as “gray feline.” Historically, Lake Titicaca was personified as a feline (Bouysee-Cassagne 1988). Gray was the color of the mountain cats that traditionally inhabited local mountains, and a rare ceramic color typically employed to depict felines on Tiwanaku keros, or ceremonial drinking vessels. Just as the materiality of sandstone invoked the bedrock of local mountains, and the color of blood and Tiwanaku feasting vessels, andesite—which indexed the more distant mountainous places from which it derived—in-voked volcanoes, water, and felines.

By the Tiwanaku Period, Tiwanaku incorporated sandstone and andesite constructions in its monumental construction. In the case of the Akapana, massive andesite blocks supported an impressive visual façade on the basal terrace of its western front side, while sandstone and smaller portions of andesite blocks formed its other, less public walls (Fig. 19). In the Tiwanaku Period, sandstone
Figure 18. Andesite block left behind at the “port” site of Iwawe, some 12 km from Tiwanaku on the lake shore (photo by Kenneth Garrett). – Bloque de andesita echado en el “puerto” antiguo de Iwawe, unos 12 km de Tiwanaku al lado de Lago Titicaca (foto por Kenneth Garrett).

Figure 19. Front façade and main staircase of the Akapana. The large façade blocks all consist of volcanic andesite, while sandstone and andesite blocks jointly form the staircase (photo by John Janusek). – Fachada frente y escalera principal de Apakana. Los bloques de la fachada se constituyen de andesite volcánica, mientras una mescla de bloques de arenisca e andesita se compone la escalera principal (foto por John Janusek).
and andesite came to represent complementary symbolic qualities (Janusek 2006). Sandstone visually indexed and symbolically represented the ancestral generative forces of local mountains. Andesite invoked more distant mountains and the life-giving properties of the lake as the origin or life-giving water. It was during the Tiwanaku Period that leaders began to incorporate the more distant lands that hugged the lake shore and provided access to andesite outcrops. Also, after AD 600 vast lacustrine floodplains were transformed into anthropogenic landscapes focused on raised field farming systems, which depended on a critical range of lake and water table levels (Kolata 1986). Andesite invoked and propagated Tiwanaku’s new political horizons, productive power, and signature agricultural systems.

Sandstone now invoked Tiwanaku’s re-fashioned history while andesite gave material form to its imperial destiny. Jointly employed in Tiwanaku’s built monuments, they simplified complex political relations and dynamic historical moments as complementary and inseparable natural elements and spiritual values.

**Monoliths and monolithic iconography**

Located at the ends of concatenated pathways that wove people through Khonkho’s and Tiwanaku’s ceremonial spaces, the stone sculptures punctuating Late Formative temple complexes provide a more intimate perspective of changes in the significance of key natural features that were elemental to Tiwanaku’s emerging prestige and power in the altiplano. Stone personages formed corporeal landscapes. Each makes a distinctive arm gesture in which one arm is placed above the other across the torso. They appear to depict mythical ancestors or their human impersonators, and the material objects themselves were likely considered “persons” much as were totem poles among many native North American societies. They idealized the corporeal forms, gestures, and iconography of didactically narrated and collectively remembered ancestral personages. In this sense they were not simply models of past persons or actions. They also provided idealized models for ritual attitudes in the present and future. They presented the ideal Tiwanaku persons that living people could strive for or at least idealize in their lives and, indeed, their after-lives.

Monolithic personages continued to be placed in ceremonial courts during the early Tiwanaku Period, but their forms, gestures, iconography, and overall meaning changed dramatically. Perhaps by way of sumptuary law, large monolithic personages were now restricted to Tiwanaku itself. This may have occurred just as Tiwanaku monopolized the volcanic stone quarries of Ccapia. In place of crossed arms, each personage now made a dual presentation (Figs 20 and 21). In one hand it held a ceremonial drinking kero and in the other a tablet for ingesting psychotropic substances. These were vehicles for mind-altering substances that facilitated two dimensions of religious experiences, one relatively intimate and personal and the other relatively communal and social. They represented complementary ritual attitudes that defined the ideal Tiwanaku persona. Else-
Figure 20. The Ponce monolith of Kalasasaya’s sunken court, its personage presenting a *kero* in its left hand and what is likely a snuff tablet in its right (photo by John Janusek). – El Monolito Ponce al sur del Templo Hundido de la Kalasasya. El personaje se agarra un *kero* en la mano izquierda, y una tableta de rape en la mano derecha (foto por John Janusek).

Figure 21. The Bennett stela of Tiwanaku’s Sunken Temple, its personage presenting a *kero* in its left hand and what is likely a snuff tablet in its right (photo by Clare Sammels). – La Estela Bennett del Templo Hundido de Tiwanaku. Como lo del Ponce, el personaje se agarra un *kero* en la mano izquierda, y una tableta de rape en la mano derecha (foto por Clare Sammels).
where I suggest that these complementary symbols and ritual practices mirrored the complementary materials—sandstone and andesite—that gave form to Tiwanaku temples and their iconic personages, which in turn indexed Tiwanaku's memorialized local past alongside its new, expansive mission.

Collectively, Tiwanaku monoliths were unlike earlier personages in that they did not simply depict deified ancestors. The impassive faces still denote deified status, but the bodily decoration had shifted from zoomorphic and generative imagery to the prestigious tunic, sash, and headgear of an elite person (Fig. 22). These personages were either ancestral deities decked out as elite persons or elite persons dressed as ancestral deities, and it is likely that iconography deliberately played on this ambiguity. What we see in these icons is a lithic representation of social status that, through recurring ritual practice and by appeal to their didactic properties and spiritual powers, legitimized the crystallization of class differences after AD 500.

Unlike Late Formative monoliths, Tiwanaku monoliths depicted imagery that indexed the celestial realm. Iconography included deities wearing headdresses with radiating—likely solar—designs and a new emphasis on predatory avian imagery. Viewed from the back, the elaborate sculpted iconography of the Bennett monolith unfolds around a central figure with radiating headdress that conjures solar rays. Each stylized “ray” ends with a feline head portrait. The central figure stands on a terraced platform, a stylized depiction of a Tiwanaku temple as stylized mountain. Above the figure are disembodied portraits of the same face with a radiating solar headdress. Intermixed among them are attendants wearing beaked masks representing predatory birds. In all cases, in contrast to the forward facing human and llama figures, the bird attendants face upward toward the sky. Further, the braided tresses that hang from the back of the Bennett personage end in predatory avian heads, figures not seen on Late Formative monoliths.

Found nearby in Kalasasaya’s sunken enclosure, the Ponce monolith stood in view of the Bennett stela. Crafted of bluish-gray andesite, it presents a structurally similar scene, yet with a distinct and to some degree complementary iconographic repertoire. The entire scene that this personage wears unfolds around a standing central figure with radiating headdress, as on the Bennett monolith. The central figure holds two staffs, as does the central figure on the Sun Portal, but he stands not on a platform temple and stylized mountain but over two skyward-facing beings wearing masks with long avian beaks. In clear distinction to the Bennett monolith, the braided tresses of the lithic personage ends in profile representations of pupfish, the largest genera of fish native to Lake Titicaca.

Portal friezes depict scenes that integrate watery, earthly, and celestial imagery. Kalasasaya’s Sun Portal presents one of the most concise and elegant summaries of Tiwanaku religious ideology. Its frieze presents a central deity—or elite person dressed as a deity—that faces the viewer, surrounded on either side by three rows of winged, genuflecting attendants rendered in profile, all above a serpentine band that weaves around 11 repeating faces of the central figure. The top and bottom rows of attendants have human-like faces. From their headdresses, wings,
arms, legs, and staffs, heads of predatory birds and pupfish trail. The middle row consists of attendants wearing sky-facing masks with beaks. The central figure they collectively face stands on a three tiered platform holding an arrow bundle in the left hand and a spear thrower in the right. Most of the appendages that trail from the central figure’s accoutrements and headdress end in feline heads. The radiant headdress makes reference to sunlight, and the figure was covered in gold lamina so that it would have dramatically reflected the sun’s rays. As noted above,
the eleven radiant masks of the lower band form a solar almanac that mimics the 11 andesite blocks of the nearby balcony that mark the sun’s cyclical movement from solstice to solstice. Tiwanaku’s political power and cultural prestige was inextricable from the productive power of the sun.

**Tiwanaku residential expansion and elite rulership**

Transformations in religious ideology and ritual practice were central to Tiwanaku’s success as a political center and influential culture. This is reflected as well in Tiwanaku’s dramatic growth into a densely populated urban center after AD 600. The Late Formative centers of Khonkho Wankane and Tiwanaku were lightly occupied relative to the size of their monumental cores. This is clearest at Khonkho, where all occupants of the main platform were directly involved with the supervision and maintenance of its ceremonial spaces and the orchestration of rituals therein (Fig. 3). This appears to have been the case for Tiwanaku as well, at least until Late Formative 2. No substantial settlement has been found in the immediate vicinity of either center, indicating that both were lightly populated ceremonial centers dedicated to periodic rituals for which many participants and pilgrims came from afar.

Tiwanaku’s urban expansion began during late Formative 2, coincident with notable changes in its monumental spatiality and religious ideology. By AD 800, at its peak during the Middle Horizon, Tiwanaku was a city of approximately 6 km² and with perhaps 20,000 people (Janusek 2004; Kolata 1993). As during the Late Formative, people lived in bounded residential compounds, however, now most dwellings were rectangular rather than circular. Clusters of adjacent compounds formed tightly connected barrios, some of which were dedicated to specialized activities such as the production of ceramic vessels. Others, in particular those located closest to the monumental core, most likely supported ceremonial activities associated within Tiwanaku’s increasingly extensive and complex temples. It is significant that all monumental residential construction at Tiwanaku, until the city’s decline, followed the axial orientation established during its early history, tied to visual and conceptual relations to sacred celestial movements and terrestrial features.

Social hierarchy intensified precipitously as Tiwanaku expanded into one of the most influential centers of the Middle Horizon Andes. At the Late Formative centers of Khonkho and Tiwanaku, high status was linked to residential proximity with key ceremonial spaces and curating the ancestral monolithic personages that stood inside of them. High status during most of the Late Formative was a matter of residing at one of the two centers. As Tiwanaku expanded, status became more intensely polarized and spatially focused. Areas of elite residence and activity have been located adjacent to the Putuni, and on top of the Kalasasaya and Akapana platforms. Human burials in these spaces yield elaborate ceramic vessels and sumptuous bodily adornments crafted of rare raw materials such as coastal shell, sodalite, silver, and gold. Especially noteworthy are several diadems
of hammered, laminar gold encrusted with malachite and azurite details, found near a series of elite burial chambers on the Kalasasaya platform (Ponce 1981). Although the burials had been looted long before Bolivian archaeologists excavated them in the 1960s, these were possibly some of the rulers that Tiwanaku’s new monoliths depicted.

What became of Khonkho Wankane? If Khonkho and Tiwanaku were so closely interconnected as twin centers, it is odd that its monumental core was left all but abandoned; in particular given the clear influence the center had on Tiwanaku’s later monumental construction, ceremonial spatiality, and residential expansion. One hypothesis is that the two centers were always in competition and reached an inevitable showdown. Nevertheless, there is no evidence for violence or destruction at Khonkho. Rather Tatakala, Khonkho’s stylistically latest monolith, appears to have stood within the main plaza for centuries. Although slumped over and eroded, it remains in the plaza today; still one of the most powerful animate objects in all Machaca. At the annual austral June solstice, recently reconstituted as Aymara New Year (“Machac Mara”), ritual participants throw sacrificial llama blood on the monolith just as the sun rises over the Kimsachata range in the horizon.

An equally valid hypothesis is that Khonkho’s elites came to Tiwanaku. This idea fits better with Tiwanaku’s predominant incorporative political strategies. It would have facilitated the recreation of an enduring aesthetic of dual complementarity. I hypothesize that many of Khonkho Wankane’s original inhabitants came to Tiwanaku and occupied the area currently under the Pumapunku. Recent research here yields evidence that Pumapunku was first occupied during Late Formative 2. Kolata and Ponce (1992) suggest that Akapana and Pumapunku formed dual monumental ceremonial spaces in Tiwanaku, a hypothesis given strength by their spatial separation and architectural parity. I suggest that this duality was an imperfect, asymmetrical aesthetic strategically created by the incorporation of Khonkho Wankane’s elite lineage into Tiwanaku’s fold. An original relation between prestigious and powerful formative centers across the Kimsachata range, I suggest, was reconstituted as an asymmetrical dual relationship within Tiwanaku itself. Though speculative, this model lies in the balance of future research.

Conclusions

Tiwanaku’s rise in the Andean highlands was grounded in a long history of cultural and urban development. This history involved the establishment of astute agropastoral productive strategies that allowed human groups and increasingly complex social institutions to thrive at one of the highest livable altitudes on Earth. These productive strategies, in turn, depended on a pragmatic relation to the world that emphasized knowledge of the vitality inherent in terrestrial forces and recurring seasonal and celestial cycles. Political authority at Khonkho
Wankane and Tiwanaku thrived not on shunning natural processes from centers as in most contemporary cities, but on rendering those processes central to the well-being of humans, their crops, and their herds. This was done by way of ritual practices linked to an ecological epistemology in which key landscape phenomena were deemed animate forces that humans could tap and influence for their own well-being. In light of Tiwanaku’s millennial longevity, one must consider this animistic ecology an effective worldview.

References


El Proyecto Lomas de Casarabe: Investigaciones arqueológicas en los Llanos de Mojos, Bolivia

Heiko Prümers

Contact details
Instituto Alemán de Arqueología
Dürenstrasse 35-37
D-53173 Bonn
Germany
pruemers@kaak.dainst.de

ABSTRACT

The Lomas de Casarabe Project: Archaeological Investigations in the Llanos de Mojos, Bolivia

The Llanos de Mojos, a vast seasonally inundated savannah in the Bolivian Amazon region, are well known for their pre-Columbian earthworks related to agriculture, such as ridged fields, canals and causeways. In contrast, our knowledge about pre-Columbian habitation sites of the region is poor. In this paper initial results of excavations undertaken in two habitation sites with monumental architecture—platform buildings locally called “lomas”—are presented. Both sites are located near the village of Casarabe to the east of Trinidad, capital of the Department of Beni. The excavations at each site revealed a succession of platforms and debris layers dating from AD 500 to AD 1400. Changes in the ceramic inventory as well as some major remodelling of platform buildings allow for a division of the pre-Columbian occupation at the sites into 5 phases. More than 120 burials were found, most of them without offerings. However, there was one “rich” tomb found at the centre of a 3 m high mound at the site of Loma Salvatierra. To date it is the only direct archaeological evidence for social stratification of a pre-Columbian society in the Llanos de Mojos.
En el año 1994 el Instituto Alemán de Arqueología y la Dirección Nacional de Arqueología de Bolivia comenzaron un proyecto conjunto de investigación arqueológica en las tierras bajas de Bolivia. Durante los primeros cinco años se investigaron sitios prehispánicos cerca del pueblo de Pailón y en la ciudad de Santa Cruz de la Sierra (Chevalier 2002; Görsdorf 2002; Hoffbauer 2002; Hutterer 1997; Prümers y Winkler 1997, 1998; Prümers 2000, 2002; Wagner y Wagner 2002; Wahl 2002). En el año 1999 se cambió de área de estudio, iniciando investigaciones arqueológicas más al norte en el Departamento del Beni (Fig. 1). El enfoque de estas investigaciones son las lomas habitacionales de la región al este de Trinidad, capital del departamento Beni. En lo que sigue se presentarán algunos datos preliminares del proyecto todavía en curso.

Geografía del área de estudio

La mayor parte del departamento Beni ocupan sabanas inundadizas. Estas cubren aprox. 110.000 km² y conforman los Llanos de Mojos, cuyo nombre se deriva de uno de los grupos étnicos, Moxo o Mojo, que habitaron la región en el siglo XVII. Ubicados entre el 13º y 15º meridiano los Llanos de Mojos están en una zona de transición entre la zona de lluvias de verano ecuatorial y tropical. La humedad...
disminuye en relación a la distancia del pie de monte andino (Beck 1983:7). Para la región de estudio esto significa precipitaciones de más de 90 mm en los meses de octubre a mayo, una estación seca en los meses julio y agosto, así como tiempos de transición en los meses mayo y septiembre. La temperatura promedio en Trinidad, capital del departamento de Beni, es de 27°C, con temperaturas máximas por encima de los 40°C y mínimas de 6°C causadas por vientos que llegan de la región polar (surazos).

En cuanto a la formación geológica, los Llanos de Mojos pertenecen a la cuenca de sedimentación que se extiende, entre el escudo brasileño en el noreste y las cordilleras subandinas en el oeste, hasta la región del Chaco en el sur. La base de esta cuenca es formada por sedimentos de hasta 2,500 m de magnitud que corresponden al terciario joven (Gerold 1986:76). Las capas superiores del relleno de la cuenca son sedimentos aluviales arenosos y gredosos depositados por los ríos que bajan de la cordillera de los Andes. El relieve de la superficie de los Llanos de Mojos debe su aspecto actual mayormente a la red hídrica y sus desplazamientos durante el holoceno.

Más de 80% de los Llanos de Mojos son pampas planas cubiertas con gramíneas. Las restantes áreas corresponden a bosques de galería a lo largo de los cursos de río y pequeñas elevaciones naturales con cobertura vegetal que en la región son denominadas “islas.” Efectivamente estas elevaciones son los únicos lugares que no se inundan durante la estación de lluvias en los meses de diciembre a mayo. Las inundaciones prolongadas anuales son consideradas por lo general la causa de la falta de árboles en las pampas. Sin embargo, esto ha sido puesto en duda por Beck (1983:29–30) quien argumentó que los bosques de várzea del bajo Amazonas aguantan hasta ocho meses de inundaciones sin morirse. Por eso Beck supone que otros factores eran decisivos para la formación de las sabanas abiertas de los Llanos de Mojos y postula la hipótesis que las sabanas resultaron de “la destrucción en área del bosque ya en tiempos prehispánicos” (Beck 1983:30). También hoy en día superficies enormes de pampas son quemadas anualmente en los Llanos de Mojos para su aprovechamiento como pastizales. No se practica ningún tipo de agricultura en las pampas ya que éstas son consideradas ineptas para este fin a causa de sus suelos ácidos y carentes de nutrientes. Por eso las únicas plantaciones son las que con el método de roza y quema se están abriendo en los bosques de galería o sobre las pequeñas elevaciones cubiertas con bosques.

**Historia de investigación**

La investigación arqueológica en el Beni comenzó con los trabajos de Erland von Nordenskiöld quien en los años 1908–1909 hizo excavaciones en tres “lomas” o “mounds” al sureste de Trinidad (Mound Velarde, Mound Hermmarck y Mound Masicito). En los tres sitios encontró capas con abundante material arqueológico además de varias tumbas, cuyas descripciones ocupan un lugar importante en sus publicaciones (Nordenskiöld 1913). Hizo observaciones acerca de la estratifica-
ción de las lomas solamente en el Mound Velarde, donde diferenció una capa de ocupación más reciente de otra más antigua. Esta separación, así como la amplia presentación gráfica del material recuperado durante sus excavaciones hacen, que sus trabajos hasta ahora sean la fuente más importante para la investigación arqueológica de la región.

Setenta años más tarde, entre 1977 y 1981, un proyecto argentino-boliviano bajo la dirección de Bernardo Dougherty del Museo de la Plata en Buenos Aires investigó seis lomas en los alrededores de Trinidad (Dougherty y Calandra 1981, 1981–1982, 1984). Las excavaciones, que muchas veces tenían una duración de tan solo una semana, se limitaron a sondajes pequeños de 2 x 2 m y consecuentemente los resultados obtenidos eran difíciles de interpretar. La evaluación de los resultados se ve limitada también por el hecho de que hasta ahora no hay una publicación detallada de los contextos y de los hallazgos encontrados. Lamentablemente es poco probable que tal publicación se realice en el futuro, puesto que la cerámica proveniente de las excavaciones de este proyecto fue utilizada como “ripi” en la construcción de la vía de acceso a la universidad de Trinidad (Pinto Parada 1987:267).

No obstante, los datos obtenidos por el proyecto argentino-boliviano han sido un primer paso importante en la investigación de los sitios habitacionales de la región de Trinidad, especialmente en cuanto se refiere a las excavaciones efectuadas en la Loma Alta de Casarabe. Ahí por vez primera se estudió, mediante un pozo de sondeo de 12 m de profundidad, la secuencia completa de las ocupaciones prehispánicas de una loma grande. El material cerámico recuperado de ese pozo sirvió para establecer una primera división del material en tres fases. Además, una serie de fechados radiocarbónicos permitió la ubicación cronológica absoluta de la secuencia. La mayoría de los 14 fechados radiocarbónicos de la Loma Alta de Casarabe así como los 24 fechados tomados por el proyecto argentino-boliviano de otras lomas de ocupación (Loma Los Aceites, Loma Palmasola, Loma Mary, Loma Kiusíu y Loma Salvatierra) caían entre 400 y 1.400 d.C., lo que indicaba una posición cronológica relativamente tardía de estas ocupaciones prehispánicas. Sin embargo habían tres fechas mucho más tempranas, de aprox. 1.000 a.C.,1 lo que abriría la posibilidad de que la ocupación en estos lugares había comenzado mucho más temprano o que ahí había habido una ocupación anterior con más de mil años más de antigüedad.

En años más recientes un equipo de arqueólogos españoles investigó sitios prehispánicos en las cercanías de San Ignacio de Mojos. Las excavaciones eran de escala muy limitada, pero aún así proporcionaron datos interesantes. Aparte del hallazgo de una tumba de una mujer adulta en el sitio Estancia Moxitania hay que resaltar las evidencias para el cultivo de maíz (Zea sp.), yuca (Manihot sp.), algodón (Gossypium sp.) y urucú (Bixa orellana) que se obtuvo en espectros polínicos de diferentes muestras de suelo tomadas en diferentes sitios arqueológicos de la región (Villalba et al. 2004).

1 Datos según Dougherty y Calandra (1984:191, Table 2): 2685 ± 145 BP (SI 5876; Loma Alta de Casarabe), 2760 ± 160 BP (SI-4117, Loma Mary) y 2775 ± 80 BP (SI-4044, Loma Los Aceites).
Aparte de estas investigaciones netamente arqueológicas se efectuaron desde mediados de los años sesenta una serie de estudios de geografía cultural que enfocaron principalmente en los sistemas agrícolas prehispánicos de los Llanos de Mojos. Ya Nordenskiöld había reportado la existencia de campos elevados en los alrededores de los sitios que él investigó. Sin embargo, en su tiempo era imposible captar la importancia de estas obras de tierra. Fue tan solo con el análisis de fotografías aéreas tomadas para la prospección petrolera de la región en los años 1960 que se puso en evidencia la transformación de áreas muy extensas de estas pampas por el hombre prehispánico. Gracias a estas fotografías aéreas, William M. Denevan podía demostrar (1966) la existencia de campos de cultivo elevados (*camellones*) que cubrían superficies de varios kilómetros cuadrados, de diques que en línea recta cruzaban las pampas, y de canales artificiales que fueron aprovechados tanto para el desplazamiento en canoa como para el control de las aguas. Todos estos relictos del pasado que anteriormente se había concebido como fenómenos “aislados” fueron así integrados en un sistema de manejo del espacio que comprobó el uso intensivo de toda la región en tiempos prehispánicos. Fue también Denevan (1966:95–96, 2001:239) quien comprobó que los campos de cultivo elevados no correspondían al período colonial como se había pensado con anterioridad sino al período prehispánico, puesto que ya existían y hasta habían caído en desuso al momento de la llegada de los Españoles.2


Las excavaciones en la Loma Mendoza

Para complementar a los estudios mencionados sobre los sistemas agrícolas en los Llanos de Mojos, el Proyecto Lomas de Casarabe inició investigaciones en montículos habitacionales que localmente son llamados “lomas.” Después de una primera prospección no sistemática se eligió a lomas de la región al este de Trinidad como objetos de estudio. Esta selección se debe mayormente a dos factores: buena infraestructura y el hecho, que tanto las investigaciones de Nordenskiöld como los estudios de Dougherty y Calandra se habían concentrado en aquella

---

2 Sin embargo hay una sola referencia del uso continuado de los campos elevados en el siglo XVIII (Tormo Sanz y Tercero 1966:97; véase también Denevan 2001:217).

La posibilidad de reanudar investigaciones previas en las demás regiones de los Llanos de Mojos no existía.

La primera loma investigada por el proyecto fue la Loma Mendoza, ubicada aprox. 50 km al este de Trinidad y 2 km al sur del pueblo de Casarabe (Fig. 1). Se trata de un montículo habitacional con una superficie de 2 ha y una altura máxima de 5 m. Por medio del montículo se había construido la carretera nacional que conecta Trinidad con Santa Cruz de la Sierra y por eso se conoce el sitio también como la Loma Cortada. El centro de la loma fue destrozado por completo durante las obras de construcción de la carretera. Donde debía ser el punto más alto de la loma actualmente se encuentra una zanja de aprox. 50 m de ancho que atraviesa el montículo de norte a sur. Sin embargo, la zanja ofreció la posibilidad de estudiar de frente la estructura interna del montículo en los barrancos dejados por las máquinas pesadas. Aún en los barrancos erosionados se delineaba perfectamente una secuencia de pisos, capas de basura doméstica y rellenos de plataformas. Un primer vistazo al núcleo del montículo dejado al aire libre bastaba para refutar la teoría de Dougherty y Calandra (1981–1982:13–15), de que las lomas en gran parte son el producto de procesos naturales.

En cuatro temporadas de campo (1999–2002) se investigó un trecho de 76 m de largo del barranco oeste. Para tal fin el barranco fue convertido en un perfil vertical que posteriormente fue limpiado y documentado por segmentos separados (Fig. 2). Además se excavó dos sondajes de 34 m respectivamente 16 m de...
largo y 2 m de ancho en el barranco. Ambos sondajes fueron excavados hasta la tierra estéril. Otras unidades de excavación estaban ubicadas en el punto más alto conservado del montículo así como en su flanco suroeste (Fig. 3). Los resultados obtenidos de estos trabajos permiten reconstruir una serie de eventos en la historia de ocupación prehispánica de la Loma Mendoza que según los fechados radiocarbónicos data entre 500 y 1400 d.C.

El inicio de la ocupación de la Loma Mendoza está relacionado con la construcción de una plataforma de apenas 50 cm de altura en el sector sur del montículo (Fig. 4). Puesto que el sitio está ubicado en el meandro seco de un antiguo
ría, es probable que tal plataforma se construyó para proteger al asentamiento de las inundaciones. En lo sucesivo esta plataforma fue modificada repetidas veces ganando en este proceso tanto altura como superficie. Una serie de pisos de tierra compactada marcaban las diferentes etapas en la construcción del montículo. Estos pisos se extendían en el perfil por más de 20 m, tenían superficies parcialmente ladrilladas y estaban “limpios,” o sea, en sus superficies no se hallaron materiales arqueológicos. También las capas de relleno de tierra gredosa muy compacta que alternaban con los pisos contenían muy poco material arqueológico. El borde sur de esta plataforma constantemente modificada estaba muy disturbado. También en el flanco norte varios pisos habían sido cortados, al parecer en el transcurso de adosamientos hacia el norte. Sin embargo, dos laderas de plataformas que correspondían a fases tempranas estaban conservadas y permitieron la documentación de un extraño detalle constructivo. El talud de las plataformas estaba escalonado y en los escalones se encontró un barro jaspeado gris-blanco. Es de suponer que originalmente los taludes habían sido cubiertos en su totalidad con este barro.

Durante los siglos VII y VIII se acumularon “capas naturales” delante del talud norte de la plataforma, que en ese entonces ya tenía una altura de aprox. 3 m. La alternancia en ese sector de capas aluviales con poco material arqueológico y de capas de basura que contenían mucha cerámica, huesos de animales y carbón vegetal hacen pensar que eventos cíclicos intervenían en el proceso de formación de esas capas. En las superficies de algunas de las capas aluviales se registraron áreas ligeramente ladrilladas que a veces estaban asociadas a trazos de ceniza. La discontinuidad e irregularidad de esos rastros era llamativa y hace suponer que sean el resultado de la quema de una vegetación de densidad desigual. A su vez, la alternancia de capas aluviales y de capas de basura podría reflejar el ritmo anual de estación seca y de estación de lluvias. Como modelo hipotético alternativo esos contextos arqueológicos también podrían ser el resultado de períodos de 10–20 años de ocupación seguidos de períodos de igual duración en los cuales el sitio estaba abandonado. Las capas con poco material arqueológico se habrían formado durante los períodos en los cuales el sitio estaba abandonado y los trazos de las quemarían los restos de la roza y quema del sitio al reiniciar la ocupación. Sin duda, el tiempo transcurrido entre cada uno de estos eventos era breve. Eso lo indican tanto los fechados radiocarbónicos disponibles hasta ahora como la uniformidad del material cerámico recuperado de las capas en cuestión.

La deposición de estas capas en el talud norte de la plataforma resultó en la formación de una terraza que en lo sucesivo también fue utilizada para actividades domésticas. Los deshechos que a su vez resultaron de estas actividades domésticas se acumularon en capas de basura en el flanco norte de la terraza. Es gracias a este crecimiento del montículo hacia el norte que se podía estudiar también a las fases tardías de la ocupación del sitio, ya que debido a disturbaciones posteriores estas no se habían conservado en los sectores meridionales.

Sin embargo, los fechados radiocarbónicos indican que la ocupación en la Loma Mendoza cesa alrededor de 1.300 d.C. y que existe un hiato en la ocupación de aproximadamente 100 años. Este hecho merece mención especial ante el fondo
de la discusión acerca de la capacidad de carga de los sistemas ecológicos en los trópicos. Naturalmente hay que tomar en consideración también a otros factores como posibles causas para el abandono de la Loma Mendoza en el siglo XIII. Sin embargo, en vista de la gran cantidad de montículos habitacionales en la región no hay que descartar la posibilidad de que estos eran poblados alternadamente.

El reinicio de la ocupación de la Loma Mendoza en el siglo XIV estaba acompañado de un cambio en el uso del sector septentrional que fue utilizado como cementerio. Esto lo evidencian 19 entierros encontrados allí en un sólo nivel. La poca distancia que había entre las diferentes tumbas sugiere una densidad sumamente alta de entierros en este sector de la loma, destruido en gran parte durante la construcción de la carretera. De los 19 entierros, 15 eran de niños depositados en vasijas y 4 de adultos enterrados directamente en la tierra. Aparentemente, el tipo de entierro variaba según la edad del difunto. Merece mención también el hecho que entre los niños había individuos de pocos meses de edad. La mayoría de las tumbas no tenían ofrendas. Como excepciones hay que mencionar a dos tumbas que tenían un collar como ofrenda. En una de las dos tumbas, que correspondía a un niño de 3 á 4 años de edad también se encontró una hachita de piedra reutilizada como pulidor.

El área del cementerio fue aplanado nuevamente durante el siglo XIV y en este proceso una de las tumbas fue disturbada. En lo sucesivo se acumuló una capa de tierra negruzca sobre la terraza. Esta capa se diferencia tanto por el color de la tierra como por su consistencia de todas las demás capas encontradas en la Loma Mendoza. Una muestra de esta capa fue analizada en el Instituto de Estudios y Geografía de Suelos de la Universidad de Bayreuth y reveló un porcentaje de aprox. 20% de carbón vegetal (Bruno Glaser, comunicación personal 2004). Este valor es idéntico al de las tierras negras de la Amazonía central (terra preta o ADE [Amazonian Dark Earths]). Aunque se desconoce los procesos exactos que llevaron a la formación de estas tierras negras, hay consenso entre los investigadores que el hombre juega un papel decisivo en este proceso por acumular constantemente deshechos orgánicos en los lugares que ocupa. Es sumamente probable, que procesos similares hayan llevado a la formación de la “capa negra” de la Loma Mendoza. Sin embargo, como ya se mencionó más arriba, todos los pisos encontrados en la Loma Mendoza estaban limpios, y los deshechos domésticos siempre fueron encontrados en los flancos de las plataformas. Parece poco probable, que los pobladores prehispánicos de la Loma Mendoza dejaran esa costumbre en algún momento para vivir entre sus deshechos. Más bien todo parece indicar que la capa negra se formó sobre la terraza del sector norte de la Loma Mendoza, porque durante esa fase el sector norte de la loma no fue utilizado como área habitacional sino como lugar de plantaciones. Sobre la capa negra se encontró una capa de aprox. 50–100 cm de grosor que contenía relativamente poco material arqueológico. Esta capa marca el final de la ocupación en la Loma Mendoza, la cual fue dejada alrededor de 1400 d.C.

4 Véase Lehmann et al. (2003) para la bibliografía extensa sobre el tema.
La reconstrucción de la historia de la ocupación que se acaba de resumir se basa exclusivamente en evidencias arquitectónicas o sea las remodelaciones de las plataformas que conforman en gran parte al sitio. Sin embargo, hay otra línea de evidencia que son los materiales arqueológicos recuperados durante las excavaciones. Estos provienen de contextos que abarcan a toda la secuencia ocupacional de la Loma Mendoza y corresponden a acciones muy diversas (tumbas, capas de basura, rellenos, pozos, etc.). La mayor parte del material arqueológico recuperado son fragmentos de cerámica, pero también se encontraron huesos de animales y algunos macrorestos de plantas. La ausencia de piedras en la región debido a la formación aluvial del paisaje también se refleja en el registro arqueológico. Sólo tres fragmentos de hachas en forma de “T” fueron encontrados durante las cuatro temporadas de excavación.

El estudio de los restos de la fauna y flora todavía está en curso, pero el análisis de la cerámica ya ha sido terminado. Como resultado de lo último se puede diferenciar cinco fases en el material cerámico de la Loma Mendoza (Jaimes Betancourt 2004, este volumen; Kupferschmidt 2004). A grandes rasgos se puede constatar un desarrollo desde una cerámica con diseños incisos y bandas aplicadas hacia una cerámica con decoración exclusivamente pintada. Sin embargo, la pintura está presente también en las fases tempranas lado a lado con la cerámica incisa predominante.

Las excavaciones en la Loma Salvatierra

En el año 2004 se iniciaron excavaciones en la Loma Salvatierra, ubicada tan solo 3,5 km al noroeste de la Loma Mendoza. Se eligió a propósito a un sitio tan cercano a la Loma Mendoza, porque de esta manera se excluyó de antemano la posibilidad de que diferencias regionales iban a dificultar la comparación del material cerámico de ambos sitios. También influyó en la decisión de efectuar las investigaciones en la Loma Salvatierra el hecho de que esta loma no presentaba modificaciones recientes.

Como gran parte de las 4 ha del sitio estaba cubierta de vegetación, el aspecto real del sitio recién se dejó apreciar cuando se abrió brechas de medición y se rozó los áreas de excavación. Durante el proceso de mapeo se hacían patentes algunos elementos del sitio que hasta ahora nunca habían sido reportados para ninguna de las lomas habitacionales de la región. El más significativo de estos elementos es un terraplén poligonal que rodea el sitio (Fig. 5). Es muy tentativo interpretar a este terraplén como relivto de una obra defensiva, probablemente una palisada. En la próxima temporada de campo se va a excavar una parte de este terraplén para confirmar esta hipótesis. Otro elemento que resalta en el mapa es una terraza de aprox. 2 m de altura, la cual ocupa el centro del sitio. Su planta es asimétrica a consecuencia de tres resaltes que se perciben muy bien en el lado norte, mientras en el lado sur están borrados. Una zanja rodea la terraza y sigue en dirección noroeste hasta chocar con el “terraplén poligonal.” Sobre la terraza
hay varios montículos, o sea construcciones de tierra maciza, que por lo general no sobrepasan los 2 m de altura. Aunque a primera vista parecería que se trata de plataformas sobre las cuales estaban situadas viviendas construidas de madera, no hay, por el momento, datos para comprobarlo. La distribución espacial de las plataformas sobre la terraza al parecer no tiene un patrón. La construcción más imponente que se levanta sobre la terraza es un montículo de 7 m de altura y 1 ha de superficie (montículo 1). En su cima el mapeo reveló la existencia de plataformas dispuestas en “U” alrededor de una plaza central, que se abre hacia el norte.
Esta descripción somera de la configuración del sitio debe bastar para demostrar que la Loma Salvatierra no es un simple “montículo de tierra,” sino un sitio arqueológico complejo dentro del cual deben existir áreas de uso muy diferentes. Para llegar a entender en qué podrían consistir estas diferencias se abrió unidades de excavación en los siguientes sectores del sitio: en la cima del montículo 1, en la terraza, y en el montículo 2, ubicado aprox. 50 m al sur del montículo 1. En la cima del montículo 1 se excavó dos unidades de 5 m por 10 m cada uno (Fig. 6). Las unidades estaban alineados en dirección norte-sur y separados por un testigo de 1 m de ancho. Cortaban la plataforma sur del conjunto en “U” de tal forma que se pudo documentar la antigua superficie de la plataforma y el talud norte delante del cual se habían acumulado varias capas de basura. De esas capas han salido muchos fragmentos de cerámica y huesos de animal. Entre la cerámica recuperada destaca un tipo de cerámica fina pintada con diseños geométricos y florales en negro sobre un fondo crema (Fig. 7). La mayoría de los fragmentos de esta cerámica fina es de cuencos trípodes, pero también aparecen formas no registradas con anterioridad en el área de estudio, como por ejemplo botellas con cuerpo lentiforme. En cuanto a la posición cronológica de este nuevo tipo de cerámica es muy probable que sea tardío, o sea del siglo XIV. Sin embargo, es sólo a partir de los datos radiocarbónicos que se podrá saberlo con certeza. Por debajo de la plataforma y de las capas de basura había capas de relleno que arqueológica-

Figura 6. Las unidades de excavación en la cima del montículo 1, Loma Salvatierra (foto de Heiko Prümers). – Excavation units on top of mound 1, Loma Salvatierra (photo by Heiko Prümers).
Figura 7. Cerámica pintada negro sobre crema, siglo XIV, Loma Salvatierra (gráfico de Heiko Prümers). – Ceramics with designs painted in black on cream, 14th century, Loma Salvatierra (graphics by Heiko Prümers).

Figura 8. La unidad de excavación sobre la terraza al comenzar los trabajos (2004), en el fondo el montículo 2, Loma Salvatierra (foto de Heiko Prümers). – Excavation unit 2, located on the platform, at the beginning of the excavations (2004); in the background mound 2, Loma Salvatierra (photo by Heiko Prümers).
mente eran estériles. En una profundidad de aprox. 3 m aparecieron por debajo de las capas de relleno nuevamente capas de basura. Éstas deben corresponder a una ocupación anterior a la construcción de las plataformas dispuestas en “U,” de la cual se espera encontrar más evidencias en la próxima temporada.

La unidad de excavación que se abrió en la terraza se ubicó en un lugar de alta concentración superficial de cerámica. La unidad era pequeña, de solo 5 m por 8 m, pero en cuanto a la cantidad de material arqueológico recuperado superó a todas las demás (Fig. 8). Los estratos encontrados eran casi horizontales. Un hecho muy llamativo era la alternancia de estratos con mucho material arqueológico y capas donde los restos arqueológicos eran escasos. Un fenómeno similar se observó para las capas de basura de la Loma Mendoza como se mencionó más arriba. Las capas superficiales no contenían cerámica de las últimas fases de ocupación. Hay muchas posibilidades para poder explicar este hecho y se espera que el análisis del material va a dar una pista hacia la explicación más acertada. En la primera capa no disturbada era sumamente llamativa la cantidad elevada de artefactos de hueso, especialmente de perforadores (Fig. 9). También se encontraron en esta capa más de 20 husos de hilar que pueden ser tomados como indicios de una producción textil local. Aunque el área aparentemente sirvió como espacio doméstico, también se encontraron entierros, mayormente de niños. Los entierros pertenecen a diferentes fases de la ocupación y no comparten rasgos en común. Tanto la orientación como la posición de los individuos varían de tumba en tumba. La mayoría no tenía ajuar a excepción de dos entierros de niños, que

tenían vasijas como ofrendas. La última capa cultural encontrada en esta unidad de excavación contenía cerámica del tipo que se había encontrado en las capas más tempranas de la Loma Mendoza. Con esto se comprueba que la ocupación comenzó al mismo tiempo en ambos sitios.

Una superficie de más de 200 m² fue excavada en el montículo 2 (Fig. 10). Se esperaba encontrar ahí restos de viviendas pero éstos no aparecieron. Las únicas evidencias que indicaban hacia el uso profano de este montículo eran capas muy delgadas de basura que datan entre 900 y 1.000 d.C. Los demás contextos arqueológicos encontrados en este montículo eran tumbas. Por el momento todo parece indicar que el montículo fue levantado al morirse un hombre de estatus elevado. La tumba de este “jefe” fue encontrada en el centro del montículo. El borde superior de la fosa estaba a 1,5 m de profundidad; el difunto descansaba a 3 m de profundidad. Estaba enterrado en posición decúbito dorsal con la cabeza hacia el norte. Sobre la frente tenía un disco de metal, y otros dos discos de metal habían sido partes de orejeras (Fig. 11). En la muñeca izquierda se encontraron tres hileras de un brazalete hecho de segmentos altamente pulidos de un hueso tubular. Cadenas con cuentas diminutas de hueso, algunas cuentas de piedra azul, y cuatro colmillos de jaguar completaron el adorno personal (Fig. 12). Un recipiente de material orgánico, probablemente una cesta, había sido depositado por debajo de las rodillas del individuo. Lamentablemente, una mancha circular era todo lo que

Figura 12. Entierro R 1005, Loma Salvatierra. Vista del área del tórax; nótese los cuatro colmillos de jaguar y las cuentas de collar (foto de Heiko Prümers). – Burial R 1005, Loma Salvatierra. Detail of the thorax area; note the four jaguar tusks and the bone beads (photo by Heiko Prümers).
se había conservado de esta ofrenda. En profundidades mucho menores se encontraron hasta ahora 14 tumbas más en el montículo. Ninguna tenía ofrendas y no obstante la proximidad de una a otra, se diferenciaban marcadamente en cuanto a orientación y posición del muerto. Es probable que los individuos enterrados en estas tumbas posteriores tuvieran alguna relación social con el “jefe.” Se espera que el análisis de la información genética de algunos de los individuos que se está llevando a cabo en el Instituto de Antropología Histórica y de Ecología Humana de la Universidad de Göttingen ayude a aclarar si había lazos de parentesco entre ellos.

Comentarios finales

“Al parecer Mojos es un campo rico para el arqueólogo. Realmente tiene un sólo defecto. Está situado demasiado alejado, muy distante de buenos medios de transporte” (Nordenskiöld 1913:244). Este resumen, al que llegó casi un siglo atrás, todavía es concluyente. Llegar a los sitios arqueológicos del Beni en la mayoría de los casos sigue siendo difícil y en estación de lluvias muchas veces se vuelve imposible. Indudablemente ésta es una de las razones por la cual la investigación arqueológica en la región no ha progresado de la manera deseada.

Sin embargo, no faltan sitios de fácil acceso. Las dos lomas estudiadas por el proyecto Lomas de Casarabe, por ejemplo, están situadas al lado de la carretera asfaltada que une Trinidad con Santa Cruz de la Sierra. Ambos sitios habitacionales presentaron contextos estratificados complejos que se acumularon durante casi mil años de ocupación. La mayoría de los materiales arqueológicos recuperados todavía no ha sido analizado. No obstante, existen ya muchos datos nuevos sobre la vida y muerte de aquellos pobladores prehispánicos, que desde 500 d.C. hasta 1.400 d.C. habitaron la región de Casarabe.

En los próximos años el proyecto continuará sus trabajos arqueológicos en la región con el objetivo de que el Beni, que hasta ahora ha sido tierra baldía para la investigación arqueológica, poco a poco se convierta en el “campo rico para el arqueólogo” que Erland Nordenskiöld soñó.

Agradecimiento. El proyecto ha sido posible gracias al financiamiento por parte de la Mancomunidad Alemana de Investigación (DFG).

Referencias


La cerámica de dos montículos habitacionales en el área de Casarabe, Llanos de Moxos

Carla Jaimes Betancourt

Contact details
Instituto Alemán de Arqueología
Dürenstrasse 35-37
D-53173 Bonn
Germany
carla.jaimesbetancourt@gmail.com

ABSTRACT

The Pottery of Two Habitational Mounds in the Area of Casarabe, Llanos de Moxos

In the southeastern part of the Llanos de Moxos, Beni, Bolivia, hundreds of large mounds have been documented. The archaeological excavations carried out by the German Archaeological Institute and the National Archaeological Unit of Bolivia in the Loma Mendoza and Loma Salvatierra, located about 50 km east of the city of Trinidad, have confirmed the gradual accretion and anthropogenic origin of these structures consisting of several level platforms associated with large areas of use, middens, offerings, and burials. Ceramics are the most frequent cultural material found in association with these habitational constructions and there is notable functional, temporal, and regional variation.

An attribute analysis of over 40,000 ceramic sherds from excavations of these two mounds, dating to approximately AD 500–1450, permits us to propose a ceramic sequence for the area of Casarabe, located in the southeast of the Department of Beni.

This paper presents mainly the results of technological attributes that have been individually analyzed, as well as the decorative and morphological variables found. We have been able to differentiate five ceramic phases. Each phase shows different morphological and decorative characteristics. However, we do not detect major changes in manufacturing technology, which indicate continuity in the ceramic tradition.
Introducción

Las excavaciones realizadas por el Instituto Alemán de Arqueología y la Dirección Nacional de Arqueología en montículos habitacionales ubicados al sur de la región de los Llanos de Moxos en el Departamento del Beni, demostraron que la Loma Mendoza y la Loma Salvatierra son construcciones antrópicas, productos de diversos momentos de la historia de construcción, remodelación y ocupación del montículo (Prümers 2003, 2004, 2008, 2009, este volumen).

En ambos sitios, la cerámica constituye el material más frecuentemente encontrado. A menudo está asociada a superficies de uso, plataformas, basurales, entierros, etc. Su presencia ininterrumpida en el registro arqueológico, en montículos construidos en diferentes etapas de ocupación, hace que sirva para elaborar secuencias cronológicas que permitan identificar nuevas tradiciones y fases cerámicas, ya sea como un continuo cultural o como manifestaciones discontinuas interactuando muchas de ellas en un ámbito local y/o regional. A pesar de lo imprescindible que era contar con una fina secuencia cerámica, que permitiera entender el panorama prehispánico en los Llanos de Moxos, hubo pocos intentos para lograr este cometido (Nordenskiöld 1913; Rydén 1941; Hanke 1957; Bustos 1976; Dougherty y Calandra 1981–1982; Fernández Distel 1987).

Sin duda, el aporte más significativo para su tiempo, lo realizó a principios del siglo pasado Erland Nordenskiöld, el cual basándose en el método etnográfico y comparativo, realizó la distribución en mapas de elementos culturales utilizados por cada grupo étnico. Además, propuso para los Llanos de Moxos una secuencia cerámica, basada en sus trabajos de excavación de dos montículos artificiales. Sólo en la Loma Velarde identificó una superposición de estilos cerámicos con claras diferencias morfológicas y decorativas. Tanto Loma Hernmarck como Loma Mascito fueron consideradas como una formación unicomponente y con características propias (Nordenskiöld 1913:222–243).

El hecho de que las formas y la decoración de la cerámica muestren características propias e individuales en cada caso, permitió postular diferentes hipótesis:

1. Se trata de grupos cerámicos provenientes de contextos diferentes (doméstico vs. funerario) que no pueden ser comparables entre sí.
2. Cada loma tendría un estilo decorativo propio debido a una ocupación diacrónica.
3. Cada complejo tendría una filiación cultural distinta, a pesar de que las lomas estuvieron sincrónicamente ocupadas.

los mismos investigadores, plantearon una secuencia cerámica para la Loma Alta de Casarabe (Dougherty y Calandra 1981–1982:25–44), que consta de tres fases: Casarabe (1465 ± 60 BP; 1617 ± 70 BP), Mamoré (755 ± 95 BP; 830 ± 70 BP; 1140 ± 90 BP) y San Juan (835 ± 70 BP; 900 ± 70 BP; 1060 ± 65 BP).

La cerámica fue clasificada de acuerdo a un criterio uniforme dentro del Programa Nacional de Pesquisas Arqueológicas na Bacia Amazônica (PRONAPABA) y los resultados fueron utilizados para la construcción de seriasiones, el método utilizado fue el “método cuantitativo para obtener una cronología cultural” o “método Ford” desarrollado por James A. Ford (1954) para crear tipologías (Meggers y Evans 1969).

Este método pretendía superar dos deficiencias del registro arqueológico: 1) la poca evidencia estratigráfica para el ordenamiento cronológico de los sitios y 2) la mínima diversidad cerámica para lograr distinciones finas temporo-espaciales (Meggers 1985:12). Sin embargo, el contar con excavaciones reducidas, de tipo “cabaña telefónica,” impidió a los arqueólogos observar en la estratigrafía, el complejo proceso de ocupación de una loma.

La clasificación cerámica basada en un análisis cuantitativo, requería que la muestra sea no seleccionada. Es decir, se prestó importancia al análisis de antíplástico, acabado y tratamiento de superficie. En la cerámica de los montículos al sur de los Llanos de Moxos, las mencionadas características tecnológicas muestran una mínima diversidad y no son los mejores indicadores para elaborar secuencias cronológicas.

A continuación se presenta algunos de los resultados obtenidos del análisis de la cerámica proveniente de tres cortes de la Loma Mendoza (cortes 1, 5 y 6) y de dos cortes de la Loma Salvatierra (cortes 2 y 4). En cada caso, se registraron unidades estratigráficas y secuencias de rasgos de manera sucesiva (Fig. 1 y 2).

### Cerámica analizada

Se analizaron alrededor 6000 fragmentos diagnósticos (bordes, asas, bases y cuerpos decorados y modificados) provenientes de la Loma Mendoza y más de 30,000 fragmentos cerámicos diagnósticos de la Loma Salvatierra. Se aplicó el método analítico de atributos (Shepard 1956:317; Rowe 1959; Duff 1996), el cual permite analizar individualmente numerosos atributos tecnológicos (pasta, cocción, color y acabado de superficie), atributos morfológicos (formas de las vasijas, bordes, labios, bases y asas) y aspectos relacionados con la técnica y los motivo decorativos. El tratamiento individual que se le dio a cada atributo permitió observar el comportamiento de cada uno de ellos en el tiempo, detectar cuáles son los rasgos susceptibles al cambio y de qué manera se exhiben, cuáles tienen una amplia va-

1 Este artículo presenta resultados modificados de mi tesis de licenciatura (Jaimes 2004) y tesis de maestría de Denise Kupferschmidt (2004). Ambas todavía no publicadas. Los resultados se actualizaron y mejoraron con el estudio que realicé para mi tesis de doctorado.
riación y cuáles otros una variación limitada, además si algunos son relativamente estables o si otros presentan cambios abruptos.

La colección cuenta con 134 vasijas enteras o semi-enteras, que sirvieron para definir las formas de las vasijas. Además se analizó un total de 12,481 bordes y labios equivalente a casi el 50% del material diagnóstico. Muchos de estos fragmentos incluyeron también una parte del cuello de vasijas globulares. Los restantes fragmentos diagnósticos analizados se distribuyen de la siguiente manera: 9466 cuerpos decorados, 1203 bases, 1396 patas y 212 asas. La enorme diferencia de número de bases frente a bordes, hacen suponer que muchas de las bases tenían la forma convexa redondeada, lamentablemente éstos fragmentos no pudieron ser identificados como bases.
Análisis tecnológico

Mediante un análisis intuitivo-visual, se identificaron ocho pastas, pero el resultado de análisis de secciones delgadas, realizadas por el Instituto de Investigaciones Geológicas y del Medio Ambiente, Universidad Mayor de San Andrés, La Paz (Jaimes 2004), determinó que la matriz arcillosa era la misma en todos los casos. Esto principalmente porque las arcillas en los Llanos de Moxos son muy similares entre sí. Se componen predominantemente de fracciones limosas y limo-arcillosas y menos frecuentemente de arcillas o limo-arenosas (Hanagarth 1993:102–103). Esto no quiere decir, sin embargo, que una misma materia prima no hubiera podido ser procesada de diferente manera, aunque se debe reconocer que una misma composición mineralógica en una extensa región geográfica limita los estudios en cuanto a producción y distribución con referencia a las fuentes de abastecimiento.

**Pasta**

De los ocho tipos diferentes de pastas, existen tres que constituyen el 98% de los fragmentos diagnósticos analizados y son los que describimos a continuación:

Pasta 1: Se caracteriza por presentar una estructura compacta, con inclusiones de cerámica molida de tres coloraciones: color naranja-ocre, blanquecino y gris. La coloración oscura se debe a la presencia de un pigmento ferruginoso y la coloración naranja a la goethita. En la superficie se puede apreciar granos de cuarzo de 20 a 100 micrones de largo, inmersos en la matriz arcillosa. La porción de desgrasante en el tiesto es la mayor entre el material analizado, llegando su porcentaje a 30%.

Pasta 2: Su estructura es laminar y compacta; dependiendo de la dispersión, cantidad y tamaño de sus inclusiones puede inclinarse a ser más laminar. Al estar cocida a bajas temperaturas ocasiona que las láminas sean deleznables. Sus inclusiones constan de cerámica molida de color gris claro de forma angulosa de 2 a 4 mm de largo.

Pasta 3: Pasta muy fina, de estructura muy compacta, tiene sólo un 15% de inclusiones de fragmentos rocosos de color gris claro, es decir, casi la mitad de la cantidad de los anteriores alfares. Sus inclusiones están compuestas por arcilla molida de forma subredondeada a subangulosa de hasta 1,5 mm de largo y arenitas limosas en mayor cantidad. Su principal característica es la visibilidad de abundantes granos de cuarzo de 1 mm.

Las demás pastas están presentes en un muy bajo número de fragmentos, mostrando algunas características tecnológicas diferentes, producto de un accidente tecnológico, ya sea debido a una saturación de inclusiones de cerámica molida o a altas temperaturas durante la cocción o una cocción secundaria.
**Antiplástico**

En la mayoría de los casos se trataba de arcilla natural secundaria o sedimentaria, que además de tener como principal componente mineral, arenitas limosas que contienen diminutos granos de cuarzo redondeado, tiene inclusiones naturales y/o intencionales de fragmentos de conchas y cerámica molida. En el primer caso, queda abierta la pregunta sobre el uso de conchas como desgrasante y si se trata de un aspecto cultural o meramente casual, ya que etnográficamente se ha registrado en algunas partes de América el uso de este material, el cual después de haber servido como alimento, era sometido al fuego, molido y añadido a la arcilla junto con la ceniza (Matson 1981:452). A pesar de que en los basurales de los montículos, uno de los elementos más frecuentes son los caracoles (*Ampullaria gigas* Spix), los fragmentos encontrados en algunos tiestos cerámicos estaban en estado natural y no parecían haber sido sometidos a un tratamiento previo. Su tamaño era mayor a 1 cm y se presenta en menos del 1% de la colección, por lo que consideramos se trataba de inclusiones naturales.

Las explosiones de burbujas que presentan algunos fragmentos de cerámica de la colección analizada, sugieren que la arcilla utilizada tenía inclusiones orgánicas naturales o añadidas como elementos no plásticos. Según Orton et al. (1997:153) este tipo de burbujas se producen cuando las inclusiones orgánicas se queman en un entorno oxidante, en ese momento, se produce dióxido de carbono que intenta salir de la pasta.

Tanto en relatos etnohistóricos (Eder 1985 [1791]:68), como etnográficos (Jaimés 2004:85), en los Llanos de Moxos se ha podido comprobar el uso de materiales orgánicos como atemperantes, entre los que resaltan: el hueso molido y el “estiercol de pescado” ó *cauixí*. El cauixí es una especie de esponja de agua dulce calcinada que se forma cubriendo las raíces de los árboles que se encuentran a orillas de los ríos. Sólo puede ser recolectada en época seca cuando el agua baja y los árboles quedan expuestos. El cauixí fue identificado por Meggers y Evans (1969) como el antiplástico utilizado con más frecuencia en la región amazónica. Sin embargo, a pesar de que Dougherty y Calandra (1981:98) identifican cauxí en cerámica de diferentes lomas, y atribuyen su uso a épocas tardías, en las colecciones cerámicas analizadas de las Lomas Mendoza y Salvatierra parece no estar presente. Curiosamente, se encuentra cauixí en la cerámica proveniente de las excavaciones de Bella Vista, Provincia Iténez, donde el material cerámico presenta claramente características tecnológicas, morfológicas y decorativas diferentes (Prümers et al. 2006).

El único desgrasante inorgánico registrado, que sin duda fue añadido intencionalmente a la arcilla es la cerámica molida. Teniendo en cuenta que, donde se encuentran los montículos, las formaciones rocosas son inexistentes, es natural que la única opción para lograr una mejor plasticidad de la arcilla hubiera sido moler fragmentos de cerámica y añadirlos a la pasta.
**Atmósfera de cocción**

Llama la atención que la mayoría de los fragmentos tenga un núcleo negro o gris y muy pocos presenten cocción completamente reducida u oxidada. Esto puede deberse tanto a un entorno reductor como a una cocción no lo suficientemente prolongada para que el carbón se queme íntegramente (Orton et al. 1997:154). Debido a una cocción poco homogénea, la cara de una vasija puede presentar una gama de tonalidades de colores que van desde grises a naranjas. En la cara interna predominan los tonos grises, una prueba más de la atmósfera reductora a la que estaban sometidos en el proceso de cocción.

Es muy probable que la cerámica de las Lomas Mendoza y Salvatierra haya sido quemada en fuegos abiertos como actualmente siguen haciéndolo, por ejemplo los Bororo del Mato Grosso (Brasil). Ahí las vasijas son colocadas boca abajo sobre una cama de combustible y cubiertas con la misma leña en forma piramidal. La quema dura aproximadamente dos horas (Muccillo y Wüst 1978:327). Los ceramistas mojeños actuales utilizan como combustible fuerte a la leña de urupán (*Aloysia gratissima*), tajibo rosado (*Tabebuia serratifolia*) y guayabochi (*Callycosphyllum spruceanum*). Las leñas del pacay (*Mimosaceae, Inga edulis*), pirauquina (*Duguetia quitarensis*) y jorori (*Swartzia jorori* Harms.) son considerados por ellos combustibles débiles.

**Tratamiento de superficie**

Se pueden distinguir superficies alisadas, escobadas y bruñidas. El alisado es el tratamiento de superficie más frecuente en ambas caras de los fragmentos analizados. Lamentablemente, no se pudo observar ningún tipo de huella que hubiera permitido saber con qué instrumentos se alisó la cerámica. Los ceramistas mojeños actualmente utilizan fragmentos de corteza de calabaza, hojas de árboles, conchas, algodón, hueso, chonta o simplemente las yemas de los dedos, mojándolos continuamente y frotando la superficie (Jaimes 2004:89).

El escobado se presenta más frecuentemente en la cara interna. Estas huellas, dejadas por el uso de un peine, un pincel grueso o un manojo de hierbas finas, son superficiales y en la mayoría de las veces pertenecían al momento de la aplicación del engobe o baño.

El bruñido, ejecutado posiblemente con una concha o un hueso pulido, ya que no se encontraron “esteques” o pulidores de cerámica (instrumento muy utilizado en las tierras altas para bruñir o pulir la superficie de la cerámica), compacta las láminas de arcilla hasta dejar cierto lustre y brillo en la superficie. Tanto las vasijas cerradas como las abiertas fueron bruñidas y se pudo distinguir dos tipos: el primero presenta “líneas de bruñimiento” las que hacen resaltar el contraste entre líneas lustrosas y matices opacos. El otro tipo es el “bruñido espejo” que se caracteriza por una superficie homogéneamente bruñida. Aparte del pulido, el “bruñido espejo” cuenta como el acabado más fino de la colección, presentándose con frecuencia en la superficie interna de los cuencos.
Como parte del tratamiento de superficie se considera la aplicación de un engobe o baño hecho de arcilla muy bien molida y decantada en agua. Algunos de los fragmentos analizados tenían una delgada película de arcilla fina del mismo color de la pasta, que tenía la apariencia de haber sido aplicada a posteriori y que parecía un engobe muy tenue. Parece muy probable, sin embargo, que estas películas de arcilla fina sean el resultado de un bruñido débil efectuado en una superficie mojada.

Las superficies con engobes presentan colores muy diferentes. En el lado exterior de los fragmentos predomina el color marrón (marrón claro y marrón rojizo). Entre los engobes más singulares resaltan los colores claros como blanco. Los tonos claros no son comunes pero están presentes y su uso se incrementa en la cara interna.

**Técnicas de manufactura**

Lamentablemente no se puede decir mucho sobre el tema. Algunos fragmentos se habían roto exactamente en la unión de dos rodetes, lo cual permitió apreciar el uso de ésta técnica. En la Loma Salvatierra se excavaron algunos fragmentos, en los cuales se puede apreciar el engrosamiento de las paredes, mediante la aplicación de capas relativamente delgadas de arcilla, adheridas a las paredes de la vasija cuando ésta estaba ya casi seca, es decir en estado de “cuero” (Fig. 3). En algunos casos, se observó huellas de improntas de redes finas, las cuales posiblemente fueron utilizadas durante el proceso de secado de la vasija, ya que normalmente se encuentran en fragmentos de cuerpos muy cerca de la base.
De acuerdo a todos los aspectos tecnológicos expuestos, se puede apuntar que el material analizado de ambos montículos muestra una sola tradición de alfarería, en la manera de procesar la materia prima para elaborar las vasijas, es decir, se advierte tecnológicamente una producción cerámica homogénea. Esto se refleja de forma contundente también, como ya se explicó, en la frecuencia de las pastas.

Análisis morfológico

La clasificación fue elaborada en tres pasos. Primero, se estableció las clases de vasija a partir de la relación entre el diámetro de la boca y la altura de las vasijas (dentro de las categorías de vasijas abiertas, cerradas y cerradas con cuello). Segundo, se identificaron los tipos morfológicos de acuerdo al contorno de las paredes de las vasijas (Shepard 1956:228–235). Tercero, se describió las formas de las partes de la vasija como por ejemplo: forma de borde-labio, base, asa y soporte.

Al haber sido las vasijas manufacturadas mediante técnicas manuales como el rodete o modelado, es difícil encontrar una vasija que presente una simetría exacta. En la colección de bordes analizados, se pueden apreciar muchas variaciones del perfil de bordes e incluso puede darse el caso que una misma vasija tenga dos diferentes tipos de terminación de labio. Se determinaron los tipos de borde-labio para cada tipo morfológico de vasija. Además, se diferenciaron 11 formas diferentes de bases y de soportes, así como 14 tipos de asa y mangos.

Dentro de las vasijas abiertas se identificaron: platos, cuencos abiertos redondos, cuencos abiertos con paredes rectas, cuencos abiertos con paredes rectas y borde evertido, cuencos abiertos carenados y cuencos profundos con paredes rectas.

Dentro de las vasijas cerradas tenemos a los cuencos cerrados redondos, cuencos cerrados carenados, cuencos cerrados carenados con borde evertido, ollas <33° con hombro cerrado o recto, ollas <59° con hombro cerrado o recto y ollas >60° y vasijas paredes rectas con borde evertido.

Dentro de las ollas con cuello existen: botellas, ollas con cuello largo abierto, recto o cerrado, ollas con cuello corto abierto o recto y de acuerdo al cuerpo de las ollas: ollas con cuerpo globular, ondulado, con vértice saliente al centro y con cuerpo lenticular.

Los “platos ralladores” (Fig. 4a)—instrumentos con incisiones profundas que sirvieron para restregar o rallar alimentos, posiblemente yuca y maíz (Villalba et al. 2004:209)—fueron clasificados dentro de una clase propia de vasijas por criterios formal-funcional. Los fragmentos presentan un acabado de superficie muy particular para el cual Echeverría (1981) propone el término de achaflanado “chamfering”. Se caracteriza por cortes oblicuos sobre las paredes exteriores o interiores con extracción de material, formando tableros horizontales que ofrecen el aspecto de gradas o escalones. Junto con las manos de moler (Fig. 4b), las cuales también muestran el tratamiento del achaflanado, forman un grupo funcional y no presentan cambios en el tiempo.
Análisis decorativo

Dentro de las técnicas decorativas, se reconoce el aplicado, el inciso y el pintado. En la técnica del pintado, se diferenció una variedad de tonos: rojo, marrón, negro o blanco sobre tonos naranjas, marrones, rojos, grises o blancos. Existen también vasijas que presentan una decoración combinada, es decir incisiones que posteriormente han sido pintadas de color marrón o rojo sobre tonos naranjas o grises.

Se registraron 50 motivos decorativos internos y más de 130 motivos externos, estos motivos son desde simples líneas incisas o punteados alrededor del borde o cuello hasta trazos finos de pintura en negativo, que muestran la destreza alcanzada por los artesanos.

Cronología del material cerámico de la Loma Mendoza y de la Loma Salvatierra

Como primer paso, se agrupó el material de acuerdo a sus características tecnológicas, morfológicas y estilísticas. Para tal fin se elaboró una base de datos utilizando un programa de estadística (SPSS), que permitió cruzar cada variable con las unidades estratigráficas. De esta manera se observó el comportamiento de cada variable de manera individual en cada unidad estratigráfica. Posteriormente se compararon los resultados de todas las variables estudiadas para detectar cuáles cambios se daban simultáneamente y en qué unidades estratigráficas. Después de elaborados estos grupos, se los ordenó en la secuencia estratigráfica para poder construir una secuencia de fases con una considerable validez estratigráfica.

El análisis se basó principalmente en los datos de los hallazgos originales, es decir objetos cuya manufactura data de la misma época de formación del nivel en
que se depositaron. Se dejó de lado los contextos como rellenos, que contenían objetos residuales o infiltrados. Si bien los cambios en la presencia o ausencia de algunos indicadores cronológicos en la cerámica son claros y concretos, no se debe olvidar que la mayoría de los estratos arqueológicos no estaban sellados y pudieron sufrir intrusiones.

Se definieron cinco fases cerámicas, las cuales son fáciles de distinguir atendiendo a sus características morfológicas y especialmente decorativas.

Cerámica de la fase 1

El material cerámico de la primera fase tanto en la Loma Mendoza como en la Loma Salvatierra, proviene de los primeros basurales y capas horizontales que representan antiguas superficies de la loma.

La mayoría de las vasijas muestra superficies externas alisadas o toscas, prevalecen los tonos naranjas en las superficies externas y naranja o grises en las internas. Se encuentran tres decoraciones características para la fase 1: triángulos con líneas horizontales y verticales inciso-pintadas en tonos rojo o marrón sobre naranja (Fig. 5d) y líneas onduladas y horizontales rodeadas de puntos incisos en el medio (Fig. 5a), asociadas a cuencos cerrados o vasijas cerradas de forma desconocida. En los cuencos abiertos la cara interna está decorada con 4 grupos de 6 líneas paralelas pintadas rojo sobre naranja o marrón, que salen a partir de un punto pintado en el centro de la vasija, hacia los cuatro puntos cardinales. Alrededor del borde interno, se encuentran pintadas líneas cortas (Fig. 5b).

El inventario cerámico de la fase 1 está compuesto principalmente de cuencos abiertos redondos, vasijas con cuello corto abierto o recto (Fig. 5c) y vasijas con cuello abierto. Se reconocen varios tipos de bases, en especial la cóncava. Muy llamativa es la presencia del soporte pequeño, de forma cóncica con decoración incisa, el cual aparece únicamente en esta fase y un soporte cónico de tamaño grande (>15 cm) que mantendrá su vigencia hasta la fase 2. El asa tipo mango que sale del borde de la olla, también caracteriza a esta fase.

Cerámica de la fase 2

La cerámica de la segunda fase en la Loma Mendoza, viene de varias capas superpuestas de manera diagonal, sobre las capas de la fase 1. Se trata de capas de basurales con una alta concentración de fragmentos de cerámica, huesos y conchas. En el caso de la Loma Salvatierra, el material proviene de dos capas horizontales, de las cuales una era un basural con bastantes concentraciones de ceniza y cerámica.

Los atributos tecnológicos se conservan iguales. Se nota un incremento en el uso de engobe en tonos grises y marrones, que principalmente aparecen en ambas superficies de las vasijas abiertas o cerradas tipo cuenco (Fig. 6a), y por otro lado, engobe de color rojo o marrón en la cara externa de formas cerradas tipo olla (Fig. 6b).

Característica para ésta fase es la decoración incisa con diferentes motivos trazados de líneas finas entremezcladas con puntos diagonales (Fig. 6d). La pintura
Figura 5. Cerámica de la fase 1. – Phase 1 ceramics.
Figura 6. Cerámica de la fase 2. – Phase 2 ceramics.
solamente se encuentra en superficies interiores de vasijas abiertas, con motivos parecidos a los de la fase 1, de grupos de líneas cortas dispersas a manera radial (Fig. 6c).

La fase 2 se caracteriza por la aparición de ollas globulares menores a 33° con hombro recto, cubiertas de engobe rojo. Disminuyen relativamente las vasijas con cuello corto recto, tendiendo el cuello a ser más largo (Fig. 6e). Aparecen bases pedestales y hay una mayor frecuencia de bases planas. Los soportes ya no tienen decoración incisa y son en su mayoría de forma cónica y simple. Las asas se reducen cuantitativamente, siendo las más frecuentes falsas asas o mangos.

**Cerámica de la fase 3**

La cerámica de la fase 3 fue encontrada en contextos no mezclados, ubicados en los niveles inferiores del corte 1 de la Loma Mendoza y del corte 4 de la Loma Salvatierra, los cuales corresponden a sucesiones de capas horizontales de ocupaciones y basurales.

La fase 3 se caracteriza por tener numerosas vasijas con superficies bruñidas, recubiertas de engobe externo color marrón rojizo o interno color blanco, que debido a una cocción reducida puede volverse gris. La decoración externa sobre sale por usar técnicas plásticas, como la incisión y punteado muy profundo, casi a manera de escisión. La variedad de elementos no es tan notoria como la combinación de ellos que formaron motivos muy particulares y fáciles de reconocer mediante líneas onduladas, triángulos y punteados diagonales (Fig. 7c y 8a).

La decoración interna es muy variada, tanto en la combinación de colores como en los motivos decorativos: reticulados, líneas onduladas con bandas horizontales, puntos sobre líneas diagonales (Fig. 7b), puntos sobre líneas concéntricas y líneas onduladas con bandas en diagonal. Los colores utilizados son rojo o negro sobre superficies naranjas, grises o blancas y rojo sobre marrón.

La fase 3 se caracteriza por una variedad de vasijas abiertas como por ejemplo: los cuencos abiertos redondos (Fig. 8c), cuencos abiertos con paredes rectas (Fig. 8b) y cuencos profundos (Fig. 8a). Las formas de bordes más representativos tienen labios con biselado interior; además estos cuencos presentan dos tipos de falsas asas, mediante aplicaciones pequeñas.

Las ollas con cuello corto pasan de moda y empiezan a producirse en mayor cantidad ollas sin cuello muy cerradas de <59°. Las ollas con cuellos recto o abierto se caracterizan por estar decoradas con líneas incisas alrededor del cuello (Fig. 7a).

**Cerámica de la fase 4**

En ambas lomas, esta fase es la más extensa desde el punto de vista estratigráfico. En la Loma Mendoza corresponde a una secuencia de capas de ocupación y a varias capas delgadas de basurales, cubiertas intermitentemente por rellenos de plataformas. En la Loma Salvatierra, está representada por varias capas de basura que caen al lado de una plataforma alta.
Figura 7. Cerámica de la fase 3. – Phase 3 ceramics.
Figura 8. Cerámica de la fase 3. – Phase 3 ceramics.
La ausencia de decoraciones incisas profundas es remplazada por la implementación de finas líneas onduladas aplicadas (Fig. 9a), como principal elemento para combinar y formar motivos diferentes junto a líneas curvas concéntricas incisas. Las bandas horizontales con punteado o digitado aplicadas aparecen en esta fase, presentando una distribución extensa temporalmente así como espacialmente (Fig. 10a). Este motivo se ha encontrado en muchas urnas y material recolectado durante prospección en diferentes zonas de los Llanos de Moxos.

Además se da un uso más frecuente de platos con decoración interna, el cambio morfológico más visible en esta fase es la aparición de los cuencos cerrados y abiertos carenados, los cuales tienen una tradición muy marcada en la amazonía. Presenta decoración externa mediante combinaciones de incisiones de triángulos, curvas concéntricas, bandas aplicadas y punteado en la parte superior de la vajilla antes del vértice (Fig. 9b y 9c).

En esta fase se puede reconocer algunos tipos cerámicos, muy bien elaborados, cocidos y decorados, que aparecen principalmente en el corte 4 de la Loma Salvatierra, es decir en el área central. Este material “fino” marca una ruptura estilística frente a todo lo anteriormente conocido, especialmente cuencos cerrados (Fig. 11b) o carenados cerrados con borde evertido (Fig. 11a) y vasijas lenticulares sin cuello (Fig. 10a), fueron decoradas con exquisitos motivos de pintura en negativo con colores combinados de rojo o negro sobre blanco o naranja.

Cerámica de la fase 5

La cerámica de la fase 5 proviene de los niveles superiores del corte 1 de la Loma Mendoza que incluye una capa de ocupación, asociada a un momento de remodelación del sector norte de la Loma Mendoza. En la Loma Salvatierra, pertenece a las últimas dos capas de ocupaciones del corte 4 y a la última capa del corte 2.

La cerámica de la fase 5 es un conjunto homogéneo, la composición de la arcilla es similar a la de anteriores fases, pero al tener paredes más delgadas, presenta una estructura mucho más compacta y la cerámica está, por lo general, mejor cocida. La mayoría del material cerámico está bien alisado y un 15% presenta engobes de colores marrones o grises.

La decoración de la última fase es incisa y principalmente pintada. La composición de la pintura tiende a ser más espesa y susceptible a desaparecer con el agua y a volverse polvo, y en muchos casos no se encuentra bien adherida a la superficie (Fig. 12f).

La pintura de color rojo o marrón sobre superficies naranjas, grises o blancas, forma motivos geométricos con trazos repetitivos: líneas zigzang a manera de escalonados (Figs 12a y 12c), en forma de espiral (Fig. 12b), triángulos concéntricos, etc. entre otros motivos menos elaborados.

Entre los principales cambios morfológicos resalta la popularidad de vasijas globulares o lenticulares con cuello abierto, la variedad de cuencos, especialmente los abiertos redondos con borde invertido (Fig. 12g) y los carenados (Fig. 12f).
Figura 9. Cerámica de la fase 4. – Phase 4 ceramics.
Figura 10. Cerámica fina de la fase 4. – Phase 4 fine wares.
Figura 11. Cerámica fina de la fase 4. – Phase 4 fine wares.
Figura 12. Cerámica de la fase 5. – Phase 5 ceramics.
Conclusiones

Las cinco fases propuestas para un tiempo de más o menos 800 años de ocupación representan ocupaciones continuas en los montículos. Según los resultados calibrados (2σ) de los fechados radiocarbónicos disponibles para las fases 1, 2 y 3, estas fechas oscilan entre 600–1000 d.C. Es decir, no es factible fechar cada fase cerámica en este corto periodo de tiempo.

El material cultural, apoyando los resultados de los fechados radiocarbónicos, no presenta rupturas marcadas, más bien mantiene una continuidad estilística, siendo la frecuencia de ciertos atributos morfológicos y decorativos los que van desapareciendo y otros los que se van añadiendo, a manera de cambios de moda, propios en un lapso de tiempo de 400 años.

La cuarta fase, aunque dispone de mayores fechados radiocarbónicos, presenta el mismo problema. Calibrando los resultados a 2σ, se obtuvieron fechas entre 900 a 1200 d.C. Sin embargo, no debemos pasar por alto que en esta fase se detecta, el uso localizado de cerámica ricamente pintada, que además coincide en la Loma Salvatierra con una importante remodelación del espacio habitado.

Hasta el momento, la fase 5 cuenta solamente con fechados radiocarbónicos provenientes de la Loma Mendoza, éstos dan fechas calibradas entre 1300 a 1400 d.C. Debemos observar que la estratigrafía del corte 1 muestra una remodelación, mediante el aplanamiento de la loma y la construcción de una capa habitacional muy dura de color negro. Primero se interpretó esta remodelación y el vacío de 100 años con respecto a la fase 4 como un posible abandono de la Loma Mendoza y una reocupación posterior, sin embargo esto no se observa en la Loma Salvatierra, por el contrario se aprecia una continuidad estratigráfica.

Las conexiones con otras regiones, que normalmente en la arqueología podrían ser estudiadas mediante la presencia de material cerámico foráneo, fueron en este caso muy escasas. El material cerámico analizado tiene características propias y responde a tradiciones netamente amazónicas. No se encontraron atributos estilísticos y menos tecnológicos de tierras altas.

Mediante comparaciones realizadas con material proveniente de otras excavaciones o de la superficie de montículos habitacionales en los alrededores de Casarabe, se corroboró que la tradición alfarera presenta una cierta uniformidad estilística, la cual no debería ser confundida con otras provenientes de sitios arqueológicos ubicados en otras latitudes de esta región.

En un futuro cercano se deben estudiar mejor las diferentes tradiciones cerámicas que se encuentran dispersas en la región de los Llanos de Moxos, pues no se puede homogenizar la variabilidad temporal y espacial que muestra la cerámica y que sin lugar a dudas llega a tener connotaciones culturales.

Agradecimientos. Al proyecto arqueológico boliviano alemán en Moxos de la Kommission für Allgemeine und Vergleichende Archäologie (KAAK), en especial al Dr. Heiko Prümers por su apoyo constante y la revisión crítica del artículo. Agradecer también al Dr. Christian Isendahl, Dra. Fernada Ugalde y Lic. Ed-
uardo Machicado por la lectura del borrador. Figuras 1, 2, 5b, 10b, 11a y 11b son de Heiko Prümers; todas las demás ilustraciones son de la autora.

Referencias


El susurro del viento: Andar lo sagrado en el mundo andino

Desde tiempos remotos, el drástico paisaje andino ha impactado a sus pobladores. A pesar de los cambios provocados por la llegada de los europeos a partir del siglo XVI persiste, si bien en forma fragmentaria, la antigua cosmovisión. El presente ensayo se propone mostrar de que modo se expresa esa cosmovisión en un caso particular en los Andes centrales. Toma como punto de partida un relato mítico sobre Inkarri y su enamorada, quienes tuvieron que dejar su lugar de residencia e iniciar un viaje que terminó separándolos. Mientras que Inkarri continuó hacia Cusco, la capital del imperio inka de la época, su enamorada se quedó en su tierra natal. De una manera simbólica, el hecho de que el noble Inkarri, representante de la sociedad inka, saliera de su residencia sin volver, nos provee de una metáfora de una sociedad que ya no existe y que dejó al pueblo en una sensación de vacío. Que la joven, como representante de la sociedad local, se quedara en su tierra de origen sería de suma importancia para el porvenir del pueblo, y su conversión en piedra sería una expresión extrema de su gran valor. Hasta hoy, es considerado necesario rendirle homenaje y llevarle ofrendas para que siga protegiendo a su pueblo y para que asegure buenas cosechas. De este modo la tierra sagrada se integra a la historia más en términos geográficos que temporales. Los puntos de referencia se manifiestan en forma de topónimos, edificios arruinados, piedras, caminos antiguos y otros vestigios. El ensayo nos lleva por esa tierra sagrada.
Inkarri and the girl

In conjunction with my project on Andean-Amazonian contacts in prehistory, I have travelled extensively in the central Andes, especially in the Department of La Paz, Bolivia, and the Departments of Puno and Cusco, Peru, trying to trace the ancient road network. The roads studied within the project all show formal features, such as roadbeds, supporting walls, stairs, drainage systems, side canals and/or bridges. I have described my findings in a number of earlier papers and reports (Bengtsson 1998b, 1999, 2000, 2003a, 2003b, 2004a, 2004b, 2005a, 2005b, 2005c, 2006a, 2006b, 2007; Bengtsson and Avilés 2002, 2003, 2004, 2005). During my travels, I have become increasingly aware of the sacred aspects of walking in the Andes and of other manifestations of the sacred. Walking in the Andes is not just walking; it is a spiritual act.

The people of the central Andes have a rich store of folklore. One version of a popular tale goes as follows:

Inkarri left Puska. He and a local girl had fallen in love, but her parents did not like him. The girl left first, walking along the ground. Inkarri followed below ground, within the earth. That is why people talk about the tunnel in Puska. Inkarri stepped out of the earth into a yard at Ketapalu, but he did not like it. Again he went into the ground. Then, he came out through the canal near the bridge at Lawanpampa. From there, he walked up to Mount K’anipata and from there to Cusco.

The girl did not walk as fast. She arrived late at Lawanpampa. There are four roads there. She did not know which one Inkarri had taken, so she just remained there. Nowadays the rock is gone. They moved it with their caterpillar when they were building a gravel road for cars. After that, there was a drought for about eight months. Then people made offerings to the Sacred Earth. Only after that has the climate improved, little by little, bringing rain (Félix Ccuno Mayta, personal communication 2004; translation by the author).

Inkarri is a personage with certain mythical characteristics, about whom several tales are told in the central Andes. He represents the Cusco nobility and their political power in inka times and, in the version related above, their presence in Puska. Leaving Puska, Inkarri descended into the underworld. He emerged twice...
into this world, the second time by way of a canal connecting the two worlds. At the point where he came out the second time, he chose one of four roads and walked along it, over the mountains, to faraway Cusco, the capital of the land of the four directions. He has not returned. This is how the tradition wants to tell us about an epoch and a way of life now lost. The shift into post-inka colonial rule is explained by the tale in spatial rather than temporal terms.

In another source in which reference to Inkarri is made, the personage—there written as Inkarrey (literally, “Inka king”)—actually corresponds to José Gabriel Condorcanqui, also known as Túpac Amaru II. He did not live during the inka reign but was a leader of inka descent, heading a rebellion in the eighteenth century. Ever since his execution by representatives of the Spanish crown, he has been said to be living in the underworld and will some day emerge to aid his people (Valderrama and Escalante 1981:30, 49). Transformations are common in the traditional central Andean worldview, and Túpac Amaru II might best be interpreted as a representative or reincarnation of an Inka king. Another interpretation would be to consider that the male figure in the tale about Inkarri and the girl refers to Túpac Amaru II. For several reasons, including such Puska characteristics as the architecture of the houses and the layout of the site, the former interpretation that sees José Gabriel Condorcanqui as an Inka king reincarnated seems the more plausible one of the two. There appears to be a direct link between Puska and inka society between the late fifteenth and early sixteenth century.

The tradition about Inkarri and his beloved shows us how the landscape is integrated into the history of its people. It tells us that a person can pass through the ground as well as walk above it, how roads—four in number—lead in the four primary directions, and that a person can turn into stone. In addition, it tells us how a human being turned to stone can exert power over the weather, the harvest, and people’s well-being for centuries. Finally, it tells us how a noble representative of inka society has walked away. In a symbolic way, the story provides a metaphor of the void left of a society now lost.

The girl in the version related above represents the local community. She walked above ground, that is, in this world, to a crucial point—at a crossroads—where she had to decide which direction to take when leaving the known social and geographical sphere. Instead, she stood where she was and, transformed into a rock, remained with her own people. She has watched over them and their harvests ever since inka times. In this way, she also represents Mother Earth. Offerings are placed beside her in the name of Mother Earth to this day. As long as her people remember her, attend to her and bring her offerings, she continues to protect them. When her people fail to do so, the weather deteriorates and the harvests fail.

sense of “people” or ethnic group, but it should be noted that such a meaning was not used within the inka empire itself, as far as we know. Rather, the term “inka” was a male epithet in inka times. When I write “Inka” with an initial capital letter, I refer to the supreme ruler. I shall keep the official spelling in the Quechua or Runasimi language.
Figure 1. The investigation area within the Department of Puno, Peru. – La zona de investigación dentro del departamento de Puno.

Figure 2. The Usicayos Valley with the places mentioned in the text. – El valle de Usicayos con los lugares mencionados en el texto marcados.
The places referred to in the tradition related above exist in this world (Figs 1 and 2). Present day Puska, a small community high on the eastern slopes of the central Andes within the Department of Puno, has a prehistoric site of considerable size whose buildings were almost certainly an inka administrative centre (Bengtsson 2007). Among them is one referred to by the local community as “Inkarri’s house” (Fig. 3). The tunnel through which he passed at the outset of his journey is assumed to have begun within the same building, and people have dug there to try and find it but without success.

Ketapalu, where Inkarri first emerged from the underworld, is situated 7 km from Inkarri’s house, in a narrow valley on the other side of a mountain pass and at a much lower elevation than Inkarri’s house, several hundred metres below. A ruined building at Ketapalu is considered by the local population to be the actual place where Inkarri appeared.

The location of Inkarri’s second ascent is at Lawanpampa, another 5 km away from Ketapalu. Coinciding with the tale, both a canal (undated) and a bridge can be seen there. Nearby, several ancient roads lead in different directions, including some that cross the high mountain range and, by way of interconnected roads, extend to Cusco, some 230 km away as the crow flies.

The remote road used by Inkarri’s beloved exists. If we imagine that we are accompanying her on the route she is said to have taken from Puska, we can see how she walked along a stone-paved road that led up to a high mountain pass.
that she crossed at about 4,200 m above sea level, well above the tree line (Fig. 4). The pass is still marked by a heap of stones (Fig. 5). Continuing beyond the pass, she reached a beautiful lake, Lake Haweqa (Figs 6–7). There she started her steep descent to the valley (Fig. 8), until she reached a stream running along the valley floor. Walking upstream, she eventually crossed the bridge near Lawanpampa, the same bridge mentioned in the Inkarri story. The bridge has a special character: it has been formed naturally by the stream carving a passage through the bedrock. When reaching the bridge, Inkarri’s beloved had walked for several hours from her home community. The rock fragment into which she was transformed, according to local tradition, has been displaced from its original location during the construction of a gravel road for cars some years before I visited there, but can still be seen near the junction of several roads.

The landscape and the vital forces of nature

The central Andes constitute an extraordinarily varied landscape, with their very high mountains, equally lofty valleys and steep slopes leading down to the lowlands. To the west, deserts and fertile river valleys constitute a thin strip of land adjacent to the Pacific Ocean. Cultivation is practised wherever possible, and
Figure 5. The heap of stones marking the high mountain pass between Puska and Lake Haweqa, facing east-southeast (photograph by Lisbet Bengtsson). – El montón de piedras marcando el abra alto entre Puska y la laguna Haweqa, hacia el este-sureste (fotografía de Lisbet Bengtsson).

Figure 6. The ancient road leading from the high mountain pass to Lake Haweqa, as seen from the Usicayos Valley, facing north-northeast (photograph by Lisbet Bengtsson). – El camino antiguo corriendo del abra alto a la laguna Haweqa visto desde el valle de Usicayos, hacia el nor-noreste (fotografía de Lisbet Bengtsson).
terrace and irrigation canals, often of ancient origin, have been built to expand the cultivable areas. A major proportion of the lowlands to the east form part of the Amazon Basin, with its swamps, savannas and dense, humid forests. The landscape of the central Andes is characterised by very abrupt changes, often with a drop of 1,000 m in altitude over a horizontal distance of only a few kilometres. Fog develops when the warm, moisture-laden updrafts from the eastern lowlands meet the cooler air high on the eastern slopes, and spectacular and dangerous thunderstorms form as these winds reach the cold upper elevations, with their peaks of snow and ice. Not only is water provided by rain, hail, snow and ice; it also emerges from the ground in the form of springs that, in some places, bring warm or even hot water to the surface. In the highlands, usually above the tree line, patches of comparably flat pasture land are found and lakes have formed. Descending from these lakes, brooks and streams run down, in some places forming cascades. These feed rivers which, in turn, plunge downwards, their waters churning along stretches of rapids and deep gorges. Cultivated fields of varied colours can be seen on the mountain slopes and along the thin strips of relatively flat land forming shelves beside the watercourses. This vivid landscape deeply impresses the people who live there, as well as visitors to the region.

In these dramatic surroundings, a central Andean worldview has survived since prehistoric times, although in a fragmented form. An array of phenomena continue to be respected, held sacred and revered to this day (many of them are also feared), despite the influence of the Christian church since the arrival of the Spaniards in the sixteenth century. The persistent links between the late prehistoric era and today's society are still unmistakable, and are especially evident in rural areas remote from modern influences.

In traditional central Andean thinking, as revealed in sixteenth and seventeenth century sources, the primordial and most powerful force of nature was the sun, thought of as male, who conveyed his vital force upon the earth by means of his rays and through the wind and the rain. This vitality was then absorbed by the earth (conceived of as a female entity) and by the animals and plants dwelling upon her. People in late prehistoric times revered the sacred in numerous manifestations, among them the creator deity, Wiraqocha; the sun and the earth; the moon, stars and heavenly constellations; the lightning and the rainbow; mountains, caves, lakes and springs from which humans (including the ancestors) and livestock once emerged; other deep recesses connected to the underworld, together with rock fragments, stones and many other phenomena that filled them with awe. According to an etiological myth, the first humans emerged from lakes, springs, valleys, caves, trees, rocks and mountains, each group in a separate place (see Sarmiento de Gamboa 1988:44 [1572]). Thus, each group could claim its own place of origin (Albornoz 1989:169 [1583/1584]). These locations were known to their respective communities and considered sacred places, and a number of them were recorded in colonial times (Cobo 1990 [1653]).

To this day, many in the central Andes consider the vital forces to stem from the sun. The sun provides its life-giving power to the earth. The *sami* or animat-
Figure 7. Lake Haweqa with the ancient road running on its left side, facing west (photograph by Lisbet Bengtsson). – La laguna Haweqa con el camino antiguo corriendo a su lado siniestro, hacia el oeste (fotografía de Lisbet Bengtsson).

Figure 8. The ancient road leading down to the Usicayos Valley, facing north-northeast (photograph by Lisbet Bengtsson). – El camino antiguo bajando al valle de Usicayos, hacia el nor-noreste (fotografía de Lisbet Bengtsson).
ing essence of the sun is manifested through light and water in many ways, such as by the circulation of water in rain, rivers and streams, and through wind. Through the correct performance of ritual, this vital force can be transferred to other beings (Allen 1988). In the upper world, a heavenly river runs in the form of the Milky Way. According to some, it continues in this world as the Vilcanota River and its tributaries, which are thought to run to an underground sea. The sun drinks that water every night, and when he rises to the sky in the morning, the water is recycled, becoming the Milky Way in a single cosmic continuum (Urton 1981:38, 68–69). Rivers flowing underground from the mountains towards the eastern lowlands can be used by the dead to return to their lakes of origin (Bastien 1985:155, 171). The earth is also said to be “full of water... like a crust covering a great internal lake” (Allen 1988:51).

Travelling

Some central Andean people who retain links with their region’s ancient worldview prepare themselves for an important journey by gathering such ritual necessities as alcohol, tobacco and coca leaves. This is a rather common procedure, even if starting from an urban centre and planning to travel by car. One way to ensure a safe journey is to perform a ritual at home before departure. If travellers set out from their home community in the countryside, they will invoke deities that include the sun, important mountains, Mother Earth and the ancestors, and will ask them for permission to make the trip and for protection along the way. The rituals before departure form part of a tradition of prehistoric origin (Arriaga 1968:23, 30 [1621]). Today invocations are often combined with those related to Christian beliefs, and some people will go to a church or a chapel before departure. Others regard travelling to the eastern lowlands as especially risky and requiring offerings before departure (Arturo Caparó, personal communication 2002). Similar traditional observances are carried out at certain locations during the trip, most importantly at the highest mountain pass. When going on foot, stops are more frequent and rituals are part of the traveller’s everyday routine. Moreover, prior to leaving their home community, they must make provision for their cultivated fields to be worked every day; if someone fails to do so and forgets the earth, then the earth will forget about them (Valderrama and Escalante 1981:36). Sowing and planting must also take place on particular days when it is believed that the earth is ready; otherwise, she will not yield (Valderrama and Escalante 1981:37). Those involved in agriculture, therefore, need to plan trips carefully and make sure their land is well taken care of while they are away.

Journeying with pack animals requires extra care, and rituals are performed before departure to protect them from exhaustion, accidents and illness. Mount Ausangate, in the southeastern part of the Department of Cusco, is the most revered sacred mountain in that region, rising to a height of 6,372 metres. If a young herder from the uplands near Mount Ausangate is about to take part
in his first trip along an old trade route between his homeland and Markapata (high on the eastern slopes), he is sent to perform a special initiation ritual at the ancient road at the beginning of the journey. It is an area in which herders build special stone towers. On each small tower they place a small stone representing a llama, and on the llama’s back they balance an even smaller stone as its load. These towers can be seen forming a row along the trade route (Percy Paz Flores, personal communication 2000). The roads are not only vestiges of transhumance and trade, but have deeper, symbolic value as well. Evidence of this can be seen in the importance of crossroads, where purification rituals are sometimes performed to get rid of pain, sadness and misfortune (Rösing 1990:228).

Since slopes in many areas of the central Andes are both long and steep, travelers must often rest, especially when they or their animals are bearing burdens. This may be done before an ascent, midway up the slope and when reaching the top. There are certain designated resting places along the roads, known as samanapata in Quechua (there is a similar term in Aymara). Some of these can be identified on maps; others are only known to local communities and travellers. Natural features of the landscape may provide these resting places, such as a rock fragment suitable to sit on. In other cases, benches have been constructed there for this purpose. Apart from referring to rest, the terms samay, sami and related words refer to breath, inspiration and luck and blessing in Quechua (Cushua-mán G. 1976:132; González Holguín 1989:75–77 [1608]). Similar meanings are found in Aymara (Bertonio 1984:306 [1612]; Lucca D. 1987:146). Thus, when climbing a mountain slope or a steep gorge, there might be such a resting place, especially at a point with a dramatic view. This is the kind of location where the mountains and Mother Earth would be invoked and where coca leaves might be offered and then shared with one’s fellow travellers. Such a pause serves to restore strength but also secures the continued protection of the powers of nature during the trip. Some of the resting places known as samana or samanapata may refer to the locations where ancient, sacred objects representing deities and spirits of nature were placed or first found (Arriaga 1968:25 [1621]). Although the objects were removed and destroyed during colonial times, the locations themselves persist, and in some instances continue to be considered sacred ground.

In addition to Mother Earth and the mountains, various spirits need to be fed. One way to do this is to blow the aroma of food towards them, a tradition that goes back to prehistoric times (Albornoz 1989:166 [1583/1584]). Another way is by pouring libations. The blowing or libation is performed before one commences to eat and drink (Valderrama and Escalante 1981:54–55). Mother Earth, the mountains, the ancestors and the spirits can become angry if not properly fed (Bengtsson 1998a:143; Sallnow 1987:131–132). The expression of wrath or discontent may include the prospect of glaciers swallowing people. In some cases, the feeding rituals performed by humans involve blood sacrifices (Allen 1988:203–206).

However, mountains may react for reasons other than hunger. Stories are told of the mountains Illimani and Mururata in the Department of La Paz competing to see which could grow taller. When Mururata won, Illimani took his sling and
used it to cut Mururata’s head off. That is why, according to the story, Mururata’s peak is truncated to this day, and why its soil is red: it is Mururata’s blood (Pacífico Gamboa Hualluco, personal communication 2003). The soil of other mountains is said to be red from the blood they have sucked from human beings (Allen 1988:183).

Certain sacred places cannot be seen directly from the ancient roads but can be viewed from intermediate places. This seems to have been the case with some of the sacred mountains, whose view is obstructed by minor ones. It appears that some of the ancient, ceremonial platforms that can be found on mountain spurs and peaks were used to address higher and presumably more important mountain deities in prehistoric times. In a number of cases, these platforms form a chain or a web, and appear to an observer to link distant places to a certain mountain. Thus, rituals performed on one platform could be seen and taken up at another, until they reached the supreme mountain deity in a region. To this day, rituals—including offerings—are performed on some of these platforms, a number of which are adjacent to or near ancient roads and way stations. Travellers most probably asked for protection at these locations before continuing on their journey, a practice that some travellers follow to this day.

It is a tradition to stop upon reaching a mountain pass and place a stone there. Carrying a stone or even a pebble to the pass and placing it there signifies that you relieve yourself of the burden and fatigue of climbing the pass. The heaps or towers of stone thus formed are sometimes referred to as a being who will help you find your way over the pass in bad weather (Avilés 2005). Travellers stop and rest by these heaps. Here they greet the sun, the surrounding mountains and Mother Earth, while blowing the *sami* vital force in different directions; they offer coca leaves and sometimes alcoholic beverages, tobacco and gifts such as flowers to the mountains and other sacred places around them, as well as to Mother Earth, then share coca leaves, tobacco and alcohol among themselves. The traces of those rituals can be seen at these heaps of stone even today. The tradition dates back to prehistoric times (Albornoz 1989:168 [1583/1584]; Guaman Poma de Ayala (Waman Puma) 1980:236 [1615]).

Travelling along roads in the central Andes, it is common to find a cross erected either close to or upon a heap of stones marking a mountain pass. In some cases, a Christian niche or a chapel stands beside it—an especially frequent sight when there is a gravel road for cars passing by. Within the chapel, one might find three small crosses on an altar, flowers and remnants of burnt candles; in addition, there may be coca leaves, bottles of beer or stronger liquors (that have usually been emptied) and signs of fire from burnt offerings. The air might be tainted with the smell of stale beer coming up from the mud floor, where libations had been poured out for Mother Earth to drink. Outside, there may be a number of minute houses about 20 to 30 cm high where offerings have been placed (Allen 1988:196–197).

Above the tree line, travellers are exposed to extreme weather conditions. Thunderstorms are especially feared, but hail, fog, heavy snowfall and soaking
rains constitute severe risks for travellers—particularly those on foot. Lightning, while it is thought to send dreams to humans, also kills (Allen 1988:53). It is said that in hail, three brothers roam. One of them is the ominous lightning. The identity of the second is not known to me, but it is said that he can be scared away by scattering kerosene and holy water in his direction until his eyes burn. The third one is a crop stealer who, if he enters a cultivated field, takes its spirit and leaves it barren of harvest. The mother of the three brothers is snow, a very old woman. The pus running down her wrinkled cheeks in furrows is the melting snow that trickles along the sides of snow-capped mountains by day. Hail resides in the lake (conceived of as female), where all the crops stolen by the three brothers are stored. This can be observed at midnight by the light of the full moon at the time of St. John, around the winter solstice in June. Those who have been killed by lightning and have passed into another life become hail’s labourers, loading and unloading the stolen crops from hail’s mules forever (Valderrama and Escalante 1981:38–40). Someone who has passed away leads a life in a different dimension and can be quite present. The view of time and space in traditional Quechua communities is quite different from the view expressed by the Spaniards and their descendants (Bengtsson 1998c).

On the other hand, the waters of streams and lakes can assume healing properties on certain ritual occasions, such as the Feast of St. John mentioned above, which takes place on the 24th of June (Allen 1988:53). However, approaching certain lakes might provoke rain or thunder. Any red lake is especially conspicuous (Nazario Mamani, personal communication 2003). Just as red soil may have gotten its colour from blood shed in fights between competing mountains, lakes may similarly be tinted with blood (Mariscotti de Görlitz 1978:263).

Some lakes reportedly contain ruined buildings. On one of the many occasions when this was observed, a man from a village took a group of people up into the mountains to visit some ruins he had once seen on a mountain peak. When they reached a lofty area containing several lakes and arrived at one of them, it started to rain. However, as they continued on to a higher elevation, the sky turned blue. The rain, it was said, poured down because the passers-by had not made any offerings. As a consequence, the man was unable to locate the ruins he had been searching for. However, when looking down upon a large lake from even greater heights, they could distinguish walls within its waters (Anonymous 1 from Colpani, personal communication 2002). The conviction that buildings, and even whole hamlets, exist within lakes is widespread in the central Andes and forms part of a long tradition that reaches back beyond colonial to prehistoric times (Morote Best 1988). A number of population centres are said to have once had a lake or quagmire where the main square is now; examples range from small villages such as Choqekancha in the Department of Cusco (Marvin Aramburú, personal communication 2002; Wilbert Rodrigo and Reynaldo Bustinza, personal communication 2002) to large centres like the city of Cusco itself (Cieza de León 1986:258 [1553]). In both cases cited, the specific locations have ancient roads leading to them and are located at crossroads. Not only are ruined buildings said to
exist in a number of lakes, but some lakes reportedly contain objects composed
of precious metals, including plants of silver and gold.

Some lakes are said to swallow humans, animals, or both. Such is the case with
a lake near a mountain pass between Charazani and Aukapata in the Department
of La Paz. Local residents say that at times a certain inka princess comes out of
the lake wearing all her jewellery and drags men down into the lake. Another
lake on the heights near the sacred Mount Illampu in the Department of La Paz
is reputed to drag both men and animals down into its waters (Louis Demers,
personal communication 2001). Wetlands are also feared. They can cause illness,
produce headaches, and some can also swallow human beings (Allen 1988:39–40).
Consequently, crossing them is a hazardous undertaking.

Although it may be convenient to stop and rest before going over a bridge,
other elements may also be in play. Bridges can be risky to cross, and offerings
and sacrifices can minimize that risk. For example, the wooden bridge where an
ancient road crossed the Charulaya River near Camata in the Department of La
Paz spanned a canyon was in use until the early 1990s. It was repaired a number
of times during the twentieth century by the local inhabitants, who always of-
fered up sacrifices on those occasions to ensure that everyone would be able to
cross it safely. Following a period of disrepair, a peasant and his mule fell from
the bridge while attempting to go across. They were found dead at the bottom
of the canyon, both still looking in the direction in which they had been headed,
the man still holding on to the line. Since then, the bridge was never repaired
and never used again. Instead, peasants, herders and traders took another bridge
built for cars somewhat further upstream (Gonzalo Lazo Monroy, personal com-
munication 2003).

One bridge of exceptional beauty has its own unique story. A villager in Tam-
billo in the Department of Puno was told by his grandparents that they had par-
ticipated in its construction (Víctor Gárate Paco, personal communication 2003).
However, judging from technical aspects of the road leading to the bridge, the
bridge itself and the sites in the vicinity, the bridge was most probably originally
built in inka times. Be that as it may, according to tradition each of the four slabs
forming the bridge’s surface was brought from a different mountain in the area.
The names of three of those mountains were still recalled by the local people in
Tambillo when I visited the site in 2003. By using stone slabs from (apparently
sacred) mountains in different directions to build the bridge or by forming a tra-
dition saying that this was done, the community, past and present, succeeded in
integrating the surrounding landscape into their building project.

The many springs in the central Andes retain the rain, as well as the light and
aura (illa) of animals (Rösing 1995:79 and references). Springs can possess very
different properties. The sun's rays may give their waters healing power. A certain
spring is said to cure children from intestinal worms and scabies. Another can
insure that your crops will grow: if you transfer some water from that spring to
others you use to irrigate your fields, the latter springs will not dry out and will
continue to provide water to your fields, even in periods of drought. However,
bearing water from one spring to another can also be carried out by the rainbow, which is thought to be a subterranean serpent living in springs who can fly from spring to spring and fill them with water. Drinking the water of yet another spring may strengthen your Christian faith as well as cure the fatigue of old age. Still another spring pertains to a demon (saqhra) and is malevolent; its waters are said to be drunk by sorcerers (laygas) in performing their witchcraft (Allen 1988:53; Valderrama and Escalante 1981:27).

The tradition of taking water from one spring and pouring it into another goes back to prehistoric times. For example, when a group of people was relocated from their homeland to another territory during the inka reign, they might take water from the spring from their place of birth with them in a vessel. They would then ritually pour that water into a spring in their new homeland and name it after their birthplace (Albornoz 1989:171 [1583/1584]).

In a number of cases, ancient roads pass near hot springs. It appears that in some cases these roads were deliberately laid out to make the springs easily accessible to wayfarers. One of several examples passes by the hot springs at Ollachea in the Department of Puno. Coming from Ayapata, it descends along a steep mountain slope and leads directly to the springs, then continues by crossing the gorge and climbing again towards a very high mountain pass. Such hot springs were used for bathing in late prehistoric times, as indicated by Cieza's account (Cieza de León 1986:297 [1553]).

Just as people might name a spring in their new homeland after their birthplace, a similar practice is reported when the group's origin or birthplace was a stone. They would take the garment that had covered the original stone with them, then ritually cover another stone in their new homeland with it and worship it (Albornoz 1989:171 [1583/1584]). In a way similar to that of Inkarri's beloved who, although turned into stone, continues to exert power over her people to this day, certain stones and rock fragments have this property and require special consideration and precautions. If a sacred block of stone, such as a building block from inka times that has remained lying on the ground, is not fed properly, its ancestral spirit might become angry because it is very hungry. It might, therefore, draw energy from a nearby human being to feed itself. This may cause illness and, ultimately, the death of that person (Bengtsson 1998a:143). Sacred stones and rocks also became hungry in late prehistoric (fifteenth to early sixteenth century) and colonial (early sixteenth to nineteenth century) times and would eat the provisions offered to them (Cobo 1990 [1653]).

That humans can turn into stone is a notion that has its origin in prehistoric times (Arriaga 1968:23–24 [1621]). One specific example is the transformation of two brothers of Manqu Qhapaq (Manco Capac), the mythical founder of Cusco and inka society, into stone (Cieza de León 1985:20 [1554]). However, individuals who had turned into stone could revert back into living beings (Cobo 1990:35 [1653]).

When I inquired about the “stone statues” forming limits between the fields used for cultivation (actually stones piled into vertical columns), such as those
near the Suches River in the Department of La Paz, I was told that the inkas, using a sling, had made the stones in the fields stand up. Afterwards, the stones, which earlier were close together, placed themselves unaided into the boundary walls that one still sees surrounding the fields today (Pacífico Gamboa Hualluco, personal communication 2003).

Rain and thunderstorms have the capacity to protect ruined houses as well as ancestral graves along a route, as does fog. When fog sweeps in and covers ruins, it is a clear sign that they want to hide and not be disturbed. Many ancient roads still in use pass by locations associated with the ancestors, including ruined houses. Some even traverse the remains of ancient hamlets and population centres. It is considered extremely dangerous to loot ancient dwellings and graves. In spite of this, such activity is quite common. There are numerous stories told about people who have become ill or have even died as a direct consequence of such looting. A flame seen from afar at night is often said to be an ancient tomb burning. Toxic gas emanating from a tomb when newly opened can cause the death of a looter, according to local people. It is known that ancestors can become angry and take revenge. This may happen not only as a consequence of having been disturbed, but also if they have been left hungry and thirsty. As in the case of certain rock fragments mentioned earlier, ancestors need provisions; otherwise, they might cause people to become sick. This conviction stems from prehistoric times (Molina [El Cusqueño] 1989:133 [1573]). As a consequence, caution must be exercised when passing near ancient tombs. However, ancestors can also be protective. Therefore, the herders may choose to assemble their animals for the night in corrals near ancient graves. Ancestors can in that way help watch over the flocks (Lane and Herrera 2005:116).

Ruins can not only be protected by weather phenomena and ancestors, but also by snakes. According to a number of tales, many ruins are replete with snakes. Snakes might find it convenient to live in the crevices of collapsed stone walls where people no longer dwell and are, therefore, unlikely to disturb them. However, in some cases it appears that snakes actually do protect ruins. In the localities where I have observed this phenomenon, the snakes “have transformed themselves into stone.” One case is at a way station of inka design that has a ceremonial platform within its precincts where snakes are manifested as rock carvings on rock fragments, both within the site itself as well as around its perimeter (Bengtsson 2005c). Snakes played a symbolic role in late prehistoric inka society. For example, they were sometimes kept and fed for years, and offerings were made to them. Snake skins were also used in ritual dances dedicated to their deities (Albornoz 1989:171–172, 174–175 [1583/1584]). A heavenly serpent watched over the snakes on earth and was worshipped (Cobo 1990:31 [1653]).

Certain localities are so important that when initially seeing them, even from a distance, rituals are performed. As late as the 1970s, I observed that people from the countryside travelling to Cusco would murmur and perform an act of obeisance toward the city when seeing it from afar for the first time during their trip. This was true even when they went by truck. As the capital of the ancient
inka empire first came to sight, they would urge the driver to stop, climb down from the back of the conveyance and make their invocations by the roadside in Quechua, while casting down their eyes and repeatedly bending over with raised hands. Such locations as this mountain pass have been sacred since late prehistory, as is indicated by Cobo’s account, which was based on earlier sources (Cobo 1990:61, 64–65 [1653]).

Travellers proceeding on foot might wish to stop to carefully wash themselves with water when approaching an important locality or the destination of a trip, such as a town. The cleansing procedure may involve certain ritual elements, such as the repeated washing of certain body parts (author’s observation; Apolo 2001). To enter a village or town without washing oneself is considered inappropriate. Ritual cleansing forms part of an ancient tradition. For example, many of the water basins at important sites from inka times are so elaborately built that it seems reasonable to believe that their use included ritual ablutions.

Most people travelling towards the eastern lowlands only go as far as the temperate valleys that overlie the humid forests, or perhaps they may proceed to the fringe of the forest—whether for trade, to visit relatives, or to cultivate plots of land. For various reasons some will on occasion continue down into the forest. This may require them to visit shamans and drink an infusion prepared with ayawaska (Banisteriopsis ssp.), a liana with hallucinogenic properties used in divination (Brack Egg 1999:62–63). Doing so, they may learn whether the deities of the forest accept their presence there (Arturo Caparó, personal communication 2002).

When such travellers are ready to return home, they again perform a ritual asking for permission and protection before they depart. During the journey, they address the deities along the route, but appear to carry out the homeward-bound rituals with less anxiety.

Final Words

Travelling is not an easy task in the rugged central Andean landscape, whether on foot or by other means. In the minds of many of the inhabitants, especially those living in rural areas, much of the landscape has both a direct and an indirect impact on their everyday lives. Traditional central Andean beliefs remain strong, in combination with views imposed by the Catholic Church and other religious communities from the sixteenth century onwards.

The rituals performed before and during a journey indicate the sacredness of walking in the Andes, both today and in the past, as do many of the tales that continue to circulate about life in relation to the landscape. The roads used today often have ancient origins, and the structures in their vicinity are often ancient as well. Along these roads, physical evidence of their importance in antiquity can be seen in the form of way stations, corrals for llamas, the remains of dwellings and hamlets, tombs, carefully built canals and water basins, stone heaps marking the
mountain passes and ceremonial platforms. Direct evidence of the sacredness of walking is found in the residue of offerings, both recent and ancient, such as candles, coca leaves, tobacco, flowers, bottles of beer and other alcoholic beverages; and in traces of burnt offerings including ashes, soot and carbon from vegetable matter and animals, as well as animal body parts. This sacredness is further implied by the presence of niches, chapels, tiny houses and animals of stone by the roadside. Other sacred sites can be inferred from place names on maps, and still others from the presence of rock carvings and paintings along the routes.

For dwellers in the central Andes, it is crucial to keep in touch with the forces of nature and to negotiate with those powers while travelling. Such travel involves a number of considerations related to the surrounding landscape. Many people consider that one must ask for permission before entering an area, in addition to asking for protection during the trip. This is done through rituals, including offerings, that have much in common with similar practices in late prehistoric times, as they have been transmitted to us in written form since the early colonial era. Unless these rituals are performed, the forces of nature can turn against travellers and cause them illness, accidents, misfortune and even death.

Additional locations where rituals are performed include rest stops from which sacred mountains can be seen and addressed, or places before embarking on dangerous stretches such as passing over bridges or through wetlands. Several of those places are related to the underworld, where ancestors lead their lives in a realm parallel to our own. Those places involve both buildings such as tombs or natural phenomena like caves, holes in the ground, springs and lakes. Local inhabitants walking in the central Andes constantly note reminders of past events, such as the colour of the soil or the water. They also keenly observe the wildlife they encounter, since some animals serve as messengers whose presence, movement, or sound foretell events and can warn passers-by of danger. Crossroads, as we have seen, also have a special meaning for foot travellers and are occasionally the setting of rituals to drive away pain, sadness and misfortune.

Finally, travellers will watch the sky for changes in weather, ready to take precautions in case of increasing wind or tornadoes and the approach of fog, clouds, lightning and thunder, rain, snow, or hail, since such changes are signs that they have not properly fed the neighbouring sacred places and Mother Earth, and consequently have not shown them the proper respect. Precautionary measures are taken to find a secure place to stay overnight and to avoid walking at dusk, when malevolent spirits are especially prone to approach humans. In addition, the time of year must never be forgotten, as the earth is especially hungry before the rains begin at the end of the dry season. If problems do occur during a trip, it is especially important to perform rituals to repair the damage.

One basic aspect of central Andean rituals is reciprocity. When foot travellers meet local people along the way, they will sit down and enter into conversation, and both parties will offer coca leaves to Mother Earth, to the surrounding sacred places and to each other. One outcome is that the local people will provide for travellers’ needs, as will Mother Earth and the sacred places. Such encounters and
rituals are crucial to continuing the journey, and will assure the safety and well-being of those making their way by foot across the Andes.

Acknowledgements. My sincere thanks go to the Bank of Sweden Tercentenary Foundation for supporting my research on Andean-Amazonian Contacts in Prehistory. Several friends, colleagues, and relatives have accompanied me along the roads described in this essay. Among them, I wish to especially mention Sonia Avilés, who has been my frequent companion on these journeys, and has also heightened my awareness of the connection between the ancient roads and the hot springs. As always happens in the central Andes, many people—whether in the towns, cities or out in the countryside—have generously shared their knowledge and views with me. Wherever I have made specific use of information provided by them, I have striven to include their names and place of residence. Any misunderstandings are, of course, my own responsibility.

References


**Personal communication**

Anonymous 1 from Colpani 2002. Personal communication. Villager from Colpani, Province of La Convención, Department of Cusco. Resident in Ollantaytambo, Province of Urubamba, Department of Cusco.

Aramburú, Marvin 2002. Personal communication. Villager in Lares, Province of Calca, Department of Cusco.

Caparó, Arturo 2002. Personal communication. Resident in Cusco, Department of Cusco.

Ccuno Mayta, Félix 2004. Personal communication. Villager in Usicayos, Province of Carabaya, Department of Puno.


Gamboa Hualluco, Pacífico 2003. Personal communication. Resident in Achocalla, Cantón Achocalla, Province of Murillo, Department of La Paz.


Lazo Monroy, Gonzalo 2003. Personal communication. Villager in Camata, Cantón Camata, Province of Muñecas, Department of La Paz.

Mamani, Nazario 2003. Personal communication. Villager in Carijana, Province of Saavedra, Department of La Paz.

Paz Flores, Percy 2000. Personal communication. Anthropologist resident in Cusco, Department of Cusco.

Rodrigo, Wilbert and Reynaldo Bustinza 2002. Personal communication. Archaeologists resident in Cusco, Department of Cusco. At the time in Choqekancha, Province of Calca, Department of Cusco.
Cruzando paisajes, transitando caminos: El ramal Inca de Sipe Sipe hasta Inkachaca (Cochabamba, Bolivia)

Walter Sánchez Canedo

Contact details
Instituto de Investigaciones Antropológicas/Museo Arqueológico
Universidad Mayor de San Simón
Cochabamba
Bolivia
walteryambae@hotmail.com

ABSTRACT

Crossing Landscapes, Traveling Roads: The Inka Road Branch from Sipe Sipe to Inkachaca (Cochabamba, Bolivia)

This paper presents an integrated visual and written reading of one of the main pre-Hispanic Andean roads that were used by the Inca State *llamacamayoc* (the lama-based transportation network) to connect three biogeographic zones (the high-altitude central Andes, the mid-altitude valleys, and the Yungas) in Cochabamba, Bolivia. Drawing on a case study of the road-segments linking Sipe Sipe–Colomi–Inkachaca, this paper demonstrates the potential of incorporating a visual narrative as an important resource for archaeological description and interpretation and suggests an approach—still under construction—to address the need for transcending some limits that archaeological remains impose on historical explanations of ideational, symbolic, and cosmological aspects of past societies, which are difficult to perceive by the “traditional archaeological eye” towards material culture alone.
Introducción

Un elemento relevante en los estudios que hacen a la arqueología del paisaje es su énfasis por la visibilidad pero también por la invisibilidad. Tal hecho va en concordancia con las postulaciones teóricas y prácticas de esta sub-disciplina (Anschuetz et al. 2001) en sentido de que el mundo que habitan los seres humanos, ahora y en el pasado, está lleno de sentidos y de significaciones. Tal multiplicidad de sentidos construidos por las sociedades—cambiantes en el tiempo—tiene en el entorno gran parte de sus sistemas de significación. Dicho de otra manera, es en el y con el paisaje (una montaña, un río, un bosque, la neblina, un ecosistema, etc.), donde la evidencia material—si es que existiera—adquiere sentido.

En tal perspectiva teórica, la metáfora visual aparece como una herramienta que puede permitir ampliar el horizonte de análisis tanto de la cultura material y/o de las evidencias halladas—en correspondencia con otros ámbitos que hacen a lo intangible e inmaterial—cómo de los sentidos posibles que se hallan, muchos de ellos, fuera de los contextos del hallazgo. Más aún. Como lo señala Soler Segura, “(la) metáfora visual entiende que la ausencia o presencia de evidencia arqueológica de algún tipo no es algo que pueda estar relacionado exclusivamente con las vicisitudes post-deposicionales del registro material, con la naturaleza del objeto depositado o con la intensidad de la investigación realizada, sino que está o puede estar vinculada a una voluntad consciente o inconsciente por y hacer visible o invisible ciertos aspectos de la vida social” (2007:57). Tal hecho mueve, entonces, a la posibilidad de comenzar a avanzar hacia aspectos que deban ir más allá de la evidencia deposicional material (patrones de asentamiento, hallazgo de restos materiales, etc.), para intentar comprender los diversos órdenes que hacen al manejo humano de la espacialidad entendida ya no como un mero “telón de fondo,” sino como un complejo dotado de una multiplicidad de sentidos, muchos de los cuales, es posible jamás se lleguen a conocer o que, por el contrario, “estén ahí,” pero debido a pre-juicios no sean visibilizados (marcos teóricos, filiaciones políticas, etc.).

Tal giro teórico tiene incumbencia en varios otros aspectos vinculados no sólo en la práctica arqueológica—formas de prospección, metodologías, sistemas de registro, etc.—sino en la posibilidad de integrar tecnologías vinculados a los Sistemas de Información Geográfica (SIG) con todos sus componentes anexos uso del GPS, de fotografías aéreas, fotos satelitales, fotos terrestres, modelaciones 3D, uso de cámaras fotográficas y filmadoras para el registro, formas no destructivas de rescate de información,1 así como a nuevas formas de encarar el estudio arqueo-

1 La tecnología ha facilitado la posibilidad de múltiples narrativas en la visualización y la creación de mundos y entornos que han desaparecido, partiendo siempre de los datos que aporta la actividad arqueológica. Entre algunas narrativas es posible destacar la creación de modelos tridimensionales, logrando un acercamiento a las propiedades físicas de los objetos representados generando articulaciones modeladas de distribuciones y relaciones espaciales existentes entre yacimientos o edificios, etc. La narrativa visual es, en la actualidad, una herramienta eficaz para la difusión del conocimiento arqueológico a sectores no profesionales, hecho que incide en un público distinto al académico ya sea desde canales de difusión masiva (History Channel, Discovery Channel, etc.) hasta recursos en formato reproducible en los hogares (DVD, VCR, etc.) (Lloret Marín 2003).
lógico—y que incumbe a la propia reflexividad del arqueólogo con respecto a sus interpretaciones—y a la presentación de los resultados (escritos/visuales).

En este último aspecto, Lloret Marín (2003:23–24) ha destacado, por ejemplo, algunos elementos importantes para comprender las diferencias narrativas entre el texto escrito y la imagen-objeto y, la “transustanciación” que supone pasar de un tipo de narrativa a otra:

1 La palabra denomina genéricamente (por ejemplo: “silex”), mientras que la imagen individualiza (“este cuchillo de ‘silex’ y no otro”).
2 El texto escrito sobre la cultura material produce una transustanciación: “La transformación de las fuentes materiales arqueológicas en narraciones textuales supone una ‘transustanciación,’ produce una verdadera ‘mutación de sustancia o de materia de la expresión.’ Un yacimiento arqueológico cualquiera…terminará transformando su cualidad visual originaria en un documento escrito más o menos elaborado.”
3 El lenguaje escrito favorece el pensamiento lineal, mientras que el lenguaje visual privilegia y promueve un pensamiento global de tipo tridimensional.
4 “El lenguaje escrito privilegia los hechos, mientras que el visual privilegia el contexto.”
5 “La alfabetización textual es aprendida desde la infancia, lo visual es casi inexistente (…) La escasa formación icónica del investigador legitima su pensamiento, se es más científico si se escribe con letras que con pixeles.”

Otro elemento importante de la transustanciación se da en la interpretación, en tanto, es mediante la palabra escrita que el arqueólogo pone en acción su propia agencia (teórica, política) en la construcción de pasados. Como lo señala Lloret Marín: “Inevitablemente, el lenguaje escrito influye en la forma en la que la historia se construye” (2003:24). Esto no supone que lo visual (lo fotográfico, por ejemplo) tenga una mayor objetividad debido a la sensación de que la imagen que se capta es lo real momentáneo. La búsqueda de la imagen a ser captada—el encuadre, el tipo de lente usado, el nivel de acercamiento, etc.—es la revelación de que la pretendida objetividad de lo real registrado tampoco es certero ya que en él impera la agencia valorativa, estética, interpretativa e incluso política del arqueólogo ya que es él quien elige “qué cosa” registrar y qué no. Un hecho que puede marcar diferencia en la interpretación del texto escrito y el visual proviene, sin duda, de la propia agencialidad del lector, en la medida que la imagen visual constituye un “texto” multidimensional y más abierto a diversas interpretaciones que lo lineal narrativo grafológico.

Estas diferencias no deben suponer distanciamientos ni definir criterios de elección entre uno y otro soporte; más al contrario, debe imperar un espíritu diplomático en la necesidad de comenzar a generar ámbitos de colaboración entre la escritura y lo visual, en la medida que ambos son medios que permiten transmitir información y conocimiento relevante pero de manera distinta pero complementaria.
Con tal espíritu colaborativo, el presente trabajo presenta de manera visual y escrita: (1) un recorrido por un camino principal trazado por los llamacamayoc, ganaderos del inca y que articula tres provincias biogeográficas en Cochabamba: la Provincia Boliviana-Tucumana (que corresponde a lo que genéricamente se conoce como los valles), la Provincia de la Puna Peruana, y la Provincia biogeográfica Yungas Peruano-Boliviano (Navarro y Maldonado 2002); (2) sugestiones que hacen a la necesidad de incorporar aspectos que involucran a lo no-visible dentro del registro material arqueológico, mucho más, si asumimos que los valles de Cochabamba fueron, durante el incario, un espacio inter-digitado y multi-“étnico” (Wachtel 1981; Sánchez 2008) y donde cada grupo debió expresar un propio orden espacial-cosmológico sobre el paisaje construido—esta comprensión dejaría de lado modelos estáticos y duros para dar paso, más bien, a la comprensión de paisajes fluidos o, por usar la metáfora de Bauman (1996), líquidos y, por lo tanto, menos aprehensibles en el registro material; (3) un énfasis explícito en el tramo Colomi–Inkachaca como una posibilidad de dinamizar el “ojo arqueológico” y que permita trascender las limitaciones que el registro material impone a las explicaciones del pasado y avanzar hacia la comprensión de otros posible órdenes—ideacionales, simbólicos, cosmológicos—que debieron intervenir en las formas en las que las sociedades del pasado ordenaron sus espacios.

Tras los invisibles rastros del camino de los llamacamayoc estatales: Sipe Sipe–Colomi

El poblado de Colomi aparece citado en el repartimiento de “pastizales” hecho por Wayna Qapac como un lugar perteneciente a los llamacamayoc estatales Sipi Sipi. Según este repartimiento, los poblados de estos llameros, se hallaban ubicados a modo de “cuentas de collar” en los valles de Cochabamba (Bajo, Central y de Sacaba), con dirección hacia la puna de la cordillera, en un modelo de territorialidad discontinua. Los pueblos señalados por el repartimiento son: Sipe Sipe, Saubze, Quillacollo, Collqapirhua, Coña Coña, Sumumpaya, Canata, Jayhuaico, Chacollo, Guayllani, Chimboco, Chiñata, Laquiña, concluyendo en Colomi (AHMC-ECC, Vol. 13, Nº 9, 1570, 186 y 186v) (Fig. 1). Aunque sin evidencia material actual—la ciudad de Cochabamba ha cubierto estos espacios—es evidente que todos estos pueblos se hallaban unidos por un camino por donde debieron circular anualmente cientos de llamas llevando cargas de maíz y transportando otros productos. No fue el único repartimiento realizado por Wayna Qapac. Un “repartimiento de tierras” agrícolas para el cultivo de maíz fue realizado en los valles Bajo y Central de Cochabamba a grupos provenientes de los “Señoríos” altiplánicos aymara hablantes (Paqaje, Lupaqa, Caranqa, Sura, Charka, Qara Qara, etc.) (Wachtel 1981; Morales 1977) (Fig. 2). Si sobreponemos ambos paisajes: el llamero y el agrícola, puede apreciarse un macro-paisaje estatal Inca, compuesto

---

2 Pastores y cuidadores especializados de las llamas (Lama gama) del Estado Inca.
de partes (micro-paisajes “étnicos”) inter-actuantes e interdependientes—y que eventualmente podrían ser observados cada una en su particularidad.

El paisaje “étnico” de poblados llamacamayoc Sipi Sipi, muestra una suerte de racionalidad: (1) se ubica de forma paralela a los principales ríos de los valles y de sus áreas de inundación, esto debido a la presencia de bofedales, ricos en pastos que permitían la alimentación de cientos de llamas; (2) cruza cerca de los complejos Inca de almacenamiento de maíz: Cotapachi, Jahuantiri, Villa Urquipiña y desde donde era conducido, una parte al Cuzco (Wachtel 1981) y, otra parte, hacia las “tierras de guerra” (Gyarmati y Varga 1999); y (3) se vincula con los distintos suyu3 o tierras agrícolas, donde cientos de mitmaqkuna trabajaban (Wachtel 1981; Gyarmati y Varga 1999).

3 Parcela, franja de territorio.

Figura 1. Mapa con el trazo de caminos que debieron unir los pueblos de los Sipi Sipi. Nótese que corre cerca de los ríos y de las zonas de inundación donde existían “pastizales” y bofedales (infografía de Iván Montaño). – Roads linking Sipi Sipi towns. Note that the network runs near rivers and flooded zones where pastures were located (image by Iván Montaño).
En tal racionalidad, Colomi aparece como un pueblo principal de los llamacamayoc Sipi Sipi y, por lo tanto, estratégico dentro de la economía política Inca. En términos geográficos, Colomi era una suerte de “frontera” ecológica ya que a sus espaldas se ubicaban las vertientes orientales, cálidas, donde vivían otras humanidades con las cuales los grupos llameros de la puna interactuaban constantemente, incluso antes de la llegada de los Incas.

Situados a “lomo de caballo,” entre los valles y los yungas, los llameros de la Puna, los llamacamayoc Sipi Sipi criaban llamas en el extenso altiplano de la cor-

4 El etnónimo Sipi Sipi es posible que fuera una hetero-denominación y que hiciera referencia al lugar de donde provenían: la cordillera (Sipi = cordillera en aymara y, su plural Sipi Sipi, puede ser pensada como una “cadena cordillerana”).

5 Colomi debió ser un lugar importante por dos razones: (1) centro de control sobre los llameros de la cordillera de Cochabamba y (2) espacio de control sobre el territorio de penetración hacia los yungas y a los llanos amazónicos.

Figura 2. Mapa del “repartimiento” de tierras y de pastizales realizado por Wayna Qapac. El repartimiento de pastizales sigue la secuencia hecha alrededor de los pueblos de llamacamayoc Sipi Sipi (SS) (infografía de Iván Montaño). – Distribution of Wayna Qapac’s lands and pastures. Pastures are distributed around the llamacamayoc Sipi Sipi towns (image by Iván Montaño).
dillera de Cochabamba y descendían anualmente, con llamas macho, a los valles de Cochabamba—y también hacia los yungas (Sánchez 2008)—para iniciar viajes hacia distintas zonas llevando el maíz estatal Inca (Fig. 3).

Si bien el camino que conectaba los pueblos de llamacamayoc Sipi Sipi debió ser principal, varios otros caminos conectaban los valles con la puna de Colomi. Un ramal importante subía desde el pueblo de Laquiña (Sánchez 2008). Formalmente construido—ubicado en sus tramos de inicio el año 2004—era una ruta muy usada incluso en el periodo colonial temprano. Otro ramal que tiene evidencia arqueológica, es el que subía desde el valle de Sacaba hacia el pueblo de Larati (Fig. 4). Este camino, formalmente construido, se bifurcaba en éste poblado en dos ramales: uno que se dirigía hacia la cordillera, para cruzar todo el altiplano y caer hacia los yungas de Tablas Monte y, el otro ramal que iba hacia Colomi.

Todo este complejo de rutas viales con distintos ramales, debe ser situado dentro del macro-paisaje Inca y dentro del interdigitado complejo paisajístico “étnico” de los mitmaqkuna7 y de los grupos locales, a fin de entender los entramados relativos entre estos distintos complejos poblacionales y sus correspondencias asociadas al uso y la organización del paisaje y los distintos órdenes y significación que se le dio. En todo este complejo habrá que añadir, la espacialidad de las propias élites

---

6 Hasta la década de 1970, tropas de llamas bajaban anualmente en sus viajes inter-ecológicos desde la puna de Pisle y Pallq’a hasta Tablas Monte, llevando charque (carne deshidratada), papa, sal y otros productos y recogiendo coca, fruta, miel, incienso, madera, etc. Es posible que tales ingresos hayan sido también frecuentes a los yungas de Inkachaca debido a su cercanía.

7 Trabajadores agrícolas estatales. Tenían un estatuto distinto a los mitmaqkuna “étnicos.”
Incas y de otros grupos de poder (guerreros, etc.) asociados al control del territorio (fortalezas, caminos, puentes, etc.).

¿Será posible ahora percibir de mejor manera la lógica de construcción de paisajes “étnicos” inter-actuantes y cruzados por caminos dentro de lo que podrían constituir paisajes culturales dotados de significación diversa?

De hecho, debido a la acción estatal Inca, entre los valles y puna de Colomi, destacan varios “tipos” de paisajes culturales construidos dentro del proceso de reestructuración del Tawantinsuyu: (1) el político-administrativo, vinculado a las élites del poder Inca, con centros importantes en el Valle Bajo y el valle de Sacaba; (2) el agrícola, en un modelo de franjas longitudinales—suyu—que corren de manera transversal de norte a sur y donde son ubicados los mitmaqkuna multiétnicos altiplánicos provenientes de los distintos “Señoríos”—y donde sería previsible hallar paisajes “éticos” menores; (3) el paisaje llamero, en un modelo de “cuenta de collar” que corre desde los valles hacia la puna de la cordillera, habitad natural de las llamas y que se vincula a los ríos y a las zonas de inundación donde se hallan los “pastizales;” y (4) el paisaje de control, asociados a grupos tanto locales (Qhawi, Quta) como traídos de otras zonas (Chicha, Yampara), con una territorialidad más bien de tipo “enclave,” ubicados en zonas estratégicas y “fronterizas.”

Dentro de tal narrativa, caminos y senderos aparecen como dispositivos culturales que articulan, espacial y mentalmente, macro- y micro-paisajes.

Lo visible y lo invisible del “camino del inca”
Colomi–Inkachaca/Paracti

El “camino del inca”\(^8\) Colomi–Inkachaca/Paracti debe ser entendido en articulación con la red de caminos que van de los valles a la puna y de ahí a los yungas y, con la presencia de *llamacamayoc* Sipi Sipi y los Amo/Umu de la “montaña”\(^9\). ¿Qué se sabe de la zona de Inkachaca/Paracti? En términos arqueológicos, Paracti/Inkachaca, se ubica en la parte oriental de la cordillera de Cochabamba (yungas), a una altura aproximada de 1800 m.s.n.m. Fue ocupada por grupos locales desde por lo menos el Horizonte Medio. La presencia en Paracti de cerámica Inca junto a cerámica local, muestra que durante el Horizonte Tardío fue un centro estratégico situado en la ruta hacia los llanos del Chapare (véase Sánchez 2008).

La documentación etnohistórica arroja mayores elementos. Son varios los trabajos que han señalado que los yungas de Paracti/Inkachaca, Iuno,\(^10\) Arepucho y Chuquiuma se hallaban poblados por grupos hetero-denominados Amo/Umu/Yumu.\(^11\) Saignes ha sido uno de los primeros en equiparar a los Amo con los Yumu (Renard-Casevitz et al. 1986). Barragán Romano considera que los Amo del Chapare se hallaban vinculados con un ayllu Amo en Mizque y que éstos se hallaban a su vez ligados con los guerreros Moyo\(^12\) de Aiquile (1994:147). Schramm considera que los Amo de Mizque, los Amo del Chapare y los Yumu (Umu) eran un mismo grupo (1995:181–185). Esta amplia presencia ha llevado a pensar a Barragán Romano en la existencia de “una provincia” Umu/Amo, cuyo pueblo principal, cerca de Paracti, “uno de los afluentes del Chapare (sic), tenía 300 indios en 1630” (1985:127).

Saignes (1985) señala que durante el incario los Amo de Paracti se hallaban sometidos a un cacique de Sacaba.\(^13\) Por la entrada, en 1588, del Capitán Francisco de Angulo al “descubrimiento y conquista de las grandes provincias de Coro Coro y Moxos” desde Colomi, sabemos que en los Yungas existía un pueblo Amo al que se llegaba luego de “una gran bajada que havia para el dicho pueblo de los Amos” (1906 [1588]). Es posible que este pueblo haya estado ubicado en Inkachaca/Paracti. Los Amo tenían relaciones directas con la gente de la puna de Colomi (Sipi Sipi) donde Angulo, en su Entrada hacia el Chapare, se encuentra con dos indios Amo enviados por “don Joan, cacique de los Amos” (Angulo 1906 [1588]). Por esta misma Entrada, se sabe que uno de los soldados que lo acompaña es un tal Joan Pedro

---

8 Es así llamado por la gente actual de Colomi.
9 Montaña es un término que fue utilizado en la documentación temprana para designar la cara oriental de los Andes que mira hacia la Amazonía y que, en la actualidad, se denomina yungas.
10 La cadena montañosa situada al este de Inkachaca se llama actualmente Iuno o Juno. Es posible que en esta zona haya existido un importante centro de los Yumu.
11 Otros etnónimos con los que son nombrados en las fuentes son: Umo/Yumu/Yumo/Hamo/Amo.
12 Barragán V. (2008) ha destacado las características guerreras de los Moyo o Moyo Moyo, grupo que sería originario de los valles de Tarija. Como soldados de elite del Inca eran utilizados para defender la frontera externa así como también para someter y vigilar a las etnias del interior, de fidelidad siempre vacilante. De manera sugerente, destaca que los Moyo estaban vinculados a los Mocho que vivían “a las espaldas de Cochabamba,” es decir en los yungas.
13 Sabemos que en Sacaba se hallaban los Quta, los Chicha y los Qhawi, todos ellos flecheros y “buenos para la guerra.”
Montañés, quien es, al parecer, el mismo Joan Montañés señalado por Urquidi (1949:62) como uno de los primeros pobladores de Cochabamba y que una fuente local señala a Joan Pérez Montañés, “beçino desta billa (de Oropeza) y de los prime-
ros pobladores della” y que se hallaba casado con María Tuico, hija del “Principal” Qhawi14 Martín Guaicha (AHMC-ECC, Vol. 9, Nro. 1, 28.IX.1611, fs. 47–184). Es posible, entonces, que la presencia de Joan Pérez Montañés en la Entrada hacia los Amo, se deba a que él conocía a la gente Amo/Umu de Paracti y como esposo de
Maria Tuico tenía alguna ascendencia sobre ellos.

Esta presencia de los Amo/Yumu en los yungas es pre-Inca lo que implica que se hallaban en constante contacto tanto con grupos de la puna (los Sipi Sipi), de los valles (los Quta, Chuy—a quienes se les oía hablar yuracaré durante la colonia temprana (Schramm 1995; Barragán Romano 1985)—y con otros grupos habitantes en la “montaña” como eran los Yuracaré cuyo hábitat abarcaba las estribaciones cordilleranas hacia los llanos del Chapare. Es posible que los Amo/Umu hayan sido “parcialidades” de filiación yuracaré que manejaban un horizonte geográfico estratégico: los yungas, ubicados entre la puna y los llanos aluviales amazónicos.

¿Quiénes eran los Amo/Umu/Yumu? En el caso de los Amo de Paracti, Saignes los considera mitmaqkuna puestos allí por el Inca para “guardar un puente de criz-
neja” y controlar un camino importante de entrada/salida hacia y desde los llanos amazónicos. La documentación señala que, por este camino, el Inca cada día “en-
viaba indios para la dicha conquista” de los indios “chunchos” (Renard-Casevitz et
al. 1986). Siguiendo la lógica Inca de “trasladar” gente dentro del mismo eco-tipo,
es probable que fueran mitmaqkuna pertenecientes a grupos locales o proveniente
de grupos de los mismos yungas—y por lo tanto conocedores de este espacio—que
provenientes de otras zonas. Su carácter local se refrenda por el hecho que daban
al Inca como tributo “plumas,15 arcos, flechas y macanas” (Saignes 1985:23), arte-
factos, estos últimos, que eran confeccionados con madera dura de chonta16 (Gu-
lielmia gasipae), palmera que crece en los llanos aluviales del Chapare y en el que
son especialistas los guerreros Yuracaré (Mujia 1914). Además, da a los Amo/Umu
una imagen de flechero. Fuentes independientes confirman el ethos guerrero de los
Amo/Umu. La “Relación” de la Entrada hecha al Capitán Juan Aguilara de Godoy (capitán de infantería “por título y nombramiento de la Real Audiencia de la ciudad
de La Plata”) por el Corregidor y Justicia Mayor de Mizque (ANB-AM, 1622.2, fs.
17) los identifica claramente como “yndios yumus de guerra” que salían a atacar, en
la colonia temprana, a los pueblos de Aripuco y de Chuquiuma situados en pleno
yungas. Además, las fuentes apuntan a que podrían ser destacados hechiceros (Umu
o Hamoni), respetados incluso por los Incas (Sánchez 2008).

Queda claro, por lo tanto que la puna de Colomi se hallaba articulada con los
yungas de Inkachaca/Paracti desde por lo menos el Horizonte Medio e intensifi-

14 Los Qhawi eran un grupo local que vivía en los valles de Sacaba y que a su vez, se hallaba articu-
lado a los Quta de Pocona (Sánchez 2008).
15 Las plumas son un elemento principal para la confección de flechas. Es posible que hayan sido
entregadas a los incas para que las distribuyeran a otros grupos “flecheros.”
16 La madera era también usada para hacer la vara ritual de los brujos. Por tal motivo, el que sacaba
chonta (“chonteador”) era considerado un “curandero” (Polia Meconi 1999:144).
cado durante el incario en la ruta hacia los llanos amazónicos y que por esa ruta circulaba gente local como proveniente de la puna/valles como de los llanos amazónicos. La presencia de cerámica Inca-Local como Inca-Cuzco apunta a la idea de que además existía un centro Inca.

Dos caminos formalmente construidos penetran hacia estos yungas: el camino de Aguirre–Supay Huarkuna–Inkachaca y el camino Colomi–Inkachaca, del cual se tratará en las siguientes páginas.

El camino que une Colomi con Inkachaca,\(^\text{17}\) es formalmente construido (Figs 5, 6 y 7). Empedrado, comienza en la ladera del cerro Jatun Chutu, sube hacia la cadena emblemática llamada Huayna Colomi, muy cerca de la laguna Phiña Khocha hasta cruzar la línea divisoria de aguas entre la puna y los yungas por un corte llamado Abra K’asa (Fig. 8). En términos biogeográficos, este camino interconecta dos provincias: la Puna Peruana y los Yungas Peruano-Boliviano (Figs 9, 10, 11 y 12). En términos humanos, es una ruta principal por donde circulaban cientos de personas entre los que se encuentran gente de los yungas, los llanos aluviales, llame-

ros Sipi Sipi—who debieron bajar constantemente con sus caravanas de llamas, principalmente durante los meses de junio-septiembre—así como gente Inca junto a guerreros-flecheros de distinta filiación étnica—¿Quta, Chuy, Churumata, Mo-

yos, Chicha?—que penetraban constantemente hacia las “tierras de guerra.” Como ruta principal Inca, debió tener gente para conservarla y cuidarla, por su carácter estratégico. En tal sentido, el paso de Abra K’asa debió tener una función estratégica militar (Fig. 13).

Con el fin de amplificar la comprensión de lo visible y lo invisible de los caminos Incas y llamero, en la siguiente sección presentamos un recorrido visual del mismo, desde su punto de partida, hasta la planicie de Yerbabuena pampa en Inkachaca (Figs 14 y 15). Para tal efecto, se han realizado varios acercamientos que van desde la presentación de fotos satelitales (Fig. 16), modelaciones 3D (Fig. 17), representaciones artísticas del paso de gente hacia la zona (Fig. 18), fotografías sacadas durante los recorridos—en los que puede apreciarse a los propios arqueólogos y la gente del lugar.

Este acercamiento visual tiene la bondad de agudizar el “ojo arqueológico” hacia aspectos relevantes del entorno, como por ejemplo, la magnificencia paisajística de Abra K’asa que debió tener implicancias imaginarias, simbólicas, rituales, religiosas, políticas, en tanto aparece como una suerte de “puerta” que marca el paso de una ecología a otra; de unas humanidades a otras. Por lo tanto, tal corte, hecho artificialmente, debe ser visto en correspondencia a los espacios que abre o cierra hacia ambos lados de la cordillera. Su presencia, por lo tanto, sugiere su carácter sagrado y su recorrido, de un lado al otro, debió ser visto como un “paso” de un mundo a otro mundo.

Su característica de ser un camino formalmente construido casi en toda su integridad, muestra igualmente la importancia de esta ruta para la sociedad inca y que apenas comenzamos a percibir y sugerir. Es posible, incluso, que tal paso haya sido pre-inca y que fuera re-significado por el Tawantinsuyu.

---

\(^{17}\) Este camino fue reportado inicialmente por Sánchez (2008). Fue recorrido el año 2003 con el arqueólogo Marco Irahola, un guía local y el dirigente de Tablas Monte, Cirilo Rojas. El año 2011 fue nuevamente revisitado.


Figura 8. Vista del paisaje con el corte de Abra K’asa (foto de Walter Sánchez C.). – View of the landscape with the break at Abra K’asa (photo by Walter Sánchez C.).
Figura 9. Imagen satelital, en el que se aprecia el pueblo de Colomi, el camino hacia Abra K’asa y de Abra K’asa hacia Inkachaca (fuente Google Earth 2009). – Satellite image with Colomi, the road to Abra K’asa and the road from there to Inkachaca (modified from Google Earth 2009).


Figura 15. Paisaje de la planicie de Yerbabuena Pampa en Inkachaca, con restos de terraplenes (fotos de Walter Sánchez C.). The landscape of the Yerbabuena Pampa plains at Inkachaca. Note the remains of terraces (photos by Walter Sánchez C.).

Figura 17. Modelo de elevación numérica que muestra la orografía y el trazo del camino entre Colomi e Inkachaca (infografía de Iván Montaño). – Elevation model showing orography and the path between Colomi and Inkachaca (image by Iván Montaño).
Conclusiones
La función central de los caminos es articular gente que vive en distintos espacios. No obstante, los caminos van más allá de su sola función comunicativa lo que implica la existencia siempre de espacios de interacción e interactuación de la gente;
como construcción humana son quienes los construyen, los controlan, los usan y les dotan de sentidos, de significancias, de símbolos, de signos. Pero además, están todos los órdenes que hacen al entorno y que tienen un sentido de significación y que si bien hacen a lo visible, sus sentidos se hallan también en los ámbitos que no se hallan en el mismo registro material sino en el ámbito de lo invisible o lo visible no explícitado (las montañas, los ríos, las nubes, etc.) y que forman parte de los paisajes mentales bajo las cuales las sociedades—tanto actuales como en el pasado—ordenan el mundo.

Los caminos, tanto aquellos formalmente construidos y que pueden ser detectados físicamente como aquellos que aparecen en las fuentes y, por lo tanto, su ámbito de visibilidad es nula en la actualidad (por ejemplo, aquellos caminos usados por los llamacamayoc y que unían los pueblos de los Sipi Sipi entre los valles y la puna), pueden delinear los rastros invisibles de los órdenes de una sociedad y, por lo tanto, la comprensión de los órdenes del espacio. De ahí que los caminos deben ser vistos no sólo como las inscripciones del poder sobre un territorio, sea estatal, local, “étnico,” sino como partes integrantes de la historia del uso y de construcción imaginaria de los paisajes por diversas sociedades.

Desde tal perspectiva, una arqueología de los paisajes debería ser sensible a los múltiples micro-paisajes, articulados e interactuantes (locales), contenidos dentro de un macro-paisaje (en este caso, el estatal Inca). Esto es particularmente importante en sociedades complejas como la del Tawantinsuyu, donde la presencia del Estado y su acción sobre el territorio ha invisibilizado la agencia activa de las múltiples sociedades locales, en sus propios procesos de construcción de sentido dentro de un territorio. Tal hecho es particularmente importante en Cochabamba donde la acción humana de los diversos e interdigitados grupos, se habría plasmado no sólo en distintos tipos de paisajes culturales “étnicos,” integrados e interactuantes por diversas redes de caminos, sino también, en complejos sistemas simbólicos bajo los cuales esos caminos y los paisajes eran dotados de significación.

Un elemento importante, devenido de lo visible, es la sugerencia de lo invisible o lo no visible explícito. Esto remite a una suerte de falencia o falta de datos—o la imposibilidad de ver aquello que “está ahí” pero que no puede ser registrado—y que nos remite a los problemas devenidos de la materialidad del registro arqueológico, en la interpretación de los resultados y en la construcción de los pasados. Un punto relevante para abordar esta relación entre lo visible y lo invisible puede sugerirse a partir del camino Colomi–Inkachaca/Paracti. Formalmente construido, es uno de los caminos prehispánicos mejor conservados en la actualidad, por lo que su registro arqueológico en la forma tradicional no es un asunto complicado. Pero, ¿Cómo aprehender los ámbitos de lo invisible en esta relación valle/puna-yungas/amazonía? ¿Cuál el significado de Abra K’asa, “puerta” ubicada en el espacio taypi, de división de las aguas, pero también entre los andes occidentales y los andes orientales? ¿Cuál la valoración significativa de este camino en el cual desde un mismo punto, Abra K’asa, puede accederse con la mirada desde un mismo punto a dos visualidades que marcan mundos distintos:
uno desértico, seco y sin nubes de la puna de Colomi y el otro lleno de árboles, húmedo y rodeado de neblina hacia los yungas de Inkachaca? ¿De un lugar poblado por llamacayoc a una zona habitada por “flecheros,” guerreros y “hombres buenos para la guerra”?

Finalmente hay que recalcar que lo visual como forma de presentación de resultados permite, más allá de los debates propios de la disciplina arqueológica, poner a disposición del lector una gran cantidad de información de distinto tipo y densidad. Lo visual en la arqueología se trata, por lo tanto, de un proyecto dirigido a realizar una arqueología abierta, fragmentada, no terminada, inacabada. Pero además inclusiva y susceptible de múltiples lecturas ya que permite incorporar la agencia activa del lector, a través de la mirada del arqueólogo. El texto escrito-visual es, por lo tanto, más que una evidencia “científica,” una invitación a conocer; más que a señalar verdades, a moverse en los ámbitos de la incertidumbre. Es una invitación al diálogo.

Agradecimientos. Una parte del trabajo de campo para la presente investigación, fue hecha con el apoyo financiero del programa Sueco de cooperación ASDI en la Universidad Mayor de San Simón. Muchas de las reflexiones contenidas en este documento fueron realizadas durante mi estadía en Uppsala University, los años 2003–2008. Agradezco los comentarios vertidos en ese entonces, por el Dr. Frands Herschend y el Dr. Christian Isendahl.

Referencias


ANB-AM (Archivo Nacional de Bolivia-Archivo Mizque), 1622.2. fs. 17. El capitán Juan de Godoy pidiendo al corregidor y Justicia Mayor de la Villa del Río, protección para los indios de Pocona contra los salvajes que les roban sus bienes y cautivan sus personas.


Barragán Romano, Rossana 1985. En torno al modelo comunal mercantil: El caso de Mizque (Cochabamba), en el siglo XVII. Chungara (Chile) 15.


Mujía, Ricardo 1914. *Bolivia-Paraguay. Exposición de los títulos que consagran el derecho territorial de Bolivia, sobre la zona comprendida entre los ríos Pilcomayo y Paraguay*, presentada por el Doctor Ricardo Mujía, enviado especial extraordinario y Ministro Plenipotenciario de Bolivia en el Paraguay (Anexos Tomo II y Tomo III, Época colonial). La Paz: Empresa Editora “El Tiempo.”


Cultivating the Yungas: Notes on Current Farming at Rasupampa and Tablas Monte

Christian Isendahl,* Juan Marcelo Ticona, and Sergio Calla Maldonado

Contact details (*)
Department of Archaeology and Ancient History
Uppsala University
Box 626
SE-751 26 Uppsala
Sweden
christian.isendahl@arkeologi.uu.se

RESUMEN

Cultivando los Yungas: Notas brevas sobre la agricultura contemporánea en Rasupampa y Tablas Monte

En la corriente dominante de economía del desarrollo agrícola los términos agricultura “pre-industrial,” “indígena” y “tradicional” a menudo se utilizan como sinónimos intercambiables para los sistemas agrarios considerados como algo estático. Sin embargo, la creciente evidencia de la investigación arqueológica a escala global presenta un panorama radicalmente diferente; éstas descripciones de los sistemas de producción de alimentos en el pasado sugieren una diversidad espacial y una variación temporal. Un ejemplo de ello es el paisaje agro-arqueológico que recientemente ha sido descubierto en Rasupampa, en la región de los Yungas del Departamento de Cochabamba, Bolivia. Inicialmente investigado, descrito y documentado por Walter Sánchez (2008), estos restos incluyen una variedad con respecto a tenencia de la tierra, control de la erosión de la capa superior del suelo y soluciones de gestión del agua que no han sido reportados en una configuración similar en otras partes de los Andes. Las investigaciones en curso exploran diferentes aspectos de este agro-sistema y la ecología histórica de los Yungas. Una parte importante de esta investigación es conocer las actuales prácticas agrícolas y sistemas agronómicos de conocimiento locales. Este trabajo resume las prácticas actuales de agricultores en Rasupampa y las regiones circundantes, a partir de una serie de entrevistas con los agricultores de la población de Tablas Monte.
Introduction

In mainstream agricultural development economics “pre-industrial,” “indigenous,” and “traditional” agriculture in the lower latitudes are often used as loosely interchangeable synonyms for farming technologies and resource management systems that are regarded as static and conservative, that resist change and innovation. They are commonly associated with agriculture with poor efficiency (therefore requiring vast land reserves to maintain production levels inter-annually) that produces mainly for household auto-consumption, with some low-level barter exchange of marginal surpluses. They are seen as essentially isolated farming traditions that respond only to local sustenance demands, disconnected from larger-scale economic, social, political, and environmental systems and processes. Indeed, if the current unprecedented boost in agricultural innovation and change driven by a short-term low-cost fossil-fuel energy regime is used as measure, then earlier agricultural innovations and the pace of technological change certainly fade in comparison.1 But succumbing to shallow recentism in evaluating the short- and long-term outcomes of agricultural resource management as we enter the post peak-oil era must surely be to ignore valuable human experience of securing food provisioning systems? The historical ecological arguments (e.g., Balée 2006; Isendahl 2010) that the present is contingent with the past and that current farming relates to pre-industrial agricultural economics, technologies, and management strategies in a formalist rather than substantivist manner—i.e., that these differ in degree rather than kind—suggests that agro-archaeology (or the archaeology of agriculture) can generate insights on the short-term efficacy of land-use decision-making and their long-term impacts that in some sense are useful for current and future management of agricultural resources and food security.

Indeed, mounting evidence from archaeological research at the global scale paints a radically different picture of pre-industrial agriculture; these are descriptions of past food production systems that contrary to uniformity and stagnancy suggest spatial and temporal diversity and variation. The archaeological evidence for prehistoric farming in the central Andean region of Peru and Bolivia is among the most extensive and diverse records of landesque capital investment for intensified agricultural production anywhere in the world (e.g., Donkin 1979; Denevan 2001). A multitude of different resource management strategies designed in particular to address issues of slope, deficient or excessive water availability, and low temperatures were developed and included a series of terracing, irrigation,

1 When the starting date of this sweep in agricultural innovation should best be placed may be a matter of discussion, but the introduction of superphosphates and nitrogen in Europe and North America at the end of the 19th century forms landmark innovations. In the 1960s and 1970s, the implementation of the so-called “Green Revolution”—a global-scale agro-technological reform attempt aiming to transform agrarian production towards monocultures of standardized cash crops with high inputs of fossil fuels throughout the agricultural production and distribution process, agro-technological machinery, chemical pesticides, fertilizers, etc.—massively exported industrialized farming at the global scale. More recently, the boom in genetically modified food plants has brought plant domestication, modification, and production under new levels of high-technological control.
and drainage technologies. Several of these Andean agrosystems have been investigated and are well understood, but much agro-archaeological research remains to appreciate the diversity of management systems regionally and in particular landscapes.

A good example of long-term agricultural change and variation is the agro-archaeological landscape that recently has been unearthed at Rasupampa, in the Yungas region of Bolivia’s Department of Cochabamba (Fig. 1). Initially investigated, described, and reported by Walter Sánchez (2008), the remains at Rasupampa include a range of land-tenure, top-soil erosion control, and water management solutions that have not been reported in a similar configuration from anywhere else in the Andes, as far as we are aware (Fig. 2). Forming a slightly sloping plain, the Rasupampa agro-archaeological landscape is characterized by a system of walled cultivation plots. In the interior of these plots there are parallel rows of single stones placed perpendicular to the slight slope of the plain, thus shaping a series of micro-terraced channels. Today, most of the pre-Hispanic agro-archaeological landscape at Rasupampa is under cultivation. But although contemporary farmers are enjoying some of the functional benefits of the remains—top-soil erosion control, surface drainage, and soil humidity infiltration in particular—this agrosystem is clearly not operated today as it was originally intended. Indeed, it is fair to say that these agro-archaeological features represent
the only existing remnants of lost agronomies; while the structures remain, the knowledge systems and the practices they were a part of have not survived. With no living tradition or know-how of constructing and maintaining the agrosystem and without any documentary evidence that describes its use, agro-archaeology is the primary tool to understand how it functioned, produced, and was socially, politically, culturally, economically, and environmentally conditioned.

Following the first phase of field research at Rasupampa during 2002–2005, which formed part of Walter Sánchez’ Ph.D.-dissertation project at Uppsala University (Sánchez 2008), a second phase of investigation was initiated in 2007 with the formation of a Swedish-Bolivian cooperative agro-archaeological research project. This project continues to explore aspects of the pre-Hispanic agrosystem at Rasupampa and the historical ecology of the Yungas (Isendahl 2008; Isendahl et al. In press). Research components include further archaeological investigation

---

2 Not only agro-technologies and agronomic knowledge systems have been lost over the last 500 years in the Andes and the Neotropical lowlands, but also many crop genetic resources (e.g., Clement 1999a, 1999b).

3 Research over 2007–2010 was co-directed by Christian Isendahl and Walter Sánchez and funded by a research grant from the Swedish Agency for International Development (Sida) to Isendahl. In addition, the field archaeological research group has consisted of Marco Irahola, Juan Marcelo Ticona, Dagner Salvatierra, and Sergio Calla.
of agricultural features in the landscape, ultimately to prepare for reconstruction and test-cultivation, and the organization of a community museum at the village of Tablas Monte, which was inaugurated in November 2009.

An important aspect of these investigations is to learn about current agricultural practices and agronomic knowledge systems in this part of the Yungas. This chapter summarizes current smallholder farming practices at Rasupampa and surrounding regions, drawing on a series of structured interviews with Tablas Monte farmers carried out by research team members Juan Marcelo Ticona and Sergio Calla, supplemented by more informal conversation and field observation made when working and living in Tablas Monte during field seasons over the last few years. Learning from current farming practices in these landscapes is vital to acquire leads on how the Rasupampa field system was used in the past and forms an important baseline for upcoming test cultivation programs.

The Yungas

Rasupampa is located in the Yungas of the eastern Andean cordillera montaña: the eastern face of the eastern mountain range of the central Andes (Fig. 3). The entire montaña macro-region of the central Andes from the eastern cordillera to the lowlands forms a complex and heterogeneous environment with considerable biogeophysical diversity. The environmental variation of the montaña is principally based on differences in altitude (particularly influencing temperature), precipitation levels, and slope gradient. The pronounced, vertically-based ecological zonation of the composite mountainous environment is mirrored in a mosaic-like geographical distribution of current and past resource exploitation zones and forms the basis for strategies of economic complementarity at several scales (Murra 2002).
Forming part of the greater Amazonian hydrological system, the montaña plays a decisive ecological role at the continental and global scales. In forcing the moist easterly air masses of the South Atlantic anticyclone to ascend and release precipitation that ultimately feeds the Amazonian drainage with nutrient-rich sediment-laden water, the montaña provides an important variable for Amazonian rain forest ecology, structure, and distribution. In this capacity, the montaña has a key function in the Holocene Earth System influencing potential biomass productivity and for the growth of pre-Hispanic complex societies in the Amazon Basin.

“Yungas” is a regional term meaning “hot valleys” in both Quechua and Aymara (e.g., Bertonio 2005:751 [1612])—the two main central Andean languages. It was picked up by the Spaniards at an early date, and in the mid-17th century Father Bernabe Cobo described the Yungas as hyper-humid, densely vegetated inhabitable places.

As a result of this abundance of water, there is another equally troublesome hindrance to human habitation: the many forests and arcábuscos [originally a Taino term for dense woodland] which grow in the hot and rainy lands of yunca climate. These forests were never inhabited by man; no trace of settlements can be seen in them because these forests are very high and dense (Cobo 1979:5).

Today, the Yungas of the eastern central Andes are normally associated with hot, well-watered, and fertile valleys with high biomass productivity (Fig. 4). Bio-geophysiographically it is a technical term for land surfaces in the mid- to low-altitude humid meso-tropics of the central Andes at elevations between 400 to

Figure 4. A forested section of the Yungas. – Una sección forestal de los Yungas.
3000 m (Navarro and Maldonado 2002:278–348), usually covering flanked colluvial terraces of long and often intermittent and complex slopes. The Yungas do not comprise a continuous section of the montaña; these are composite and broken landscapes, interfingered with mountain ranges and river floodplains. The Yungas are partly covered with rain forests, but large sectors are currently under cultivation. Fertile soil characteristics, hydrological patterns, and areas with moderate slope gradients offer good conditions for agricultural production of many different plant species. At different altitudes, distinct sectors of the Yungas correspond to the ideal growing ranges of different sets of plants, thus producing a series of broadly vertically defined agro-ecological zones with different crop suitability.

The mosaic distribution of agro-ecological zones, high humidity, and location between the Neotropical lowlands and the Andean region contribute to make the Yungas among the richest biodiversity regions in global comparison. At the boundary connecting the high elevation Andes with the lowland Neotropics, the Yungas might have provided species refugia during distinct climatic episodes (Pennington et al. 2010; Prance 1982), but there is a need for historical ecological research to provide long-term perspectives on the dynamics between resource exploitation and species biodiversity at different spatial scales and time intervals in this hotspot region (Myers et al. 2000). Indeed, despite the biodiversity of the montaña and the agricultural production potential of the Yungas, archaeological investigations in this ecological mosaic have been few and fragmentary and pre-Hispanic settlement and land use patterns of the Bolivian Yungas are poorly known, partly reflecting a common perception of the montaña as peripheral to early Tiwanaku and Inka state development in the higher altitude Andes. However, since the 1970s—and particularly following historian Thierry Saignes’ ground-breaking work (1985)—archaeologists at the Universidad Mayor de San Simón (UMSS) in Cochabamba have conducted important investigations in the Yungas (for a research summary see Sánchez 2008:21–25), but much archaeological field research remains to understand the long-term social dynamics of this complex and logistically difficult region in detail (see also Sánchez, this volume).

The Rasupampa field system

Rasupampa forms an extended natural plateau that stretches north–south and slopes slightly towards the north, measuring some 2000 by 400 m and covering c. 40 hectares (Fig. 5). The plateau is well defined topographically by higher terrain to the north, east, and south and by the steep slope of the Jatun Mayu river gorge to the west. Sections of the steep slope towards the river are covered with pre-Hispanic agricultural terraces that have been mapped in part by Sánchez (2008:150–153). The entire Rasupampa plateau was probably once covered with agro-archaeological remains, but only part of its greatest extension remains today: over the last decade and more large sectors of the remains have been destroyed. Stones have recently
been taken from Rasupampa to refurbish the road connecting Tablas Monte to the Cochabamba–Santa Cruz highway, and the agro-archaeological features have been dismantled to increase valuable chaco (field plot) cultivation space. Efforts to increase local awareness of the value to protect and preserve the agro-archaeological remains—supported in particular by the argument that a long-term record of local resource management is relevant for local farmers—have thus been extremely urgent and we have focused investigations on documenting the remains and disseminating our findings to increase local awareness of the agro-archaeological heritage. We have done this first by concentrating on mapping large sector of the agricultural landscape and, second, by organizing—in close cooperation with villagers and community authorities—a community museum at Tablas Monte in which the Rasupampa field system is described and explained.

So far, we have mapped about eight hectares in the southern section of the plain, about 20% of the Rasupampa plateau and the majority of the area where agro-archaeological features still remain (Fig. 6). Mapping the sample area hectare by hectare, we are collecting an extensive database of the agro-archaeological landscape that currently includes information on nearly 600 feature contexts. Most of these feature contexts are walled plots that vary greatly in size (from about 2 by 5 m to 20 by 40 m) and shape (from nearly perfect rectangles to amorphous polygons) (Fig. 7). The density of walled plots changes over the mapped section of the landscape owing to differences in micro-topography, the sizes of the plots, and the degree of preservation, from about 50 to over 100 defined plots per hectare.
The walls have been constructed from rocks appearing naturally in the plain, with larger boulders at the base and fist-sized rocks in the upper levels, and are usually between half a meter and a meter high and as wide (Fig. 8). Most walled plots have parallel rows of stone in the interior, spaced at intervals of about 65 to 80 cm and perpendicular to the direction of the very slight slope (Fig. 9). The rows of stone and the furrows created between them potentially served a variety of different functions according to the season of the agricultural calendar: horizontal drainage of excess water, topsoil erosion control, vertical distribution and...
Figure 7. A rectangular field plot at Rasupampa. – Una parcela rectangular en Rasupampa.

Figure 8. A Rasupampa field wall. – Un muro en Rasupampa.
levelling of soil moisture content, raising soil temperature, reducing high solar radiation, lowering evaporation, and facilitating tending. Limiting growth space might also have stimulated the development of preferred tuber sizes and shapes of cultivated root crops (Fig. 10). These features have not been documented in agro-archaeological research from elsewhere, and appear to be unique to the well-watered Yungas. Other agro-archaeological features in the landscape include larger inter-plot networks of canals draining and distributing water (Fig. 11), slope terracing, circular walled features lacking interior furrows (probably the remains of storage structures; Fig. 12), and rectangular and apsidal field houses. The general pattern of the agro-archaeological remains that have been investigated quite clearly suggests overall planning; these are not *ad hoc* gardens but form part of a planned agrosystem of soil, slope, and water management that was designed to increase the productivity of the land. Subdivisioning of sectors and gardens into smaller plots is evident in wall constructions, indicating elaboration over time—probably owing to generational shifts. Although we are indeed in a phase of research where we are formulating new questions as much as we are answering old ones, the evidence from Rasupampa adds significantly to our knowledge of the diversity of agriculture in the Yungas.
Figure 10. The root crop yacón is currently cultivated at Tablas Monte. – El tubérculo yacón se cultiva actualmente en Tablas Monte.

Figure 11. A water distribution canal at Rasupampa; photo uphill towards the south. Note the water check devise in the wall, in the center of the image. – Un canal de distribución de agua en Rasupampa; foto desde arriba hacia el sur. Nótese el dispositivo de retención de agua en la pared, en el centro de la imagen.
Incomplete dating is an issue of compulsory concern in landscape archaeology and our work is no exception in this regard. There are currently no unambiguous chronological indicators available that are directly associated with the agroarchaeological features. Until datable excavated data is recorded from Rasupampa itself, ceramic evidence from Sánchez’ excavations at Tablas Monte about a kilometre away offers a tentative indication of the temporal dimension of landscape occupation, and suggests that the agrosystem dates from the period between the Middle Horizon of the mid-first millennium AD until the Late Horizon of the 15th century (Sánchez 2008), a time-frame that clearly needs to be narrowed down in future research.

To determine the function of the agricultural system requires excavation, reconstruction, and test cultivation. To this end we aim to select representative field plots for detailed investigation and reconstruction and initiate an experimental cultivation program to test the functions and productivity of the agrosystem with a range of Andean cultivars using a variety of cropping and tending strategies to be determined in dialogue with the members of the local community that will conduct the test cultivation. Important indigenous plants to be tested include tubers and root crops such as **arracacha,** manioc, and **yacón** (Table 1). Substantial results from the projected test program and the evaluation of the reconstructed

---

4 In the text, English names are used for plants when available. Plant names italicized in the text have no English common name. Botanical names and local and English common names are listed in Table 1.
Yungas agrosystem will take time to accumulate and we are looking forward to a continued engagement in applied agro-archaeology at Rasupampa with the community at Tablas Monte on a long-term basis.

In our conversations, Tablas farmers (Tableños) cite many different positive qualities of cultivation in Rasupampa: (1) the soils are darker and more favorable for growing a wider range of crops than elsewhere, (2) the climate is warm but not hot and it is relatively agreeable to work in, (3) the rains pass fast and it is dryer than at many other locations, (4) there are fewer insect pests than at lower

Table 1. Local, English, and botanical names of plants cultivated in the Yungas of Tablas Monte and Rasupampa. – Los nombres locales, inglés y botánicos de las plantas cultivadas en los Yungas de Tablas Monte y Rasupampa.

<table>
<thead>
<tr>
<th>Local name</th>
<th>English</th>
<th>Botanical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>achira</td>
<td>purple arrowroot</td>
<td>Canna edulis</td>
</tr>
<tr>
<td>achojcha</td>
<td>squash-like crop</td>
<td>Cyclanthera pedata</td>
</tr>
<tr>
<td>ajo</td>
<td>garlic</td>
<td>Allium sativum</td>
</tr>
<tr>
<td>arveja</td>
<td>pea</td>
<td>Pisum sativum</td>
</tr>
<tr>
<td>arracacha</td>
<td>vegetable and root crop</td>
<td>Arracacia xanthorrhiza</td>
</tr>
<tr>
<td>camote</td>
<td>sweet potato</td>
<td>Ipomata batatas</td>
</tr>
<tr>
<td>caña</td>
<td>sugar cane</td>
<td>Saccharum spp</td>
</tr>
<tr>
<td>cebolla</td>
<td>onion</td>
<td>Allium spp</td>
</tr>
<tr>
<td>cilantro</td>
<td>coriander</td>
<td>Coriandrum sativum</td>
</tr>
<tr>
<td>durazno</td>
<td>apricot</td>
<td>Prunus armeniaca</td>
</tr>
<tr>
<td>guayaba</td>
<td>guava</td>
<td>Psidium guajava</td>
</tr>
<tr>
<td>hierba buena</td>
<td>mint</td>
<td>Mentha spp</td>
</tr>
<tr>
<td>lechuga</td>
<td>lettuce</td>
<td>Lactuca spp</td>
</tr>
<tr>
<td>limón</td>
<td>lemon</td>
<td>Citrus spp</td>
</tr>
<tr>
<td>locoto / ají</td>
<td>chili peppers</td>
<td>Capsicum pubescens / Capsicum baccatum</td>
</tr>
<tr>
<td>maíz (aycha sara)</td>
<td>maize</td>
<td>Zea mays</td>
</tr>
<tr>
<td>maní</td>
<td>peanut</td>
<td>Arachis hypogaea</td>
</tr>
<tr>
<td>membrillo</td>
<td>quince</td>
<td>Cydonia spp</td>
</tr>
<tr>
<td>pacay</td>
<td>ice-cream beans</td>
<td>Inga spp</td>
</tr>
<tr>
<td>papa</td>
<td>potato</td>
<td>Solanum spp</td>
</tr>
<tr>
<td>poroto / habas</td>
<td>beans</td>
<td>Phaseolus vulgaris</td>
</tr>
<tr>
<td>tomate</td>
<td>tomato</td>
<td>Lysopersicon spp</td>
</tr>
<tr>
<td>tomate de árbol</td>
<td>tree tomato</td>
<td>Cyphomandra betacea</td>
</tr>
<tr>
<td>umbo</td>
<td>passion fruit</td>
<td>Passiflora spp</td>
</tr>
<tr>
<td>walusa / gualuza</td>
<td>new cocoyam</td>
<td>Xanthosoma saggitifolium</td>
</tr>
<tr>
<td>yacón</td>
<td>tuber crop</td>
<td>Smallanthus sonchifolius</td>
</tr>
<tr>
<td>yuca</td>
<td>manioc</td>
<td>Manihot esculenta Crantz</td>
</tr>
<tr>
<td>zanahoria</td>
<td>carrot</td>
<td>Daucus spp</td>
</tr>
<tr>
<td>zapallo</td>
<td>pumpkin</td>
<td>Cucurbita maxima</td>
</tr>
</tbody>
</table>
elevations, and (5) the relatively level topography allows for the use of a tractor (!) to work the land. As a consequence of the latter point, the main negative aspect of Rasupampa that was raised by some is the abundance of stones and rock in the terrain—i.e. the ancient field system—that makes working the land difficult. Other problematic issues Tableños raise include that the climate is relatively warm so that there are more insects and larvae than at some other locations, and that frost and a lack of rain and water can sometimes be problematic.

In the main, Tableños young and old think of the archaeological stone structures at Rasupampa as the house and field remains of an Inka village. Some argue that the original functions of the remains were clearly agricultural; principally to channel water and to provide well-defined compartments for the cultivation of different plants. Other qualities associated with the interior stone linings are: (1) top-soil erosion control, (2) facilitating walking and transport in the field with less risk of damaging the crops, (3) protecting the plants from the sun, and (4) making it easier to cultivate in straight lines. But despite a widespread general understanding of the function of the walls and stone rows as mainly agricultural (an awareness that has become much more widespread since our work began), these are considered by many an obstacle and nuisance for farming; they take up space in the chaco and make it difficult to shift the soil and mix with manure, and several areas of Rasupampa have recently been cleared from walls and stones, even after initial archaeological research activities began in 2002.

The community at Tablas Monte

Tablas Monte is an agricultural community located one kilometer uphill to the east of Rasupampa (Fig. 5). Today, the population numbers some 700 inhabitants, with about one third five years or younger, and less than one in twenty over 60. All villagers live essentially off the land, consuming their own food crops and vending surpluses at regional markets in Colomi or Cochabamba, although a handful of household incomes are supplemented by small businesses such as carpentry, apiculture, transport (both cargo and personal), keeping kiosks and public telephones, or by wage labor (el cancheo). The village is located in undulating terrain and household lots are dispersed over the landscape. There is some minor house lot gardening, but quite limited fencing, and mules and other domestic animals stray rather freely within the village.

The general post-Contact history of settlement in the Yungas at and around Tablas Monte is unclear, but re-colonization seems to have started in the 18th century and intensified during the following century, at least in part owing to logging for Yungas wood resources for carpentry and construction, for apiculture, and for cultivation of some indigenous crops (including chili peppers, manioc, and sweet potato). A map produced by Franciscan missionaries in 1804 indicates Tablas as a village along the main road between Cochabamba and the lowlands. Today, Tablas Monte is located an hour’s drive off the main highway that connect
the highland city of Cochabamba with Villa Tunari by the Andean piedmont and Santa Cruz de la Sierra in the lowlands.

While some families may have a longer residential history in the area, many current resident families settled at Tablas Monte in the 1950s following the Bolivian land reform. Over the last decade there has been some immigration from the highlands, particularly from the region of Potosí, that may be thought of as climate refugees (this they often seem to do themselves)—people leaving increasingly drought-stricken drier higher altitudes for the more humid Yungas. Over the same period of time many more Tableños—sometimes entire families—have emigrated to find work in Spain or Argentina. Over the last couple of years, however, following the financial crisis in 2009, the number of homecoming Españoles has increased. People that return—having managed to build-up some savings from fruit harvesting or unskilled construction labor abroad—commonly invest in transport businesses or improved housing, and buy electronic products.

Land resources and tenure systems

In mountainous regions the environmental gradient is steep, i.e. the environment changes dramatically over short distances, which provides the fundamental characteristic to influence the spatial patterning of land and resource management. The shape of the environmental gradient usually depends on changes in one or two variables that control a host of dependent, second-level variables. In mountainous slope landscapes such as the Yungas, elevation controls temperature which in turn is a major limiting factor for the growth of different plants and crops, along with soil characteristics, hydrology, and topography. In Andean archaeology and anthropology, the related concepts of verticality, ecological zonation, and economic complementarity are used to describe the spatial patterning of agro-ecological zones and land management based on variation in elevation, topography, and hydrology (Murra 2002). This environmental heterogeneity and patterning characterizes the collected land resources of the Tablas Monte community, which are distributed over different agro-ecological zones.

The regional land tenure system is dominated by agricultural collectives (*sindicatos*) that own land and that distribute the rights to cultivate land to its members. There are four sindicatos at Tablas Monte that organizes farmers and control tenure of large cultivable areas in the region: Primero de Mayo, Quince de Agosto, Tablas Monte, and Villa Barrientos. Each fully paid-up member has the use-right of at least one hectare of the sindicato’s land holdings. Once acquiring land through the sindicato (which a person can do from the age of 18), use-rights are exclusive and for life. Use-right of sindicato land may also be transferred within the family, e.g. through inheritance. In addition to sindicato land holdings, there is privately owned terrain that may be leased, bought, and sold freely (in 2008 the price of a chaco was about 1000 USD a hectare).
Although sindicato land once distributed is essentially considered as the smallholder’s own, he or she may lose these rights if not abiding to certain rules and fulfilling certain obligations towards the collective. This will happen if the proprietor has an unpaid debt to the sindicato (e.g., if he or she has not paid the annual fee of 50 centavos per hectare [about 0.10 USD in 2008’s currency exchange rate]), does not come to its’ rather frequent meetings, or does not complete communal work that has been decided by the sindicato assembly. There is also a rule that a chaco will revert to the sindicato if it has been abandoned for more than three years and the farmer does not reclaim it (a field in fallow does not count as abandoned), which is causing a particularly conflicting situation for families leaving only temporarily to work in Spain and Argentina, making it difficult to reclaim the chacos they used to cultivate once they return to the village.

The farmers at Tablas Monte have plots that they cultivate at several different locations, of which Rasupampa is only one. Each of these plots and locations are associated with particular qualities regarding soil fertility, slope gradient, vegetation cover, temperature, precipitation, air humidity, wind conditions, etc., following the steep environmental gradient of the Yungas. Maintaining access to a variety of environments suitable for the cultivation of different crops harvested at different times of the year is a way to increase food security and to spread agro-economic risk at the household level. This strategy of resource management is demonstrably resilient at lower levels of social organization where there is a strong connectivity between managers and the resource—i.e., at the household and community levels.

Tableño farmers have usually access to chacos in at least three, but sometimes up to six different places. But all chacos are not farmed simultaneously; the plots—half a hectare or one hectare each—are in different phases of the fallow cycle (but see below on the effects of applying chicken manure, which is becoming common) and one, two, or three plots are actively cultivated at anyone time. Many farmers have access to around three hectares of cultivable land in total and annually farm between half a hectare to three hectares, but there is an unequal distribution of land among community members—some have 40 or more hectares and may cultivate about five hectares annually, whereas some have nearly nothing and need to rely on el cancheo—i.e., wage labor—on the fields of a more affluent land owner to sustain themselves. Despite smallholder inequality there is a good reserve of unclaimed cultivable land in the area.

Most chacos are (not surprisingly) in terrain with marked inclination—indeed, many are on steep or very steep slopes, sometimes approaching 45 degrees inclination in patches—and Rasupampa forms the only major terrain within three hours walking distance from the community that is nearly level. With fields located in a series of different environments, a Tableño may have a field close to the homestead, within 20 minutes walking distance, but may also need to walk two, three, even five hours to reach some of his or her fields, yet still often returning at night to the village. At only about 20 minutes’ brisk walk downhill from the village, Rasupampa is certainly well located. In the last couple of years, however, walking
distance is less of an issue as light motorcycles (usually 150 cc) have fast become enormously popular in the village (nearly 50 as of November 2010). Using motorcycles, Tableños can cut down significantly on transport time and spend more hours tending the fields, thus increasing productivity.

Changes in climatic conditions owing to differences in elevation are often considered the most important set of variables to determine suitable farming terrains; not only on account of the direct influence of temperature and humidity on soil fertility, but also because it affects the number of insect pests. There are thus several conditions to balance when choosing the most optimal locations for cultivation. While terrain preferences relate mainly to the productivity of the land and warm and well-watered locations are usually the most valued, one farmer points out that although low-elevation chacos are generally more productive the insects thriving in hotter and more humid climate make the air stuffy and discourages from working there. Proximity to the homestead is an additional factor, but usually not the determining one.

Which particular locations that are found most productive varies between farmers, but some value Rasupampa the highest precisely on account of the warm temperature and humidity of the soils, remarking that almost everything grows there. However, it is noteworthy that those Tableños that do prefer to farm at Rasupampa have no stone walls or lines in their chacos; these have been removed. The fact that many farmers remove the agro-archaeological remains—including both the walls and the micro-terraces/channels—on account of easier tilling and planting and to free areas for cultivation is certainly problematic from our point of view. The potential benefits of the ancient field structures in regards to top-soil erosion and water management does not seem to be a factor important enough to be reckoned with today. While many Rasupampa farmers retain these features, it is unclear whether or not they would have removed them if they had had the time and energy to spend to do so. Most of these lands are still inaccessible for mechanical plowing, and so the soil is worked with digging stick, hoe, or pick axe. Destructive tendencies are alarming and there is a need for maintaining dialogue with current land managers on these matters to slow down the pace of damage done to the archaeological heritage.

Yungas climates and soilscape

Owing to poor temporal and spatial coverage of meteorological stations in the Bolivian montaña and considerable differences in mountainous micro-climate, the annual precipitation average at Rasupampa is uncertain but should be in the vicinity of at least 3000 mm. Although there is relatively speaking no distinct dry season without rain in the annual precipitation pattern—Yungas climates are more strongly characterized by seasons of more or less intense rainfall—Tablas farmers identify three general climatic seasons over the year: frio (“cold”), seco y calor (“dry and warm”), and lluvia (“rain”). The cold period runs from January to
May and is generally associated with the most pleasant weather; fresh air and no rain when working the fields. Since the near-equatorial latitudinal location provides for relatively modest seasonal differences in average temperature the most pronounced sudden lowering of temperature is associated with surazos, which are brief episodes of continental invasions of polar air from Antarctica that are common during the southern hemisphere winter. The period of less rain takes place in May to September, with June and July being the driest months. The wettest period may start in August and continue for the remaining part of the year.

Night frost and cold spells, excessive rains causing root rot, and dry season heat killing off plants are causes for concern in the annual climatic cycle. Compared to many other regions of the tropics—both in lowland and highland locations—droughts are quite rare in the Yungas and relatively minor when they do occur. The latest reported drought at Tablas Monte—in the mid-2000s—was a three-month period without rain. Such drought events may certainly lower some harvests, but are not on the scale to devastate smallholder economies. Instead, landslides are of much greater concern and potentially more damaging to life and limb. Landslides occur regularly in the Yungas, and particular high-risk zones include strongly sloping terrain cleared from forest vegetation when they come under heavy rainfall, i.e. under conditions where Yungas farmers often work and live. Indeed, some years ago there was a landslide right behind the village school. Although school buildings were luckily spared, a new school was erected on safer ground soon thereafter.

Local perceptions of spatial variation of different kinds of climates are linked to the precipitation and thermal characteristics of chaco locations, reflecting the vertically-based agro-ecological zonation of the Yungas. For instance, one Tableño associates tibio (moderately warm) with Rasupampa, helado (frost) with Bronce Mayo, and caluroso (hot) with Conchu Mayo, all locations where plots are cultivated. Hence, Tableños maintain a strongly two-dimensional spatio-temporal referential framework for climate variation and diversity based on lived experience. In terms of long-term climate change, there seems to be local consensus that Yungas climates have changed over the last few years. It is unclear, however, to which extent these perceptions are strictly experience-based or stimulated from the broader worldwide climate change discourse in public media. Either way, there are some variations among Tableños in regards to exactly how current climate is perceived as different from in the past. Some views voiced to us include that: (1) local climates have become warmer and that the sun is stronger now than before, (2) droughts were more frequent in the past, (3) there are no annual cold periods as there used to be, (4) there was higher precipitation during December to February before than there is today, (5) May to July used to be colder, (6) there were stronger frosts before, and (7) the annual cycle of seasonality has become more pronounced. In the humid Yungas, warmer climate is generally seen as positive from a local agricultural perspective—with a range of plants maturing faster and producing better—and people seem to maintain a somewhat conflicting at-
titude on climate change, given other normative views normally communicated in public discourse.

The main livelihood issues and farming concerns that Tableños raise are related to climate; to rains and to droughts. For instance, one cause for concern is that the heaviest rains will come early in the season and rush harvest, humidity causing molding and rotting of the produce. Other concerns include: (1) droughts jeopardizing a good harvest, (2) frosts or too much rain damaging the potato harvest, (3) cool temperatures negatively affecting crop growth and delaying harvest, and (4) the crop diseases and insect pests that follow in the wake of the rains.

In regards to the Yungas soilscape, Tableños recognize three main kinds of soil in their landscapes, all defined on basis of their color: yana jallpa (black soil), kellu jallpa (yellow soil), and puca jallpa (red soil). Cultivation is nearly always associated with yana jallpa soils. Yana jallpa is a high-order category in the local folk soil taxonomy for a series of related fertile soils that exhibit some variation in color, organic content, texture, stone inclusions, and depth, but that are all black to dark brown with high organic content, good capacity to hold humidity, and with a 10–30 cm deep sandy A horizon that is comfortable to work under both dry and humid conditions. Although all of these dark fertile soils are known as yana jallpa, there are some named varieties, for instance the sandy variety chauja jallpa. Since all plants cultivated in the area grow best in these kinds of soils, essentially all chacos are in locations with yana jallpa soils. In Rasupampa, yana jallpa dominate, but there are some minor patches with kellu jallpa in areas affected by top soil sheet erosion. The yellowish kellu jallpa are relatively deep clayey soils with little available nutrients and organic content that are hard to work and are normally not cultivated, although they can be if chicken manure is added profusely. Kellu jallpa clays are sometimes used as adobe in house construction. Puca jallpa is the least common of the main soil categories and is a reddish soil with very low fertility that is not used for cultivation at all.

Cultivation in the Yungas

The main phases of agricultural work that structure the agronomic year in Rasupampa and elsewhere in the slash and burn cultivation of the Yungas include: (1) clearing the chaco from vegetation, (2) turning the soil, (3) planting the crops, (4) weeding and spraying for pests, and (5) harvesting. If a chaco is opened up after a period in fallow it needs to be cleared from trees and bush overgrowth. Cut weed, foliage, and branches are left on the ground, but thick wood with higher energy value are brought home for firewood. Tableños have usually burnt the cut thicket in their chacos after being left to dry, but the practice of leaving organic matter unburned on the ground as mulching was recently introduced as an alternative to burning by NGO agronomy consultants and has become more common.

The soil is worked and turned with a digging stick, a hoe, or a pick axe, mixing in ash, charcoal, and decomposing organic matter with the soil. Recently it has
Table 2. The local agricultural cycle with the time of planting (P), weeding (W), spraying with insecticides (S), and harvesting (H) noted for each crop. – El ciclo agrícola local con las temporadas de siembra (P), deshierbe y limpieza (W), fumigación con insecticidas (S) y cosecha (H) marcadas para cada cultivo.

<table>
<thead>
<tr>
<th>Plant</th>
<th>J</th>
<th>F</th>
<th>M</th>
<th>A</th>
<th>M</th>
<th>J</th>
<th>A</th>
<th>S</th>
<th>O</th>
<th>N</th>
<th>D</th>
<th>J</th>
<th>F</th>
<th>M</th>
<th>A</th>
<th>M</th>
<th>J</th>
</tr>
</thead>
<tbody>
<tr>
<td>achira</td>
<td>P</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>P</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>H</td>
</tr>
<tr>
<td>arveja</td>
<td>P</td>
<td>W</td>
<td>W</td>
<td>H</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arracacha</td>
<td>P</td>
<td>W/P</td>
<td>P</td>
<td>H</td>
<td>P</td>
<td>P</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>H</td>
<td>H</td>
<td>H</td>
</tr>
<tr>
<td>camote</td>
<td>P</td>
<td>W</td>
<td>W</td>
<td>H</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>caña locoto</td>
<td>P</td>
<td>W/S</td>
<td>H</td>
<td></td>
<td>P</td>
<td>W/P</td>
<td>W/S</td>
<td>W/S</td>
<td>W/S</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
</tr>
<tr>
<td>maíz</td>
<td>P</td>
<td>W</td>
<td>P</td>
<td>P</td>
<td>W/S</td>
<td>H</td>
<td>W/S</td>
<td>W/S</td>
<td>H</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>H</td>
<td>H</td>
</tr>
<tr>
<td>maní</td>
<td>P</td>
<td>W/P</td>
<td>W/S</td>
<td>W/S</td>
<td>H</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>H</td>
</tr>
<tr>
<td>papa</td>
<td>P</td>
<td>W</td>
<td>P</td>
<td>P</td>
<td>W/S</td>
<td>H</td>
<td>W/S</td>
<td>H</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>H</td>
</tr>
<tr>
<td>poroto</td>
<td>P</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>H</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
</tr>
<tr>
<td>walusa</td>
<td>P</td>
<td>S</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
</tr>
<tr>
<td>yacón</td>
<td>P</td>
<td>W</td>
<td>P</td>
<td>P</td>
<td>W</td>
<td>P</td>
<td>W</td>
<td>P</td>
<td>W</td>
<td>P</td>
<td>W</td>
<td>P</td>
<td>W</td>
<td>P</td>
<td>W</td>
<td>P</td>
<td>W</td>
</tr>
<tr>
<td>yuca</td>
<td>P</td>
<td>S</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>S</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
</tr>
<tr>
<td>zapallo</td>
<td>P</td>
<td>W</td>
<td>P</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>S/H</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
</tr>
</tbody>
</table>
also become very common to mix the soil with chicken manure and other sources of nitrogen that produces a highly fertile soil providing for faster plant growth. After mixing the soil, farmers wait for another two weeks before planting.

Since different plants have different growth periods, conditions, and tending needs, the annual agricultural work calendar from planting to harvesting varies depending on which crops and varieties are cultivated, but also on the location of chacos in the Yungas mosaic and on the preferences of individual farmers (Table 2). At Rasupampa Tableños cultivate many different sets of plants, including purple arrowroot (*achira*), *arracacha* (at least three different varieties defined by color: white, yellow, and violet), beans, sweet potato (white, yellow, and violet varieties), chili peppers (Fig. 13), manioc (white, yellow, and pink, including both sweet and bitter varieties), maize, peanuts, potatoes, pumpkin (Fig. 14), tree tomato (Fig. 15), new cocoyam (*walusa*; white and black varieties), *yacón* (white, yellow, and violet; Fig. 10), and several different kinds of vegetables (Table 1). But over the last few years chili peppers, pumpkin, manioc, potatoes, and peanuts have come to dominate at Rasupampa. While not currently actively cultivated we have also noted the existence of a few cotton bushes (Fig. 16).
Figure 15. Tree tomato. – Tomate de árbol.

Figure 16. Don Julián Escalera with cotton picked from a free-growing bush at Rasupampa. – Don Julián Escalera con el algodón recogido de un arbusto que crece libre en Rasupampa.
There are several different modes to acquire planting material and how these methods are balanced off each other varies from farmer to farmer. Some Tableños mainly save planting material from the previous harvest, selecting for the largest, most resilient, and most productive plants. Others principally purchase the planting material (e.g., of chili peppers, maize, potatoes, and pumpkin) from commercial and semi-commercial foundations and suppliers that endorses the cultivation of particular crops, for instance PROINPA (Fundación Promoción e Investigación de Productos Andinos, a foundation for the promotion and investigation of indigenous crops such as beans [poroto], new cocoyam [walusa], and yacón). Some seeds are exchanged between Tableños, for instance seeds of fruit trees such as lemon, apricot, and passion fruit. Normally, however, exchange of planting material of important crops such as chili peppers, maize, peanuts, and potatoes is usually restricted to within the family or the closest kin, and extra-familiar exchange of these crops amounts to borrowing. There are also reports of exchange between Tablas Monte and other communities, ranging from nearby Corani Pampa (at a distance of some 30 minutes by car) to communities in the distant Yungas of La Paz, but such exchanges are reportedly very uncommon today. One Tableño mentions that seeds and planting material are sometimes drawn from the forest, indicating that forests and fallow fields form important resource bases for planting material, in addition to as hunting grounds and for collecting wild foods and fruits, wood construction material, and firewood.

Previous to the introduction of chicken manure one to four years of cultivation at Rasupampa was followed by 15 to 20 years of fallow (10 to 12 years is reported as minimum and 20 years as ideal) to let the land rest (descarsar la tierra) and the soil to recharge nutrients. But with the current practice of adding chicken manure and mixing it into the soil, the long-fallow system has been side-stepped for continuous cultivation. It remains to be seen the long-term effects of high-nutrient manuring on the sustainability and resilience of smallholder agro-economies and Yungas agro-ecosystems. Which are the social, economic, and ecological trade-offs, for instance in relation to lowered intensity of forest clearance cycles per capita, increasing dependence on additives such as nitrogen-heavy commercial manure, and a radically different metabolism in the soil cycle?

With the increasing use of chicken manure, crop rotation schemes are clearly becoming less important to follow. But particular sequences of crop rotation are still maintained in many chacos that are cultivated over several seasons previous to long-fallow in order to balance soil to plant nutrient and matter cycles (Table 3). For instance, in a four-year scheme arracacha is grown during the first year, followed by peanuts and yacón year two, then sweet potato the third year, followed by adding fertilizers year four.

Tableños intercrop three to five different plants in the same chaco, for instance arracacha, chili peppers, maize, and potatoes, but all are planted in their individual rows. Some plants are grown together, or can at least be grown together without negative effects on yields, but some plant combinations are avoided since the crops do not grow well together (Table 4). For instance, yacón grows well with purple ar-
rowroot and new cocoyam, but not with maize and manioc. *Arracacha* should not be grown with chili peppers and potatoes because it hardens the soil, and potatoes cannot be grown with chili peppers or with pumpkins. There are other such restrictions regarding intercropping, but the basic point for some Tableños is that “nothing should be cultivated together side by side, all plants are compatible if they are not put together but have their respective place in the chaco.”

Farmers use chemical pesticides to combat pests such as flies, bugs, larvae, and grasshoppers that cut and eat plant leaves. In general, there are more pests at warmer temperatures, and so there are more pests in Rasupampa compared to at higher elevations and fewer than in field plots located at lower altitudes. Applying chemical insecticides by spraying is the main way to control pests (indeed, no other technique is used except for simple and probably quite ineffective bug traps: a yellow plastic container filled with animal oil), and there are many different insecticides sprayed for different plants and pests. For some plants no insecticides are applied at all, but spraying practices vary highly between farmers. Insecticides are however more commonly applied to cash crops such as chili peppers and potatoes, whereas crops principally locally consumed are usually not sprayed at all, for instance the root and tuber crops *arracacha*, manioc, sweet potato, and *yacón*. There are also some plant fungi pests, against which fungicides are used. Other pests include deer and rabbit that eat plants, and Tableños hunt and set traps both to protect plants and for food supplements. Over the last couple of years we have also seen an increase in the common rat in Tablas Monte, a nuisance which may increase damage to food supplies and planting material kept in peoples’ homes.

The Yungas agricultural cycle is a tough schedule; there are many tasks all year round and farmers have difficulty to identify either the most or the least work-intensive period, declaring that “we really hardly ever rest, only on Sundays and fiestas.” Within the household, everyone participates in working the fields, including children off school hours—there are firm sindicato prohibitions against keeping children from school. In addition to the household as the basic agricultural production unit there are two forms of collaboration in agricultural work: (1) *el cancheo*, or waged agricultural day-labor on a contract-basis, paid with money or farm products such as *arracacha*, chili peppers, and potatoes; and (2) *ayni*, an Aymara term for reciprocal labor—“I help you today, you help me

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chili pepper</td>
<td>Potatoes</td>
<td>Fallow begins</td>
<td>Potatoes</td>
<td>Fallow begins</td>
</tr>
<tr>
<td>Chili pepper</td>
<td>Potatoes</td>
<td>Beans or maize</td>
<td>Maize</td>
<td>Fallow begins</td>
</tr>
<tr>
<td>Chili pepper</td>
<td>Potatoes</td>
<td>Maize</td>
<td>Potatoes</td>
<td>Fallow begins</td>
</tr>
<tr>
<td>Chili pepper</td>
<td>Maize</td>
<td>Potatoes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arracacha</td>
<td>Peanuts and</td>
<td>Sweet potato</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>yacón</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table 3. Examples of crop rotation sequences followed by Tableños. – Ejemplos de secuencias de rotación de cultivos seguido por Tableños.*
<table>
<thead>
<tr>
<th>achira</th>
<th>achojcha</th>
<th>arveja</th>
<th>arracacha</th>
<th>camote</th>
<th>caña</th>
<th>locoto</th>
<th>maíz</th>
<th>maní</th>
<th>papa</th>
<th>tomate de árbol</th>
<th>walusa</th>
<th>yacón</th>
<th>yuca</th>
<th>zapallo</th>
</tr>
</thead>
<tbody>
<tr>
<td>achira</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>achojcha</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arveja</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>arracacha</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>camote</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>caña</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>locoto</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>maíz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>maní</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>papa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tomate de árbol</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>walusa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>yacón</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>yuca</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>zapallo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
tomorrow.” Both forms may be used during extra-intensive work periods, particularly at harvest time, but the ayni seems essentially to have fallen out of use and the only form of reciprocal labor today is between close kin, for instance between brothers or between father and son. The older generation of Tableños recalls that people were working together much more before, but that this was previous to the land reform of the 1950s when there were landlords with large holdings, which is no longer the case. In the past, there was also a form of communal labor—for instance organized during a house construction project—that was called sacawama (Aymara) and raymi (Quechua). During the sacawama or raymi, women prepared meals and chicha (an alcoholic beverage made from fermented maize common all over the central Andes) for a male work party.

Local agronomic knowledge—the know-how to produce in these landscapes—is normally conveyed within the family, passed on from generation to generation. Children are taught how to cultivate from their elders—their parents, grandfathers, and from older brothers—observing and participating in the field, allowed to practice and learn to perfect their farming skills working the chaco alongside their older kin. In some instances, however, learning how to cultivate is different, for instance when a crop has been introduced by external organizations (e.g., PROINPA, whose consultants have instructed Tableños how to cultivate poroto beans). The interference of external agencies and actors is potentially problematic and needs to proceed with some delicacy—as indeed we have learnt. Some time ago village elders opposed consulting agronomists from an international NGO that advised against swidden on account of that burning weaken the land and impoverish forest resources, arguing that the visiting engineers do not understand local farming. But today, a Tableño remarked, “young people who have been to school and can read and write better value the advice of agronomic engineers.” Indeed, this particular agronomist recommended mulching, which was adopted by the sindicato and is now enforced by regulations on cultivation practices, with a fine of 500 bolivianos (about 100 USD) for burning fields.

In thinking about the past, how agriculture has changed over time and assessing transformations in local livelihoods, Tableños bring up various different aspects of change and continuity, from very specific details to sweeping comments about how life was better before. When it comes to farming practices, however, these are thought of as having changed very little over time. The agricultural calendar has been similar for generations: young people cultivate in the same way as their elders do—who after all taught them everything they know about farming in the Yungas. But local agriculture is recognized to have changed radically on two accounts in recent times: (1) the application of chicken manure as fertilizer and (2) spraying the plants with chemical insecticides. Some also note that several plants and varieties that were cultivated in the past have become less common, suggesting that there was a stronger emphasis previously on root and tuber crops such as purple arrowroot, arracacha, manioc, sweet potato, new cocoyam, and yacón than there is today.
Another expression of change is that the agricultural rituals that were previously performed as an integrated part of the agricultural calendar seem largely to be growing out of general use, and are these days maintained principally by elderly Tableños. Agricultural rituals were to a great extent celebrated communally in the past but have become more private, performed on an individual basis in the home or in the chaco, for instance the koa (a ritual offering of plants made for a good future harvest). Harvesting rituals are celebrated in the chaco in the form of libations of chicha and offerings of food prepared from the harvest’s plants. To challar in this way is to give back, to compensate for what the Earth provides, and to challar chicha (spilling beer on the ground) remains a very common rite at every fiesta and celebration that involves the consumption of alcohol, as elsewhere in the Andes. Rituals to bring about rain also used to be more common, but are growing out of practice. In these rituals, fires are lit on high places in the hope that these would produce rain. A Tableño recounted how an elderly farmer took up this ritual practice and made fires on the hills to bring on the rains during the most recent drought. But no rain came, increasing the skepticism of other villagers to the “old ritual ways.”

Farmers consume portions of everything they cultivate and harvest, including purple arrowroot, achojcha, arracacha, chili peppers, coriander, garlic, maize, manioc, mint, new cocoyam, onion, pea, peanuts, potatoes, pumpkin, sweet potato, tomatoes, yacón, fruits like guava, ice-cream beans, lemon, and quince, and vegetables. Relatively speaking they consume less of the chili pepper harvest, since it is the main cash crop. A major portion of the harvest, about 70–90%, are sold at the markets in Cochabamba and Colomi, most importantly chili peppers, maize, potatoes, and pumpkin, but also some achojcha, arracacha, onion, and new cocoyam. The remaining part is kept for domestic consumption and for next year’s planting.

With the central markets at Colomi and Cochabamba as the main distribution nodes it is no longer common with direct exchange of products with farmers from other regions. In the past, however, people from the Altiplano travelled to the Yungas to exchange their products with the Tableños, for instance arracacha, chili peppers, peanuts, and pumpkin for beans and higher-region potato varieties such as chuño. Today, products are occasionally exchanged between other nearby communities—Maica Monte, San José, and Corani Pampa—for other products, and there is also exchange between families at Tablas Monte. Between Tableños it is, however, more common to borrow foodstuffs, usually to be returned a year later by the next harvest.

Long-term storage is problematic in the humid Yungas environment since planting material and food stuffs soon start to decay and rot, although some crops store better than others. Harvested new cocoyam is relatively resistant and can be stored for about a year without going bad, chili pepper seeds may be stored up to 5 months, and maize and dried beans may last 4 months in storage. Chili pepper fruits and pumpkin last no more than a month, and arracacha, manioc, and yacón can hardly be stored at all after harvest, a couple of weeks at most according to local accounts.

Planting material is guarded in a dark and protected place within the house (local houses are one- or two-storied wooden structures with floorboard walls and floors,
roofing of corrugated iron, on a low stone foundation or on sill stones). It may also be placed in sacks underneath the house, in a special cupboard of sticks (*troje*) where it is not reached by the sun, or in glass containers. Less common today is the practice to store seeds in ceramic containers (*puñus*) in a corner of the house. Seeds may also be stored in a protected and shaded place of the chaco, either covered with branches (*pahuichi*) or placed underground in excavated depressions, sometimes lined with stones and covered with straw (forming a *pirwa*). Since a larger share of the harvests is produced for the markets in Cochabamba and Colomi today than before, there is less demand for long-term storage. The produce is sold soon after harvest (chili peppers in particular) and often guarded only a short time by the side of the road before being loaded on to trucks for transport to the markets.

On a final note, asked to consider how farming may be improved and assessing what it takes to increase agricultural production the most important factors that Tableños cite include: (1) adding more manure and fertilizers to mix with the soil and boost plant growth; (2) increased spraying with insecticides, fungicides, and pesticides; (3) constructing an irrigation system; (4) having the means to hire extra agricultural labor, particularly at harvest time; (5) having more mules to transport harvest from distant and inaccessible fields; and (6) economic support to invest in a tractor to work the soil and for faster motorized spraying. Some Tableños go somewhat against increasing mechanization and application of fertilizers and chemicals as the main program to increase production, and raise organic fertilizing and mulching as important alternative practices for increasing local smallholder livelihoods.

**Final remark**

Principally drawing on a series of interviews with smallholder farmers resident in the community at Tablas Monte this chapter has outlined a brief overview of many different aspects of current farming practices and food production systems in the Yungas of Cochabamba. This kind of agricultural landscape narrative forms an important baseline for assessing—in conjunction with other kinds of data, particularly archaeological sources—longer-term agricultural dynamics. The basic appreciation of current local agronomic knowledge and practices in the region of Tablas Monte that this chapter provides offers important leads for understanding past agrosystems in this landscape and are vital for reconstructing the function of the “forgotten” field system at Rasupampa.

**Acknowledgements.** We are most grateful for the time and the expertise that many Tableño farmers shared with us to describe their work. We are indebted to them and to all their fellow Tableños and the authorities of the community and sindicatos for permitting our investigations at Rasupampa and for their hospitality and generosity in welcoming us to their village and their homes. We are also grateful for permission to conduct fieldwork granted by the past and current director of
the Instituto de Investigaciones Arqueológicas in Cochabamba, David Pereira and Maria de los Angeles Muñoz. Financial support was provided by a research grant from the Swedish International Development Cooperation Agency to Christian Isendahl. This chapter has benefitted from Lilian Rebellato’s suggestions on the text, and Adriana Muñoz kindly translated the abstract and captions into Spanish; many thanks to both for their time and expertise! All images are by the senior author unless noted otherwise.

References


PUBLICATIONS FROM AFRICAN AND COMPARATIVE ARCHAEOLOGY
DEPARTMENT OF ARCHAEOLOGY AND ANCIENT HISTORY, UPPSALA
UNIVERSITY

Studies in African Archaeology

Editor: Paul J. J. Sinclair

Studies in Global Archaeology

Editor: Paul J. J. Sinclair
